



ANNUAL REPORT 2009

NATIONAL DRUG
AND ALCOHOL
RESEARCH CENTRE



Published by:
National Drug and Alcohol Research Centre
UNSW
Sydney NSW 2052
22-32 King Street
Randwick NSW 2031
Telephone: (02) 9385 0333
Facsimile: (02) 9385 0222
<http://ndarc.med.unsw.edu.au>

CONTENTS

About the Centre	4
Forward	5
Acting Director's Report	6
Management Structure	7
From the Executive	8
The Year in Review	11
Statistics	21
Postgraduate Program	22
Current Projects	23
Completed Projects	43
Appendix A – Staff List	52
Appendix B – Postgraduate Students	54
Appendix C – Research Grants and Funding	56
Appendix D – Seminars	59
Appendix E – Publications	60
Appendix F – Conference Presentations	65
Appendix G – Workshops and Presentations	71

ABOUT THE CENTRE

The National Drug and Alcohol Research Centre (NDARC) is a premier research institution in Australia and is recognised internationally as a Research Centre of Excellence. NDARC was established at the University of New South Wales (UNSW) in May 1986 and officially opened in November 1987. It is funded by the Australian Government as part of its National Drug Strategy. NDARC is situated on the University of New South Wales Randwick campus in the eastern suburbs of Sydney.

The Centre is multidisciplinary and collaborates with medicine, psychology, social science and other schools at UNSW, as well as with a range of other institutions and individuals in Australia and overseas. NDARC engages in collaborative projects with other researchers throughout Australia to provide a national focus for research in the alcohol and other drugs field, and has links with researchers overseas. Facilities at the Centre include a computer network, a Document Archive with an extensive bibliographic database, as well as seminar and conference facilities.

In addition to the research conducted at NDARC, other activities include an Annual Symposium and a range of special conferences and educational workshops. NDARC researchers have a strong record of contributions to scientific journals and other publications, and NDARC also produces its own Australian Drug Trend Series, Technical Report Series, and occasional Research Monographs. In conjunction with the National Drug Research Institute in Perth (NDRI), NDARC also produces a free bi-monthly newsletter, CentreLines, to increase communication between the national research centres, other researchers, and workers in the alcohol and other drugs field within Australia.

MISSION STATEMENT

The overall mission of NDARC is:

“To conduct high quality research and related activities that increase the effectiveness of the Australian and International treatment and other intervention responses to alcohol and other drug related harm.”

GOALS

In order to increase the effectiveness of the Australian treatment response to drug problems, four goals need to be met:

- (1) Improve our understanding of the nature and extent of alcohol and other drug-related harms to which treatment and other interventions should be directed;
- (2) Increase knowledge on the range and effectiveness of treatment and other interventions that are aimed at reducing forms of alcohol and other drug-related harm;
- (3) Increase knowledge among treatment and intervention providers about which programs are effective and which individuals are most suited to them;
- (4) Increase the community's knowledge of appropriate and effective treatment and other intervention programs for alcohol and other drug-related problems.

FOREWORD



The Hon. Kevin Rozzoli AM



Collaboration must become the norm, rather than the exception. We can only conjecture what could happen if we all worked together towards the common goal of fully understanding the problems of substance abuse.



It is often said that the greatest tribute an organisation can extend to its departing leader is to carry on the excellent work of that organisation in a seamless and effective way.

This year saw the departure of Richard Mattick as Director, although he remains with the Centre in a research capacity. This is an ideal outcome. While no longer 'hands on' in any administrative capacity, his store of knowledge as to how the Centre works and his vast experience across the many aspects which now characterise its activities are a valuable resource not only for our acting Director, Alison Ritter, but I am sure for our incoming Director.

Richard's contribution to the Centre has been exceptional. I personally have very much enjoyed our working association and the friendship that has grown over the years. In his period as Director he presided over huge changes which tested us in many ways. His leadership in setting up the executive management team was outstanding and in no small way contributed to the smooth transition. We thank him most sincerely for his past contribution and enthusiastically welcome his ongoing role.

The management team, ably led by Alison, demonstrates the depth that now exists within NDARC. International standard research can only be achieved in an atmosphere of sound administration. It was clearly evident at this year's NDARC Symposium that neither the volume nor the quality of research had been in any way effected, or that the enthusiasm of our team had in any way diminished.

I was particularly pleased to have the opportunity at the Symposium to launch the book *Pharmacotherapies for the Treatment of Opioid Dependence*, edited by Richard Mattick and Nicholas Lintzeris. The book showcased an impressive body of research in a field where the provision of treatment remains highly controversial. It provides valuable, scientifically-based evidence on the effects of maintenance treatments and their cost, and opens a window on the quality of the work that has been done. While it provides some answers, its greatest value is in the way it juxtaposes the work of a wide spectrum of research in a way that enhances the value of each and every contribution.

If we can find common pathways in the different approaches to problems we can build a powerful new knowledge base for the next stage of our research program.

Increasing our understanding of cross linkages as they are identified will decrease the randomness of the paths of discovery and make it easier to match already validated work to questions that still need to be answered. We must build a better 'systems' approach to our research and our future work must reflect that. The more we build our knowledge base the more we will have the opportunity to throw out the ineffective old methods of 'one-off' research, which, even if it is not intended, can create a competitive rather than a collaborative environment.

Collaboration must become the norm, rather than the exception. We can only conjecture what could happen if we all worked together towards the common goal of fully understanding the problems of substance abuse, its causes and solutions. The research world must unite to achieve maximum efficacy from the scarce resources we have at our disposal. The enormous cost of substance abuse in both human and financial terms demands huge dedication to such an outcome. It is my belief that NDARC is showing the world how it can be done.

As I have done on previous occasions I thank the staff for their contribution to NDARC's continuing success, for it is their body of work that is the vital core of its existence. I wish to also thank the Dean, Professor Peter Smith, and Faculty staff for their continued support and our many partners and stakeholders for their continued support and cooperation.

I am confident that under our new Director the Centre will maintain its place at the cutting edge of drug and alcohol research.

Once again I have pleasure in commending this Annual Report for your diligent attention.

The Hon. Kevin Rozzoli AM

A handwritten signature in dark ink, appearing to read 'Kevin Rozzoli'.

Chairman, NDARC Board of Management

ACTING DIRECTOR'S REPORT



A/Prof. Alison Ritter

Acting Director from 7 June 2009



Above all our business is to provide the research evidence to support the development of evidence-based drug and alcohol policy and clinical practice. In this we have been outstandingly successful.



Prof. Richard Mattick

Director to 5 June 2009

The past year has been one of continued achievement but also significant change for the National Drug and Alcohol Research Centre, with Professor Richard Mattick stepping down as Director after eight years.

During Richard's time as Director the Centre has grown from 37 staff to over 130 staff who conduct and support our research across a broad range of drug and alcohol fields: epidemiology and identification of potential harms; information and training; prevention and early intervention; treatment and other intervention; drug market analysis, and drug policy. We have been very fortunate to have had someone of Richard's calibre leading the Centre. I was pleased to be invited to act in the role of Director, taking up the responsibilities in June 2009.

The Federal Government renewed its core funding of \$8.8 million for a further three years from January 2009 through to December 2011. The government's commitment to sustaining research and evidence-informed approaches in Australia is to be applauded. NDARC would not be able to fulfil its mission without this essential core funding. The federal government funding comprises approximately 20 per cent of the Centre's total funding with the remainder being generated by competitive grants from a variety of sources including the National Health and Medical Research Council (NHMRC), the Australian Research Council, state government departments, charities, and international bodies. We have been extremely successful in the 2009 funding rounds with significant grants set to commence next year, including more than \$3.6 million in NHMRC grants.

Above all our business is to provide the research evidence to support the development of evidence-based drug and alcohol policy and clinical practice. In this we have been outstandingly successful. Not only by the measure of the number of research papers published in Australian and international peer reviewed journals but by the translation of that research. Aside from the National Cannabis Prevention Information Centre (NCPIC) and the Drug Policy Modelling Program (DPMP), there are many other examples which encompass this core aim of the Centre. For example, in 2009 NDARC completed one of the largest follow-up studies conducted anywhere in the world of persons receiving opioid pharmacotherapy. At a population level the program averted 1,111 deaths that would have represented a 29 per cent increase

in the mortality rate. A second example of translation and impact is the publication this year of new national guidelines on managing comorbid posttraumatic stress disorder, which have had an exceptionally positive reception from alcohol and drug services.

This year we have also continued to expand our work and presence in the international arena. We are a collaborating centre of the World Health Organisation and are currently involved in projects spanning several countries including China, Iran, Myanmar, Thailand, Vietnam, Myanmar Malaysia, Singapore, Mongolia, Lao PDR and countries across Europe and North and South America.

In 2009 NDARC academics provided expert comment to numerous media outlets, particularly the ABC, on a range of issues including cocaine; alcohol and young people; alcohol and women; methamphetamine, drug markets, alcohol taxation, and needle syringe programs in prisons. We were very fortunate to have Marion Downey join us in August this year – a highly experienced media and communications expert. The aim of all our media work is to provide factual, scientific information to increase the general public's awareness and knowledge about the issues and potential solutions.

None of the above would have been possible without the dedication of our researchers and they have been recognised for their achievements at all levels. For example, five of our PhD students were chosen for the 2009 Faculty of Medicine Dean's List. Two NDARC researchers won the Dean's Rising Star Award. Many researchers have been successful with new grants, and high impact publications.

The administration team at NDARC has provided outstanding support. The Executive team has demonstrated excellent leadership throughout 2009. In February 2010, I hand over the Acting Director role to Professor Maree Teesson. 2010 will bring new challenges for NDARC. We are looking forward to the commencement of the new NDARC Director and to continuing to produce high quality research across the multiple domains of alcohol and drug issues.

Alison Ritter

Acting Director, NDARC

MANAGEMENT STRUCTURE

EXECUTIVE COMMITTEE

The Executive Committee is the major decision-making body in NDARC, and is responsible for the overall direction and management of the Centre. Meetings are scheduled fortnightly.

Members in 2009 were:

Director NDARC (until 5 June 2009)

Professor Richard Mattick

Acting Director NDARC (from 7 June 2009)

Associate Professor Alison Ritter

Assistant Directors:

Professor Maree Teesson

Professor Jan Copeland

Professor Louisa Degenhardt

Associate Professor Anthony Shakeshaft (until 2 October 2009)

Associate Professor Christopher Doran (from 6 October 2009)

NDARC Executive Officer

Dr Shale Preston

NDARC ADVISORY BOARD

The NDARC Advisory Board met three times during 2009 and there was a fair bit of movement in terms of its members. During the year, Professor Denis Wakefield was the official NDARC Advisory Board representative for the Dean of the Faculty of Medicine. Mr David McGrath and Dr Norman Swan regretfully tendered their resignations; Ms Virginia Hart took up another post (Assistant Secretary, Mental Health and Chronic Disease Division) within the Australian Government Department of Health and Ageing; Ms Hart was replaced by the new Assistant Secretary of the Drug Strategy Branch, Mr Simon Cotterell; Professor Richard Mattick stood down from his role as the Director of NDARC on 5 June 2009; and Associate Professor Alison Ritter, in her role as the Acting Director of NDARC, took on Advisory Board duties from 27 August 2009. Finally, in August, the Advisory Board welcomed two new members: Ms Pru Goward MP and Dr Don Weatherburn. These new members share a wealth of experience and the NDARC Advisory Board is very fortunate to have secured their services.

Members in 2009 were:

The Honourable Kevin Rozzoli, AM, Dip Law

Chair

Professor Denis Wakefield, MBBS (Hons I), MD, DSc, FRACP, FRCPA

Associate Dean (Research),
Faculty of Medicine,
The University of New South Wales

Mr Keith Evans, BA, SRN, RMN, ANZIM

Executive Director,
Drug and Alcohol Services South Australia

Professor Les Field, BSc, PhD, DSc, CChem, FRACI, FAA

Deputy Vice-Chancellor (Research) &
Professor of Chemistry,
The University of New South Wales

Ms Virginia Hart (until 5 March),
BA (Hons), M.Clin Psych, LLB (Hons)

Assistant Secretary,
Drug Strategy Branch,
Population Health Division,
Australian Department of Health and Ageing

Mr Simon Cotterell (from 27 August)

Assistant Secretary,
Drug Strategy Branch,
Population Health Division,
Australian Department of Health and Ageing

Mr David McGrath (until 23 February)

Director,
Mental Health and Drug and Alcohol
Programs,
NSW Department of Health

Dr Norman Swan (until 5 March)
MBChB, FRCP, DCH, MD (Hons)

Host, *The Health Report*, Radio National,
Australian Broadcasting Corporation (ABC)

Professor Richard P Mattick (until 31 August)

BSc, MPsyCh (Clinical), PhD

Director,
National Drug and Alcohol Research Centre

A/Prof. Alison Ritter (from 1 September)

Acting Director,
National Drug and Alcohol Research Centre

Ms Pru Goward (from 27 August)
BA (Psych)

Shadow Minister for Community Services

Shadow Minister for Women

Dr Don Weatherburn (from 27 August)
BA (Hons), PhD, PSM, FASSA

Director, NSW Bureau of Crime Statistics and Research

FINANCE COMMITTEE

This Committee oversees NDARC's financial and administrative areas, and is responsible for creating and monitoring annual budget models and forecasts. The group meets once a month and in 2009 comprised: Professor Richard Mattick (Chair until 4 June 2009); A/Prof. Alison Ritter (Chair from 5 June 2009); A/Prof. Anthony Shakeshaft; Dr Shale Preston; Crisanta Corpus; Lin Chin (until 7 September 2009); and Jackie Du (from 9 November 2009).

OTHER COMMITTEES

The Research Committee was discontinued in 2009 owing to the creation of the Directorates under the Director, Assistant Directors and the Executive Officer.

Other Committees which continued as in previous years were:

- the Library Committee (comprising Professor Shane Darke, Dr Sharlene Kaye, Dr Wendy Swift, Ms Eva Congreve (until 30 June 2009), and Mary Kumvaj (from 1 July 2009);
- the NDARC Employee Assistance Team (NEAT) Committee (comprising Dr Sharlene Kaye, Dr Matthew Dunn, Ms Sarah Larney, Dr Katherine Mills, and A/Prof. Alison Ritter);
- and various Steering Committees for individual projects.

On Wednesday, 2 December 2009 the first Green Team meeting was held at NDARC. The Green Team was formed to promote sustainability and its membership is as follows: Emma Black, Amy Gibson, Jenny Chalmers, Jackie Du, Karina Hickey, Hector Navarro, Dr Shale Preston, and Barbara Toson.

STAFF MEETINGS

Staff meetings are held on the first Thursday of every month and staff members are encouraged to take their turn in chairing the meetings. These meetings provide general information, acknowledge staff achievements, discuss current projects and provide an opportunity for staff to share ideas and raise issues.

FROM THE EXECUTIVE



Prof. Maree Teesson

“

The research group values highly the successful collaboration with clinical services in Australia and internationally.

”

Our research group leads an internationally recognised program of research which aims to increase our understanding of drug and alcohol problems, prevent these where possible and improve treatment responses.

Our research group of 27 includes three Professors (Teesson, Darke, Dolan), four Senior Lecturers (Slade, Mills, McKetin, Ross), six Research Fellows (Newton, Kay Lambkin, Proudfoot, Taplin, Carragher, Sannibale), four PhD students (Mewton, Johnston, Barrett Larney), and 10 researchers. Successes in 2009 included:

- A successful program of research in prevention of alcohol and drug harms through our innovative CLIMATE Schools internet program (Teesson, Newton, Vogl).
- Examining the high rates of alcohol problems among young Australians (Slade, Teesson, Mills, Mewton).
- Leading international research in the area of comorbid mental disorders and substance use disorders (Darke, Teesson) including comorbidity treatment guidelines (Mills, Teesson, Sannibale, Proudfoot).
- Leading international research in the classification of disorders (Slade, Teesson, Mewton, Mills, Carragher).
- Developing new internet-based interventions for alcohol and depression (Frances Kay Lambkin, Teesson).
- Conducting a successful program of research in PTSD (Mills, Teesson, Sannibale and collaborators at Medical University in South Carolina). The work is now an international trial.
- Large clinical trial for social phobia and alcohol problems (Teesson and Sannibale, in collaboration with Macquarie University and Royal Prince Alfred Hospital).
- Research on suicide including developing a better treatment response (Ross, Darke).
- Successful completion of a large amphetamine treatment cohort (McKetin, Ross).
- Evaluating drug treatment clinic for female users in Iran and HIV seroincidence in Myanmar (Dolan, Larney).
- Collaborating with UNSW researchers to develop a vaccine for hepatitis C infection (Dolan).
- New research with women in treatment examining parenting, interventions and child maltreatment (Taplin).



Prof. Louisa Degenhardt

“

NDARC is collecting information on the prevalence, incidence and disability associated with illicit drug use worldwide.

”

The international and strategy Directorate collaborates with a range of international institutions including the World Health Organisation (WHO), the United Nations Office on Drugs and Crime (UNODC), the joint United Nations Program on HIV/AIDS and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA).

Current significant international projects include:

- Secretariat of the Reference Group to the United Nations on HIV and Injecting Drug Use. The Secretariat produces a range of global reviews of evidence. In 2009 it began collecting data and reviewing evidence to produce the world's first systematic global and regional review of the provision of prevention, treatment and care services for injectors living with HIV (Mattick, Mathers, Degenhardt);
 - Global Burden of Disease (GBD): mental disorders and illicit drug use expert group. As part of the 2007 World Health Organisation GBD project, NDARC is collecting information on the prevalence, incidence and disability associated with illicit drug use worldwide to update the 2005 GBD estimates (Degenhardt, Nelson, Bucello);
 - Ongoing collaboration with the World Mental Health Survey Consortium examining data from over 30 countries on drug use and dependence.
- A key focus of the directorate has been its collaboration with the United Nations Office on Crime (UNODC) and the UN Commission on Narcotic Drugs (CND).
- Some significant local projects completed this year include:
- The Suboxone post-marketing surveillance study monitoring the extent of diversion and related harms arising from the injection of medications prescribed for the treatment of opioid dependence. A study of diversion of opioid treatment medications will be submitted in 2010 as Briony Larance's PhD thesis.
 - A review of mortality among 45,000 people receiving opioid substitution therapy in NSW from 1985-2006 (Degenhardt, Randall, Burns and Mattick).
 - A review of the health and psychological consequences of ecstasy use completed for the Department of Health (Degenhardt, Silins, Sindich).



