

The Kirby Institute 30 Years Strong



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Messages from the Director and Patron

The decades since 1986 have seen this organisation mature into an international institute in infection and immunity. We can be proud of the contributions that we've made in treatment and prevention of HIV, hepatitis C and sexually transmissible infections; frankly, we've done a great job. We will continue to meet our domestic responsibilities in relation to blood-borne viruses, STIs and indigenous health but we are also positioned to expand our skill base into emerging areas of infection and immunity.

Now that HIV has transformed into a chronic condition managed well in Australia with antiretroviral therapy, people are living longer and healthier lives but appear to be at higher risk of those illnesses of older age. We have long been interested in the correlation between HIV and cancer, particularly those cancers which seem to strike gay men at disproportionately high levels, and we have recently added a new clinical trials program in partnership with St Vincent's Hospital to prevent and treat HIV-related cancers.

HIV remains one of the most intensively studied diseases in the history of medical science. We have developed skills, techniques and expertise which we now apply to other infectious agents. Much of our success in the area of viral hepatitis was informed, particularly in its early stages, by our ongoing work in HIV. However, hepatitis C also presents its unique challenges, such as the highly marginalised populations often affected in Australia. Sustaining the momentum of treatment will be the major public health challenge in the future, and the key will be development of quality treatment and care for the most marginalised populations, such as people who inject drugs, the homeless, and prisoners.

The decades since 1986 have seen this organisation mature into an international institute in infection and immunity. We have also used our skills and expertise gained through HIV research to understand and assist with the high levels of blood-borne viruses and sexually transmissible infections in remote and regional areas of Australia where Indigenous people are disproportionately affected.

Further afield, the Kirby is involved in reproductive and sexual health in Papua New Guinea and neglected tropical diseases including scabies in the Pacific Islands. After many years of providing clinical services and skills transfer through the HIV-NAT Collaboration in Bangkok, our long involvement in Asia continues, with our most recent involvement in a 'test and treat' program in Indonesia.

We reflect with pride the many achievements of the past thirty years. We have grown from scratch an internationally recognised multidisciplinary research institute on blood borne viruses and along the way seen the evolution of HIV from a fatal illness to something treatable with a nearnormal life expectancy.

We've applied our expertise in antiviral therapy into viral hepatitis and other infections, and we've seen our results translated into guidelines and policy changes at the highest levels.

I recognise that leadership is building the team – these things can't be done by just one person; it's about the team.

I am proud of the work of the Kirby Institute and all it has achieved over 30 years to improve human lives and well-being in Australia and worldwide. For 30 years, its existence has mirrored the history of HIV. Virtually from the start of the epidemic, I witnessed the remarkable work of the Institute under the leadership of Professor David Cooper. We both rejoiced in the friendship of Dr Brett Tindall, a brilliant researcher who died of AIDS and in whose name an annual lecture is held by the Institute.

In the 1980s, healthcare workers struggled to cope with the effects of AIDS. It was only when Luc Montagnier and Françoise Barré-Sinoussi identified HIV that it became possible to detect its presence in the human body. Only then could scientists effectively search for treatments.

Since those early frantic days, a human rights approach was taken to this disease. This was something new in epidemiology. But it proved effective, notably in Australia under the leadership of Dr Neal Blewett AC and Professor Peter Baume AC, now Life Governors of the Kirby Institute. The Institute is continuing their inspired ideas by unique combination of outstanding scientific research and vital engagement with groups most vulnerable to infection: gay men, sex workers, people who inject drugs, prisoners and Indigenous people.

While the scientists got on with their research, I continued to participate in the work of international agencies. In 1988, I was appointed to the WHO Global Commission on AIDS, a post I held until 1992. UNAIDS was created in the mid-1990s and, with WHO, quickly turned to globalising funding and distribution of the anti-retroviral treatment (ART) that changed the face of the HIV epidemic in the mid-1990s.

While David Cooper was treating patients and turning their lives around and this Institute was testing and innovating new procedures, I was taking part in the UNAID Reference Group on Human Rights; the UNDP Global Commission on HIV and the Law; and the UNAIDS/Lancet Commission in Defeating AIDS and Advancing Global Health. In a kind of global miracle, nearly 17 million people, in some of the poorest countries of the world, were afforded access to ART. This is a marvellous achievement. But it could be expanded to 30 million recipients. And meantime scientists, including in the Kirby Institute, work relentlessly to the ultimate goals: a vaccine and a cure for HIV.

What of the future? The Millennium
Development Goals of 2000 and now the
Sustainable Development Goals (SDGs) of
2015 commit the United Nations and the world
to ensure that, by 2030, everyone will have access
to essential healthcare, wherever they maybe.
This is a mighty goal.

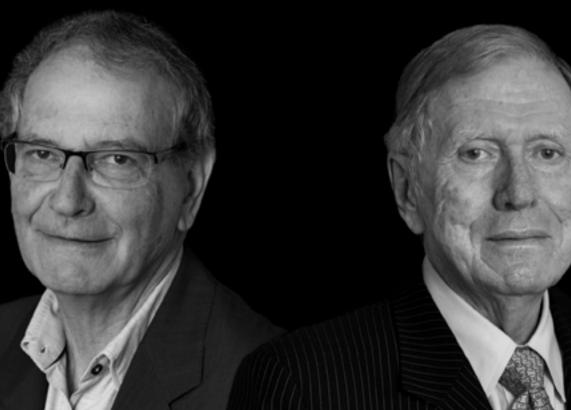
The Kirby Institute will play a crucial part in advancing and attaining the SDGs. Brilliant science and outstanding social policy will chart the way.

The Kirby Institute, as a body that for 30 years has learned and taught these lessons, will continue to expand its agenda. When HIV is controlled and the new treatments for hepatitis C have turned around the epidemic in Australia, there will still remain many diseases to engage

Through world-class science and close collaboration with colleagues in Australia and overseas, the Institute will continue to provide leadership. Engaging in multidisciplinary research. Always working closely with vulnerable communities as we push forward the frontiers of global public health.

The past 30 years have seen great progress. But the best achievements lie ahead.

When HIV is controlled and the new treatments for hepatitis C have turned around the epidemic in Australia, there will still remain many diseases to engage the Institute.



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Scientia Professor David A Cooper AO Director of the Kirby Institute weithis

The Hon. Michael Kirby AC CMGPatron of the Kirby Institute

TOGETHER WEARE STRAGNG

"Together we overhauled clinical trials regulation in Australia, and access to unapproved drugs." David Cooper

The crucial collaborations:

Together we are strong

Every segment of the population has been affected by thirty years of HIV infection, but some have borne a far greater share than others. The gay community, haemophiliacs, sex workers and people who inject drugs were the first notable groups to suffer the shocking emergence of HIV in Australia in the mid-1980s. Later, other groups such as rural and regional communities, with little exposure to the education campaigns and limited access to testing and related health care, were also affected. Over time, the Kirby Institute (then the National Centre in HIV Epidemiology and Clinical Research) collaborated with all these groups and with many research groups internationally, but none was as important and crucial to good research outcomes as the links with Australia's gay communities.

A number of people at the Kirby Institute participated in the earliest days of forging links with the community: David Cooper, Garrett Prestage and Basil Donovan all recall the start of the co-operation and respect between medical researchers and community. The first ten years of the epidemic were the most difficult, with the constant spectre of illness and death in the absence of effective treatments. The turning point came in 1996, the year in which the treatment revolution transformed HIV from a lethal infection into a manageable condition. The start to this ongoing journey began in the Paddington Town Hall in 1983.

Doctors, among them Cooper and Donovan, met with representatives of key gay organisations and together decided to set up a cohort study of gay men in Sydney to monitor what was happening. They held a gay community meeting at Paddington Town Hall to explain what they were going to do. Hundreds of men came, Prestage among them.

"We were all scared, and hungry for information, and for some sign that we could do something," Prestage said. He found the meeting reassuring because doctors and the community were working together. "They explained what they knew, which wasn't much, and why they needed, no, why we needed, to set up a cohort study. That study was eventually called SAPS, the Sydney AIDS Prospective Study, and was one of the most influential early studies internationally in the response to HIV.

"It led soon after to the setting up of the National Centre in HIV Epidemiology and Clinical Research, now the Kirby Institute, under David's leadership from the beginning. So, the Kirby's very foundation was based in a direct and strong relationship between researchers and community."

"With the help of the community, we developed mechanisms to allow expanded access," Cooper said. "Together we overhauled clinical trials regulation in Australia, and access to unapproved drugs." Cooper nominated Bill Whittaker, the first executive director of ACON, and Peter McDonald as two centrally important figures of that period. McDonald was chairman, and Whittaker a member, of the review task force which recommended sweeping changes to the clinical trials approval in Australia.

Cooper also pointed to the extensive network of committees and working groups established through the 1980s and 90s as giving the community a strong voice. "There was an evolution in the community response over the years," he said. "The distress and understandable frustration, the angry activism of ACT UP, segued into more consultative ways of working together.

"Reforming the clinical trials mechanisms and the special access for drugs really heralded a true co-operation where the community input was both valuable and welcome. That was clearly demonstrated in getting improved protocols and better research process."

The role of the National Centre, and particularly Cooper, in the international research effort that led to HAART and its announcement in 1996, is sometimes overwhelmed in the long list of the National Centre's achievements.

"The impact this had on the gay community, especially in Sydney, was utterly fundamental," Prestage said. "A community that was unendingly traumatised by constant illness and death, and its apparent inevitability, was suddenly presented with new hope. People speak of the 'Lazarus effect', but among gay men that was a very real thing."

The Kirby's partnerships with community continue. The most recent example is the launch of EPIC-NSW, an expanded PrEP study following 2015's Prelude demonstration study at eight sites, at Mardi Gras in 2016. EPIC (Expanded PrEP Implementation in Communities) combines rapid roll-out with population-level monitoring, with the target of reaching 3700 high-risk men through sexual health clinics and specialist GPs.

This trial presents an exciting opportunity to dramatically reduce HIV diagnoses in New South Wales," Cooper said. "New South Wales Health has committed crucial resources for this trial and drawn together key partners. We're excited to be working again with ACON, Positive Life NSW and ASHM. It's this partnership approach that is the principal strength of this trial."

Another important example is a new, historic memorandum of understanding signed between the Kirby and Burnet Institutes. The Australian Hepatitis C Elimination Program creates opportunities to undertake joint research, education, professional training and program design and evaluation. The collaboration provides for the two institutes to engage with Australian and international agencies for research and program funding, with the ultimate aim of eliminating hepatitis C virus in Australia by 2026.

Health is a fundamental human right. But it's still not equally accessible to all.

It's why for 30 years we've never stopped asking the tough questions, working in partnership with some of the world's most marginalised and vulnerable communities.

FINDING THE ANSWERS

In the early 1980s, the tools were too few. Specialists in immunology, infectious diseases, epidemiology, oncology and haematology joined together quickly and often informally in a frantic search for answers to the HIV pandemic which was emerging in the US.

"We knew it would reach us in Australia," said Director of the Kirby Institute, David Cooper. "We had to be as ready as we could be." In 1983, Cooper and some early colleagues formed the Sydney AIDS Study Group, in grim and accurate anticipation of soon having cases to study. With foresight, the group also set up the Sydney AIDS Prospective Study (SAPS), a prospective immune-epidemiological study of gay men. This was the earliest HIV research conducted in Australia. By 1985 Cooper had published the seminal description of the acute retroviral syndrome of primary HIV infection, a description still used in clinical practice thirty years later.

The formation of the three national HIV research centres in 1986 was crucial both to the research effort and also for its public government support. One centre each for virological and behavioural research complemented the National Centre in HIV Epidemiology and Clinical Research, established under the directorship of Cooper, who was then a young immunologist at Sydney's St Vincent's Hospital. In the same year, Cooper established Australia's first clinical trial of an HIV treatment, using the first available drug to treat confirmed cases of HIV infection, AZT, and acyclovir. Conflict arose with representatives of the gay community who wanted free access to the treatment for all people with confirmed HIV infection. Cooper affirmed that the trial is necessary to establish the best treatment regimens with the new drug and AZT becomes available by 1987. By 1988, the Centre published the first Australian data on the incidence of AIDS and the risk factors associated with the development of AIDS, from work in the SAPS network, formed five years earlier.

By 1989, when John Kaldor was appointed head of the Epidemiology Unit, the National Centre's research program has grown to include the co-ordination of surveillance and epidemiological studies of HIV/AIDS in Australia and the collation and analysis of data on surveillance and epidemiology collected by the states, territories and Commonwealth; clinical trials of therapeutic treatments; research into epidemiology, natural history and clinical aspects; and providing other centres with assistance in research design, data collection, processing and analysis, and training in epidemiology.

The Kirby Institute's armoury of weapons in the ongoing war against infectious diseases, blood-borne viruses and sexually transmissible infections is substantial.

From 1990, the National Centre entered a period of rapid expansion of its participation in clinical trials, both within Australia and in increasingly large international collaborations. After an overhaul of the Australian drug evaluation process, the clinical trials activity includes antiretroviral therapy, opportunistic infections, HIV-associated malignancies, immune-based therapies, vaccines and laboratory developments. The rate of research publications becomes greatly increased and the National Centre's reputation and expertise continue to grow.

The Australian HIV Surveillance Report begins publication in 1990 and the following year the National Centre establishes collaborations with the Australian Red Cross blood transfusion service, with the Australian Defence Force, Departments of Corrections, and with services designed for people who inject drugs.

The years of work leading up to 1995 and 1996 brought about the most significant development in the search for an enduring treatment which could not just delay morbidity and mortality but might make the virus a manageable condition. Cooper told the International AIDS conference in 1996 that 1995 saw the demise of monotherapy and the ascendancy of combination therapy, but warned that in the absence of hard data, a rush to combination therapy held the "danger of patients getting anecdotal combinations".

The large number of available or soon-to-be-available drugs meant that the years following 1996 saw large numbers of clinical trials testing a range of innovative drug combinations in many different situations. Protocols are now largely agreed on which drugs to prescribe and when they should be used.

Three decades on, the Kirby Institute's armoury of weapons in the ongoing war against infectious diseases, blood-borne viruses and sexually transmissible infections is substantial. The many lessons from early HIV research, in particular the use of combination therapy, have been translated into many other disease fields, including viral hepatitis. Once HIV had evolved from a terminal diagnosis to a chronic manageable condition, the scope for the Kirby also broadened to wider issues.

The areas of expertise are comprehensive and are grouped into four fluid areas: clinical science including clinical trials; basic science, taking in the lab; epidemiology/public health, including long-running behavioural research, and national surveillance, producing vitally important data which in turn influences policy decisions, funding and research directions. Within each of these areas are a wide range of research topics, ranging from hepatitis C treatment and prevention to HIV-related cancers to pre-exposure prophylaxis to the ongoing work for a vaccine, which thirty years later still remains the Holy Grail of HIV research.



10 Discover Timeline Discover 11

1980s



1983

"We were all scared, and

The Sydney AIDS Study Group, formed by David Cooper and Julian Gold, begins the Sydney AIDS Prospective Study (SAPS), a prospective immune-epidemiological study of gay men, to determine the natural history of AIDS and its epidemiology in Australia.

SAPS will go on to provide the largest body of prospectively collected data on sexual behaviour in gay men in Australia and will give rise to similar periodic studies in most capital cities of Australia, still underway thirty years later.

Palace faces sex

timebomb

796ye 7837 KM



1985

David Cooper is lead author on a publication describing the acute retroviral syndrome of primary HIV-1 infection.



1986

Three research centres are established by the Australian Government in response to the emergence of HIV/AIDS. David Cooper is appointed the inaugural director of the centre in Sydney, initially called the NHMRC Special Unit in AIDS Epidemiology and Clinical Research.

The Special Unit conducts the first study of HIV seroprevalence among people who inject drugs and develops a technique to screen returned syringes for HIV antibodies.



1987

AZT becomes available for prescription in Australia. The Special Unit is charged with monitoring its usage and starts preparing to recruit 600 participants for a national study of open-label AZT.



1988

The Clinical Trials Unit published the first data on incidence of AIDS and the risk factors associated with the development of AIDS in the SAPS network.



1989

The (first) National HIV/AIDS Strategy is adopted and establishes a network of collaboration with health departments and other health organisations nationally. To reflect its expanded role under the Strategy, the NHMRC Special Unit is renamed the National Centre in HIV Epidemiology and Clinical Research (NCHECR).

The NCHECR conducts the first national study of HIV prevalence in babies born 1988-1989 and finds no cases of HIV infection among 10,000 live births.









12 Discover Timeline Timeline Discover 13

1990s



1990

The Australian National Council on AIDS (ANCA) convenes a Working Party on the Availability of HIV/AIDS Treatments. chaired by Peter McDonald. The final report in late 1990 leads to increased Commonwealth funding to expand the clinical trial infrastructure.

The Clinical Trials and Treatments Advisory Committee (CTTAC) is formed to advise the NCHECR management committee. It is a major collaboration between HIV specialists, clinical trials experts, general practitioners and community organisations.

1991

A review of the drug evaluation process in Australia, a then-complex approvals process believed to cause delay in potential HIV treatments, leads to the Therapeutic Goods Administration (TGA) introducing a Clinical Trials Notification Scheme.

Collaboration is established with the Australian Red Cross blood transfusion service, which routinely tests blood donations: with the Australian Defence Force which at this time tests all personnel; and with Departments of Corrections in all states which test prison entrants at this time

The years of work leading

up to 1995 and 1996 brought

about the most significant

development in the search for an enduring treatment.

1992

The Sydney Men and Sexual Health Study (SMASH) is established in collaboration with the National Centre in HIV Social Research and the AIDS Council of New South Wales (ACON).

A major expansion of the work in SAPS, the Sydney Men and Sexual Health Study (SMASH) is established in collaboration with the National Centre in HIV Social Research.



1993

1997

Using data from the National AIDS Registry, the first major analysis of AIDS incidence in Australia 1982-1992 is published. Cumulative HIV incidence to the end of 1993 is estimated at approximately 15,200. AIDS incidence is estimated to plateau at

approximately 850 cases in 1995.

This is the fifth year of the SMASH (Sydney

Men and Sexual Health) study. One of the

radical change among HIV-positive men in

treatment use. Prior to 1996, SMASH data

indicated decreasing levels of treatment use, to just over a third by late 1995. After

therapy, there was a rapid uptake.

news about the effectiveness of combination

most important findings in 1997 was a



1994

Enrolments into SMASH (Sydney Men and Sexual Health) pass 1,000. 90% of the cohort agree to participate in the clinical arm of the study and are allocated among 236 medical practitioners. Of the 930 clinical participants, 212 are HIV positive. More than half of SMASH participants know someone who had died following AIDS in the previous six months.



1998

A report based on work by the Hepatitis C Projections Working Group is published, giving an alarming indication of the extent of hepatitis C in Australia. By the end of 1997, there were an estimated 196,000 people living with HCV in Australia, with 11,000 new infections that year. In related work, a national hepatitis C surveillance strategy was developed to improve the national surveillance of HCV.



1995

The Delta study reports on the benefits of combination therapy. Survival of people who are treatment-naïve in Delta 1 is significantly better with combination therapy, with an estimated reduction in mortality of 38%.

The evidence is now decisive that the use of at least two antiretroviral drugs in combination must now be the recommended treatment. David Cooper declares that 1995 marks a turning point in HIV clinical trials.



1999

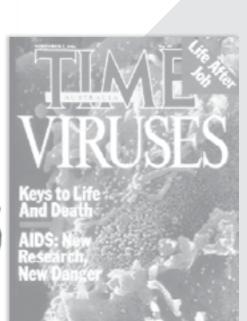
The Australian HIV Observational Database (AHOD) is established, starting in June, using a number of hospital and primary care sites nationally. It looks at treatment uptake and outcomes, and will provide information on patterns of use of ART.

NCHECR is one of the agencies asked to assist in the evaluation of an 18-month trial of a medically supervised injecting centre in Kings Cross, Sydney.



The HIV-NAT program begins in Bangkok. The collaboration between colleagues from Thailand, Australia and the Netherlands (N, A and T of HIV-NAT) provides for the transfer of skills and infrastructure, while conducting clinical trials of HIV treatments.

THE SYDNEY MORNING 60 creds





14 Discover Timeline Timeline Discover 15

2000s



2000

This year's surveillance report shows, for the first time in a decade, an increase in survival following an AIDS diagnosis. but also a lower than expected impact of preventive interventions for mother-tochild HIV transmission. Country of birth was associated with some AIDS-defining illnesses, including tuberculosis. AIDS diagnoses have dropped 85 percent in the past six years, from 955 cases in 1994 to 147 cases in 1999



2001

The fifth annual surveillance report indicated the ongoing fall in the occurrence of AIDS, due largely to five years of combination therapy; the increased proportion of heterosexually acquired cases of HIV infection that had an association with a country of high prevalence; and the continuing high rates of HCV transmission among people injecting drugs. HCV appears to have overtaken HBV as the leading indication for liver transplant.



2008

in STI care

2002

The Australian-Thai Vaccine Consortium continues enrolment of gay men in the HIM study and reaches more than 900 by the end of 2002. Development progresses on the first clinical trial for the vaccine.

A major advance in the treatment of lipodystrophy is achieved with the MITOX study, which demonstrated an evidencebased strategy for reversing lipoatrophy by switching NRTIs in the treatment program. inhibitors in the treatment program.

2008 saw the establishment of two new

NCHECR programs. STI research was

Program. The Aboriginal and Torres Strait

Island Health Program began planning for

a community randomised trial in 21 remote

communities, designed to support primary

health care services to achieve best practice

expanded into a new Sexual Health



2003

Through funding from the American Foundation for AIDS Research, NCHECR is designated to be the point of co-ordination for an observational database that includes a number of countries in the region.

Enrolment into the first clinical trial of the Viral Hepatitis Program, HEPCOG, began in 2003. The study examined the natural history of acute hepatitis C infection and the use of pegylated interferon for the treatment of acute HCV infection among IDUs.



2004

The first results are published from the HIM cohort, funded through the Australia-Thailand Vaccine consortium, which completed enrolment of 1425 men by the end of 2004. An analysis of hepatitis A and B infection showed that overall levels of immunity were about 70%, but only half of gav men aged below 25 were immune.