Prof. Jan Copeland

“

The national Cannabis Information and Helpline is taking calls from cannabis users and their families and clinicians.

”

This year has seen the National Cannabis Prevention Information Centre (NCPIC) further develop its service delivery, community information, and workforce development activities.

It now has around 20 staff based at NDARC and project staff located with consortium partners nationally.

The free national Cannabis Information and Helpline (CIH) is taking calls from cannabis users and their friends and families and from clinicians. The website has been very positively received and is now making available a wide range of materials. Our information and clinical resources continue to be very popular with close to 190,000 resources distributed to the health sector, the criminal justice sector and the community sector this year.

NCPIC hosted the first National Cannabis Conference this year and attracted around 300 participants. Morag Millington joined Paul Dillon and Clare Chenoweth in the communications team, working together on various communication campaigns and initiatives, including the cannabis and driving poster.

The Clinical Services and Evaluation team is thriving under the care of Dr Melissa Norberg. The team has been joined this

year by Dr David Allsop who is responsible for the development of the cannabis withdrawal scale. Other new staff include doctoral candidate Ms Tracey Wright who is managing the mail-based intervention study with Karina Hickey; Dr Rob Battisti who is conducting a study into the efficacy of brief interventions for cannabis dependence in collaboration with the Brain and Mind Research Institute; and Dr Jennifer Mackenzie who is working on studies into measurement of cannabis use and withdrawal symptoms.

NCPIC staff provided 44 conference papers and had 12 publications accepted, including a book, a Technical Report and 10 international peer-reviewed publications during this year. The Community and Clinical Training team has also worked extremely hard in 2009 providing 148 workshops.

The Cannabis Clinical Guidelines were completed in mid 2009 – a culmination of more than a decade of research into the screening, assessment, and management of cannabis-related problems. We continued to develop two priority areas: Indigenous communities and workforce/workplace resources.

The following year will see us finalising our preparations for the independent review that will inform the future development of this unique Centre.



A/Prof. Alison Ritter

“

To exclude illicit drug problems from current policy development will be to the detriment of all Australians.

”

The Directorate comprises the Drug Policy Modelling Program (DPMP) and NDARC's national drug trends and monitoring programs: the Illicit Drug Reporting System (IDRS), the Ecstasy and Related Drugs Reporting System (EDRS) and the National Illicit Drug Indicators Project (NIDIP).

DPMP has continued to develop new evidence to inform policy and engage with policy makers to shape better Australian drug policy. The collaboration across the multiple DPMP sites (NDARC, Burnet Institute, ANU, Griffith University and University of Queensland) has been highly productive.

The number of projects within DPMP continues to grow, and space does not permit a full list of all the DPMP work. The NDARC DPMP research team conducted 14 projects in 2009 including work on the economic consequences of various cannabis policy options; public opinion; the media and illicit drug policy in Australia; comparative policy analysis; and studying economic consequences of different types of law enforcement interventions directed towards methamphetamine. The ANU team continue to develop Integration and Implementation Sciences. The Queensland

teams have conducted research examining the impacts of drug law enforcement, and the Burnet team have continued the Melbourne Injecting Drug User Cohort Study (MIX). DPMP has an active PhD program, with 10 current PhD students.

This year DPMP convened the first Illicit Drug Policy Roundtable in Canberra with 27 leaders and experts in drug policy from a wide range of policy domains. There was a resounding view that to exclude illicit drug problems from the current policy development process, with its focus on innovation and commitment to a healthier society, will be to the detriment of all Australians.

NDARC's drug monitoring systems, the IDRS and the EDRS, and NIDIP, under the leadership of Dr Lucy Burns, continued to provide vital information about Australia's drug markets and trends in drug-related harms, enhancing the evidence base for the development of policy responses and interventions.

In 2009 the IDRS teams interviewed more than 900 injecting drug users, providing information on their use patterns, drug markets and related issues. The EDRS interviewed more than 750 regular ecstasy users. Indicator data for both systems included seizures, purity analysis, overdose and treatment data.

FROM THE EXECUTIVE



A/Prof. Anthony Shakeshaft

“

Our research will address the disproportionately high degree of drug and alcohol harm among Indigenous Australians.

”

The primary research focus of our Directorate in 2009 was prevention of alcohol-related harms, assessment of community-based interventions, cost benefit evaluations of drug and alcohol interventions and Indigenous-specific research.

Our team continued to lead the largest randomised community trial aimed at reducing alcohol harms that has ever been conducted internationally – the Alcohol Action in Rural Communities (AARC) project – in collaboration with the University of Newcastle. AARC is funded by the Alcohol Education Research Foundation (AERF).

The primary outcome of AARC in 2009 was the completion of all the intervention strategies that have been implemented over the previous three years. The project has continued to produce publications in the peer-reviewed literature, numerous conference presentations and symposia and supported PhD students towards the completion of their projects. This project will be completed in 2010, during which time the majority of the analyses pertaining to the overall findings of the study will be completed and published. Two PhD students, Courtney Breen and Alys Havard, are currently working on AARC-related theses.

Dr Anton Clifford and I have developed the first Indigenous-specific research group. The development of this team reflects the disproportionately high degree of drug and alcohol harm experienced by Indigenous Australians.

In 2009, the team continued working on integrating evidence-based practice into routine delivery of health services in Aboriginal Community Controlled Health Services in NSW. A project to expand this work to family-based approaches for alcohol misuse was awarded an NHMRC project grant in 2009.

I reduced my hours at NDARC in 2009, following my appointment as Head of the Research Division at the Sax Institute. However I will continue to supervise PhD students and will oversee the completion of the AARC project.

A/Prof Chris Doran was appointed as head of the Directorate in October 2009. He is the chief investigator of the recently completed AERF-funded ACE alcohol project assessing the cost effectiveness of programs to reduce the burden of harm from alcohol misuse. In 2010 he will lead an NHMRC-funded project on the economic evaluation of interventions to reduce the burden of harm from alcohol misuse in Indigenous Australians.



Dr Shale Preston

“

I feel confident that NDARC is well placed administratively to meet the challenges of another decade.

”

2009 was a very productive and pleasing year in terms of enhancing NDARC's central administrative arm.

In March 2009, Evie Alis commenced work as the Executive Assistant for the Director. We were fortunate to secure Evie in this role as Evie possesses a Bachelor of Social and Science and a strong administrative background (having previously worked as the EA to the Managing Director of the Sydney Symphony and the Executive Support Officer/EA to the Dean, Learning and Teaching (Health), at Griffith University.

In May 2009, Michaela Turner commenced work as an Administrative Officer in the Centre. Here again, Michaela has a strong background, having a Bachelor of Arts in Communication, a Master of Landscape Architecture and a working history in university administration. Prior to joining NDARC, Michaela had worked as a Project Officer for three years at the UNSW Rural Clinical School, Coffs Harbour Campus.

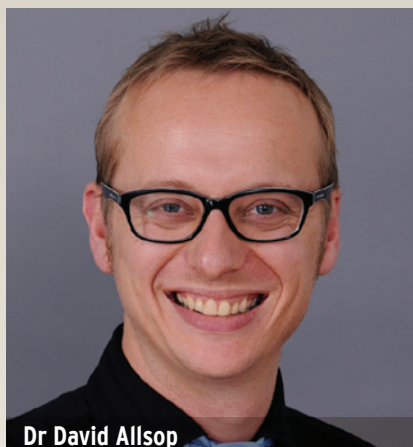
In June 2009, Mary Kumvaj stepped in to fill Eva Congreve's shoes as NDARC's Librarian when Eva went on long service leave for nine months. Mary is a professionally qualified librarian with substantial professional experience in the tertiary, non-government and public sectors.

Marion Downey joined NDARC as the Communications and Media Manager in August 2009. Marion's background is impressive. She spent seven years as Director of Communications for Sydney South West Area Health Service and before that was the Health Writer for the *Sydney Morning Herald*. She wrote extensively on health and policy issues for the *Sydney Morning Herald*, including drug and alcohol, and at SSWAHS handled a number of sensitive and contentious issues around drug and alcohol service delivery.

Finally, in November 2009, Jackie Du commenced work as a Finance Officer at NDARC, supporting our Finance Manager, Crisanta Corpus. Jackie possesses a Masters of Professional Accounting and has wide ranging experience in finance and university financial systems.

As NDARC's Executive Officer, I am delighted with all of the above appointments. With the addition of these new staff members and the existing central administrative team members (Crisanta Corpus, Julie Hodge, Carla Santos and Caroline Santoso) I feel confident that NDARC is well positioned in terms of its administrative functioning as it stands poised to meet the challenges of another decade.

THE YEAR IN REVIEW



Dr David Allsop

Dr David Allsop joined NCPIC in June 2009 as a lecturer to manage a project developing a clinical cannabis withdrawal scale for assessing the stage and severity of cannabis withdrawal in collaboration with Professor Jan Copeland and Dr Melissa Norberg. The withdrawal project is in full swing with some 25 dependent cannabis users currently enrolled or having already completed a carefully observed two week abstinence period from their daily cannabis use.

Dr Allsop has also been working on a meta-analysis project with Dr Sally Rooke of NCPIC, Dr Einar Thorsteinsson of the University of New England, Dr Anne Karpin of Macquarie University, and Professor Copeland investigating the impact of computer-delivered interventions for alcohol and tobacco use. The study found that relatively simple computer-delivered interventions are at least as effective as other forms of treatment. A further grant application to develop an in-house interactive voice response system for carrying out community-based surveys is currently in review.

He has also been working with Dr Shanlin Fu, UTS, and Dr John Lewis, UNSW, in the development of a protocol to assess the effectiveness of saliva tests for measuring THC levels after water pipe and joint smoking.

An NHMRC project grant proposal to carry out a phase II clinical trial of a novel cannabinoid-based medication for alleviating cannabis withdrawal symptoms has been developed in collaboration with NCPIC colleagues and A/Prof. Nick Lintzeris, Professor Iain McGregor, and A/Prof. Adrian Dunlop. If successful, this would represent the first effective adjunct pharmacotherapy for the treatment of cannabis use disorders.



Dr David Bright

Dr Bright joined the Drug Policy Modelling Program at NDARC in 2008. He commenced work on the National Drug Law Enforcement Research Fund (NDLERF) project which examines the relative cost effectiveness of different types of law enforcement interventions directed towards methamphetamine.

This project aims to both detail the methamphetamine supply chains in Australia and to assess the returns on investment for law enforcement. It will provide comparisons of the economic consequences of law enforcement on criminals and criminal networks at each level of the supply chain.

This will be assessed through estimating the burden exerted by law enforcement on the criminal networks: that is, the extent to which law enforcement efforts increase the costs to criminals who manufacture, distribute and supply methamphetamine.

Dr Bright has recently commenced work on research which applies social network analysis to criminal networks involved in the manufacture and distribution of methamphetamine.

The research aims to describe criminal networks (including the roles of individuals involved and the relationships between individuals) and to assist law enforcement to target interventions in ways that can most effectively disable such networks.

Preliminary results were presented at the first Australian Illicit Networks Conference held in December 2009.

Dr Bright's current research includes the operation of illicit drug markets, decision making and behaviour of drug traffickers, and the effectiveness of drug law enforcement.



Dr Lucy Burns

Dr Lucy Burns continued leadership of the national surveillance projects: the Illicit Drug Reporting System (IDRS), Ecstasy and related Drugs Reporting System (EDRS) and National Illicit Drug Indicators Project (NIDP). As part of this work she was also responsible for convening the 2009 Drug Trends Conference. This year the conference focused on how information drawn from our drug monitoring systems can be used to inform and evaluate policies.

Dr Burns also continued to work with external colleagues and Elizabeth Conroy (NDARC) on a number of projects examining substance use and homelessness. One of these, the Michael Project, is the largest longitudinal study of homelessness in Australia; examining a range of outcomes, including substance use and mental health.

She was also successful in securing funding from the Alcohol Education and Rehabilitation Foundation to examine treatment for older Australians who are homeless and have an alcohol use problem.

Dr Burns also continued her work with a range of other organisations to examine drug use in pregnancy. She was primary author on a report for the Intergovernmental Committee on Drugs (IGCD) on Fetal Alcohol Spectrum Disorders in Australia and was invited to the 2009 NIDA forum in Reno, Nevada, to speak on drugs in pregnancy.

She is continuing her research for NSW Health, with colleagues A/Prof. Anthony Shakeshaft and Emma Black, on alcohol use in pregnancy. The research includes triangulating data from the NSW Admitted Patient Data Collection and NSW Midwives Data Collection and identifying the experiences of both pregnant women and health service providers.

THE YEAR IN REVIEW



Dr Natacha Carragher

Dr Natacha Carragher joined NDARC in late 2008 as a Research Fellow focusing on an NHMRC project grant exploring the contributions of epidemiological data to the revision of the extant psychiatric classification system. Under the auspices of this grant, Natacha examined the underlying structure of major depression and posttraumatic stress disorder using a series of sophisticated latent variable modelling techniques. This work was conducted in collaboration with Tim Slade, Maree Teesson, Katherine Mills as well as colleagues from the UNSW School of Psychiatry. The research is novel in that it marks the first attempt to apply latent variable methods to these psychiatric disorders using data from the Australian general population.

Throughout the year, Natacha disseminated the results of this research at several conference presentations and symposia to both national and international audiences. A paper based on the symptom structure of posttraumatic stress was published earlier this year; a number of further papers are currently under review and in preparation and will emerge later this year.

Natacha is also involved in collaborative work with colleagues at the University of Acadia in Canada on a variety of different projects, including the classification of pathological gambling.

Earlier this year, Dr Carragher and colleagues from the University of Ulster published the results of her research into treatment-seeking behaviours for depression in the general population based on a chapter from her PhD thesis.



Dr Jenny Chalmers

In 2009 Dr Jenny Chalmers concluded her work with Alison Ritter on an Australian National Council on Drugs (ANCD) commissioned project to determine whether the availability, accessibility and affordability of Australia's pharmacotherapy programs for the treatment of opioid dependence meet demand, with the publication of two ANCD research papers. As part of the project DPMP built an Australia-wide system dynamics model of the opioid pharmacotherapy treatment system as a tool for investigating the implications of policy reform.

In cooperation with NSW Health Jenny and Alison modified the model so as to explore policy areas of interest to them in their development of a new Opioid Treatment Program Strategic Plan. A report was presented in December.

In collaboration with colleagues from the NSW Bureau of Crime Statistics and Research (BoCSAR) Jenny published a BoCSAR bulletin on the findings of a study to estimate how methamphetamine users would respond to changes in the prices of methamphetamine and heroin, using hypothetical drug purchasing scenarios.

Participants were given a hypothetical fixed drug budget, presented with a range of drug 'pricelists' and asked how much of each drug they would buy. A journal article is under review.

Jenny also has a paper under review with Katrina Grech and Caitlin Hughes designed to increase awareness of the potential of comparative policy evaluation as a tool for drug policy evaluation, provide some guidance for consistency in its application and advocate for its use in federated nations, such as Australia.



Dr Anton Clifford

Dr Anton Clifford continued to work on his NHMRC post-doctoral Fellowship, awarded to conduct alcohol intervention research in Aboriginal communities in rural NSW that experience a disproportionately high burden of alcohol-related harm, relative to non-Indigenous Australians.

He also continued to work closely with Catherine Deans on a project funded by the Department of Health and Ageing to integrate evidence-based alcohol screening and brief intervention in five Aboriginal Community Controlled Health Services in NSW.

Outcomes of this project to date include finalising the analyses of health service level data to measure the success of the project, two successful grant applications to implement a number of complementary interventions, conference presentations and two papers in press for publication.

He was awarded, with A/Prof. Anthony Shakeshaft, A/Prof. Komla Tsey, Ms Miranda Rose and Dr Julaine Allan, an NHMRC grant to investigate the feasibility and effectiveness of a family-based intervention for Indigenous Australians with alcohol dependence.

The intervention which will commence in 2010 recognises the importance of family relationships that have always been vital to the cohesion and wellbeing of Indigenous communities. It will use a number of cognitive behavioural strategies to reduce alcohol consumption among high risk drinkers and to teach family members how to help their relatives to reduce their alcohol consumption and to promote their entry to and engagement with treatment.



Prof. Shane Darke

In 2009, Professor Shane Darke continued his research on the harms associated with illicit drug use. A major study on violence amongst methamphetamine and heroin users was completed and published.

Work continued on the effects of mental illness and substance use on early drop-out, retention rates and successful program completion at We Help Ourselves. Work on aspects of drug overdose also continued.

A major NHMRC funded study on organic brain damage after non-fatal overdose continued, in conjunction with Professor Skye McDonald of the School of Psychology and Dr Sharlene Kaye (NDARC).

A study of the toxicology and organ pathology of fatal heroin and methadone overdose was also conducted, as was a study of oxycodone overdose deaths in NSW. Work with Dr Kaye on the diversion and misuse of stimulant medication for attention deficit hyperactivity disorder (ADHD) among illicit psychostimulant users commenced.

During the second half of 2009, Professor Darke was on sabbatical. He visited and presented to the Institute of Psychiatry in London, and the European Monitoring Centre for Drugs and Drug Addiction in Lisbon. During the sabbatical, he wrote a successful book proposal for Cambridge University Press, "The lifecycle of the opioid user: Typical beginnings, trajectories and outcomes", which he is currently writing for publication in 2011.

He continued his roles as Australasian and Regional Editor of *Addiction* and Editor of *Drug and Alcohol Dependence* and the *Journal of Drug Issues*.



Dr Erol Digiusto

The large proportion of injecting drug users (IDUs) who have chronic hepatitis C experience many barriers to receiving hepatitis C antiviral therapy.

Dr Erol Digiusto moved to NDARC in 2008 to implement and evaluate an intervention designed to address this problem with Professor Richard Mattick and Professor Robert Batey, Julia Purchas, Rowena Friend, and collaborating clinical investigators at nine methadone and buprenorphine maintenance treatment clinics and six hepatitis C clinics around New South Wales.

The main aims of this project are to increase the number of IDUs who undertake hepatitis C diagnostic assessment, who are appropriately referred to antiviral therapy services, and who initiate and complete antiviral therapy.

The intervention involved identifying site-specific service development and shared-care goals at a set of intervention clinics; conducting training sessions and providing relevant clinical reference materials and assessment tools for staff; encouraging new activities and clinical procedures; and distributing a range of educational materials to their clients.