The SMART, ESPRIT and SILCAAT studies continue to recruit and/or follow up patients. These large multinational research projects address critical questions relating to the primary treatment of HIV infection.



2005

Involvement with research partners continues strongly in Thailand and Cambodia through in-country placements. The TREAT Asia network, sponsored by amfAR, has the technical support of the Biostatistics and Database Program. amfAR and NCHECR were successful in applying to be the Asian-Pacific regional cohort in the NIH-sponsored program of international cohorts for the epidemiological evaluation of HIV disease outcomes, globally known



2009

The Therapeutic and Vaccine Research Program wins a grant of \$18 million (USD12.42 million) from the Bill and Melinda Gates Foundation to support a research project with the potential to extend drug therapy to millions of HIV-affected people worldwide. The project, dubbed ENCORE, will study the effectiveness of optimised doses of HIV drug treatment.

A collaboration between NCHECR and the Universities of Melbourne, Adelaide and Western Australia was brought to fruition by an NHMRC program grant for a program titled HIV and HCV Vaccines and Immunopathogenesis. The five-year grant begins in January 2009 and addresses the urgent global health priorities concerning the development of vaccines and better treatments for HIV and hepatitis C.



2010

The SECOND-LINE study commences recruitment in 49 sites across 18 countries; and the CORAL and Encore2 studies were completed and presented at national and international meetings. The START pilot phase of enrolment is completed in mid-2010. As a consequence of achieving this key milestone, the Division of AIDS at the US NIAID announced in September that the study would proceed into the definitive phase, with the number of sites globally being tripled in order to achieve the target enrolment of 4000 participants before the end of 2012.



2006

hepatitis.

2006 marks the twentieth year of the NCHECR's operations. It is also the tenth year of publication of the Annual Surveillance Report.

The most significant international trial to which NCHECR is contributing, SMART, was terminated prematurely in January due to increased mortality in the drug conserving or interruption arm, which showed twice the risk of disease progression.



The major new HIV therapeutic trial for 2007 is ALTAIR, a randomised comparison of three regimens of combination antiretroviral therapy in treatment-naïve subjects.

Recruitment closes for ATAHC, the largest study in the world of the treatment and natural history of acute hepatitis C infection among people who inject drugs (PWID). Preliminary findings on treatment outcomes are released.



The many lessons from early HIV research, in particular the use of combination therapy, have been translated into many other disease fields, including viral





16 Discover Timeline Discover 17

2000s



110

The National Centre in HIV Epidemiology and Clinical Research celebrates its 25th anniversary of the establishment of Australia's three National Centres of HIV Research by changing its name to the Kirby Institute for infection and immunity in society.

The Justice Health Research Program is established and the HIV Biology Group moves to the Kirby Institute.

The first annual National Trachoma Surveillance Report, edited by the National Trachoma Surveillance and Reporting Unit (NTSRU), was produced in 2011. Australia is the only developed country where trachoma is still endemic.



2012

The START study has recruited close to 4000 subjects. This large study with seven nested sub-studies addresses the question of when to start ART based on CD4+ cell count.

Enrolment begins into the NHMRCfunded Opposites Attract project, a five year cohort study of HIV transmission in HIV-serodiscordant gay couples. Complementing Opposites Attract is the TAXI-KAB study which is collecting information about gay men's knowledge, attitudes and beliefs about biomedical prevention of HIV.



2013

Preliminary results were presented at CROI 2013 of the SECOND-LINE study, designed to compare combinations in participants failing first-line therapy. This trial was the first time that second line treatments were examined in low and middle-income countries.

The ENCORE-1 trial indicates that a reduction in daily dose of one third of the antiretroviral (ART) efavirenz, a commonly used treatment for HIV, is both safe and effective compared to the higher dose currently recommended.





2014

The Kirby Institute launches a new initiative to increase HIV testing and uptake of treatment in Indonesia. The Test and Treat Indonesia study will evaluate a range of possible interventions among five key affected populations.

Kirby researchers lead a world-first study, to evaluate curative hepatitis C treatments as a means of preventing HCV spread within prisons. The SToP-C study will investigate whether a significant reduction in infections is possible with a "treatment as prevention" strategy.



2015

The Surveillance and Evaluation Program for Public Health (SEPPH) is restructured into the Surveillance Evaluation and Research Program.

The 2015 Surveillance Report highlights:

Australia is close to achieving global targets for the testing and treatment of HIV, but more needs to be done to identify and treat infections early

Deaths related to chronic hepatitis C virus infection have increased by 146% in ten years and the uptake of treatment remains extremely low.

Almost half of all people living with hepatitis B remain undiagnosed

Chlamydia remains the most frequently reported notifiable infection in Australia.

Australia's human papillomavirus (HPV) vaccination program has been a great

success. Launched in 2007, the program has led to the virtual disappearance of new cases of sexually transmitted genital warts in young women and a 57% drop in the rate of detection of abnormal cervical cells among young women undergoing 'Pap tests' for cancer prevention.

The START terminates early after interim

results showed conclusively that immediate treatment of HIV infection is clinically superior to treatment deferred. The World Health Organisation goes on to change international treatment guidelines for HIV in support of early treatment. The guidelines signify a landmark change in the international response to HIV treatment and prevention.

The World Health Organisation releases new HIV treatment guidelines inspired by the outcome of the Kirby Institute's ENCORE1 trial, endorsing a lower daily dose of efavirenz as a valid treatment option for people living with HIV.

A world-first study conducted in Fiji finds treatment of a whole community with ivermectin has been shown to virtually eliminate scabies, reducing prevalence by 94 per cent and providing new hope in the fight to control this debilitating disease.

Results of the Skin Health Intervention Fiji Trial (SHIFT) are published in the New England Journal of Medicine.

Kirby researchers join collaboration with 22 international institutions in a joint initiative to accelerate the search for an effective HIV vaccine. Funded by the European Commission, the European AIDS Vaccine Initiative (EAVI2020) will bring together HIV researchers in Europe, Australia, Canada and the US in a focused effort to develop both protective and therapeutic vaccines.

The Kirby institute is awarded \$4.5 million by the United States National Institute of

Health to conduct the largest international study of newly available, directly acting antiviral drugs for recently acquired hepatitis C virus infection.

The Kirby Institute announces a collaboration with the Papua New Guinea Institute of Medical Research (PNGIMR) and other national and international institutes to conduct a world-first study in maternal and newborn health in PNG.

A 20 year report on Needle and Syringe Program attendees in Australia shows the number of young Australians injecting drugs has declined over 20 years and transmission of HIV related to injecting drug use has been efficiently contained.

Results from the first Australian study to analyse HIV transmission risk among couples with differing HIV statuses suggest that HIV positive men who are on treatment and have an undetectable viral load are not transmitting the virus to their partners.

2016

EPIC-NSW begins at Sydney's Mardi Gras. This study is designed to target large numbers of vulnerable men and offer them PrEP with the long-term goal of virtually eliminating HIV transmission in NSW.

Kirby's Justice Health Research Program

awarded \$2.5m over five years to develop

research capacity in Indigenous offender

interventions Research Group receives a

partnership project grant for STRIVE Plus, a

participates in the successful bid to

Excellence in Offender Health and is

health research. The Public Health

continuation of the STRIVE study.

establish the Centre for Research

The Kirby Institute partners with Australia's leading experts in clinical, laboratory and public health research on The Australian Partnership for Preparedness Research on Infectious Diseases Emergencies (APPRISE) to boost the country's response to infectious disease outbreaks.

The final report of the long-running Seroconversion Study has shown that earlier diagnosis and peer support for people newly diagnosed with HIV reduce the likelihood of onward transmission.

The Kirby Institute is awarded a major Cancer Institute NW grant to develop a clinical trial program in cancers associated with HIV infection at St Vincent's Hospital. And AIDS Malignancy Consortium clinical trial site is launched at the Kirby Institute and St Vincent's Hospital, allowing Australian patients with HIV-associated cancers to access innovative trials of new therapies for the first time.

A historic collaborative partnership is formed between the Kirby Institute and the Burnet Institute. The Australian Hepatitis C Elimination Program aims to eliminate the burden of hepatitis C virus in Australia within a decade.

A new generation hepatitis C cures are made available on the Pharmaceutical Benefits Schemes on 1 March. By July, Australia is leading the world in the treatment of hepatitis C, with the most rapid uptake of new treatments seen anywhere in the world, putting us on track to cure more people with hepatitis C in 2016 than in the past twenty years of interferon-therapy.

Once HIV had evolved from a terminal diagnosis to a manageable condition, the scope for the Kirby also broadened to wider issues. The sum of our energies is so much greater than the parts.

Every day we use our global reach and expertise to better equip those at the front line of epidemics with the knowledge and tools they need to respond effectively.



RESEARCH AND COMMUNITY EMPOWERMENT

Scientia Professor John Kaldor

"Nothing about us without us" and "no survey without service" are just two examples of slogans that have been used by communities to express the way they have felt about research and, by extension the researchers who have come calling. Many communities have a good understanding of what research can achieve, but want to be empowered to ensure that it addresses health issues that are priorities for their members. They also want to see research conducted in a way that maximises both short and long-term benefits and minimises potential harms to community members. Much of the Kirby Institute's work involves infectious diseases that are associated with particular communities, so we aim to give prominence to community authority and ensure that we respect these principles in our research practice. That means not only talking to communities about our research projects, but working with them to improve the ways we design and implement projects.

Research partnerships have to work in both directions, with the researchers learning about communities at the same time as communities learn about research. To make this happen, we have made it our practice to set up project advisory committees and steering groups in which community representatives have prominent roles. More recently, we have entered into formal collaborations with community organisations, through mechanisms such as NHMRC Partnership Grants. In fact many researchers at the Kirby Institute are members of the very communities that are our research partners: From the beginning, numerous Kirby staff members working on HIV have been gay men living with or otherwise affected by HIV, and our researchers have simultaneously volunteered in HIV related community organisations. Similarly, Aboriginal researchers and research students have been integral to the work on Aboriginal health in our organisation, and have contributed to Aboriginal community health organisations at the same time.

Exactly the same principles of community empowerment apply to our collaborations in low and middle income countries, but in this context our approach has more often been to engage with communities through our local research collaborators. They are better placed than us to do so from a linguistic and cultural perspective, and are more likely to be there for the longer term. What we can bring to these relationships is the experience that we have had in successfully working in researchercommunity partnerships in Australia. While the types of organisations and relationships may be very different, the underlying premise is the same: Ensure that communities are empowered to be part of shaping and running the research, and that the collaboration is genuine, with communities having

We aim to give prominence to community authority and ensure that we respect these principles in our research practice.

real input into decision-making processes. Our first venture into the Asia-Pacific region was the HIV-NAT collaboration with the Thai Red Cross, which after 20 years has grown into an internationally recognised, Thai-led centre of research excellence, renowned for its outstanding science as well as its strong community partnerships. We have applied the same principles to our collaborative undertakings in other countries of the Asia-Pacific region (with particular long-term involvements in Cambodia, Indonesia and Papua New Guinea), and to all of the training programs that we have offered to our counterparts from low and middle income countries. Those who emerge from our programs, whether they are short courses or doctoral degrees inevitably have a strong sense of how research and communities fit together.

The 30th anniversary of the Kirby Institute is a time to celebrate our scientific contributions to improving the health of communities by building a stronger evidence base for prevention and treatment. But we can also reflect on what we have learned about the ways in which we have worked with communities. The scientific literature provides extensive guidance on what are often referred to as the technical aspects of research methodology: How to select and recruit participants, what laboratory tests or questionnaires should be used, the correct statistical methodology for analysing the results. It is much harder to find information about how to build and sustain effective research partnerships with communities, so we also aim to share our experience and build on it. We have not always got it right the first time, but believe that our relationships with communities are such that they are able to let us know quickly and frankly when this happens, and work with us to improve our community processes. We also recognise that these relationships depend on having robust and adequately resourced community organisations to act as our counterparts. We have now entered into a new decade, committed to advancing knowledge and practice in this area, just as we do in the so-called technical aspects of research, and applying the lessons of three decades to next 30 years of our work.



REFLECTIONS FROM THE FRONT LINE

Some of our research leaders reflect on their work and the future our research.



PROFESSOR SEAN EMERY

Head, Therapeutic and **Vaccine Research Program**

Q What is the focus of your research?

 ${\bf A}$ My focus is on conducting research that is robust, withstands scrutiny, and informs high quality health policy. For 30 years, the Kirby Institute has played a leading role in challenging dogma and hyperbole and insisting that health policy reflects real world evidence.

Q What inspires you?

 ${\rm A}$ Very simply - making a difference.

Q What brought you to the Kirby Institute?

 $A \ \ \text{A sense of adventure. Doing something different. Building a model for collaborative endeavour. In the initial years of the HIV epidemic there$ was little infrastructure and a non-permissive regulatory environment that worked against providing people with HIV/AIDS with access to experimental drugs.

The Kirby was pivotal in developing both the coordinating infrastructure and the domestic network that quite literally provided access to thousands of Australians to drugs that were subsequently licensed for the treatment of HIV. This saved lives.

Q What progress or transitions has your area seen in 30 years?

A First, I think it is fair to say that progress has been astounding. HIV is now a manageable chronic disease – a remarkable feat. And also, the origins of therapeutic research were firmly vested in partnership with the pharmaceutical sector.

Inevitably the processes of drug development moved away from academic partnerships and the residual infrastructure moved inexorably toward real independence and pursuit of more strategic objectives linked to improving outcomes of treatment. Defining better strategic use of life-saving medications that could be deployed readily in resource limited environments was not a goal shared by the private sector. The Kirby Institute led that exercise.

Q What are the next steps for your research?

 ${
m A}$ Enabling lifelong HIV treatment in low and middle income countries. Conducting research that results in people living longer and





Head of the Viral Hepatitis Epidemiology and Prevention Program

Q What is the focus of your research?

A My research focuses on infectious disease prevention in vulnerable populations – people who inject drugs, female sex workers, people living with HIV, marginalised youth and homeless people. Much of my work has focused on the prevention and reduction of drugrelated harms.

Q What inspires you?

 Λ I am inspired by the potential to make a difference and the resilience of those for whom injustice and suffering are everyday realities.

Q What brought you to the Kirby Institute?

A I first came to the NCHECR in 2004 to work with John Kaldor as part of my NHMRC Fellowship. One of the things that attracted me at the time was the absence of social and qualitative research and the potential for multi-disciplinary collaborations to add value by increasing understanding of people's lived experiences.

Another thing that attracted me was the potential to continue to develop the system of HIV and hepatitis C surveillance in needle and syringe program attendees established by the late Dr Margaret McDonald. With the help of colleagues and collaborators, and the leadership of Dr Jenny Iversen, this has become an internationally recognised model of best practice for effective and responsive surveillance among PWID.

Q What progress or transitions has your area seen in 30 years?

A We now have the knowledge and the tools to prevent and treat HIV and hepatitis C. However knowing what works doesn't mean we can make a difference. In many settings we still lack the political will, financial resources and community support to address these infections, particularly among vulnerable populations.

Q What are the next steps for your research?

A Translating knowledge into practice and in particular, using our knowledge of what works to inform sustainable, high-coverage HIV and hepatitis C prevention and treatment programs in low- to middle-income countries. Trialling a vaccine to prevent chronic hepatitis C infection. Testing HIV prevention interventions for female sex workers in Cambodia. Estimating the incidence of HIV and other STIs among MSM in Vietnam. Research on non-medical pharmaceutical opioid use among young people in Australia.





PROFESSOR MATTHEW LAW

Head of the Biostatistics and Databases Program

- Q What is the focus of your research?
- A Using statistical and mathematical models to optimise treatment and prevention of HIV and STIs
- Q What inspires you?
- $\label{eq:A} A \quad \text{What keeps me going is that -- after all the bluff and bluster, expert opinion, shameless self-aggrandisement, mindless sloganeering and aspirational targets -- ultimately simple data, from well-designed studies, analysed appropriately, will tell the truth.}$
- Q What brought you to the Kirby Institute?
- A The honest answer is that I always fancied seeing a bit of the world, and NCHECR advertised a stats job in The Guardian. It took me a while to realise I had really fallen on my feet. I think what is special about Kirby is that pretty much any question you might have about HIV, HCV, HBV, and STIs you can find a proper international expert in the building who can help.
- Q What progress or transitions has your area seen in 30 years?
- A Everything in HIV has changed treatment, prevention, outcomes. It's extraordinary. It's nice to have played a small part in that.
- Q What are the next steps for your research?
- $A\,$ I'm hopeful that there will be renewed interest in long-term treatment outcomes in HIV-positive people. Whatever anyone says, there isn't going to be a cure or vaccine, and new infections will continue to occur (see earlier comment about data telling the truth!). There is a lot to learn yet about ageing and HIV.





PROFESSOR ANDREW GRULICH

Head of HIV Epidemiology and Prevention Program

Q. What is the focus of your research?

A The main focus of my research is on HIV prevention and related issues, particularly HIV-related cancers, as it affects gay and bisexual men.

Q. What inspires you?

 ${
m A}$ Doing work that makes a difference to my community's life.

Q What brought you to the Kirby Institute?

A As a gay man and young doctor growing into adulthood in the early 1980s, HIV was really the issue at the centre of my early life. It was not just a societal threat, it was a direct and personal threat, and working against it seemed like the best defence. I left Adelaide, where I did my medical degree, in 1986, before I had seen a single person with HIV on the medical wards.

After four years becoming an epidemiologist in London, Sydney was the right place to come back to – and the NCHECR was growing as the place to be in Australia for people who wanted to contribute to the HIV medical research response. In 1980s Australia, homophobia was pretty rampant but was never an issue within this Institute and within the HIV response more generally in Australia.

Q What progress or transitions has your area seen in 30 years?

A I started work at the Kirby Institute (then NCHECR) in 1995. I had an office with a window overlooking Victoria Street in Darlinghurst. In 1995, about 1000 people, mostly gay men, died of AIDS in Australia, and many of them walked to St Vincent's Hospital along Victoria Street below my window. It was a really sobering place and time to be – the evidence that a horrible tragedy was befalling gay men in Australia was everywhere to be seen.

One of my first international AIDS Conferences was the 1996 meeting in Vancouver, where the first evidence that the protease inhibitor class of antiretroviral drugs might be able to reverse the progress of HIV/AIDS.

Within a few short years the streets of Darlinghurst changed – many people with HIV, but unfortunately not all, gained weight and started being well again. It was so quick. As a member of the gay community it was like a miracle. As a doctor and a medical researcher it was astounding to see the real-world effect of successful research unfold before me. It has been a privilege to live through.

Q What are the next steps for your research?

A Ending HIV! The new combination of biomedical tools that we have for HIV prevention actually means that we have the chance to dramatically reduce HIV transmission. My group is involved in research in rolling out new methods of HIV prevention (such as PrEP) and in monitoring the population-level results. In addition, we are addressing the unacceptably high rates of anal cancer in gay men with and without HIV, and are developing screening and vaccination approaches to prevent this disease.





DOCTOR MARLENE KONG

Head Aboriginal and Torres Strait Islander Health Program

Q What is the focus of your research?

A My work is focused on addressing the significant rates of STIs and bloodborne viruses affecting the Aboriginal and Torres Strait Islander population in Australia. Of course, this cannot be done without the collaboration of the NGO sector including the Aboriginal community controlled sector, as well as government agencies.

Q What inspires you?

A I am an Aboriginal woman and medical practitioner with a strong passion for addressing the significant disadvantage of the Indigenous population within Australia. I acutely understand the significant inequities of not only the social determinants of health including education, employment, and housing; but the bigger picture of the upper stream determinants including how society is structured and organised.

Q What brought you to the Kirby Institute?

 $A \quad \text{KI has a great reputation for research, particularly in HIV medicine. This job opportunity was a way to practice my Public Health Medicine skills as well as a great introduction to the world of competitive research.}$

Q What are the next steps for your research?

A The most important priority for me is to see a significant shift in health outcomes for the Aboriginal population in the area of STIs and BBVs, through carefully considered, collaborative, transitional and sustainable changes in the way research is carried out, which is inclusive of all those, both Aboriginal and non-Aboriginal, who are equally passionate about making a difference.





PROFESSOR BASIL DONOVAN

Head of the Sexual Health Program

Q What is the focus of your research?

A I enjoy leading and participating in national surveillance networks that enable us to evaluate population health interventions for STIs and bloodborne viruses. I also have a longstanding interest in how public policy affects sexual health, particularly in vulnerable populations. More recently I have also had a focus on the molecular epidemiology and antimicrobial resistance of STIs.

Q What inspires you?

 ${\bf A}$ I delight in keeping my patients vertical and free to do what they like.

Q What brought you to the Kirby Institute?

A I was drawn to KI by the calibre and vision of the people who work here. The dedication to all human rights – not just the right to good health – pervades the place. It is no accident that the Kirby is the only medical research institute in the world that is named after a non-billionaire lawyer and a champion of human rights.

Q What progress or transitions has your area seen in 30 years?

 \boldsymbol{A} I have had the privilege of witnessing HIV cease to be a fatal illness; observed the disappearance of vaccine-preventable diseases caused by other STIs such as HBV, HAV, and HPV; and overseen advances in clinical services and human rights relevant to sexual health.

Q What are the next steps for your research?

A I work across a broad range of research fields, from molecules to populations, with many irons in the fire. I would love to see more STI vaccines in the pipeline





ASSOCIATE PROFESSOR REBECCA GUY

Head of the Surveillance Evaluation and Research Program

Q What is the focus of your research?

A I am interested in infections that are transmitted by sex or blood contact, including HIV and other sexually transmitted infections, and hepatitis B and C. My research into the control of these infections has two main strands that are interconnected. One strand is driven by my interest in trying out new technologies in routine health care settings, while the other involves compiling large-scale data sets, so I can understand what is happening to infection rates in populations. The ultimate measure of success for me is being able to demonstrate through population level data that a novel technology, whether it is new diagnostic test, a new treatment, or new patient management software, is helping to reduce disease rates.

Q What inspires you?

A I am inspired by the commitment of my colleagues, whether in the next door office, or in government health departments, community organisation or the front line of clinical care to work together on the prevention of sexually transmitted and blood borne viral infections.