The study will compare the effectiveness of Collaborative Shared Care compared with Usual Care (at control locations).

Recruitment of participants was completed in 2009, and final follow-up data collection will occur in 2010.

Presentations on improving shared care for methadone patients with hepatitis C, and on assessing and managing mental and drug use issues in this group, were made at methadone clinics in regional NSW.



A/Prof. Kate Dolan

In 2009, A/Prof. Kate Dolan continued her very active profile on the international front. Her main project is overseeing the Centre's clinic for female drug users in Tehran, which opened in August 2007. Research from the Centre showed that most women had no previous exposure to drug treatment, even though they had extensive drug using careers.

A/Prof. Dolan also started a new project for the United Nations Office on Drugs and Crime (UNODC) aimed at building capacity in drug research in Myanmar. She will visit Myanmar several times to review the needs of drug researchers and to advise on a sero-incidence study of HIV among IDUs in the Golden Triangle.

She was awarded an Australian National Council on Drugs (ANCD) grant to update their 2004 review of supply, demand and harm reduction in Australian prisons. She continued working locally on a range of studies looking at hepatitis transmission in prisons and on a project to examine the possibility of developing a vaccine for hepatitis C infection. She (and her PhD student, Sarah Larney) have been exploring the long-term impact of methadone treatment on a range of outcomes for IDUs released from NSW prisons.

Kate was the keynote presenter at the first conference on an integrated response to drugs and infections across European criminal justice systems in Krakow, Poland. UNODC Iran has invited A/Prof. Dolan to sit on an expert group on women's research in Iran and she is on the UNODC's expert panel to develop a toolkit for situation and needs assessment in prison settings. She took six months study leave to write a book.

THE YEAR IN REVIEW



A/Prof. Chris Doran

Associate Professor Chris Doran was appointed to the NDARC executive team in late 2009.

A/Prof. Doran is a health economist with extensive experience in the area of priority setting and the identification of cost effective health care interventions to reduce the burden of harm associated with drug and alcohol misuse. He is leading a large multi-state, NHMRC-funded capacity building grant in the area of health economics. Dr Wendy Gong and Ansari Jainullabudeen joined NDARC in July 2009 as part of that capacity building project.

He is the chief investigator on the Alcohol Education Research Foundation (AERF) ACE alcohol project assessing the cost effectiveness of programs to reduce the burden of harm from alcohol misuse. This project has been finalised this year, leading to several local and international publications including the *Lancet*.

This year A/Prof. Doran and Ansari Jainullabudeen completed, with Robyn Room and others, another AERF funded project: the range and magnitude of alcohol's harm to others.

The NHMRC approved funding this year for a project titled Economic evaluation of interventions to reduce the burden of harm from alcohol misuse in Indigenous Australians, on which he is the chief investigator.

Internationally, he is currently working on several philanthropic funded projects in Vietnam, Laos and Singapore, designed to improve the evidence base of health policies.

He is currently supervising three PhD students.



Dr Matthew Dunn

Dr Matthew Dunn, who was promoted to Lecturer in 2009, continued his work investigating issues related to illicit drug use among elite athletes in Australia.

The findings from the first year of this project were released by the federal Minister for Sport, the Hon. Kate Ellis, and received nationwide media attention.

Together with Drs Lucinda Burns and Wendy Swift and Professor Richard Mattick, Matthew received additional funding from the Department of Health and Ageing to widen the scope of this project, the first of its kind in Australia.

Athletes from sports such as rowing, cycling, tennis, baseball, basketball and waterpolo will be surveyed. An initial publication from this project, reporting on athlete opinions of drug testing in sport, was accepted for publication in the *International Journal of Drug Policy*.

In 2009 Dr Dunn published a number of papers arising out of his PhD investigating the influence of drug use, exercise and sexual orientation on body image concerns in men. He also published a paper on the use of drug detection dogs.

Matthew is also conducting a pilot study investigating substance use among university student-athletes, a project which is in collaboration with University of New South Wales Sport and Recreation.

In 2009 Matthew presented his work at conferences such as the Australasian Professional Society on Alcohol and other Drugs (APSAD) conference and the Australian Conference of Science and Medicine in Sport.



Dr Wendy Gong

Dr Wendy Gong was appointed to NDARC as a Research Fellow in mid 2009. Working with Alison Ritter's Drug Policy Modelling Program (DPMP) research team, Wendy is conducting a project funded by the National Drug Law Enforcement Research Fund (NDLERF) to examine the economic consequences of different types of law enforcement interventions directed towards methamphetamine.

This project has two aims: 1) to provide a rich description of the Australian methamphetamine supply chains in order to inform drug law enforcement intervention; and 2) to conduct an economic evaluation of different law enforcement interventions directed at different levels of the market.

The project report will examine drug law enforcement interventions at different levels of supply chains, analyse the market structure and dynamics (e.g., price, purity, and mark-ups), and build an economic model to compare policing costs with impact on the criminal networks which is measured by the replacement costs of seizure activities.

The project will help to develop an evidence-base to assist in deciding how to allocate scarce resources in drug law enforcement investment.

The initial work progress was presented to the Australasian Professional Society on Alcohol and other Drugs (APSAD) conference titled: 'review of economic evaluation methods of law enforcement against drugs'.

Another presentation, 'Understanding the dynamics of Australian methamphetamine markets: making better use of price data', is being prepared for the 4th Annual Conference of the International Society for the Study of Drug Policy in Santa Monica next year.



Dr John Howard

Dr John Howard continued his work with NCPIC, finalising a training package for youth sector workers to enhance their capacity to provide effective interventions for young people experiencing cannabis-use related difficulties. This package is in self-directed and train-the-trainer formats, and John scripted and produced a brief DVD demonstrating motivational enhancement techniques to accompany the package. He provided over 20 face-to-face full day training sessions for those who work with youth, in a variety of roles across metropolitan, rural and remote Australia.

John supervised a Faculty of Medicine Independent Learning Project student who undertook a web-based project on self-managed change, and began the development of a self-managed change resource for young people with complex and multiple needs. He continued supervision of PhD candidate Melanie Simpson and with her completed an evaluation of a youth cannabis clinic and a number of conference papers.

Working with Hammad Ali and Lisa Robins at NDARC, John completed a review of adolescent substance use and responses for WHO's Western Pacific Regional Office, and began a two year project funded by AIDSfunds, Netherlands, with the Asian Harm Reduction Network.

For this project, he is working with Sarah Larney on increasing access to and developing youth-friendly harm reduction services in Nepal, China and Thailand which involves development and research activities within each country.

He continues to work with Amanda Roxburgh and others on an ACON project on comorbidity, amphetamine-type stimulants (ATS) use and same-sex attracted people.



Dr Caitlin Hughes

Dr Caitlin Hughes continued to work for the Drug Policy Modelling Program on a range of collaborative projects including identifying alternative policing responses for responding to MDMA users (with Alison Ritter from DPMP and Fiona Christian and Patricia Ward from NSW Police) and building a Queensland Cannabis Diversion Model (with Queensland Police and Queensland Health).

In collaboration with Michael Lodge and Alison Ritter, she completed an analysis of drug policy coordination which led to a report titled *Coordination of Australian Drug Policy: A Governance Perspective*. This involved the development and administration of a survey designed to test compliance of the National Drug Strategy advisory structures and processes with good governance principles. The survey was administered to key stakeholders involved in the advisory structures.

In collaboration with Jenny Chalmers and Katrina Grech, Caitlin identified methods for undertaking high quality inter-state comparative drug policy evaluation in Australia.

In July 2009 she commenced a new Commonwealth Department of Health and Ageing funded study. The study is the first of its kind to examine the impacts of Australian media reporting on youth attitudes to illicit drugs. It is being conducted with Kari Lancaster, Bridget Spicer, Francis Matthew-Simmons, Michael Lodge and Paul Dillon. As part of the study, patterns and trends in print media reporting are being analysed from 2003-2008, and focus groups and a large nationwide survey are being conducted with Australian youth aged 16-24. The study is due for completion in June 2010.



Dr Delyse Hutchinson

Dr Delyse Hutchinson is a Postdoctoral Research Fellow at the Centre. In 2009 she managed a pilot study of 70 families examining the impact of parental substance use during pregnancy on infant development and family functioning.

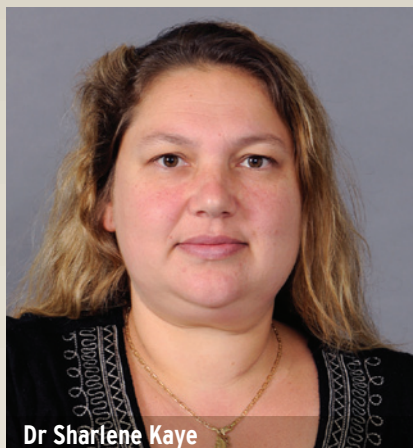
Findings from the pilot study were presented at Royal Prince Alfred Hospital, the Langton Centre 'Meeting of the Minds' seminar series, and at the Australasian Professional Society of Alcohol and Other Drugs Conference in Darwin.

NHMRC Project Grant funding was awarded to conduct the project on a large scale in NSW, and with the National Drug Research Institute in WA. Dr Hutchinson will manage larger scale recruitment and assessment of 2,000 families, due to commence in mid 2010. Results will directly inform health policy on the use of alcohol, tobacco and other substances in pregnancy.

Dr Hutchinson is also scientific co-director of the Cannabis Cohort Research Consortium (CCRC), which aims to examine priority issues on the causes and consequences of cannabis use through secondary data analysis of existing national and international cohorts.

In 2009, a pilot study was completed which demonstrated evidence for the feasibility of combining data from multiple large cohorts. The study involved the Christchurch Health and Development Study (CHDS), the Mater University Study of Pregnancy (MUSP) and the Victorian Adolescent Health Cohort Study and assessed the associations between early cannabis use and later educational outcomes. The Consortium's work was presented at the ARACY Conference, 'Making Prevention Work' in Melbourne, and the National Cannabis Conference in Sydney.

THE YEAR IN REVIEW



Dr Sharlene Kaye

In 2009, Dr Sharlene Kaye continued her work with Professor Shane Darke investigating the diversion and misuse of stimulant medication for attention deficit hyperactivity disorder (ADHD) among illicit psychostimulant users.

She is a member of the International Collaboration on ADHD and Substance Abuse (ICASA) and presented at their annual meeting on the research protocol for an Australian study, commencing in 2010, on the prevalence of ADHD among people with substance use disorders.

Dr Kaye and Professor Louisa Degenhardt are collaborating with Professor Steve Allsop (National Drug Research Institute) and Professor David Hay (School of Psychology and Speech Pathology) on a Curtin University funded study of ADHD among people entering treatment for drug or alcohol dependence.

Dr Kaye has also continued coordinating a study of organic brain damage after non-fatal overdose, led by Professor Shane Darke and Professor Skye McDonald (School of Psychology) and has continued in her role as Assistant Editor for *Addiction*.

Dr Kaye has been the co-author of two significant monographs published this year: 'Cardiovascular disease risk factors and symptoms among regular psychostimulant users' (NDARC) and 'Comparative rates of violent crime among methamphetamine and opioid users: Victimisation and offending' (NDLERF).

She was chief investigator of the most comprehensive large-scale examination of MDMA-related mortality to date, reviewing the coronial and toxicology reports of 82 deaths over five years where MDMA (or ecstasy) was identified as a cause of death.



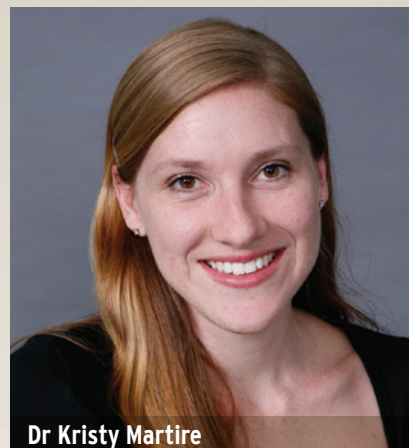
Dr Frances Kay-Lambkin

Dr Frances Kay-Lambkin continued her focus on developing and evaluating internet-based treatments, with active participation in a range of clinical research projects for people with depression (and their carers), substance use problems, and unhealthy lifestyles.

Frances commenced a dissemination trial of a computer-based treatment for depression and substance use comorbidity with a Drug and Alcohol Service on the Central Coast in NSW. This project has attracted four postgraduate students in Clinical Psychology, who will use the results for their theses in 2010. This year saw the first publication of the SHADE project (Self-Help for Alcohol/other drug use and Depression) appear in *Addiction*, for which a commentary was commissioned by the journal, reporting, "We believe this is an important contribution to the field, as there is a need to develop and test procedures that can fit in well with existing health-care structures." Frances signed two licensing agreements with Cobalt Therapeutics (USA) and A4e Employment (Australia) to commercialise SHADE in the USA and the employment sector in New South Wales. SHADE was recognised at the 2009 National Drug and Alcohol Industry Awards for research excellence.

Work continued on the Healthy Lifestyles randomised controlled trial, which will provide free psychological treatment to 300 people with psychosis across NSW and Victoria. This trial was recognised at the NSW Mental Health Matters awards for excellence in research and evaluation.

Frances's standing as a researcher was also recognised in 2009, with the Australian Professional Society for Alcohol and other Drugs (APSAD) Early Career Award for Excellence in Science and Research and the UNSW Dean's Rising Star Award.



Dr Kristy Martire

Dr Kristy Martire joined NDARC in 2008 as a Research Fellow. Since that time she has produced several reports describing the participants and outcomes associated with a court diversion initiative for offenders with a history of substance abuse: the Magistrates Early Referral Into Treatment Program (MERIT). Together with Sarah Larney and Tim McSweeney, three research bulletins and two annual reports have been produced relating to this program.

Kristy also completed two projects, the first evaluating a prison-based reintegration service (the Connections Project), the second assessing the magnitude and impact of unpaid financial sanctions on the rehabilitation experiences of offenders with Sandra Sunjic from Justice Health, Libby Topp from the National Centre in HIV Epidemiology and Clinical Research, and Devon Indig from the Centre for Health Research in Criminal Justice.

The results of this research indicate that almost all offenders surveyed owed money in outstanding fines and court costs, and that on average these sums would take several years to repay and posed a significant barrier to successful community reintegration.

Also related to the reintegration of prisoners, Kristy had one letter to the editor published in the *Australian Medical Journal* and one manuscript published with Sarah Larney providing the first credible estimates of the number of prison separations occurring in Australia each year. Kristy is continuing work on reintegration issues with Dr Diane Sivasubramaniam from the University of Toronto, Canada, focusing specifically on the impact of minor drug convictions on employment prospects.



Prof. Richard Mattick

Professor Richard Mattick stepped down as Director of NDARC in June after eight years but continues to lead a number of major research programs at the Centre.

Professor Mattick was co-editor with Robert Ali and Nicholas Lintzeris of *Pharmacotherapies for the Treatment of Opioid Dependence* which was published this year. The book contained contributions and chapters from over 40 experts in the field, many of whom are at NDARC.

He was lead author of a Cochrane Review of research evidence on the effects of methadone maintenance treatment (MMT) compared with treatments that did not involve opioid replacement therapy (Mattick, Breen, Kimber and Davoli).

He is coordinating investigator, with Dr Delyse Hutchinson, of the Cannabis Cohort Research Consortium. A major successful outcome of the Consortium in 2009 was the harmonisation of data from three separate cohort studies to determine linkages between early cannabis use and educational outcomes (Hutchinson and Silins).

Major new grants awarded this year include a \$1.9 million NHMRC grant to study the impact of parental alcohol and other drug use on infant development from the prenatal period through to the early years of life (Mattick, Hutchinson, Burns, Swift et al.).

Professor Mattick continued his active participation in international and national drug and alcohol organisations and advisory committees including the Australian Delegation to the UN Commission on Narcotic Drugs (CND); NSW Health Expert Advisory Group to the Minister of Health; the Australian National Council on Drugs; and the Alcohol Beverages Advertising Code Adjudication Panel.



Dr Rebecca McKetin

Dr Rebecca McKetin continues to lead the Methamphetamine Treatment Evaluation Study (MATES). MATES is a prospective longitudinal cohort study of 501 dependent methamphetamine users which is being conducted in collaboration with researchers from around Australia.

The results from MATES have shown that our existing drug treatment services can substantially reduce methamphetamine use and related harms. Continuation of this cohort study has been funded by the Australian Government Department of Health and Ageing, and we will soon have data on outcomes three years after entry to drug treatment.

Dr McKetin has continued her involvement with the evaluation of the NSW Health Stimulant Treatment Programs, which are running through the Hunter New England Area Health Service and St Vincent's Hospital in Sydney.

Her interest in methamphetamine use and mental health has led to collaborations with researchers at the University of Cape Town, where methamphetamine use among adolescents has become a concern, and her participation in an international consortium of researchers examining methamphetamine psychosis.

Her other recent activities include collaborating with Professor Jan Copeland and Dr Melissa Norberg on developing brief interventions for ecstasy users, and leading a study on understanding ecstasy use trends in Australia using pseudo-cohort analysis with NDARC colleagues Drs Jennifer Chalmers, Lucy Burns and Laura Vogl.



Dr Katherine Mills

Dr Katherine Mills continued work on her landmark NHMRC-funded randomised controlled trial which examines an integrated intervention for PTSD and substance use disorders - Concurrent Treatment with Prolonged Exposure (COPE). She and Professor Teesson visited collaborators at the Medical University of South Carolina to discuss future innovative research that may be conducted in this area.

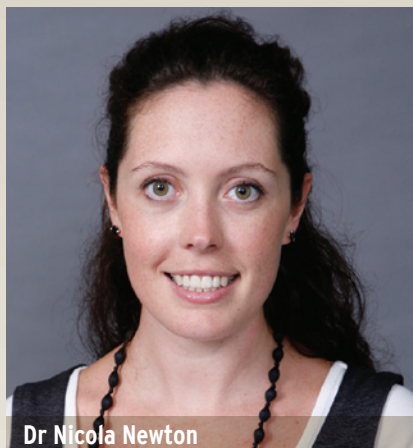
Dr Mills released, and began the national dissemination of, the Australian Government Department of Health and Ageing funded 'Guidelines on the management of co-occurring alcohol and other drug and mental health conditions in alcohol and other drug treatment settings.'

She received a number of honours this year including an Early Career Award from the US College on Problems of Drug Dependence, a commendation for the NDARC Ian Webster Achievement Award, and an NHMRC Career Development Award to commence in 2010.