Q What brought you to the Kirby Institute?

A I completed my PhD in 2008 and was awarded an early career fellowship. I was attracted to the Kirby Institute as an ideal place to undertake my fellowship due to its long history of success in large scale national and international public health and clinical research, the potential to make a difference at a population level.

Q What progress or transitions has your area seen in 30 years?

 Λ First, human papillomavirus (HPV) infection is an important cause of cancer that is now largely preventable by vaccination. A highly effective prophylactic HPV vaccine was licensed in 2006, and the world's first national vaccination program implemented in 2007 in Australia.

Second, new prevention strategies for HIV have emerged, including pre exposure prophylaxis (PrEP), which protect people from the risk of HIV infection

There has been a huge advance in technology to enable people to have diagnostic tests at health services and receive their results while they wait. This can make a massive difference for remote communities, where people have had to wait weeks for a result in the past.

Q What are the next steps for your research?

A Over the next five years I will translate the findings from my studies into real-world programs and provide opportunities for the next generation of researchers to advance their careers.



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WE ARE KIRBY

A global research institute is made up many people, doing a hundred different things to make the place work. Here is a glimpse of the different kinds of people who make up the Kirby.

The Clinical Trials Coordinator Hepatitis C

Pip Marks

I was doing clinical trials in gastro-intestinal cancer and after six years I wanted a new challenge. I wanted to be doing research that really mattered to people. And I wanted work in a disease area where the patients needed the most help. Hep C patients are among the most marginalised populations and I felt I could make a real impact to their lives. I also wanted to work with world-class academics and Professor Greg Dore certainly fits that bill. And finally, I wanted to work at an institution with a great culture where people are accepted and appreciated for the work they do, where people can be true to themselves and where people's voices are encouraged, regardless of what level they are paid at, and a place where debate and a variety of ideas are welcomed.

The work the Viral Hepatitis Clinical Research Program has done on treating people who inject drugs for their hep C infection has been world-leading. In the early days this population was excluded from treatment. Our ATAHC, ATAHC II and ACTIVATE studies have produced the evidence that has contributed to change in policy both nationally and internationally and we've led the development of international HCV treatment guidelines for people who inject drugs. The result is that Australia is one of very few countries in the world currently providing universal access to new direct-acting antiviral therapies regardless of injecting status or disease stage.

The Kirby Institute is focused on helping the most marginalised people in society. We approach our research in an open and non-judgemental way. Kirby treats their staff in exactly the same manner. The diversity at Kirby is fantastic and I think all staff and students feel truly welcome, appreciated and accepted regardless of gender, race, religion and sexuality.

The PhD Candidate - Laboratory of HIV Biology, Immunovirology and Pathogenesis

Andrew Wong

The Kirby Institute's excellence in scientific research into HIV was what drew me to pursue further studies as a PhD student. I feel fortunate to be delighted in heading to work every morning, and to be surrounded by people of extraordinary talent

The people at Kirby are its greatest asset. My peers are benevolent with their time, and unhesitatingly offer support; be it moral, academic or mentorship.

I've so far made inroads into the production of vectors that can mediate gene therapy— a possible avenue to permanently treat HIV infection. We're finding ways of improving our success at genetically manipulating T cells to establish a safeguard against HIV, and this may perhaps offer people with a life-long protection from the virus.



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The Statistician

Am Jiamsakul

I came to the Kirby Institute because I wanted to be able to use my Thai language skills as part of my work, and I knew that the Kirby collaborated with many Thai hospitals.

In my seven years at the Kirby, the most rewarding project I've worked on was leading a research study involving only statisticians within a network. This project was methodologically based, which allowed statisticians from all over Asia to have more prominent roles in the manuscript writing process.

The people at the Kirby Institute work hard and play hard. You can expect to see the same people dazzling at the Mardi Gras parade and then go on to present at international conferences.

The PhD Candidate

Steven Philpot

I was interested in undertaking a PhD in social research, and Kirby had an opening to work on the Opposites Attract study, among other studies. I was immediately attracted by the helpful nature of the people around me and the kind of research being conducted by Kirby. At the moment I am conducting the interviews for the Opposites Attract study, and they have proven to be extremely interesting and informative.

The relaxed and non-corporate environment of the Kirby is great; everyone is trusted to do their own work and encouraged to work in way that best suits their own personality and needs.

The office is full of friendly faces – people are more than happy to joke around, but also leave you alone if you want to be. We have a particularly close team in the HIV Epidemiology and Prevention Program. I am known for my inability to understand personal space and love to give out hugs.

The Administration Manager

Yvette Toole

I came to the Kirby on a six week temp assignment, and 21 years later I'm still here. When I started there were only 48 people employed. To think that now we have more than 250 staff/students; how we have grown! On that first day I remember when I walked into level 2, 376 Victoria Street Darlinghurst, what greeted me was a shabby rundown building with orange and brown carpet with many holes and splits in it which was all stuck together with gaffer tape, and blue/grey walls with patches everywhere. Regardless of the look of the place, it was filled with the most amazing people who made me feel incredibly welcome and pretty much straight away I felt I was in a uniquely special place.

I have always felt so lucky and privileged to work with such talented people. To think that when I started in 1995 the talk was about particular drug therapies to extend life, statistics and LTNP [long-term non-progressors]. To now think that in 2016 we are talking about ending HIV. It is utterly mind-blowing. It has been a true honour for me to provide the support for amazing people to ensure that they

The Program Co-ordinator *Kate Slatver*

I was attracted to the Kirby as I was a student at UNSW, and wanted to get into a public health organisation. One of the most rewarding projects I've been involved in is the planning stages of the large scale point-of-care STI testing for antenatal care in PNG. It was great to be involved in meetings with senior experienced researchers and be exposed to the mechanics of planning such a large-scale study with so many collaborators. It was also great to see what is required in implementing this type of study in

The Kirby Institute has a great culture of collaboration across programs. Junior researchers can feel comfortable approaching senior researchers for advice or guidance. The breadth of research areas means that there is often an expert that you can approach about any topic.

a developing context.

The Clinical Project Coordinator - HIV

Simone Jacoby

I started at the Kirby in 2004 and I applied for a role here because HIV has been an interest for me since high school, working for my old university was appealing and I was looking to get settled having just moved back to Australia from the UK.

Working on the START study was a real privilege. To have been part of a study that changed global HIV treatment guidelines was incredibly rewarding. Feeling that you have been a part of something that will change the lives of millions around the world is very humbling.

Our collaborations, both internally and with outside organisations, have resulted in ground-breaking work and made a real difference to the lives of millions around the globe.

The Associate Professor Jason Grebely

I applied for a Postdoctoral Fellowship under the mentorship of Greg Dore in the Viral Hepatitis Clinical Research Program. Interestingly enough, I only ever planned to stay for one to two years. But, after developing a love for Australia and a great work environment, I have now been here for almost 10 years.

The most rewarding projects that I have worked on are the ETHOS and LiveRLife Projects, focused on enhancing HCV care for people who inject drugs. Working closely with the community, health providers, other researchers and policy makers has been incredibly gratifying. It is amazing to see a project lead to systems-level change and be integrated into health policy, such as national and state-based hepatitis C strategies.

Kirby is full of a great array of personalities and backgrounds which makes it a really welcoming place to come to work. People are passionate about what they do and the enthusiasm is infectious (much like most of the work we are focused on).



Now is not the time to stand still. We are on the precipice of major breakthroughs in our quest to end HIV, hepatitis C and other infectious diseases. But there's more to do.

Lasting change requires brave determination, not merely to test existing boundaries but to completely reshape them.

FACTS & STATS

Staff statistics

In the past 30 years, The Kirby Institute has grown to employ more than 200 full-time staff.

YEAR 10

53 staff members

YEAR 1

staff members 200

YEAR 20

150 staff members move to new office



YEAR 30



5X Every dollar of Department of Health funding leverages five dollars of





external funding.

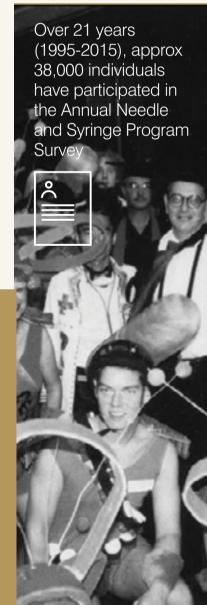
FACTS & STATS

Quick statistics

\$30 MILLION



38,000



125

the world



COLLABORATIONS

We collaborate actively with over 650 organisations in more than 41 countries on 6 continents.

650+ Countries

Organisations

Continents



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OUR RESEARCH

ENCORE

The challenge

United Nation goals aim to treat 90% of all infected individuals by 2020 with the intent of eradicating AIDS. The costs of implementing these goals are borne by global public sector programs and national government support in many countries around the world. To achieve the UN goals, approximately 36 million people will require treatment, with 17 million already commenced. The continued scale up of treatment programs comes at a time when funding is static and likely to reduce.

How we are helping

Between 2010 and 2014, Professor Sean Emery and his team conducted a clinical trial, known as ENCORE1, with 630 participants in 13 countries across Africa, Asia, Australia, Europe and Latin America. They reduced the dose of efavirenz, an important HIV drug therapy, by one third and observed trial participants regularly over the course of two years to gauge whether the lower dose of drugs was strong enough to suppress HIV replication.

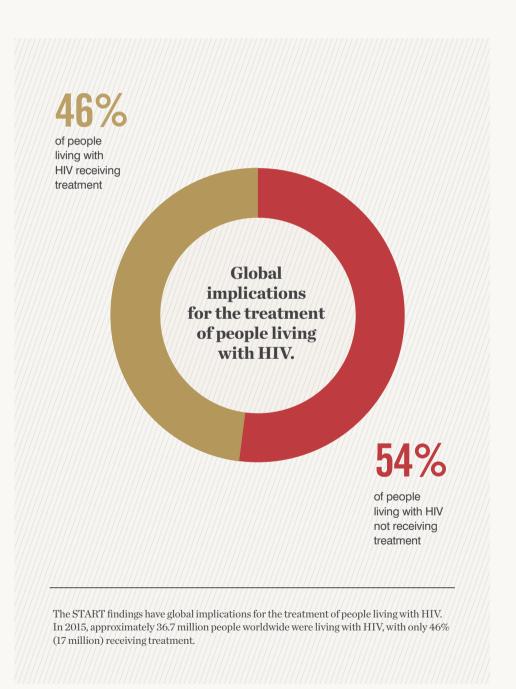
Results

The results showed that a reduced dose is both safe and effective in suppressing HIV and results in fewer drug-related side effects, compared to the standard dose recommended at the time of the study.

Impact

Following the study, The World Health Organization (WHO) has updated international treatment guidelines endorsing a lower daily dose of efavirenz. The new WHO guidelines mean that more people can be treated for the same amount of money. It will have a profound impact on the health and well-being of millions of people around the world, who will now have access to life-saving treatment. The biggest impact of this development will be felt in low and middle-income countries, where there is often limited access to lifesaving drugs for those who need it.

Funded by the Bill and Melinda Gates Foundation. Supplemental funding from the NHMRC.



Research supports early treatment for HIV

The challenge

Antiretroviral therapy (ART) helps people with HIV live longer, healthier lives and reduces the risk of transmission, but treatment requires a life-long commitment and until recently, there was no conclusive evidence to indicate how long after diagnosis treatment should commence.