She successfully applied for NDARC to host Associate Professor Sudie Back, from the Medical University of South Carolina (MUSC), as a visiting Fulbright Scholar. Dr Back is expected to take up her scholarship in mid- 2010 when she will work with Dr Mills in finalising the analysis of the COPE trial. Her colleagues at MUSC have applied for funding from the US Department of Veterans Affairs to trial the COPE treatment (being evaluated by Dr Mills) in returned veterans from the Iraq and Afghan wars who are suffering from PTSD and substance use disorders.

Dr Mills supervised two PhD students: Emma Barrett, researching aggression and violent crime among substance users with PTSD (first supervisor); and Francis Matthew-Simmons (second supervisor).

THE YEAR IN REVIEW



Dr Nicola Newton

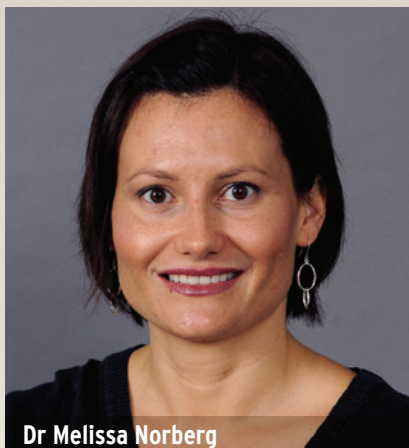
In 2009 Nicola Newton was awarded her PhD which she completed at NDARC and was appointed to the position of Associate Lecturer.

She continued to work in collaboration with Professor Maree Teesson and Dr Laura Vogl on a number of research projects aimed at preventing and minimising alcohol and drug use in adolescents. This work is known as the CLIMATE Schools series for drug prevention and involves developing and evaluating universal school-based drug prevention programs that are facilitated by the internet. During 2009, Vogl, Teesson and Newton were successful in obtaining a further grant from DOHA to develop and evaluate a new CLIMATE Schools program for the prevention of ecstasy use in Year 10 students.

During the year Dr Newton presented the findings of the CLIMATE Schools research at various national and international meetings including the College on Problems of Drug Dependence conference in Reno, US, and the UK Drug Education Forum meeting in London, UK.

In December 2009, Dr Newton was awarded a UNSW Vice-Chancellor's Post-Doctoral Fellowship commencing in 2010. This prestigious award provides a salary and research support funds for a period of three years.

Her post-doctoral research will involve developing and evaluating a comprehensive model for substance use prevention that will combine effective universal and indicated approaches to target both low- and high-risk students. This will be carried out as a collaborative effort between NDARC and the Addictions Department at Kings College London where Dr Newton holds an Honorary Research Fellowship.



Dr Melissa Norberg

Dr Melissa Norberg is the National Clinical Services and Evaluation Manager at NCPIC. During her first year with NCPIC, she and her team were involved with developing and testing alternative methods for delivering treatment for cannabis use disorders. Her team examined the feasibility and acceptability of delivering treatment through the post, the telephone, and the internet.

In addition, Dr Norberg adapted the previously successful Adolescent Cannabis Check-Up intervention to fit young people with co-occurring mental health issues. Examination of this brief intervention continues to be conducted at the Brain and Mind Research Institute.

Outside of treatment research, Dr Norberg was involved in the development and evaluation of two cannabis assessment measures: a cannabis withdrawal scale and a cannabis use interview. Along with fellow NDARC colleagues, Professor Jan Copeland and Dr Rebecca McKetin, she successfully secured NHMRC funding to examine the efficacy of a brief intervention for ecstasy use.

Importantly, this trial will examine if adherence to motivational interviewing principles is responsible for producing reductions in ecstasy use.

Lastly, Dr Norberg was involved in comorbidity research. She developed and tested an integrated intervention for co-occurring panic disorder and alcohol dependence and continued her examination into the mechanisms underlying social anxiety disorder and alcohol use.

In recognition of her work, Dr Norberg was awarded a Dean's Rising Star Award from the UNSW Faculty of Medicine.



Dr Heather Proudfoot

During 2009, Dr Heather Proudfoot was employed as a part-time Research Fellow in various fields of endeavour within the Centre. In collaboration with Maree Teesson, she published an article on the impact of alcohol disorders on GP workload in Australia, using data from her PhD research. This research used data from the first Australian National Survey of Mental Health and Wellbeing (NSMHWB).

She has been investigating replication of this and other research on service usage, using data from the second NSMHWB which was conducted in 2007.

In collaboration with Dr Laura Vogl, Dr Wendy Swift, Professor Jan Copeland and Dr Greg Martin, she developed and validated a short scale to assess cannabis problems in young people - Cannabis Problems Questionnaire for Adolescents, Short form (CPQ-A-S).

Data for this study came from surveys carried out by Dr Laura Vogl and colleagues in the CLIMATE study, and data from prior research by Dr Greg Martin and Professor Jan Copeland on a longer version of the scale (CPQ-A). The research on the CPQ-A-S was published in 2010, and a copy of the scale is now available on the NCPIC website.

Dr Proudfoot attended the Drug and Alcohol Nurses Australasia Conference in Brisbane in June 2010, to present the new 'Guidelines on the Management of Co-occurring Mental Health Conditions in Alcohol and Other Drug Treatment Settings'. She was part of the team led by Dr Katherine Mills that developed these guidelines in 2008.

In 2009 she also conducted broad-scale literature reviews for NDARC publications used to publicise facts about drug and alcohol use, including prevalence of usage, drug effects, harms and effective treatments.



Dr Joanne Ross

In 2009, Dr Joanne Ross and colleagues (Professor Shane Darke, Erin Kelly and Kate Hetherington) conducted a comprehensive study of suicide risk assessment practices in residential drug and alcohol rehabilitation programs across Australia. The study sought to identify gaps in current practice, and to highlight opportunities for assisting staff in managing suicide risk.

Outcomes of the study to date include a technical report which is currently under review by the Australian Government Department of Health and Ageing.

Stage 2, under review, will produce three important resources to assist staff in drug and alcohol services in conducting suicide risk assessments. Firstly, a suicide policies and procedures pro-forma (for use by managers) to help guide the process of creating supportive links with mental health services, and upon which suicide risk assessment guidelines can be established; secondly, an acute suicide risk screener to help guide and document acute risk assessments; and thirdly, a suicide risk formulation template. Findings from Stage 1 of the project will be presented at the 13th European Symposium on Suicide and Suicidal Behaviour in 2010.

Dr Ross also worked on an NDLERF study, directed by Professor Shane Darke, which examined the rates of violent crime among methamphetamine and heroin users. This study was completed in 2009, and has produced three publications to date.

Dr Ross continues to be an investigator on a three year follow-up of the Methamphetamine Treatment Evaluation Study (MATES) cohort. She also completed a Masters of Clinical Psychology in December 2009.



Dr Claudia Sannibale

During 2009, Dr Sannibale and her team (Dr Kylie Sutherland, Kirsty Taylor, Delphine Bostock Matusko, Marie O'Leary and Alicia Visser) and co-investigators (Professor Maree Teesson, Dr Katherine Mills, Professor Mark Creamer and Professor Thiagarajan Sitharthan) have now completed the recruitment and treatment phase of their randomised controlled trial: 'integrating treatment for alcohol use problems and comorbid PTSD'.

Overall, there were 184 referrals to this multi-site study and 154 telephone assessments. Sixty-two of the 90 eligible referrals were recruited to the study and randomised to receive either integrated treatment for PTSD and alcohol use disorder or treatment for alcohol use disorder alone.

Study participants received three months of manual guided and supervised cognitive behaviour therapy. The study has achieved high rates of treatment retention and post-treatment follow-up. By the end of December 2009, 87 per cent of the sample had been re-assessed at least once post-treatment, and 71 per cent twice.

Early study results of changes achieved during treatment, which were presented at the NDARC Annual Symposium and at the Australian Psychological Society national conference in Darwin, revealed significant reductions in PTSD symptoms and mean number of drinks per week in both treatment groups.

Dr Sannibale is a chief investigator on several treatment trials, including a 'Randomised controlled trial of treatment for alcohol use disorders and social phobia' and 'The efficacy of an intervention for PTSD among illicit drug users' which is approaching completion.



Dr Tim Slade

In 2009, Dr Tim Slade continued his role as a Senior Research Fellow providing biostatistical advice to staff and students at NDARC.

He worked closely on a number of projects, most notably the Alcohol Action in Rural Communities (AARC) project with Courtney Breen and A/Prof. Anthony Shakeshaft. This work has examined the alcohol-related crime outcomes with a particular focus on assessing change over time through the application of linear mixed models.

With the release of the data from the 2007 National Survey of Mental Health and Wellbeing he has been involved in a number of collaborative projects which have used this data to answer research questions on the epidemiology of mental and substance use disorders. The initial results of this survey were released in a series of papers published in the *Australian and New Zealand Journal of Psychiatry* in mid 2009.

Dr Slade also continued to supervise the NDARC arm of a large multi-centre NHMRC project grant examining the contributions of epidemiological data to the revision of psychiatric and substance use classification systems.

This project has resulted in a number of interesting papers, including a paper looking at the validity of the current DSM-IV thresholds for alcohol abuse and alcohol dependence (co-authored with Rachel Grove and Orla McBride), a paper exploring theoretical and observed sub-types of cannabis abuse and dependence (co-authored with Orla McBride and Professor Maree Teesson) and a paper demonstrating that the cannabis abuse criterion of 'hazardous use' does not perform the same in young adults as it does in older adults.

THE YEAR IN REVIEW



Dr Wendy Swift

Dr Wendy Swift, who is employed part-time as a Senior Lecturer, continued her focus on cannabis. During the year she continued to write papers arising from a recently completed collaborative project with the Centre for Adolescent Health, involving secondary analyses of cannabis use in the Victorian Adolescent Health Cohort Study. To date, this research has produced six papers (three published) and a future collaboration is planned examining alcohol use in this cohort.

Dr Swift in 2009 continued to work on developing earlier pilot work on cannabis potency (strength) and contamination, with funding from the NCPIC to conduct a demonstration project study analysing cannabis potency and the presence of potential contaminants in Australian cannabis seizures.

Due to state drug laws, negotiations regarding access to seizures have been complicated, but the possibility of accessing NSW Police seizures is currently being pursued. She presented a keynote address on this work at the First National Cannabis Conference in Sydney.

She continued her collaboration on a variety of studies, including an ARC Discovery Grant estimating the current societal costs related to cannabis and the economic costs and benefits of alternate policy options, a study examining barriers and facilitators to treatment seeking among cannabis users, and research examining attitudes towards, knowledge and prevalence of illicit drug use among professional athletes.

This latter project received extra funding for an extension mid-year from the Australian Government Department of Health and Ageing.



Dr Stephanie Taplin

Dr Stephanie Taplin continued in the second year of her three-year post-doctoral research fellowship funded by the NSW Department of Community Services (DOCS) and the University of NSW.

She is working with Professor Richard Mattick on a study of child protection and mothers in substance abuse treatment, a study which aims to improve our understanding of parental substance misuse, its impact on children and the interventions that may improve outcomes for this population.

The first half of 2009 was predominantly taken up with finalising the research design and recruiting NSW Opioid Treatment Program (OTP) treatment agencies into the study.

The second half of the year was largely spent interviewing women participants; that is, women on an OTP in the Sydney area who had children under 16 years of age. Women were generally keen to participate in the study with 126 interviews being completed by end 2009.

A great deal of qualitative and quantitative data are being collected from both the women and administrative data sources, covering participants' substance use and treatment histories, their demographic characteristics, children and parenting, and any parenting-related interventions, particularly those from child protection services.

Throughout 2009, Stephanie has also been actively involved in discussions about the current state of knowledge of parental substance use and its impacts on children via presentations at a number of conferences and preparation of submissions to state and Commonwealth governments.



Dr Laura Vogl

Dr Laura Vogl continued to work on her ARC Postdoctoral Fellowship, awarded for a project on fear, sadness and alcohol use in adolescents. The aims of this project are to investigate the impact of anxiety and depression on prevention outcomes. Laura has also continued to conduct research on the adolescent prevention series, CLIMATE Schools. In collaboration with Professor Maree Teesson and Dr Nicola Newton, Laura has worked on the development and evaluation of a number of computer-based interactive programs for adolescents aimed at preventing or minimising drug abuse.

During 2009, Laura completed the evaluation of the most recent CLIMATE Schools module which aimed at preventing cannabis and psychostimulant use. The evaluation demonstrated that this program was successful in achieving these goals.

On the strength of the CLIMATE programs, Dr Vogl was approached by the Department of Juvenile Justice to develop a treatment program for drug use and criminal behaviour for young offenders and their families. Dr Vogl has been developing this program in collaboration with Anna Roberts. In collaboration with Dr Rebecca McKetin, Dr Jenny Chalmers and Dr Lucy Burns, Laura has also been investigating the differential gender effects on the uptake of ecstasy use in young people.

A major highlight of 2009 was the receipt of an ARC grant to investigate the impact of parental supply on adolescent alcohol use. This work will build on a review conducted for the Australian Government on the impact of parental supply on adolescent alcohol use which Laura completed in collaboration with Catherine Deans, Professor Maree Teesson, Dr Delyse Hutchinson and Paul Dillon. The ARC grant will commence in 2010.

STATISTICS

STAFFING

As at 31 December 2009, NDARC employed 122 staff. This represents a 15% increase in staff from the same time the previous year. The above figure includes full-time and part-time academic staff, research staff and support staff. In addition, NDARC had 11 conjoint appointments. Casual staff and visiting academics have not been included in the count. A full list of 2009 staff is given in Appendix A.

On a sad note, one of our key Senior Research Officers, Jennifer McLaren, died after a long illness and many NDARC staff (both current and former) attended her funeral at the Eastern Suburbs Crematorium on Monday, 12 October 2009. Jennifer is sadly missed. She was a very popular person, a highly skilled researcher and a valued member of the NDARC team. The Executive Committee agreed to name a research award in Jennifer's honour.

Towards the close of 2009, the Dean advertised widely (within Australia and overseas) for a new Director for NDARC and it was anticipated that interviews would be held early in 2010.

In December 2009, NDARC's Executive Officer, Dr Shale Preston, was awarded the UNSW Staff Excellence Award for Excellence in Leadership and People Management. This prestigious award recognises exceptional leadership and people management that has

resulted in enhanced performance of a group or a team.

FUNDING

From 1 January 2009, funding from the Australian Government Dept of Health and Ageing is based on calendar years, rather than financial years.

The second change for the new contracts is called a disaggregated multi-schedule agreement, which means that there are no variations in the funding agreement; rather, the costs associated with each new schedule in the disaggregated one are not added to the core-funding schedule, therefore simplifying budget analysis and sign-off procedure from the Department, thus enabling NDARC to more effectively isolate each project from core funding.

NDARC also received funds from Commonwealth Government granting agencies, including the NHMRC, ARC and NDLRF; from NSW state government departments including NSW Health, DOCS, Bureau of Crime Statistics, RTA and Juvenile Justice; from charities, foundations and professional organisations and from international bodies, such as the United Nations, World Health Organisation and the USA National Institutes of Health. Expenditure of \$14.6 million was incurred during the 2009 calendar year, which includes core funding, research grants and fellowships awarded to NDARC.

DISSEMINATION

Dissemination of NDARC's research and publications to a broad audience, including the drug and alcohol sector, government policy makers, the general public, the media, the academic community and NGOs, is central to our strategic direction.

The four major components of our communications strategy are: media relations; publications such as CentreLines, the Annual Report and fact sheets; the website; and educational meetings, the pinnacle of which is the Annual Symposium.

The Communications and Media Manager position was vacant until late August when Marion Downey was appointed. She initially focussed upon re-establishing strong media relationships and rebuilding the NDARC brand in the wider community. Seven media releases were issued in the last quarter of the year. A release on preliminary findings of the Alcohol Action in Rural Communities (AARC) project was followed up by Australian Associated Press (AAP), the ABC, Channel 7 and 2UE and syndicated to over 90 media outlets featuring comments by A/Prof. Anthony Shakeshaft. A release on the findings of the Illicit Drugs Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (EDRS) was reported nationally and Chief Investigator Dr Lucy Burns was interviewed by media outlets including ABC's PM program, *The Australian* and AAP who syndicated the story widely.

The *Weekend Australian* ran a feature on a *Lancet* review of the health effects of cannabis use, published by NDARC's Professor Louisa Degenhardt and Professor Wayne Hall (University of Queensland).

Expert comment was sought from numerous senior NDARC staff on topics including alcohol, women and children, the economic burden of alcohol, methamphetamine use, ecstasy use and drug and alcohol policy. Increasing the number of senior staff who engage with the media has successfully communicated the breadth and depth of NDARC research to a broad audience.

Key goals of 2010 will be to further establish our profile, redevelop the website, and change the content of the Annual Symposium to increase the number of external delegates.

CORE FUNDING COMPONENT	2009
Baseline Administration	\$811,700
Baseline Materials	\$230,000
Baseline Research Capacity	\$1,301,525
PhD Scholarships	\$50,000
Illicit Drug Reporting System	\$445,600
TOTAL CORE FUNDING	\$2,838,825

SCHEDULE	DESCRIPTION	2009
5	Climate Schools Ecstasy Module	\$142,600
6	Injecting Drug Users Interview Component (IDRS)	\$291,388
7	Ecstasy and Related Drugs Reporting System (EDRS)	\$663,692
8	Brief Intervention - The Ecstasy Check-up	\$179,746
9	Redevelopment of On Thin Ice: A User's Guide	\$49,995
10	Evaluation Outcomes for Methamphetamines (MATES)	\$119,091
11	Illicit Drugs and the Media	\$133,773
12	Ecstasy Use Among Young Women in Australia	\$43,636
TOTAL CORE FUNDING FOR SCHEDULES 5 TO 12		\$1,623,921

POSTGRADUATE PROGRAM

NDARC had 27 postgraduate students enrolled during 2009. Congratulations to Dr Nicola Newton and Dr James Shearer who were awarded their doctorates in August 2009 and to Dr Amy Gibson and Dr Devon Indig who were awarded their doctorates in December 2009. Also, in December 2009, Dr Nicola Newton received word that she had been awarded a UNSW Vice-Chancellor's Post-doctoral Fellowship commencing in 2010. This prestigious award provides a salary and research support funds for a period of three years.

In Semester 2, 2009 we were pleased to welcome an international PhD student, Ms Dam Anh Tran, to NDARC. Ms Tran from Vietnam is the recipient of a prestigious AusAID Australian Leadership Award Scholarship (ALAS). She joins an elite group of scholars who have been identified as having the capacity to contribute to the future development of their home country and the Asia-Pacific region. Ms Tran's research area is: Accessibility to anti retroviral (ARV) treatment in Vietnam.

In 2009, no less than five of our PhD students were presented with Dean's List Awards:

- Courtney Breen
- Amy Gibson
- Alys Havard
- Sarah Larney
- Louise Mewton.

Acknowledgement on the Dean's List is the highest award made by the UNSW Faculty of Medicine to any student and is intended to be awarded to students who have made outstanding contributions in their respective years.

A number of NDARC postgraduate students were selected to give presentations at the annual School of Public Health and Community Medicine (SPHCM) Postgraduate Research Student Conference on 23 November 2009. Dam Anh Tran, Alys Havard and Amy Johnston gave oral presentations while Emma Barrett, Peter Gates, Amy Gibson, Briony Larence, Frances Matthew-Simmons, Paul Nelson, Fiona Shand and Edmund Silins gave poster presentations. Emma Barrett was given an Honourable Mention for her poster presentation which was entitled 'From victim to victimiser: Violent crime among substance users with PTSD'.

NDARC's postgraduate students were actively involved in national and international conferences (listed in Appendix G) in 2009. Of note, Emma Barrett (the recipient of the 2008 annual NDARC International Travel Assistance Scheme Award) attended The College on Problems of Drug Dependence Conference in Reno, Nevada, USA from 20 June to 25 June 2009. At the conference Emma presented her PhD research on criminality among substance users with PTSD.

Full details of the 2009 postgraduate students, their supervisors and thesis titles, are listed in Appendix C.

NDARC has a very active postgraduate program, offering both PhD and Masters by Research degrees in a wide variety of topic areas, depending on student background and interest. Students are enrolled through the SPHCM but supervised through NDARC. A number of postgraduate scholarships are funded by the Centre, and advertised periodically when they are available.

Prospective students are also encouraged to apply for NHMRC scholarships or Australian Postgraduate Awards (APAs), which are offered by the Australian Government.

Examples of recent PhD topics include:

- Aggression and violent crime among substance users with posttraumatic stress disorder.
- Assessing the social, health and economic aspects of alcohol in Australia.
- The importance of child maltreatment as a risk factor for mental disorder among opioid-dependent persons.
- The cannabis information and helpline: evaluation and randomised controlled trial.
- Alcohol-related emergency department presentations in rural NSW.
- Suicidality in the general population.
- Opioid substitution treatment in prisons and post-release.
- The impact of public opinion on illicit drug policy.
- A comparative analysis of drug court processes and outcomes in Sydney and London.
- Mental disorders in young people: evidence from the 2nd Australian National Survey of Mental health and Wellbeing.
- Assessing the economic consequences of cannabis policy options.
- Patterns of substance abuse and mental health comorbidity in a heroin dependent group.

OUR SUCCESSFUL DEAN'S LIST STUDENTS



Courtney Breen



Amy Gibson



Alys Havard



Sarah Larney



Louise Mewton

CURRENT PROJECTS

EPIDEMIOLOGY

National Illicit Drug Indicators Project (NIDIP)

NDARC Staff: Dr Lucy Burns and Ms Amanda Roxburgh

Aims: The aims of the National Illicit Drug Indicators Project (NIDIP) are to provide epidemiological data on trends over time in drug-related harms, to complement other Australian monitoring systems such as the Illicit Drug Reporting System (IDRS) and the Ecstasy and related Drugs Reporting System (EDRS), and to improve the understanding of, and systematically track changes in, drug-related harms for both illicit and prescription drugs.

Design and Method: To date, NIDIP has identified a comprehensive range of data sources, and produced reviews of drug-related data indicators at a national level as well as within New South Wales. These indicators include: information on population patterns of drug use from national surveys, data on deaths due to drug overdoses, drug-related morbidity and drug treatment data, indicators of drug purity and seizures, and drug-related crime data. Analyses of these indicators are published on a regular basis. The project currently publishes bulletins on drug-related deaths and drug-related hospital presentations on an annual basis on the NDARC website. These bulletins, along with reports and peer-reviewed journal articles, aim to provide as comprehensive an overview as possible of trends in drug use and related harms in Australia over time.

Benefits: NIDIP was established with the recognition that there was a greater need for the regular dissemination of trends in the epidemiology of drug-related harms in Australia. It was also established to provide comparable monitoring at an international level as there is increasing recognition among international organisations and countries of the need for evidence-based decision making in order to respond effectively to drug-related problems, particularly given the transborder issues associated with global drug trafficking. The recognition of a national and internationally comparable approach to illicit drug-related surveillance and monitoring is highlighted through a number of countries with illicit drug data collections in place (e.g. the Community Epidemiology Working Group on Illicit Drugs (CEWG) in the US and the European Union European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) as well as international efforts to coordinate global drug trends. The benefits of NIDIP include the enhanced dissemination of information on trends in harms related to heroin and psychostimulant use and prescription drug use, and a greater evidence base for the development of policy responses and interventions in relation to these harms. NIDIP also provides comparable monitoring of trends at an international level.

Date Commenced: June 2002

Expected Date of Completion: Ongoing

Funding: Australian Government Department of Health and Ageing

Secretariat of the reference group to the United Nations on HIV and injecting drug use

NDARC Staff: Professor Richard Mattick, Professor Louisa Degenhardt, Dr Bradley Mathers, Dr John Howard and Dr Hammad Ali

Other Investigators: Alex Wodak, Director, Alcohol and Drug Services, St Vincent's Hospital

Aims: The overall objective of the Reference Group is to advise relevant UNAIDS (the United Nations Joint Program on HIV/AIDS) co-sponsors, especially the United Nations Office on Drugs and Crime (UNODC) and the World Health Organization (WHO), and the UNAIDS Secretariat, as well as other members of the UN Interagency Task Team on injecting drug use, on effective approaches to HIV prevention and care among injecting drug users. The Reference Group comprises individuals selected for their expertise in the epidemiology of injecting drug use, HIV prevention or treatment.

The National Drug and Alcohol Research Centre was appointed to undertake the role of Secretariat of the Reference Group for 2007.

Design and Method: The primary tasks of the Secretariat include:

- Coordination of the Reference Group
- Management of key-indicator data holdings which are used to monitor global trends in injecting drug use and HIV as well as coverage of HIV prevention and care for injecting drug users
- Provision of ad-hoc technical support to UNAIDS co-sponsor agencies
- Production of the Reference Group's bi-annual reports (global and regional trends in the epidemiology of injecting drug use and HIV, and estimates of HIV prevention and care service coverage for injecting drug users)
- Production of thematic research papers on topics of current concern
- Management of the Reference Group website.

Date Commenced: April 2007

Expected Date of Completion: September 2010

Funding: The United Nations Office on Drugs and Crime

Using epidemiology to inform psychiatric classification (DSM-V and ICD-11)

NDARC Staff: Dr Tim Slade, Professor Maree Teesson and Dr Katherine Mills

Other Investigators: Gavin Andrews (CRUfAD, UNSW), Andrew Baillie (Macquarie University), Mark Oakley Browne (Monash University) and Ayelet Meron Ruscio (University of Pennsylvania, USA)

Aims: The aims of this project are to:

- Develop, using epidemiological data, models of the typology of mental disorders that lead to improvements in the classification systems
- Contribute to the American Psychiatric Association's revision of DSM-IV to DSM-V and the World Health Organization's revision of ICD-10 to ICD-11

CURRENT PROJECTS

Design and Method: This project relies on the appropriate application of statistical methodology to existing and future epidemiological data sets with the express aim of achieving valid, useful and empirically-supported classification systems. Data will be derived from three epidemiological surveys of mental disorders and the research plan will follow in three sequential and iterative stages:

- Identification and documentation of the key diagnostic parameters around 13 mental disorders
- Identification of the latent structure of each of 13 major mental disorders with particular attention on the boundaries separating each disorder from normality. It is expected that the outcomes of this stage will address the following fundamental questions:
 - (a) Is this disorder best conceived within a categorical or continuous framework?
 - (b) Does the latent disorder correspond to one or more existing diagnostic categories, a variant or a subtype of an existing category, or an entirely new grouping?
 - (c) What is the relation of the disorder to milder pathological states?
 - (d) Is there evidence for meaningful subtypes or lower-order factors within the disorder, and, if so, to what extent are they consistent with subtypes specified by current classification systems or contemporary theory?
 - (e) Is there meaningful dimensional variation among affected cases that would support the addition of a severity score to the diagnostic criteria?
- Evaluation of the structural findings to determine their practical utility for DSM-V and ICD-11. It is expected that the outcomes of this stage will answer the following fundamental questions:
 - (a) What are the best symptoms to identify each mental disorder at the latent level?
 - (b) Should symptoms be differentially weighted in the diagnostic calculation?
 - (c) Are these criteria applicable across all subtypes of the same disorder?
 - (d) What are the best thresholds to identify categorical mental disorders?
 - (e) Can defensible thresholds be identified for truly dimensional disorders?
 - (f) What are the costs and benefits of making changes to the classification systems?

Date Commenced: January 2008

Expected Date of Completion: December 2010

Funding: National Health and Medical Research Council

Global burden of disease: mental disorders and illicit drug use expert group

NDARC Staff: Professor Louisa Degenhardt, Mr Paul Nelson and Ms Chiara Bucello

Other Investigators: Harvey Whiteford, Amanda Baxter and An Pham (Queensland Centre for Mental Health Research, University of Queensland)

Rationale: The original Global Burden of Disease (GBD) Study was commissioned by the World Bank in 1991 and provided burden of

disease estimates for the year 1990. New estimates for 2001 were published as part of the second revision of the Disease Control Priorities Project.

The principle guiding the burden of disease approach is that best estimates of incidence, prevalence, and mortality can be generated through the careful analysis of all available sources of information in a country or region (corrected for bias). The disability-adjusted life year, or DALY, was developed to assess burden of disease: a time-based measure that combines years of life lost due to premature mortality and years of life lost due to time lived in health states less than ideal.

The current study will involve a complete systematic assessment of the data on all diseases and injuries, and produce comprehensive and comparable estimates of the burden of diseases, injuries and risk factors for two time periods: 1990 and 2005. Improved techniques and new data will be used.

As part of the GBD Study, researchers at NDARC and the Queensland Centre for Mental Health Research at the University of Queensland are currently undertaking research that will determine the global burden of disease of illicit drug use and dependence, and mental health disorders. This represents the work of the Mental Disorders and Illicit Drug Use Expert Group.

Aims: The GBD study has two major objectives:

- To produce estimates of the burden of diseases and injuries, and to assess risk factors, for the years 1990 and 2005 organised in 21 regions covering the globe
- To develop a series of tools for use by specific audiences, to standardise and broaden burden of disease research and analysis, and to produce publications tailored to policy makers and a non-research audience.

As part of the first GBD Study objective, the Mental Disorders and Illicit Drug Use Expert Group aims to produce estimates of the burden of disease associated with mental health disorders and illicit drug use and dependence.

Design and Method: The GBD Study will take three years to complete. The project will examine more than 175 diseases and injuries, and more than 45 risk factors, in 21 regions of the world.

Systematic reviews of the prevalence, incidence and duration of mental health disorders and associated mortality and disabling sequelae will be conducted by the Mental Disorders and Illicit Drug Use Expert Group. Additionally, exposure and effects of risk factors will be assessed. Expert Groups will communicate their figures at defined intervals with other Expert Groups and with the Core Team to ensure consistency across conditions, and will be subjected to external peer review.

NDARC is collecting data on the following drug groups:

- Heroin and other opioids
- Amphetamine-type stimulants
- Cocaine
- Cannabis.

Progress: Systematic reviews of mortality, prevalence, incidence and remission/duration of dependence on heroin and other opioids, amphetamine-type stimulants, cocaine and cannabis have been conducted, and data extracted. The comparative risk assessment for

illicit drugs is underway.

Date Commenced: July 2007

Expected Date of Completion: December 2010

Funding: National Health and Medical Research Council (NHMRC) Fellowship

Alcohol-related crime in the Sydney Local Government Area

NDARC Staff: Ms Stephanie Love, A/Prof. Anthony Shakeshaft

Other Investigators: Elissa Wood (NHS Kingston, UK)

Aims: To apply a surrogate measure of alcohol-related crime to Sydney LGA to determine whether rates of crime have increased over time.

Design and Method: Longitudinal data analysis using routinely collected police data, modified to improve the reliability of the measure.

Progress: Annual updates based on the initial analysis which was completed in 2008 are submitted to the City of Sydney Council each year as per the project brief.

Date Commenced: November 2007

Expected Date of Completion: March 2012

Funding: City of Sydney Council

Alcohol use in pregnancy

NDARC Staff: Dr Lucy Burns, A/Prof. Anthony Shakeshaft, Ms Emma Black

Other Investigators: Jenny Powers (University of Newcastle), Deborah Loxton (University of Newcastle), Elizabeth Elliott (University of Sydney), Adrian Dunlop (Hunter New England Area Health Service)

Aims: The aims of this project are:

- To provide a comprehensive account of the distribution of alcohol use and harms associated with pregnancy in the Australian context; triangulating data from the NSW Admitted Patient Data Collection and the NSW Midwives Data Collection
- To examine the effect of the Australian alcohol drinking guidelines on alcohol consumption among pregnant women before and after the 2001 guidelines were introduced, using the Australian Longitudinal Study on Women's Health quantitative data (1996-2006)
- To examine views and experiences of alcohol use in pregnancy, and utilisation of current health services, identifying the experiences of both pregnant women and health service providers
- To develop a formal questionnaire, based on these findings, to identify the perceived needs of women at risk of an alcohol-affected pregnancy.

Design and Method:

Aim 1: Using these data we will plot a number of maternal characteristics of alcohol-affected pregnancies including reasons for admission, Statistical Local Areas of residence and hospital codes to determine geographical indicators of risk. We will also plot neonatal

outcomes including low birth weight, poor growth, prematurity and transfer rates to specialist care.

Aim 2: Analyses will assess the effect of the 2001 alcohol guidelines by comparing drinking patterns and their underlying factors among women who were pregnant in 1996, 2000, 2003 or 2006. We will plot these longitudinal alcohol patterns against time since pregnancy and change in alcohol guidelines to determine whether the change in alcohol guidelines has altered women's drinking patterns in pregnancy. We will use longitudinal analyses to identify the relationships between underlying risk factors and drinking patterns during pregnancy.

Aim 3: While the quantitative analyses (Aims 1 and 2) will have determined risk factors for harmful and unsafe alcohol use during pregnancy, Aim 3 will elaborate on those findings by establishing what influences women's decisions about drinking during pregnancy, and by exploring the perceptions of service providers about these decisions. To meet this aim a number of focus groups will be conducted with high-risk women, women in the general community and health service providers.

Aim 4: This new questionnaire will form the basis of a pre-intervention measure, to be used in a community capacity building intervention, aimed at addressing the unmet needs of pregnant women with regard to alcohol harm.

Progress: Aims 1 and 3 are currently underway, Aim 2 paper has been completed and submitted for peer review, and Aim 4 will be addressed upon completion (or near-completion) of Aims 1-3.

Date Commenced: April 2008

Expected Date of Completion: Early 2010

Funding: NSW Health

Ten-year follow up of a cohort of heroin dependent prisoners

NDARC Staff: Ms Sarah Larney and A/Prof. Kate Dolan

Rationale: Methadone maintenance treatment (MMT) is an effective treatment for opioid dependence that reduces criminal activity and mortality. This study will analyse outcomes for a group of men recruited in prison in 1997-1998

Aims: The aims of this project are to determine:

- If duration of methadone treatment is associated with reductions in court appearances and time incarcerated
- If opioid-using prisoners released from prison on MMT have reduced court appearances and incarceration episodes compared to opioid-using prisoners released from prison while not on MMT
- If duration of methadone treatment is associated with reductions in mortality among ex-prisoners
- If opioid-using prisoners released from prison on MMT are less likely to die than opioid-using prisoners released from prison not on MMT.

Design and Method: Outcomes for 382 opioid-using prisoners recruited in 1997-1998 will be examined by linking methadone treatment records, court appearance records, imprisonment records and mortality records.

CURRENT PROJECTS

Progress: Ethical approval for the project has been received and data linkage has commenced.

Date Commenced: April 2008

Expected Date of Completion: March 2010

Funding: National Drug Law Enforcement Research Fund

IDENTIFICATION OF POTENTIAL HARMS

Cannabis Cohort Research Consortium (CCRC)

NDARC Staff: Dr Delyse Hutchinson, Professor Richard Mattick (coordinating investigators) with Professor Jan Copeland, Professor Louisa Degenhardt, Dr Elizabeth Maloney, Ms Marian Shanahan, Mr Edmund Silins, Dr Wendy Swift, Professor Maree Teesson, Dr Laura Vogl, Dr Tim Slade, Dr Caitlin Hughes and Dr John Howard

Other investigators: Steve Allsop, National Drug Research Institute, Curtin University of Technology; Tanya Caldwell, National Centre for Epidemiology and Population Health, Australian National University; David Fergusson, Christchurch School of Medicine and Health Sciences, University of Otago; Wayne Hall, School of Population Health, University of Queensland; Jake Najman, Queensland Alcohol and Drug Research and Education, University Of Queensland; George Patton, Centre for Adolescent Health, University of Melbourne; Richie Poulton, Dunedin Multidisciplinary Health and Development Research Unit, University of Otago; Bryan Rodgers, Australian Demographic and Social Research Institute, Australian National University; Diana Smart, Australian Institute of Family Studies; John Toumbourou, School of Psychology, Deakin University; Carolyn Coffey, Centre for Adolescent Health, Melbourne; Rachel Skinner, Children's Hospital, Westmead, Sydney; Robert Tait, Centre for Mental Health Research, Australian National University; Reza Hayatbakhsh, School of Population Health, University of Queensland

Aims: The Consortium aims to foster relations among partners; identify limitations in knowledge on patterns and causes of cannabis use, potential harms and adverse outcomes; examine priority issues in an efficient and timely way through secondary data analysis of existing national and international cohorts; and provide health and policy feedback to the Commonwealth, health professionals and the public.