How we are helping

The Kirby Institute, in partnership with three other international research centres, coordinated the world's first large-scale randomised controlled trial to clearly define the best time for HIV-positive people to begin ART. The START study enrolled 4,685 people at 215 sites in 35 countries, including Australia.

Results

In 2015, START was terminated ahead of schedule after interim results provided conclusive evidence that immediate treatment of HIV extends survival and prevents serious disease complications and death.

Impact

The findings have global implications for the treatment of people living with HIV. In 2015, approximately 36.7 million people worldwide were living with HIV, with only 46% (17 million) receiving treatment. Based on the START results, the WHO updated international treatment guidelines to recommend that anyone diagnosed with HIV should begin treatment as soon as possible. WHO estimates that extending ART to all people with HIV and expanding prevention choices would help avert 21 million AIDS-related deaths and 28 million new infections by 2030.

Funded by the National Institutes for Health (NIH), the National Health and Medical Research Council of Australia, and a number of government organisations based in Europe.

The SHIFT trial – Scabies control in Fiji

The challenge

Scabies makes the World Health Organisation's list of neglected tropical diseases - with 100 million persons infected worldwide. In the Pacific Islands, including Fiji, it is one of the most serious health problems, with one quarter of the population infected. The terrible itching leads to infection of the skin by bacteria that can cause potentially deadly diseases of the kidneys, heart and bloodstream. A safe, effective means of controlling scabies and skin sores is urgently needed.

How we are helping

The Kirby Institute coordinated a trial of mass drug administration (repeat administration of single-dose treatment to whole communities) for scabies control with 2051 participants enrolled across three Fijian island communities. The trial was conducted in collaboration with the Murdoch Children's Research Institute and Fiji Ministry of Health.

Results

One round of mass drug administration using oral ivermectin reduced the prevalence of scabies by 94 per cent one year after the intervention. The prevalence of skin sores also declined by 67%.

Imnact

The study shows that MDA has the potential to break the cycle of disease transmission by eliminating infection from a whole population. The findings, published in The New England Journal of Medicine in December 2015, have transformed the global conversation on integrated programs for neglected tropical diseases.

Funded by the Australian National Health and Medical Research Council.

Optimising new Hep C treatments

The challenge

Hepatitis C infections among young people who inject drugs and HIV positive people are increasing in many high income countries, including in Australia. Early engagement, testing and treatment in these populations have the potential to limit transmission. We want to know more about the effectiveness of these drugs in people with recently acquired hepatitis C infection, as well as the impact of adherence, risk behaviour and potential for subsequent reinfection.

How we are helping

Researchers at the Kirby Institute are conducting the largest international study of newly available, directly acting antiviral drugs for recently acquired hepatitis C. Researchers aim to determine whether we can halve the treatment time among people who have recently acquired hepatitis C, while still achieving the same results. 250 participants with recent infection will be enrolled from eight countries to evaluate the effectiveness of short course therapy with the most effective directly acting antiviral combinations.

Impact

This research is crucial in order to prevent ongoing transmission of hepatitis C and to enhance the cost-effectiveness of treatment. Findings from this project will provide recommendations to guide clinicians and public health policy in the effective management of HIV positive and negative individuals and populations at risk for, or recently infected with hepatitis C.

Funded by the United States National Institute of Health.

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OUR RESEARCH

An EPIC trial

The challenge

In 2015, the Kirby Institute's Annual Surveillance Report of HIV indicated that over a quarter of the people diagnosed with HIV in Australia the previous year had substantial damage to their immune system, indicating they had likely contracted their infection a number of years ago. Experts in Australia believe that in order to end HIV, we will need to maintain and strengthen the established strategies of testing, treatment and prevention, as well as increasing the use of new technologies such as pre-exposure prophylaxis (PrEP) to prevent infection.

How we are helping

A landmark clinical trial, led by the Kirby Institute in partnership with NSW Health, ACON and Positive Life NSW, is designed to reduce new HIV infections to half the present rate within two years and to virtually eliminate HIV transmission in NSW by 2020. The trial is the first study globally to combine rapid roll-out of PrEP with population-level monitoring. HIV-negative people at high risk of infection are given a daily dose of the medication currently used in standard HIV treatment. 3700 high-risk, mostly gay and bisexual men will be enrolled through sexual health clinics and selected GP practices, potentially preventing almost 150 new HIV infections over a one-year period. International clinical trials have established PrEP to be highly effective at preventing HIV infection among high-risk people.

Impact

EPIC-NSW has the potential to change the face of HIV transmission in NSW, the first state in Australia to implement such a rapid and large-scale trial of this prevention strategy. If successful, it will pave the way for the widespread use of PrEP.

Funded by NSW Health. A significant proportion of treatment for the trial has been provided by Gilead Sciences.

Maternal and newborn health in Papua New Guinea

The challenge

In Papua New Guinea, as in many low-income countries, curable STIs and genital infections such as chlamydia and gonorrhoea are common among pregnant women. If left untreated, STIs can lead to serious problems during pregnancy.

How we are helping

The Kirby Institute is collaborating with the Papua New Guinea Institute of Medical Research (PNGIMR) and other national and international institutes to conduct a world-first study in maternal and newborn health in PNG which will investigate whether same-day, clinic-based testing and treatment of sexually transmitted infections can improve pregnancy outcomes for women.

Results

We conducted a pilot study in Milne Bay Province in 2014, where we found a high prevalence of chlamydia, gonorrhea, trichomonas and bacterial vaginosis, with over half of antenatal women having one or more of these infections. Among these women, 70% were not identified as having an STI based on clinical grounds alone.

Impact

Now that we know that point-of-care STI testing and treatment in routine antenatal clinic settings is feasible in PNG, researchers will start to rollout a large-scale field trial. If they continue to demonstrate that this approach not only increases the detection and treatment of STIs, but actually improves pregnancy outcomes, the trial will have a potentially major impact on policy and practice in all high-burden, low-income settings.

Funded under the Joint Global Health Trials initiative, established by the UK Department for International Development, the Medical Research Council UK and the Welcome Trust.

1 IN 4

People diagnosed with HIV in Australia (2015) the previous year has substantial damage to their immune system

1

3700

high-risk, mostly gay and bisexual men will be enrolled through sexual health clinics and selected GP practices, potentially preventing almost 150 new HIV infections over a one-year period.

THE KIRBY IMPACT

EPIC-NSW has the potential to change the face of HIV transmission in NSW, the first state in Australia to implement such a rapid and large-scale trial of this prevention strategy. If successful, it will pave the way for the widespread use of PrEP.

TTANGO

The challenge

In 2015 the Kirby Institute reported that the of diagnosis of gonorrhoea infection among Aboriginal and Torres Strait Islander people was 18 times higher and chlamydia was over three times higher than the rate of diagnosis in the non-Indigenous population. Chlamydia and gonorrhoea occur at especially high rates in remote Aboriginal communities. Control of STIs in remote communities is compromised by delays in diagnosis and treatment due to distances between health services and laboratories and difficulties locating and recalling patients for treatment.

How we are helping

Researchers at the Kirby Institute in collaboration with other researchers, community organisations, government and laboratories are leading a world-first trial called TTANGO (Test, treat, and go). Using cutting edge molecular point-of care technology initially created to test for tuberculosis, researchers are working with health services to implement and evaluate these point-of care tests for chlamydia and gonorrhoea in remote Aboriginal communities.

Impact

Preliminary results show use of the new technology was acceptable to staff and patients, the point-of tests was as accurate as laboratory tests and point-of-care testing significantly reduced the time to treatment. The final analysis is planned for late 2016, followed by health economic analyses to make the case for a Medicare Rebate. The program has been expanded to a large network of health services in WA, NT, SA and FNQ.

Ttango1 is funded by the Australian National Health and Medical Research Council. Ttango2 is funded by the Australian National Health and Medical Research Council and the Australian Department of Health.

New drug uncovers hidden HIV cells

The challenge

A cure for HIV requires the eradication of latent (dormant and therefore hidden) virus from reservoirs in immune cells throughout the body.

How we are helping

Researchers have successfully tested a new drug that activates hidden reservoirs of HIV cells in individuals on antiretroviral therapy, one of the first steps to eradicating the virus and eventually finding a cure. The study, led from Aarhus University in Denmark with support from international collaborators including the Kirby Institute, also found the drug did not negatively affect the function of killer T cells, essential for the elimination of HIV-infected cells by the immune system. HIV latency depends on the activity of proteins from the human host called histone deacetylases (HDAC), and previous work has shown that HDAC inhibitors (HDACi) can disrupt HIV latency.

Results

The study tested a single HDACi, romidepsin, on six Caucasians participants with a median age of 56 and a median time on antiretroviral therapy (ART) of 10 years. Blood samples had evidence of HIV transcription, the first step of latency reversal, in all participants. After the second infusion, HIV RNA (genetic material) became detectable in the blood plasma in five of the six participants.

Impact

The results establish a new benchmark for future trials investigating the potency of latency reversing agents to be used in HIV eradication efforts.

Funded by the Research Council of Norway and Bionor Pharma ASA.

Forces unite in the quest for an HIV vaccine

The challenge

In Australia, HIV has largely become a chronic, manageable infection - but chronic HIV disease management is not the end goal. Despite the tremendous successes we've made in the prevention and treatment of HIV, the development of an effective vaccine to prevent HIV infection remains elusive.

How we are helping

The Kirby Institute has partnered with scientific collaborators from 22 institutions around the world on a joint initiative to accelerate the search for an effective HIV vaccine. The European AIDS Vaccine Initiative brings together a multidisciplinary team of leading HIV researchers from public organisations and biotech companies from across Europe, Australia, Canada and the USA in a focused effort to develop protective and therapeutic HIV vaccines. The Kirby Institute's Professors David Cooper, Anthony Kelleher and Miles Davenport are part of the Australian contingent currently working on creating an effective HIV vaccine in our laboratories.

Funded by the European Commission.

44 Innovate Research Research

OUR RESEARCH

LiveRLife

The challenge

Injecting drug use is the leading risk factor for hepatitis C virus (HCV) in Australia, but treatment uptake among people who inject drugs (PWID) is exceptionally low. Rates of advanced liver disease, associated healthcare costs and liver disease-related mortality among this group are rising. Increasing knowledge about HCV risk factors, disease progression and treatment among PWID is an important part of controlling the disease.

How we are helping

Researchers from the Kirby Institute wanted to understand how a liver health promotion campaign would affect knowledge, assessment and treatment of HCV among PWID. They worked in partnership with community and research organisations, NGOs, clinical services and health policy makers to develop evidence-based campaign messages focused on encouraging participants to have a liver scan called a FibroScan. They produced LiveRLife – a liver health promotion campaign tailored for PWID who attend drug and alcohol services.

Results

The campaign was implemented in drug and alcohol services across NSW. The results have shown that among PWID, peer communication is highly influential in sharing positive clinical experiences. The vast majority of participants were willing to recommend FibroScan to their peers.

Impact

The LiveRLife campaign and study have provided an opportunity to evaluate an intervention that engages a hard-to-reach population through the integration of a FibroScan assessment.