Design and Method: The Consortium is a newly developing collaboration which stemmed from the need to better address pressing questions about the relationship between cannabis, other drug use, life-course outcomes (e.g. early school drop-out) and mental health in children and young adults. Longitudinal cohort research provides the best available methodology for assessing these relationships. The Consortium aims to achieve its goals by involving partners in capacity building activities, and by providing capacity to allow collaborative work to proceed to high-level grant application stage. Collaboration between researchers involved in existing cohorts allows for better assessments of relationships to be made, uses existing data more efficiently and increases opportunities for knowledge translation.

Progress: A pilot study has been completed which aimed to

determine the feasibility of combining data from the Christchurch Health and Development Study (CHDS), the Mater University Study of Pregnancy (MUSP) and the Victorian Adolescent Health Cohort Study (2000 Stories), to potentially strengthen associations between early cannabis use and educational outcomes. Findings have been accepted for publication and a high-level grant application is being prepared which will extend the work of the pilot study. Additionally, a framework for measuring cannabis use is in the initial stages of development and a review which assesses the link between cannabis and psychosis has been accepted for publication. Several aspects of the Consortium's work have been presented at the ARACY Conference - Making Prevention Work (2009), Melbourne; and the National Cannabis Conference (2009), Sydney.

Date Commenced: 2006

Expected Date of Completion: Ongoing

Funding: The Consortium is supported by funding from the Australian Research Alliance for Children and Youth (ARACY) NHMRC/ARC Research Network.

Child protection and mothers in substance abuse treatment

NDARC Staff: Dr Stephanie Taplin and Professor Richard Mattick

Rationale: Parental substance misuse has become an issue of major concern to child protection agencies: when and how to intervene when children are in the care of parents who are misusing substances. Significant numbers of parents who are in drug treatment are involved with the child protection system in NSW: receiving treatment and ceasing drug use may be a condition of retaining parental responsibility for their children. 'To date, however, there have been very few studies that have examined the relationship between substance abuse treatment experiences and child welfare outcomes, and the few existing studies find mixed results' (Green, Rockhill and Furrer, 2007: 461). This study aims to increase our knowledge and understanding of these complex relationships by undertaking a study with a group of women in opioid pharmacological treatment in NSW.

Design and Method: The main study involves the recruitment of 200 women who are in pharmacological treatment in NSW who have a child or children under the age of 16 years. Women are asked to complete a one-off face-to-face interview about their own histories, and their involvement with both drug treatment and child protection services. Information is predominantly collected via interview, but their consent is also sought to access their drug treatment and child protection records (where relevant). Key informant interviews are also being conducted with service providers to obtain background information about the way agencies are working in this area.

Progress: Recruitment for the main study is well underway at several opioid treatment agencies, with interviews expected to be completed by mid 2010.

Date Commenced: February 2008

Expected Date of Completion: March 2011

Funding: NSW Department of Community Services' Collaborative Research Program with the University of NSW

Attitudes towards, knowledge of, and prevalence of illicit drug use among elite athletes

NDARC Staff: Dr Matthew Dunn, Ms Johanna Thomas, Dr Wendy Swift, Dr Lucy Burns and Professor Richard Mattick

Aims: The aim of this study is to investigate a range of substance use issues among a sample of elite athletes in Australia. The study will involve:

- Assessing knowledge about illicit drugs among this group
- Assessing lifetime and past-year substance use
- Examining the sources of information which athletes use to inform their knowledge of illicit drugs
- Exploring attitudes towards illicit drug policies
- Identifying the need for resources, education programs and policy approaches.

Design and Method: This study will consist of two components. Firstly, a cross-sectional sample of 700 elite athletes from a range of national sporting organisations. For this component, participants will self-complete a structured interview schedule. The second component will involve interviews with key experts who, through the nature of their employment (such as trainers, coaches, and other personnel from sports institutions/organisations), are in regular contact with athletes. Key experts will be interviewed using a semi-structured interview schedule.

Date Commenced: July 2008

Expected Date of Completion: December 2010

Funding: Australian Government Department of Health and Ageing

The characteristics of cannabis in Australia

NDARC Staff: Dr Wendy Swift (NDARC) and Mr Paul Dillon (NCPIC)

Other Investigators: Steve Allsop (National Drug Research Institute) and Colin Priddis (Chemistry Centre of Western Australia)

Rationale: There is little detailed information about the Australian cannabis market, including the chemical characteristics of the locally available cannabis product. The collection of accurate and current data is crucial for providing appropriate, evidence-based information to the Australian public, to cannabis users and their families, and to health, law-enforcement and other related practitioners. The study builds on recently completed pilot work on cannabis potency and contamination.

Aims: This study aims to establish a methodology to assess the characteristics of the locally available cannabis product, and to use this methodology to collect information on local cannabis seizures.

Design and Method: Chemical analyses of cannabis seizures will be informed by a recent pilot project comprising a literature review (McLaren et al. (2008), *Addiction*) and interviews with an international group of key experts on potency and contamination. This research has identified substantial variability in cannabis potency but an overall trend towards a modest increase in the US and some European countries. It has also identified the potential for contamination of available cannabis product with naturally occurring fungi and moulds, as well as pesticides. We will conduct laboratory

analysis of cannabis seizures in the WA jurisdiction over a 6 to 12 month period.

These analyses will:

- Measure potency: the ratio of % of the active ingredient THC to % of the chemical cannabidiol (CBD) (n=approx. 200 samples)
- Screen for a selected number of contaminants based on those identified in pilot work (maximum n=100 samples), such as natural contaminants (e.g. moulds, bacteria and fungi), growth enhancers and pesticides
- Collect, where available, information on type and provenance of each seizure, and related information (e.g., presence of pesticides at seizure) that may prove useful in linking cultivation methods to the outcomes of interest.

Progress: Unfortunately, due to the requirements of state legislation in Western Australia, we did not receive permission to access WA cannabis seizures for this study. We are currently negotiating with the NSW Police Service regarding potential access to cannabis seizures for analyses of potency in NSW.

Benefits: The project has several potential public health and law enforcement benefits, including:

- The provision of important Australian data on the characteristics of cannabis, which can aid in the education of users and health professionals about the health risks associated with market practices
- The protocol may serve as a model to be expanded to other jurisdictions to provide routine monitoring and to measure longitudinal changes (e.g. in potency) that may result from policy, law enforcement and public health strategies
- Contributing to increasing the capacity of health, education and law enforcement programs to be seen as credible sources of information about the effects of cannabis
- Intersectoral collaboration between NCPIC (including its consortium members NDARC and NDRI) and the Forensic Science Laboratory at the Chemistry Centre of Western Australia (CCWA).

Date Commenced: September 2008

Expected Date of Completion: September 2009

Funding: National Cannabis Prevention and Information Centre

Impact of parental substance use on infant development and family functioning: a pilot study

NDARC Staff: Dr Delyse Hutchinson, Dr Elizabeth Maloney, Professor Richard Mattick, and Dr Lucy Burns

Other Investigators: Steve Allsop (NDRI), Jakob Najman (QADREC), Elizabeth Elliott (University of Sydney and the Children's Hospital at Westmead), Sue Jacobs (RPAH). Numerous associate investigators are also involved

Aims: The aims of the pilot study are to:

- Establish the feasibility of recruiting and following up a group of pregnant women (including a subsample of high-risk women attending a specialist drug and alcohol pregnancy service), and the feasibility of recruiting their partners

CURRENT PROJECTS

- Monitor alcohol use patterns and mental health in pregnant women and their partners
- Examine the relationship of maternal and paternal alcohol use and mental health with obstetric and neonatal outcomes for mothers and infants
- Determine how prenatal alcohol use and mental health problems in pregnant women and their partners impact on infant development (physical, cognitive, behavioural and emotional) and family functioning (family cohesion, conflict, and parent-infant attachment).

Design and Method: 100 pregnant women and their partners will be recruited during the prenatal period. Parents are eligible to participate in the study from conception up to 40 weeks gestation. Participants will be recruited through antenatal services attached to the major hospitals in Sydney. Participants will also be recruited through specialist drug and alcohol antenatal services to ensure that an adequate number of parents with substance use problems are included in the sample. Infants will be assessed at 12 months of age.

There will be five assessment waves in the cohort study: Baseline (Trimester 1: conception to 12 weeks), Follow-up I (Trimester 2: 13 weeks to 27 weeks), Follow-up II (Trimester 3: 28 weeks onwards), Follow-up III (60 days postnatal) and Follow-up IV (Infant age 12 months). Mothers will be assessed at all time points, partners will be assessed at Baseline and Follow-up IV, and infant assessments will be conducted postnatally and at Follow-up IV. Multi-method assessments will be utilised including interview, questionnaire and observational assessment measures. DNA is also being collected via cheek swab to assess epigenetic changes over the first year of life (epigenetics refers to the programming of gene expression by environmental exposures such as drug use, stress, or diet).

Progress: 68 women recruited to date from the general antenatal clinic. Over 90% of partners have agreed to participate. Preliminary findings presented at the Langton Centre 'Meeting of the Minds' seminar series. To date, 44 8-week postnatal follow-ups have been completed, with genetic data collected and currently being stored at the Murdoch Children's Research Institute in Melbourne. Recruitment of the high-risk sample of women from the Drugs in Pregnancy Treatment Service due to commence shortly. A number of grant applications have been submitted over the last year to help recruit 100 families.

Date Commenced: March 2008

Expected Date of Completion: Ongoing

Funding: UNSW Goldstar Award (Award for a highly ranked NHMRC Project Grant in 2007)

Impact of parental substance use on infant development and family functioning

NDARC Staff: Professor Richard Mattick, Dr Delyse Hutchinson, Dr Lucy Burns, Dr Wendy Swift, Ms Marian Shanahan, Ms Emma Black, Ms Gabrielle Campbell, Ms Erin Kelly

Other Investigators: Steve Allsop, National Drug Research Institute, Curtin University; Jake Najman, Queensland Alcohol and Drug

Research and Education Centre, University of QLD; Elizabeth Elliott, University of Sydney Clinical School, Children's Hospital at Westmead; Sue Jacobs, Royal Prince Alfred Hospital

Aims: The aims of this project are to:

- Identify substance use patterns in a cohort of pregnant women and their partners during the prenatal period and the characteristics associated with substance use
- Examine the relationship of maternal and paternal substance use with pregnancy outcomes for mothers and their infants
- Determine the extent to which substance use in pregnant women and their partners predicts problems in (a) infant development (physical, cognitive, behavioural and emotional), and (b) family functioning (marital/intimate partner relationship quality, conflict and violence, parenting behaviour and parent-infant relationship quality).

Design and Method: This will be the first large-scale Australian cohort study to examine the effects of substance use in pregnant women and their partners during the prenatal period on infant development and family functioning. The impact of other factors such as social support, biological factors, income, parents' emotional well-being, exercise, nutrition and temperament will also be examined. The research design involves a longitudinal birth cohort study, in which 2,000 pregnant women and their partners will be recruited during the prenatal period (conception to birth). Participants will be recruited through antenatal services attached to major hospitals in New South Wales and Western Australia. Participants will also be recruited through specialist drug and alcohol antenatal services.

Multi-method assessments will be utilised including interview, questionnaire and observational assessment measures in the prenatal period, at 8 weeks of age and at 12 months of age. Parents will be provided with the results of their infant's 12 month development assessment (the Bayleys Infant Development Scales), which includes feedback and recommendations.

Progress: Ongoing

Date Commenced: January 2010

Expected Date of Completion: 2014

Funding: National Health and Medical Research Council

Issues related to substance use among university student athletes

NDARC Staff: Dr Matthew Dunn and Ms Johanna Thomas

Aims: The aim of this study is to investigate a range of substance use issues among a sample of university student athletes. The study's aims are to understand student athletes' knowledge of recreational illicit drugs and the effects of these drugs; information sources they may use to gain information about illicit drugs and how credible they rate these sources; their attitudes toward drug testing in sport; their use of nutritional supplements and conditioning aids; and self-reported alcohol and illicit drug use.

Design and Method: This study will use a cross-sectional design. Participants will be university student athletes from a variety of sports at the University of New South Wales, who will self-complete a structured interview schedule.

Date Commenced: October 2009

Expected Date of Completion: December 2010

The diversion and misuse of stimulant medication for attention deficit hyperactivity disorder (ADHD) among illicit psychostimulant users

NDARC Staff: Professor Shane Darke, Dr Sharlene Kaye

Aims: The aims of this project are to:

- Examine the nature of the diversion of prescribed pharmaceutical stimulants among illicit psychostimulant users
- Investigate the misuse of prescribed and illicitly obtained pharmaceutical stimulants among illicit psychostimulant users
- Determine the correlates of the diversion and misuse of pharmaceutical stimulants.

Design and Method: This study employs a cross-sectional survey design. 300 illicit methamphetamine or cocaine users will be administered a structured interview examining prescribed and illicit use of medications used to treat the symptoms of ADHD (i.e. Ritalin, dexamphetamine).

Progress: Data collection in progress

Date Commenced: 2009

Expected Date of Completion: June 2011

Funding: National Health and Medical Research Council

Exploring the relationship between cannabis use and criminal offending among adults and adolescents

NDARC Staff: Ms Melanie Simpson, Professor Jan Copeland and Dr John Howard

Aim: To explore the relationship between cannabis use and criminal offending among both adults and adolescents

Design and Method: This project is comprised of three smaller studies. The first is a prospective follow-up study of 300 young offenders aged 14-21 years recruited through community youth services and youth detention facilities. The second is an in-depth qualitative study of 20 heavy cannabis using young offenders. Half of the participants will have used cannabis prior to committing crime, while half will have initiated cannabis use after committing their first crime. The third study involves the secondary analysis of the Drug Use Monitoring Australia (DUMA) study data. This study will examine data collected from four sites across Australia between the years of 2000 and 2007, and will focus specifically on adult detainees over 18 years of age.

Progress: Baseline recruitment for the prospective follow-up study has been completed. Six month follow-up interviews are currently underway. The two remaining studies are anticipated to commence in the next few months.

Date Commenced: July 2008

Expected Date of Completion: December 2011

Funding: Australian Government Department of Health and Ageing

HEALTH ECONOMICS

Building capacity in health economics

NDARC Staff: A/Prof. Chris Doran

Other Investigators: Rob Carter (Deakin University); Jeff Richardson (Monash University); Jan Barendregt, Theo Vos, Wayne Hall and Tim Coelli (University of Queensland); and David Evans (World Health Organization)

Rationale: This proposal aims to build research capacity and methodological sophistication in economic evaluation and priority setting in health. An unprecedented critical mass of Australian experts in economic evaluation will be created who can then train a new generation of researchers.

The proposal covers the following topics:

- Assessing the impact of economic evaluation and priority setting methods on resource allocation in Australia to better understand the methodological, conceptual, practical and political barriers to its use ('policy analysis')
- Developing appropriate, valid and reliable utility measures that are culturally appropriate for Indigenous populations, children and carers ('utility measures')
- Developing methods and tools for measuring non-health sector costs and benefits from a social perspective ('cost-benefit')
- Refining methods for adjusting cost-effectiveness results to reflect other values such as equity, applicability and feasibility ('second filter')
- Exploring the usefulness and appropriateness of different modelling approaches used in economic evaluation ('modelling')
- Developing techniques to measure gains in overall health system efficiency from the adoption of cost-effective interventions ('efficiency').

Aims: The proposed outcomes are:

- An increased number of independent researchers with expertise in economic evaluation/priority setting who develop their own research programs
- Establish a critical mass of researchers who can improve the standard and acceptance of economic evaluation and priority setting methods in health, including priority setting for Indigenous Australians and other groups with special needs
- Value-adding to existing priority setting and economic evaluation projects by validating methods and developing new approaches
- Effective linkages between researchers and policy makers, advocates and other stakeholders to increase appreciation of the use of economic evaluation and priority setting in health policy and clinical practice
- Research transfer through workshops, presentations and peer-reviewed publications.

Progress: The grant commenced in April 2007 and runs for a five year period until April 2012. A number of post-graduate researchers have been employed on the project including: Hector Navarro (UNSW PhD student), Joshua Byrnes (UNSW PhD student), Dam Anh Tran (UNSW PhD student), Dr Wendy Gong (UNSW post-doc), Dr Sophie Shih (Deakin Uni post-doc), Cathy Mihalopoulos (Deakin Uni PhD student),

CURRENT PROJECTS

Dr Kompal Sinha (Monash Uni post-doc; Dr Lennert Veerman (UQ post-doc). Each researcher has developed a capacity building plan that maps their research aims for the next five years. The team communicate regularly and meet face to face annually to review progress and plan for the future. Output from the project has been exceptional with over 50 peer-reviewed papers generated and over \$2m in research funding awarded.

Date Commenced: April 2008

Expected Date of Completion: April 2012

Funding: National Health and Medical Research Council

DRUG MARKET ANALYSIS AND SUPPLY REDUCTION

The Illicit Drug Reporting System (IDRS)

NDARC Staff: Dr Lucy Burns, Ms Natasha Sindicich, Ms Jennifer Stafford, Mr Benjamin Phillips, Ms Joanne Cassar and Professor Richard Mattick

Other Investigators: Chris Moon and Tania Davidson (Department of Health and Community Services); Rosa Alati, Rebecca Rainbow (Queensland Alcohol and Drug Research and Education Centre); Robyn Vial and Nancy White (Drug and Alcohol Services SA); Raimondo Bruno and Barbara de Graaff (University of Tasmania); Danielle Horyniak (Macfarlane Burnet Institute for Medical Research and Public Health); and Simon Lenton (National Drug Research Institute)

Aims: The aims of this project are:

- To monitor the price, purity, availability and patterns of use of heroin, methamphetamine, cocaine and cannabis
- To identify emerging trends in illicit drug markets in Australia that require further investigation.

Design and Method: The IDRS analyses three main sources of information to document drug trends:

- A quantitative survey of injecting drug users (IDU)
- A semi-structured interview with key experts (KE), who are professionals working in the illicit drug field, and have regular contact with and/or specialised knowledge of illicit drug users, dealers or manufacture
- A collation of existing indicator data on drug-related issues.

Data from these three sources are triangulated against each other to determine the convergent validity of trends detected. The data sources complement each other in the nature of the information they provide. Data from each year's IDRS studies are compared to earlier findings to determine changes in drug trends over time. The strength of the IDRS is the ability to compare data across jurisdictions as well as over time.

Progress: The IDRS is an ongoing project that is conducted annually in all Australian jurisdictions. In 2009, over 900 IDU were interviewed across Australia, providing information on their use patterns, drug markets and related issues. Key experts from a range of professions provided information on the ecstasy and related drug users they had contact with. Indicator data including Australian Customs Service seizures, purity analysis, overdose and treatment data were

examined.

Date Commenced: January 1997

Expected Date of Completion: Ongoing

Funding: Australian Government Department of Health and Ageing

The Ecstasy and Related Drugs Reporting System (EDRS)

NDARC Staff: Dr Lucy Burns, Ms Natasha Sindicich, Ms Jennifer Stafford, Ms Joanne Cassar, Mr Benjamin Phillips and Ms Laura Scott

Other Investigators: Anita Feigin (Macfarlane Burnet Institute for Medical Research and Public Health); Raimondo Bruno and Allison Matthews (University of Tasmania); Nancy White (Drug and Alcohol Services South Australia); Rosa Alati and Lucy Kennedy (QADREC); and Simon Lenton (National Drug Research Institute)

Aims: The aims of this project are:

- To describe the characteristics of a sample of current regular ecstasy users interviewed in each capital city of Australia
- To examine the patterns of ecstasy and other drug use of these samples
- To document the current price, purity and availability of ecstasy and other party drugs across Australia
- To examine the incidence and nature of harms related to the use of ecstasy and related drugs (ERD)
- To identify emerging trends in the party drug market that may require further investigation.

Design and Method: Previously known as the Party Drug Initiative (PDI), the EDRS is coordinated by the National Drug and Alcohol Research Centre, and is conducted by different research institutions in each Australian state and territory.

The EDRS uses a similar methodology to the Illicit Drug Reporting System (IDRS). Regular ecstasy users are interviewed as they were identified as a group of drug users that are able to provide the required information on patterns of ecstasy and related drugs (ERDs) use, the current availability, price and purity of ERDs and perceived health issues associated with ERDs use. A semi-structured survey of experts in the field of ERD (e.g. party promoters, treatment providers and law enforcement personnel) is also conducted and indicator data (e.g. purity of drug seizures and overdose rates) are analysed. These data sources are examined together to identify convergent trends in ERDs use and markets.

Progress: The EDRS was conducted successfully in every state and territory in 2009. Seven hundred and fifty-six regular ecstasy users were interviewed, providing information on their drug use patterns, ERD markets and related issues. Key experts from a range of professions provided information on the ecstasy and related drug users they had contact with. Indicator data including Australian Customs Service seizures, purity analysis and treatment data were examined.

Output: In 2009, the annual National Drug Trends Conference was held in Sydney in September, in conjunction with the NDARC Symposium conference, where a summary of jurisdictional drug trends findings was provided, in addition to a national overview and presentations on specific areas of interest arising from the data, to

relevant health professionals, law enforcement, and policy makers. Throughout the year, quarterly bulletins outlining current drug trends or issues of interest were also disseminated.

Date Commenced: January 2003

Expected Date of Completion: Ongoing

Funding: Australian Government Department of Health and Ageing

PREVENTION AND EARLY INTERVENTION

Alcohol Action in Rural Communities (AARC)

NDARC Staff: Ms Courtney Breen, Mr Josh Byrnes, Dr Anton Clifford, Dr Suzanne Czech, Ms Catherine Deans, A/Prof. Chris Doran, Ms Alys Havard, Mr Hector Navarro, Ms Stephanie Love, Professor Richard Mattick, A/Prof. Anthony Shakeshaft

Other Investigators: Rob Sanson-Fisher (University of Newcastle), Ann Roche (National Centre for Education on Training and Addiction, Flinders University), Catherine D'Este (University of Newcastle)

Aims: This project aims to conduct a cost-benefit analysis of a community action intervention strategy to reduce alcohol-related harm in rural communities in NSW. For more information on this project, please go to the AARC webpage found at <http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/page/AARC>.

Design and Method: The community action approach used in this study involves the systematic and coordinated implementation of a range of intervention strategies across whole communities. The simultaneous and sustained implementation of a number of complementary interventions aims to maximise their combined effect, even though the interventions themselves may be of variable effectiveness. This approach will be evaluated using a randomised controlled trial design. Ten matched pairs of rural communities were identified and one community in each pair was randomly allocated to the intervention condition, and the other to the control condition. Alcohol-related harm will be measured using alcohol-related problems (as measured by a community survey), alcohol-related criminal incidents, alcohol-related traffic accidents, alcohol-caused hospital admissions and alcohol-related emergency department presentations. This project will also undertake a cost-benefit economic analysis to determine whether the community action approach is associated with positive net social benefits.

Progress: Pre-test data continue to be analysed and written-up for publication. A number of interventions have occurred and are continuing: GP training in screening and brief intervention; web-based self-screening and advice; access to controlled drinking program by correspondence; high school interactive education session; self-screening and advice in chemists; workplace policies and practices; targeting weekends at high risk of alcohol-related harm; feedback of results and alcohol harms through local media; program targeting young people at high risk of alcohol harm; drink-driving campaigns; the Good Sports program; financial advice; parenting resources; and liquor accords. The post-test survey will be conducted in March 2010 and the final results analysed and written up by July 2010.

Date Commenced: January 2004

Expected Date of Completion: July 2010

Funding: Alcohol Education and Rehabilitation Foundation (AERF)

CLIMATE Schools: ecstasy module

NDARC Staff: Dr Nicola Newton and Professor Maree Teesson

Other Investigators: Gavin Andrews (Clinical Research Unit for anxiety and depression, St Vincent's Hospital)

Aims: To develop and evaluate the effectiveness of an evidence-based, computer-driven, prevention program for the prevention of ecstasy use and related harms.

Design and Method: The development process: the CLIMATE Schools: ecstasy module will be evidence-based and developed in collaboration with secondary school teachers, students and experts in the area of ecstasy. In line with current evidence, the content of the program will (1) provide information regarding short and long term legal, social and health consequences of using the drug, (2) challenge students' perception of inflated peer drug use and hence peer acceptability by presenting students with conservative drug use norms, (3) build resistance and harm minimisation skills and (4) teach skills for dealing with a drug-related emergency.

Initially, the research team will consult with teachers and education officials with regard to how best this program could be developed to be implemented within the senior years of secondary schools where time is short and the focus is predominantly academic. Cartoon scripts will then be developed to incorporate the proposed content within the context of an interactive teenage drama. This drama will become the primary subject of the initial focus groups for teachers, students and ecstasy experts. The research team will incorporate suggested changes from these groups. The second stage of the development process will involve the production of the teacher manual which will incorporate varied classroom activities. These activities will be developed to ensure optimal peer involvement and interactive classroom sessions rather than promoting ineffective didactic teaching methods. This manual and the cartoons will then be subjected to a second round of focus group review, again involving secondary school teachers, students and ecstasy experts. Feedback will subsequently be incorporated and the module finalised, ready for evaluation. This methodology replicates the successful development of the previous CLIMATE Schools drug prevention modules which have been devised and implemented by NDARC.

Progress:

- Ethics approved
- Focus groups with teachers, students and health professionals completed
- Animation and development currently underway.

Date Commenced: July 2009

Expected Date of Completion: June 2010

Funding: Australian Government Department of Health and Ageing

CURRENT PROJECTS

TREATMENT AND OTHER INTERVENTIONS

Long-term treatment outcomes for methamphetamine dependence: a 3 year follow-up of the MATES cohort

NDARC Staff: Dr Rebecca McKetin, Dr Joanne Ross, Professor Richard Mattick, Ms Rachel Sutherland and Ms Erin Kelly

Other Investigators: Jake Najman (QADREC, University of Queensland), Amanda Baker (University of Newcastle), Abdullah Mamun (University of Queensland)

Aims: The Methamphetamine Treatment Evaluation Study (MATES) is the first and only longitudinal treatment outcomes study for methamphetamine use in Australia. This internationally unique study is designed to assess whether existing drug treatment services are effective in reducing methamphetamine use and related problems (e.g. psychosis and depression). The first phase of the study found that methamphetamine users responded positively to drug treatment, with large reductions in drug use, related psychiatric morbidity, crime and HIV risk behaviour. The aim of the MATES 3 year follow-up is to assess longer-term treatment outcomes for methamphetamine use.

Design and Method: MATES is a prospective longitudinal cohort study. Participants in the MATES cohort will be re-contacted and interviewed 3 years after their entry to drug treatment. The interview will assess methamphetamine use, other drug use, and major drug-related harms (e.g. HIV risk, crime, psychosis).

Progress: Ethics approval for the 3 year follow-up has been obtained and follow-up interviews are underway.

Date Commenced: July 2009

Expected Date of Completion: June 2010

Funding: Australian Government Department of Health and Ageing

The efficacy of an integrated treatment for post traumatic stress disorder (PTSD) and substance use disorders

NDARC Staff: Dr Katherine Mills, Professor Maree Teesson, Dr Claudia Sannibale, Ms Emma Barrett, Ms Philippa Farrugia, Ms Sabine Merz and Ms Julia Rosenfeld

Other Investigators: Amanda Baker (University of Newcastle); Sally Hopwood (Centre for Traumatic Stress, Westmead Hospital); Sudie Back (Medical University of South Carolina, USA); Kathleen Brady (Medical University of South Carolina, USA)

Aims: The present study is one of the first randomised controlled trials to examine the efficacy of an integrated therapy for PTSD and substance use disorders.

Specifically, the aims of the study are to:

- Evaluate the efficacy of an integrated intervention for PTSD and substance use disorders by comparing the treatment outcomes of those who receive the intervention with those who receive standard care for their substance use

- Identify factors that influence the efficacy of the integrated intervention including:
- Subject characteristics - demographic, substance use and psychological factors
- Treatment characteristics - treatment compliance
- To assess the feasibility of implementing the intervention as measured by treatment retention and client satisfaction.

Design and Method: A randomised controlled trial is being conducted to address the research aims. One-hundred and three participants were recruited from alcohol and other drug treatment services in greater Sydney and via advertisements. Participants were randomised to one of two groups stratified according to sex: (i) those who receive the intervention (n=55), and (ii) those who receive standard care (n=48).

The intervention is a modified version of Concurrent Treatment of PTSD and Substance Dependence developed in the United States. The intervention consists of thirteen 90 minute sessions involving cognitive behavioural therapy with exposure techniques. Attempts are made to follow-up all participants at 6 weeks, 3 months and 9 months post-baseline. Baseline and follow-up interviews include validated instruments to measure demographics, substance use and dependence, substance use and PTSD treatment history, criminal involvement, general physical and mental health, trauma exposure and PTSD, depression, anxiety, borderline personality disorder, and health service utilisation.

Progress: Participants were recruited from April 2007-June 2009. Follow-up of participants is continuing.

Date Commenced: January 2007

Expected Date of Completion: December 2011

Funding: National Health and Medical Research Council and NSW Health

Integrating treatment for alcohol use problems and comorbid post traumatic stress disorder (PTSD)

NDARC Staff: Dr Claudia Sannibale, Professor Maree Teesson, Dr Katherine Mills, Dr Kylie Sutherland, Ms Kirsty Taylor, Ms Delphine Bostock-Matusko and Ms Marie-Andree Peek-O'Leary

Other Investigators: Thiagarajan Sitharthan and Alicia Visser, Centre for Addiction Medicine, Sydney South Western Area Health Service; and Mark Creamer, Australian Centre for Posttraumatic Mental Health, University of Melbourne

Aims: The study aims to determine the efficacy of an integrated cognitive behaviour therapy (CBT) intervention for PTSD and alcohol use problems in the treatment of these disorders in the general community. It aims to compare treatment for these problems delivered simultaneously with treatment for alcohol use alone.

Design and Method: This is a randomised controlled trial of CBT for PTSD and alcohol use problems. To be eligible, participants are required: to be 18 years or older; consume alcohol at risky levels (drinking >29 drinks per week for men and >15 drinks per week for women); meet diagnostic criteria for PTSD; be currently stable in terms of self-harm, suicide intent or psychosis; and have basic literacy in English. Participants are recruited from the general

community, GPs, psychiatrists, specialist drug and alcohol and anxiety clinics, and a range of organisations. Recruitment and treatment is currently underway at four sites in Sydney (NDARC; Centre for Addiction Research, Western Sydney Area Health; Drug Health Services, Royal Prince Alfred Hospital and Liverpool Hospital, Sydney South Western Area Health Service; and Herbert Street Clinic, Northern Sydney Central Coast Area Health Service).

Progress: One hundred and seventy-three individuals enquired about participation of which over 146 were screened and 62 were recruited to the study. The treatment phase of the study ended September 2009 and currently follow-up is underway. Thus far, 79% of the sample has completed post-treatment follow-up; 61% have been re-assessed at three months following treatment and 42% at six months following treatment completion. Overall, early results show marked, clinically significant, improvements in symptoms of PTSD and alcohol use problems in the study sample.

Date Commenced: June 2007

Expected Date of Completion: June 2010

Funding: National Health and Medical Research Council (NHMRC)

Development and evaluation of specialist services for female drug users in Iran

NDARC Staff: A/Prof. Kate Dolan

Other Investigators: Bijan Nassirimanesh, Persepolis (NGO) and Azarakhsh Mokri (Iranian National Centre of Addiction Studies, Tehran University of Medical Sciences)

Aims: The aims of this project are as follows:

- To improve the health, welfare and social functioning of women who use drugs including those who inject drugs, are former prisoners or engage in commercial sex work in Tehran
- To design, deliver and evaluate a co-ordinated range of services to meet the immediate health and welfare needs of this vulnerable population
- To provide services that are non-judgemental, professional, culturally sensitive, accessible and acceptable to Iranian women in this target population.

Design and Method: The activities to be carried out in this program of work are as follows:

- To design programs and establish a women-only community-based clinic to provide a range of services including: methadone maintenance treatment; sexual health services; needle syringe program; contraception and family planning; primary healthcare; counselling; employment training; legal services and a drop-in centre
- To undertake research and produce evidence on the efficacy of project activities including a study of the prison methadone program.

Progress: Data collection is continuing. A paper was presented at the Harm Reduction Conference in Lebanon and a paper is under review.

Date Commenced: May 2007

Expected Date of Completion: Dec 2010

Funding: The Drosos Foundation, Switzerland

Suicide risk assessment and intervention strategies: current practices among drug and alcohol treatment providers

NDARC Staff: Dr Joanne Ross, Professor Shane Darke, Ms Erin Kelly and Ms Kate Hetherington

Aims: The aims of this project are to:

- Examine existing suicide risk assessment and intervention strategies used by drug and alcohol treatment providers, in order to document and understand current practice in residential rehabilitation services
- Identify additional or under-utilised opportunities for intervention
- If appropriate, to outline the core components of a potential suicide risk assessment tool for drug and alcohol workers.

Design and Method: This study employs a cross-sectional design. A semi-structured questionnaire is being used to interview treatment agency staff responsible for the case management of drug and alcohol clients about their current suicide risk assessment practices. The questionnaire examines the frequency and extent of current screening practices, barriers to conducting suicide assessments, perceived needs in terms of assessment tools, and knowledge of suicide risk factors. The clinical managers of these services are also being asked about current policies and procedures relating to suicide risk assessment. All generalist residential rehabilitation services across Australia (N=73) are being invited to participate.

Progress: Questionnaires for the study have been designed and ethics clearance obtained. Interviewing is well underway, and is expected to be complete by the end of September.

Date Commenced: December 2008

Expected Date of Completion: February 2010

Funding: Australian Government Department of Health and Ageing

Improving shared healthcare for methadone patients with hepatitis C

NDARC Staff: Dr Erol Digiusto, Ms Julia Purchas and Professor Richard Mattick

Other Investigators: Robert Batey, Rowena Friend, Pooba Govender, Robert Anderson, Paul Webster, Sally McKenna, Paul McGeown, Jack Kehoe, Francis Haldar, Martin Veysey, Andrew Eakin, John Wenman, Mark Cornwell, Jenny McDonald and John Quin

Aims: This study is evaluating an intervention process, the aim of which is to develop and sustainably establish a collaborative shared-care environment which optimally supports methadone patients in undertaking diagnostic assessment and antiviral therapy for hepatitis C. More specific aims are to increase the number of methadone patients who (a) undertake diagnostic assessment, (b) are referred to hepatitis C antiviral therapy services, (c) are assessed as being suitable for antiviral therapy, and (d) undertake and adhere to antiviral therapy.

Design and Method: We are conducting this study through methadone and hepatitis C clinics in NSW metropolitan and regional locations in order to compare the process and outcomes of Usual Care (at control locations) with the effects of Collaborative Shared

CURRENT PROJECTS

Care (at intervention locations). The intervention involves identifying site-specific service development and shared-care goals with the clinicians at the methadone and hepatitis clinics; visiting the intervention sites to conduct training sessions and discuss relevant clinical guidelines; regularly communicating with intervention-site clinicians to monitor and support implementation of the agreed service development processes; regularly contacting recruited patients to monitor their progress.

Progress: Nine methadone clinics linked to six hepatitis C therapy services are participating in the study. Two workshops have been conducted at each of the intervention sites, patient recruitment has been completed, and follow-up data collection will occur in March 2010.

Date Commenced: April 2008

Expected Date of Completion: June 2010

Funding: NSW Health - anonymous charitable foundation

The development and evaluation of a treatment and relapse prevention program for juvenile offenders aimed at reducing substance use and criminal behaviour

NDARC Staff: Dr Laura Vogl, Ms Anna Roberts and Dr John Howard

Other Investigators: Geoff Wilkinson (Department of Juvenile Justice)

Aims: The aim of the current project is to develop a treatment and relapse prevention program for juvenile offenders which will jointly address substance use and criminal behaviour. The aim is to develop a program which is:

- Feasible, acceptable and readily implemented in the different Juvenile Justice environments
- Effective in reducing substance use
- Effective in reducing the risk of future criminal behaviour
- Effective in modifying risk and protective factors associated with crime and substance use behaviour.

Design and Method: The NSW Department of Juvenile Justice (DJJ) has engaged NDARC to develop a treatment and relapse prevention program for substance use and criminal behaviour.

Program content will be developed based on an extensive literature review of evidence based interventions and focus groups with DJJ staff, clients and client families. Program content will be developed to overcome the identified difficulties associated with implementation. In addition, program content will be created so as to be easily adapted to group or individual work as well as delivery in both community and custodial environments.

Progress: An extensive literature review has been conducted and the development of program content commenced.