The researchers will continue this work with two specialist homelessness health services in NSW and roll out the LiveRLife campaign nationally

Funded by the Australian National Health and Medical Research Council and the Department of Health.

Opiate substitution therapy and Hep C prevention

The challenge

Opiate substitution therapy (OST) can protect against hepatitis C virus acquisition in people who inject drugs (PWID). Globally only about 8% of PWID have access to OST. Modelling suggests that scaling up OST to 50% world-wide could avert between one and two million HCV infections over the next ten years.

How we are helping

In a world-first study, researchers at the Kirby Institute examined the acquisition of HCV among PWID enrolled in a prospective observational study based in Sydney, New South Wales. They assessed HCV incidence from 2009 to 2011, and risk and protective factors associated with infection, including uptake of Needle and Syringe Programs and OST.

Results

The study showed a protective effect of OST on newly acquired hepatitis C infection in PWID. The risk of acquiring HCV was 8% per year between 2009 and 2011, a marked drop from 31% per year in a similar cohort between 1999 and 2001. The number of people receiving OST nationally had almost doubled since 1998 and this was accompanied by a reduction in the population size of PWID. These two factors, combined with increased coverage of needle and syringe programs are the likely key drivers of reduced HCV incidence.

Impact

These results suggest OST should be an essential component of any HCV prevention strategy although it is not the only answer to HCV prevention. In order to significantly reduce the burden of the virus we also need to scale-up antiviral treatment and prophylactic vaccine development for HCV, as well as continue to support evidence-based interventions like needle and syringe programs.

Initial funding through the UNSW Hepatitis C Vaccine Initiative. Subsequently funded by the Australian National Health and Medical Research Council.

HIV 'wakes up' only once a week under treatment

The challenge

Researchers have been looking for ways to reduce latent HIV infection in the body, in order to create a remission to allow drug therapy to be suspended. However it was unknown how long it takes for latent HIV cells to reactivate after treatment suspension. Previous modelling suggested that the virus was activated four to five times a day, and estimated that the number of latent cells would need to be reduced 2000 times to produce an average one-year remission after treatment cessation.

How we are helping

The study combined patient data on time to viral rebound, after treatment interruption, with mathematical modelling and statistical analysis. Data from the Kirby Institute's PULSE study was analysed with data from three smaller patient cohorts undergoing ART-interruption. Mathematical modelling was used to estimate the average frequency of viral rebound.

Results

The study found that HIV cells in the body of a person receiving antiretroviral treatment become activated 24 times less frequently than previously thought. The results were consistent across all four cohorts, indicating that virus rebound after treatment interruption occurs once every five to eight days. This research provides the first direct estimate of the rate of HIV reactivation and indicates that latent cell numbers need to be reduced by 50-70 times to produce a one year remission..

Impact

This finding has the potential to inform future research into biomedical interventions for HIV.

Funded by the Australian National Health and Medical Research Council.

Gay men, aging and HIV

The challenge

In the current era of effective HIV treatments, HIV-positive people are living longer and healthier lives, but they appear to be at higher risk of age-related illnesses compared with HIV negative people.

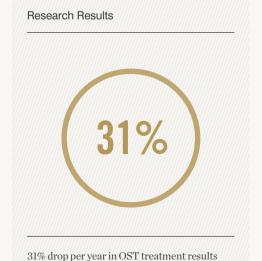
How we are helping

Researchers at the Kirby Institute are investigating whether older gay men living with HIV age differently to gay men without HIV. The APPLES (Australian Positive & Peers Longevity Evaluation Study) study aims to determine whether being HIV-positive increases risk of illness, or whether the differences seen between HIV-positive and HIV-negative individuals are caused by other factors, such as lifestyle, diet or other health conditions.

Impact

Knowledge gained from the research will inform the development of evidence-based, clientcentred care, including screening, prevention and advocacy programs for the larger numbers of older HIV positive people in Australia.

Funding provided as a research granted by Gilead Sciences, Australia



between 1999 and 2001.

New Centre for Research Excellence in Offender Health

The challenge

In Australia there are over 33.000 people in prison at any one time. Prison populations are transient: more than 50,000 people cycle through Australian prisons annually and we have an estimated ex-prisoner population of at least 400,000 nationally. Prisoners have some of the worst health outcomes of any population group and are one of the most marginalised and stigmatised groups in Australia. Aboriginal and Torres Strait Islander people are overrepresented in Australian prisons, and Aboriginal women are the fastest growing group in Australian prisons. Almost all prisoners return to the community after relatively short periods in detention, thereby imposing this substantive disease burden on the wider community. For this reason, improving the health of offenders is not only important because it has a positive impact on the individual offender, but has significant consequences for society as a whole.

How we are helping

The Kirby Institute was successful in its application to establish an NHMRC national Centre for Research Excellence (CRE) in Offender Health. The centre brings together a team of internationally recognised researchers to addresses infectious disease and mental health (including neuropsychiatric illness) among offender populations.

Impact

The CRE will strengthen collaborative relationships with other correctional jurisdictions across Australia to help us to ensure the gains established in NSW can be rolled out effectively in other states.

Funded by the Australian National Health and Medical Research Council.

New approach to estimating trends in chlamydia

The challenge

Chlamydia is the most common notifiable STI in Australia. Untreated, it can lead to poor reproductive health outcomes including infertility. Because chlamydia often has no symptoms, the infection often remains undiagnosed and unreported. We need to understand incidence to determine the impact of an infection in a community. However, calculating incidence at a population level on an ongoing basis is difficult and costly as it involves repeat testing of a large cohort of people.

How we are helping

Researchers at the Kirby institute developed an alternative approach to measure incidence. They used mathematical modelling based on a probabilistic tree where branches represent acquiring or not acquiring the infection, developing or not developing symptoms, being tested, treated and being notified as a case. Using routine population data, each individual in the population is assigned a probability for each step along the branch over the course of each year.

Results

Using the model, researchers estimate that the total number of people acquiring chlamydia in 2013 was 4.3 times the number of reported diagnoses. Results from this study suggest that more than three quarters of new infections remain undiagnosed.

Impact

These results can tell us whether control efforts are working, and how we should target future prevention strategies. This model can be replicated in other countries that collect similar notification data on chlamydia and help to establish a more accurate understanding of population level incidence of chlamydia.

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2015 FUNDING

National Health and Medical Research Council (NHMRC)

Program Grants	AUD\$
Sexually transmitted infections - causes, consequences and interventions	\$ 101,123
Discovery and translation of interventions to control sexually transmitted infections and their consequences	\$ 1,264,728
Hepatitis C infection: epidemiology, pathogenesis, and treatment	\$283,175
HIV latency, pathogenesis and immunity	\$ 1,643,757
Project Grants	
A randomised trial of rapid point-of-care tests for chlamydia and gonorrhoea infections in remote Aboriginal communities	\$ 11,130
A randomised trial to determine the safety and efficacy of early versus deferred treatment of HIV	\$ 235,785
Viral load, HIV treatment and HIV transmission in serodiscordant male homosexual couples	\$ 120,698
The Encore1 Study: the pharmacokinetic, pharmacodynamic and pharmacogenomic outcomes of reduced dosage of Efavirenz	\$ 41,883
HIV-1 transcriptional gene silencing by promoter targeted si/shrnas	\$ 237,718
The efficacy of mass drug administration strategies to control scabies in a highly endemic population	\$ 69,875
Point-of-care diagnosis of sexually transmitted infections to improve maternal and neonatal health outcomes in resource-limited, high-burden settings	\$ 314,140
HIV treatment as prevention: a longitudinal assessment of population effectiveness	\$ 236,795
Dissecting the dynamics of malaria infection.	\$ 158,055
New strategies to increase testing and treatment for endemic sexually transmitted infections in remote aboriginal communities	\$ 431,985
Health outcomes and service utilisation in a cohort of people who inject drugs, sex workers and at-risk youth - a record linkage study	\$ 145,554
Regulation of F-actin during HIV spread	\$ 237,653
Identifying undiagnosed HIV infection among Australian gay men: delivering HIV testing through a national, community-based study	\$ 73,792
Sexual and reproductive health and behaviours of young offenders (14-18 years) in NSW and QLD	\$ 225,787
Can preventive care activities in general practice be sustained when financial incentives and external audit plus feedback are removed	\$ 60,000

National Health and Medical Research Council (NHMRC) Continued

Evaluation of a model for assessment and treatment of hepatitis C virus among injecting drug users in the opiate pharmacotherapy setting (ETHOS)	\$ 26,707
The HIV prevention revolution: measuring outcomes and maximising effectiveness	\$ 280,922
Surveillance and treatment of prisoners with hepatitis c (stop-c)	\$ 246,137
Uptake, sustainability and impact of scaling up point-of-care testing for sexually transmissible infections in remote and regional aboriginal communities (ttango 2)	\$ 314,072
Striveplus: refinement and translation of an intervention designed to improve sexual health service delivery in remote communities	\$ 394,581
Reducing impulsive behaviour in repeat violent offenders using a selective serotonin re-uptake inhibitor	\$ 1,324,589
Centres of Clinical Research Excellence	
Offender Health	\$ 543,466
Fellowships	
Dr Jason Grebely (Career Development Fellowship)	\$ 113,373
Dr Gail Matthews (Career Development Fellowship)	\$ 113,373
Dr Mark Boyd (Career Development Fellowship)	\$ 113,373
A/Prof Vanessa Venturi (Career Development Fellowship)	\$ 64,482
A/Prof Rebecca Guy (Career Development Fellowship)	\$ 113,373
Dr Huachan Zou (Early Career Fellowship)	\$ 52,441
Dr Hammad Ali (Early Career Fellowship)	\$ 6,482
Dr Jennifer Iversen (Early Career Fellowship)	\$ 78,661
Dr Mary Poynten (Postdoctoral Training Fellowship)	\$ 33,241
Dr Bradley Mathers (Postdoctoral Training Fellowship)	\$ 92,816
Prof. Basil Donovan (Practitioner Fellowship)	\$ 121,462
Prof. Greg Dore (Practitioner Fellowship)	\$ 121,462
Prof. Anthony Kelleher (Practitioner Fellowship)	\$ 121,462
Prof. Andrew Grulich (Principal Research Fellowship)	\$ 162,993

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2015 FUNDING

National Health and Medical Research Council (NHMRC) Continued

Prof. Matthew Law (Principal Research Fellowship)	\$ 150,660
Prof. John Kaldor (Senior Principal Research Fellowship)	\$ 184,345
Prof. Lisa Maher (Senior Research Fellowship)	\$ 134,725
Prof. Miles Davenport (Senior Research Fellowship)	\$ 88,121
A/Prof. David Wilson (Senior Research Fellowship)	\$ 104,926
Postaraduate Scholarships	
Postgraduate Scholarships Yin Xu	\$ 16,364
Yin Xu	\$ 16,364 \$ 23,519
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-	\$ 23,519

Australian Research Council (ARC)

Postgraduate Scholarships

Partner choice and sexual behaviour among gay and bisexual men	\$ 114,509
Drug using behaviours and beliefs, and associated harms, among gay and bisexual men	\$ 209,734
Understanding the dynamics of T cell responses to chronic infection	\$ 89,421

Australian Government

Federal Department of Health

Research activities for blood borne virus and sexually transmissible infections	\$ 8,604,969
,	
Establishment and maintenance of a trachoma surveillance and reporting unit	\$ 78,979
Extended genital warts surveillance network	\$ 120,178
National trachoma surveillance and reporting 2015 - 2017	\$ 181,848

Australian Government Continued

Development, implementation and management of a national HPV genotype specific surveillance system	\$ 41,605
NSW Office of Medical Research	
Institute of Virology infrastructure funding	\$ 526,472
NSW Ministry of Health	
NPA-IECD Aboriginal sexual/reproductive health project	\$ 37,594
NSW needle and syringe program enhanced data collection	\$ 56,965
The HIV Seroconversion Study	\$ 88,191
ACCESS-Plus – a national sentinel surveillance system for STIs	\$ 7,471
NSW HIV rapid testing evaluation framework	\$ 20,000
Male Sex Workers and HIV and STI risk project	\$ 10,000
Implementation of HIV pre-exposure prophylaxis with antiretroviral medications among people at high risk for hiv infection	\$ 145,286
The NSW Research Program for HIV, STIs and viral hepatitis	\$ 691,712
Pilot implementation study of patient delivered partner therapy (PDPT)	\$ 127,273
The HIV prevention revolution: measuring outcomes and maximising effectiveness	\$ 318,000
Other State Departments	
Australian collaboration for chlamydia enhanced sentinel surveillance (Dept. of Health and human Services, Victoria)	\$ 67,645
Study of risk factors for HIV seroconversion (Queensland Health)	\$ 21,726
Systematic review peer-reviewed & grey literature-prison cell size & health effects (Dept of Justice, Corrective Services NSW)	\$ 39,572
National prison entrant's bloodborne virus survey (Dept of Justice and Regulation, Victoria)	\$ 22,173
The relationship between psychotic mental illness and offending in NSW (Mental Health Commission of NSW)	\$ 36,133
Liverlife: a liver health campaign for marginalised populations (Southeastern Sydney Local Health District)	\$ 25,600

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2015 FUNDING & DONATIONS

National Institutes of Health, USA

Asia Pacific HIV research collaboration: cancer studies (subcontract with American Foundation for AIDS Research)	\$ 6,730
INSIGHT - Leadership (subcontract with University of Minnesota)	\$ 319,274
INSIGHT - FLU 002 & FLU 003 (subcontract with University of Minnesota)	\$ 653,050
START study (subcontract with University of Minnesota)	\$ 1,509,491
TREAT Asia HIV Observational Database (subcontract with American Foundation for AIDS Research)	\$ 473,233
TREAT Asia pediatric HIV observational database (TApHOD) (subcontract with American Foundation for AIDS Research)	\$ 315,129
Treatment of recently acquired hepatitis C virus infection (ATAHC 2)	\$ 845,295
Cambodia intergrated hiv and drug prevention implementation (subcontract with University of California)	\$ 13,559
Hepatitis C Virus (HCV) (subcontract with American Foundation for AIDS Research)	\$ 12,760
Opposites Attract study (subcontract with American Foundation for AIDS Research)	\$ 59,675
Mechanisms limiting neonatal immunity (subcontract with Cornell University)	\$ 12,826
Anti-influenza Hyperimmune intravenous immunoglobulin (FLU - IVIG) international	\$ 325,727
International collaborative of prospective studies of HIV and hepatitis in IDU (subcontract with University of New Mexico)	\$ 60,541

Other Grants and Contracts

Australian

Monitoring transfusion transmissible infections among blood donors (Australian Red Cross Society)	\$ 25,000
Support for clinical and epidemiological HIV research capacity in Indonesia (AusAID/Australian Society for HIV Medicine)	\$ 163,403
Preventing morbidity and mortality from anal cancer (Cancer Council NSW)	\$ 400,102
Reducing Australia's Aboriginal prisoner population using justice reinvestment - Assessing the public's views to treatment versus incarceration using citizens' juries (Lowitja Institute)	\$ 19,696
HCC outcome improvements through translational research in western Sydney (Westmead Millennium Institute)	\$ 50,000
Evidence check for NSW STI strategy (The Sax Institute)	\$ 24,600
Global intensive professional program in HIV (AusAid)	\$ 21,995

Other Grants and Contracts Continued

International

ENCORE: Evaluation of novel concepts in optimization of antiretroviral efficacy (Bill and Melinda Gates Foundation, USA)	\$ 491,386
Evaluation of HIV epidemics and programs in Asia (World Bank, USA)	\$ 1,186,976
The DAD Study, Data Collection on Adverse Events of Anti-HIV Drugs (Copenhagen HIV Programme)	\$ 43,850
Implementation of 'Test and Treat' strategies for HIV treatment and prevention (World Health Organisation)	\$ 1,817,596
Development of a mathematical model based on HIV case reporting (UNAIDS)	\$ 184,353
Modelling resource needs to optimise impact of the global efforts to ending AIDS by 2020 (UNAIDS)	\$ 15,112
European Network of HIV/AIDS cohort studies to coordinate at European and international level clinical research on HIV/AIDS: 'EuroCoord' (University College London)	\$ 12,992
Scholarship Alison Marshall (Canadian Institutes of Health Research)	\$ 5,302
Scholarship Evan Cunningham (Canadian Institutes of Health Research)	\$ 24,708

Pharmaceutical Industry

CSL Limited	\$ 144,598
Gilead Science Pty Ltd	\$ 304,563
Gilead Science Inc (USA)	\$ 1,241,569
Janssen-Cilag Pty Ltd	\$ 15,000
Merck Sharp & Dohme	\$ 235,157
Pfizer Inc	\$ 2,247,146
AbbVie Pty Ltd	\$ 441,858
Callimmune Australia Pty Ltd.	\$ 39,960

TOTAL	\$36,653,231
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Donations 2015

TOTAL	\$1,553,518.3]

DONOR SPOTLIGHT

Capital Campaign for Kirby

It is through the valued support of our funders that the Kirby Institute is able to conduct leading edge research that is improving health outcomes in Australia and around the world.

This year marked the successful conclusion of an ambitious capital campaign for the Kirby Institute. Launched in 2011, the campaign was dedicated to securing funds for new, world-class research facilities in the redeveloped Wallace Wurth Building on UNSW's Kensington campus and in the new Translational Research Centre on the St Vincent's Hospital campus.

The cutting edge new facilities were made possible by State and Federal Government grants, UNSW funding, and philanthropic gifts. Most notable among the philanthropic gifts was a \$10 million pledge from the Atlantic Philanthropies to match all donations made to the Kirby dollar for dollar.

Inspired by this matched funding challenge and the vital work the Kirby Institute is doing to alleviate global health challenges, other significant contributions were made by the Estate of the late Peter Ikin, through the Curran Foundation, the Berg Family Foundation, The Glendonbrook Foundation, the Roth Charitable Foundation, Mr Geoffrey Alder, the Estate of the Late Dr Lynn Joseph, and an anonymous donation of \$1,000,000.

Such bold support has raised the bar for philanthropic support of medical research in Australia.

The Kirby Institute's new facilities are an asset to the local health district; to New South Wales; and to Australia more broadly, and they are critical to the global reputation of the Kirby Institute.

For 30 years , the Kirby Institute has remained focused on breaking new ground in the response to epidemics. As a direct result of this tremendous generosity, we are now well positioned to lead communities towards a future free from the burden of disease.

For 30 years, the Kirby Institute has remained focused on breaking new ground in the response to epidemics. The Kirby Institute would like to thank the following individuals and organisations for their generous support and contribution to The Atlantic Philanthropies match campaign:

New South Wales Government

Australian Government

The Atlantic Philanthropies

Estate of the Late Peter Ikin

Anonymous

Berg Family Foundation

The Glendonbrook Foundation

Ms Jillian Segal AM, Mr John Roth and The Roth Charitable Foundation

Mr Geoffrey Alder

Estate of the Late Dr Lynn Joseph



THE KIRBY INSTITUTE

Thank you for your support

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If you have questions about this form, your **gift, or the work of UNSW Foundation**, please contact us by fax, email, or Tel: **02 9385 3202** 9am-5pm, Mon-Fri.

56 Making a difference Donation Form

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Caroline Thng MBBS, MRCP, Dip HIV, Dip
GUM, DFSRH
Rajesh (Rick) Varma MB ChB, MRCP,
Dip TM&H, Dip FFP, Dip GUM, Dip HIV,
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Head and Associate Professor

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Damian Conway MB, BCh, MMed(STD/ HIV), FAChSHM, MRCGP, DRCOG, DFFP PhD

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Research Officer Praveena Gunaratnam BA(Hons), MPP, MSc(PH), PhD

Research Assistant

Program Coordinator
Jane Costello NZCC, MintS

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Head and Associate Professor

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Senior lecturer

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Griselda Buckland Hila Haskelberg BSc Natalie Espinosa BS (Biomed), MA.AppSc (Ex&Sc)

Viral Hepatitis Epidemiology and Prevention Program

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Research Officer
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Sonja Memedovic BPsych
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Visiting Professor

Senior Visiting Fellows

Visiting Fellows

Medicine, St Vincent's Hospital Sydney

Honorary Senior Lecturer

Adjunct Lecturer Kathy Triffitt BA, Grad Dip, Ph D

Research Officer Tetsuo Tsukamoto

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KIRBY INSTITUTE **STUDENTS 2015-16**

PhD candidates

Completions 2015/S1 2016

Masters Students

Supervision of non-Kirby Institute Students

Continued from our Q&A section

OUR RESEARCH LEADERS



Professor Miles Davenport

Professor Miles Davenport heads up the Infection Analytics Program at the Kirby Institute. Miles and his team use insights in mathematicians, computer science and physics to design and optimise treatment and vaccination for major infectious diseases.



Professor Andrew Lloyd

Our people Making a difference 61

Professor Andrew Lloyd is head of the Viral Immunology Systems Program. The collaborative team of clinicians and scientists uses interdisciplinary approaches to study the complex interactions between pathogen, host, and environment, which underpin human viral infections, particularly hepatitis C.



Professor Tony Butler

Professor Tony Butler is head of the Justice Health Research Program. Their work involves surveillance of blood-borne viruses and STIs in the prison setting, and a focus on developing interventions and examining the health antecedents of offending. The health and human rights component associated with this area of research has obvious synergies with the work of the Institute's Patron. research has obvious synergies with the work of the Institute's Patron.



Professor Anthony Kelleher

Professor Anthony (Tony) Kelleher is head of the Immunovirology and Pathogenesis Program. His team is primarily involved in basic HIV research, with projects on various stages of the HIV infection, including transmission and the body's defence against the virus, and how these are modulated by therapies. They conduct clinical and natural history studies in unique populations of patients with HIV infection, such as those rare individuals who control HIV infection without therapy. Identifying the reasons why this group remain healthy, without damage to their immune systems, is extremely important for understanding control of HIV infection, and for developing new therapeutic interventions and preventative vaccines.



Professor Greg Dore

Professor Greg Dore is head of the Viral Hepatitis Clinical Research Program - an international leader in hepatitis C research, particularly in key affected communities such as people who inject drugs and HIV co-infected populations. The team is involved in clinical research and also laboratory research, particular molecular virology, and natural history studies in hepatitis c infection and hepatitis b infection and vaccines.



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