Date Commenced: May 2009

Expected Date of Completion: June 2011

Funding: NSW Department of Juvenile Justice and Australian Research Council

The Michael Project evaluation

NDARC Staff: Dr Lucy Burns, Ms Elizabeth Conroy and Ms Emma Black

Other Investigators: Paul Flatau (Murdoch University), Kathryn Taylor (Murdoch University), Richard Bryant (UNSW), Tim Marchant, Anne Hampshire, Kathryn di Nicola and Karen Larsen (Mission Australia)

Aims: The Michael Project is a three-year collaboration between Mission Australia (MA) and a philanthropic individual which aims to develop a holistic approach to dealing with the issues of homelessness. The Michael Project will work with homeless men in the greater metropolitan Sydney area who are clients of MA Supported Accommodation Assistance Program (SAAP) services. These services currently address a variety of needs including (but not limited to) outreach and comprehensive case management, specialist support and therapeutic programs, crisis and transitional accommodation, brokerage, education and vocational programs, and health care. The Michael Project will enhance these existing services through four integrated programs: Client Wellbeing and Counselling Intervention; Self-care and Health; Missionbeat; Outreach Nurse; and Social Inclusion Skills Development.

The current study aims to evaluate the impact of the Michael Project on key outcomes associated with each of the five integrated programs. Specifically, this study aims to:

- Collect baseline data on a proportion of clients accessing five Sydney-based MA services to provide detailed information on the risk factors for homelessness among this client group
- Collect follow-up information 3-months and 12-months post-baseline to assess changes in key client outcomes over time (e.g. substance use, quality of life, health status)
- Assess the impact of the number of MP services provided on key client outcomes (e.g. substance use, quality of life, health status)
- Identify key indicators of continued homelessness (homelessness risk factors).

Design and Method: Face-to-face longitudinal quantitative survey upon entry to a MA service (baseline), 3 months following entry, and 12 months following entry. Qualitative component involving qualitative interviews with participants 12 months post-baseline, focus groups with service providers and service managers, and semi-structured self-complete survey with case workers. Evaluation of routine indicator data collected in relation to the Medibest Nurse service.

Progress: Interviews and data collection are underway. Two-hundred and fifty baseline surveys have been collected and 150 interviews at three months post-baseline.

Date Commenced: February 2008

Expected Date of Completion: 2010

Funding: Private benefactor through Mission Australia

Qualitative study of mental health and mental health treatment among young cannabis and psychostimulant users in residential substance abuse treatment

NDARC Staff: Dr Anthony Arcuri, Dr John Howard, Professor Jan Copeland and Dr Melissa Norberg

Aims: To explore mental health difficulties of young people with problematic cannabis and/or psychostimulant use in residential substance use treatment and to ascertain past barriers to treatment for mental health and substance use difficulties and what these young people find most helpful in their current treatment program.

Design and Method: This study was conducted at the Ted Noffs Foundation (TNF), with residents of their Program for Adolescent Life Management (PALM). Recruitment was extremely slow, but eight PALM residents were interviewed, when theoretical saturation (when no new information seems to emerge from the data analysis) was reached. The data from the interviews was analysed using a grounded theory approach, with the assistance of the NVivo software package. The grounded theory approach has been chosen for its particular usefulness in understanding topic areas that are under-researched.

Progress: In data collection and analysis stage.

Date Commenced: June 2009

Expected Date of Completion: January 2010

Funding: Australian Government Department of Health and Ageing

Screening and brief intervention in Aboriginal community controlled health services in rural NSW

NDARC Staff: Dr Anton Clifford, Ms Catherine Deans, A/Prof. Anthony Shakeshaft (NDARC and The Sax Research Institute, Sydney, New South Wales)

Aims: To implement best-evidence screening and brief intervention for alcohol misuse into routine delivery in Aboriginal Community Controlled Health Services (ACCHSs) in rural NSW.

Design and Method: Pre/post intervention design using mixed methods to measure both the implementation process (qualitative and quantitative indicators) and intervention outcomes (quantitative indicators).

Progress: Currently all outcome data are being collected, and the qualitative process measure data are being obtained and analysed. All ACCHSs involved in the project have implemented screening and brief intervention and will continue with support from the project staff and locally identified and trained clinical staff. Post-test outcomes will be available in March 2010.

Date Commenced: May 2008

Expected Date of Completion: March 2010

Funding: Australian Government Department of Health and Ageing, as managed by the National Drug Research Institute (NDRI)

Magistrates Early Referral Into Treatment (MERIT): Annual Report 2008

NDARC Staff: Dr Kristy Martire and Mr Tim McSweeney

Aims: To produce the 2008 Annual Report for the MERIT program

Design and Method: The 2007 Annual Report describes program activity, program exits, health outcomes, factors associated with program completion and criminal justice outcomes for those individuals referred to the MERIT program during 2007. Analysis was conducted on an existing dataset of 2,731 referred defendants.

Progress: Draft report complete

Date Commenced: October 2009

Expected Date of Completion: May 2010

Funding: Crime Prevention Division, NSW Attorney Generals' Department

Evaluation of the Cannabis Check-Up+ among young cannabis users with co-occurring mental health conditions

NDARC Staff: Dr Melissa Norberg, Mr Robert Battisti, Professor Jan Copeland, Ms Judit O'Vari and Ms Sharon Ryle

Collaborators: Daniel Hermens (Brain and Mind Research Institute, University of Sydney), Ian Hickie (Brain and Mind Research Institute, University of Sydney), Susie Purcell (Headspace Macarthur) and Ms Michelle Lampis (Headspace Central Sydney)

Aims: To investigate the efficacy of a brief motivational interviewing and cognitive therapy-based intervention for cannabis use among young individuals (aged 14-30) with cannabis dependence and comorbid mental illness. The intervention is designed to be an adjunct to treatment-as-usual, with a view to increase readiness for cannabis use change among young people with a mental health condition.

Design and Method: A telephone screening interview for eligibility is conducted and eligible participants attend a baseline assessment appointment with the study therapist. This assessment includes a detailed examination of the participant's substance use history as well as the completion of multiple psychometric assessments and a mental health diagnostic interview. Following this assessment, participants are randomly allocated to either an immediate treatment or delayed treatment condition. Individuals within the immediate treatment condition receive 3 weekly 1-hour treatment sessions, in which the results of their assessment are fed back to them, along with psychoeducation about cannabis and skills for reducing use. Following completion of these sessions, participants complete 1 month and 3 month follow-up assessments. Individuals in the delayed treatment condition receive the treatment immediately after a 3 month wait-period.

Progress: Thirty individuals have enrolled in the study.

Date Commenced: July 2009

Expected Date of Completion: November 2010

Funding: Australian Government Department of Health and Ageing

CURRENT PROJECTS

Development of a cannabis withdrawal scale

NDARC Staff: Dr David Allsop, Dr Melissa Norberg, Ms Jennifer McKenzie, and Professor Jan Copeland

Aim: To develop a clinical measurement tool for assessing the stage and severity of cannabis withdrawal using rigorous psychometric analysis.

Design and Method: This study will recruit non-treatment-seeking, cannabis dependent participants from the community. Participants will be 50 people (aged 18-65) who regularly use cannabis (average 5 days per week), and who meet DSM-IV criteria for cannabis dependence. Participants will complete a baseline assessment, and will provide daily withdrawal symptom information during a one week "smoking as usual" baseline phase, followed by a two week cannabis abstinence phase. The daily withdrawal data will be analysed using psychometric techniques to evaluate the validity and reliability of our candidate cannabis withdrawal scale. The primary outcome will be the production and preliminary testing of a psychometrically rigorous clinical instrument for measuring the various components of the cannabis withdrawal syndrome. Secondary outcomes include a variety of measures of psychological functioning which will be used to predict scores on the withdrawal scale.

Progress: To date, 28 people have completed the baseline interview. Six people have been excluded from the study due to non-compliance with study protocol, and 10 people have fully completed the one week baseline phase, the two week cannabis abstinence phase, and the one month follow-up phase. There are currently 12 people who are active in the study - either in baseline, withdrawal, or awaiting their one month follow-up.

Benefits: Resumption of cannabis use alleviates withdrawal symptoms, thus cannabis withdrawal is believed to be a major contributor to the high rates of relapse observed clinically. Despite the discomforts associated with cannabis withdrawal and the role that withdrawal plays in relapse, there is currently no valid and reliable measure for quantifying the nature and severity of cannabis withdrawal during a quit attempt. The creation of this psychometrically valid clinical tool for measuring cannabis withdrawal is an essential first step along the path towards developing interventions that can alleviate the discomfort (and relapse) caused by the cannabis withdrawal syndrome. Without this valid and reliable tool for measuring withdrawal, we would not be able to reliably quantify whether novel psychotherapies or pharmacotherapies are having the desired positive impact.

Date Commenced: July 2009

Expected Date of Completion: June 2010

Funding: Australian Government Department of Health and Ageing

Refining the timeline followback to assess cannabis use

NDARC Staff: Dr Melissa Norberg, Ms Jennifer Mackenzie and Professor Jan Copeland

Rationale: The timeline followback (TLFB) is the most widely used calendar-based method for collecting retrospective estimates of drug use. The TLFB uses a calendar and other memory aids (e.g. birthdays,

holidays, special events) to gather retrospective estimates of an individual's daily substance use over a specified time period. Studies on the psychometric properties of the TLFB for the measurement of alcohol consumption have shown high temporal stability and correlations between self and collateral reports have been high. Studies examining illicit drugs provide support for using the TLFB to assess frequency of illicit drug use (including cannabis); however, no study has examined the reliability and validity of collecting cannabis quantity information for adults.

Current administrations of the TLFB for assessing cannabis use only require individuals to nominate the days in which they have used cannabis. On the other hand, other assessment instruments require individuals to nominate both the frequency and quantity of cannabis used. Tools that assess quantity of use sometimes provide guides for assessing use; however, research has provided conflicting figures. Therefore it is imperative that researchers develop a reliable method to assess cannabis quantity. By doing so, an improved understanding of hazardous use can be garnered. In addition, reliable assessment will improve between subject comparisons when evaluating treatment effectiveness.

Aims: The aims of this project are to:

- Improve cannabis quantity assessment
- Evaluate the test-retest and interrater reliability of the modified TLFB
- Evaluate the convergent validity of the modified TLFB by obtaining collateral reports about cannabis use.

Design and Method: The TLFB study involves having current cannabis users attend two face-to-face interviews, 14 days apart, for provision of the TLFB interview for cannabis use assessment over the past 90 days. At their first visit, participants also undertake a clinical interview on their drug and alcohol use. Collateral informants are asked to come into the centre during this 14 day period to complete the TLFB interview regarding the participant's cannabis use.

Progress: Recruitment began in November 2009. Advertisements have been placed in local newspapers and street magazines as well as on-campus recruiting.

Date Commenced: November 2009

Expected date of completion: June 2010

Funding: Department of Health and Ageing

Mail-based intervention for cannabis use

NDARC Staff: Ms Tracey Wright, Dr Melissa Norberg, Ms Karina Hickey, and Professor Jan Copeland

Aim: The project aims to test the effectiveness of mail-based psychological treatment for cannabis use and related problems.

Design and Method: The intervention is delivered by post; therefore, unlike with electronic therapies, no pre-existing technology is required to complete the treatment. The project uses cognitive-behavioural therapy, motivational interviewing and adherence techniques, along with relapse prevention methods. Participants receive six treatment modules, with feedback delivered four times, all via mail. The study employs a pre/post design to evaluate the feasibility and potential efficacy of the treatment.

Progress: 38 individuals have enrolled in the study.

Date Commenced: October 2008

Expected date of completion: April 2010

Funding: Australian Government Department of Health and Ageing

Web-based intervention for cannabis use

NDARC Staff: Ms Sally Rooke, Professor Jan Copeland and Dr Melissa Norberg

Aim: To evaluate the efficacy of a web-based cognitive behavioural therapy (CBT) intervention in treating cannabis use and related problems.

Design and Method: This study is a two-group randomised controlled trial involving 800 participants. Participants assigned to the control condition will be sent a link to an educational resource relating to cannabis use. Participants assigned to the experimental condition will be sent a link to the intervention website, which will contain six CBT modules, assessments with feedback, and several optional extras. Between-groups comparisons will be conducted at post intervention and at a three-month follow-up. Primary outcome variables will be cannabis use, abuse, and dependence.

Progress: Twenty individuals have enrolled in the study.

Date Commenced: October 2008

Expected Date of Completion: December 2010

Funding: Australian Government Department of Health and Ageing

Characteristics of successful versus unsuccessful cannabis quitters

NDARC Staff: Ms Sally Rooke and Dr Melissa Norberg

Aim: This study will profile characteristics (demographics, cannabis use history, personality traits and mental health) and quitting strategies of individuals who have successfully quit using cannabis versus individuals who have attempted to quit, but have not been successful.

Design and Method: Participants will be classified into one of two groups: individuals who used to smoke cannabis but have abstained for at least a year, or individuals who currently use cannabis and have made at least one unsuccessful attempt to quit. Groups will be compared in terms of quitting strategies, demographics, and psychological characteristics.

Progress: The questionnaire has been designed and is awaiting ethics approval

Date Commenced: May 2009

Expected Date of Completion: April 2010

Funding: Australian Government Department of Health and Ageing

Process evaluation of the Cannabis Information and Helpline (CIH)

NDARC Staff: Mr Peter Gates, Professor Jan Copeland and Dr Melissa Norberg

Aim: This study is designed to evaluate the Cannabis Information and Helpline (CIH). The study will establish who calls the CIH, what they

expect from the service, how satisfied they are with the call, and how the call was helpful to them. In addition, we will investigate trends in counselling style as well as characteristics of callers and associations with call outcomes.

Design and Method: This study has two phases. First, CIH callers (N = 200) are asked to give consent to participate in a 15 minute phone interview. The interview assesses callers' satisfaction with the service and the counsellor that answered the phone, various aspects of the call, such as how easy it was for them to reach a counsellor, what happened during the call, and how the call was helpful to them. Secondly, the data routinely collected by CIH will be analysed to identify patterns and if certain types of callers and counsellor behaviours are associated with differential outcomes.

Progress: Ethics approval has been granted, and Lifeline have confirmed CIH requirements can be met. Recruitment has been completed and two articles will be submitted to peer reviewed journals by June, 2010

Date Commenced: August 2008

Expected Date of Completion: August 2011

Funding: Australian Government Department of Health and Ageing

Telephone counselling via the Cannabis Information and Helpline (CIH)

NDARC Staff: Mr Peter Gates, Professor Jan Copeland and Dr Melissa Norberg

Aim: This study is designed to develop a brief telephone-based cannabis treatment and compare the effectiveness of this treatment against a control condition.

Design and Method: This study will recruit participants who phone the Cannabis Information and Helpline requesting assistance in reducing their own cannabis use. Treatment effectiveness will be assessed by reduction in cannabis use and general improvements in quality of life. Three hundred and thirty-six participants will be randomised into two groups: immediate treatment or three-months delayed treatment. Treatment is four sessions of cognitive-behavioural and motivational enhancement therapy. Treatment delivery is meant to be flexible, in that successful patients will continue to learn new skills during each session, whereas unsuccessful participants will undergo motivational interviewing and problem-solving techniques in an effort to address their lack of improvement. Participants will be interviewed pre-treatment, immediately post-treatment, and at one- and three-months post-treatment.

The treatment is delivered by Cannabis Information and Helpline counsellors. All counsellors receive two full-days of training. Counselling calls will be monitored randomly to assess treatment fidelity.

Progress: Ethics approval has been granted. Counsellors have been trained and recruitment has begun. Recruitment will be completed by the beginning of 2011.

Date Commenced: August 2008

Expected Date of Completion: August 2011

Funding: Australian Government Department of Health and Ageing

CURRENT PROJECTS

Increasing access to effective harm reduction interventions for vulnerable and marginalised young drug users

NDARC Staff: Dr John Howard (and Ms Sarah Larney until end July 2010)

Other Investigators: Asian Harm Reduction Network, Chiang Mai, Thailand; Yunnan Institute for Drug Abuse, Kunming, China; Youth Vision, Kathmandu, Nepal; Thai AIDS Treatment Action Group (TTAG), Bangkok, Thailand

Rationale: Injecting drug use is fuelling the HIV epidemic in different parts of the world, but the problem is especially concerning in Asian countries where large numbers of people who inject drugs are living with HIV/AIDS: HIV-infected injecting drug users make up 30-35% of all HIV-infected individuals, compared with 0.6% for South Africa and 3% for Kenya. The spread of HIV/AIDS amongst this group - and through them amongst their partners and the general public - tends to be the result of the use of contaminated injecting equipment and engaging in unsafe sex work.

Young people who have developed substance dependency and substance-related problems are often treated in adult drug use programmes, even though developmental, psychological, social, cognitive and family differences underscore the need for specialised approaches. In addition, young people tend not to engage with adult-oriented services, and show poor attendance and participation rates.

This project aims to identify and minimise barriers to accessing and enhancing effective health and social care services for vulnerable and/or marginalised young drug users. Based on an in-depth and prospective analysis of injecting drug use by young people in three well established settings, innovative harm reduction approaches will be developed, reviewed, adjusted and implemented, and the capacity of key on-site staff will be built. The specific mix of interventions at each site will be determined at the initial planning meeting, so that they meet the particular local needs. While directly benefitting participating services, lessons learned will form the basis for developing a Toolkit for providing comprehensive harm reduction interventions for young, marginalised drug users. The Toolkit will comprise a minimum set of components for a facilitating policy environment, harm reduction intervention guidelines, facilitators' notes, and background articles.

Aims: Research Questions to be addressed by this project are:

- What are the attributes of harm reduction interventions/ programmes that produce positive outcomes (e.g. reduced risk behaviours, improved social functioning) for young people who use drugs in the target countries?
- What is required to scale up effective harm reduction interventions for young people (aged 10-25) who use drugs?

Design and Method: Working with implementing partners in situ, interaction with young people, staff and communities during field visits, ongoing consultation, development of training materials and a tool kit, synthesis of monitoring and evaluation activities.

Progress: Four field visits undertaken to assist and shape local projects at the three sites (Kathmandu, Kunming and Bangkok), with two more during 2010. Focus groups conducted at each site to identify the needs and wants of young IDUs and those at risk of IDU, and to obtain more in-depth understanding of their substance

use and the contexts within which it emerges and is maintained. Training in increasing use of 'youth friendly' approaches undertaken at each site, and data collection tools and monitoring and evaluation processes enhanced.

Outputs:

- Increased access to and coverage of a comprehensive range of harm reduction services essential for young drug users.
- Improved health and wellbeing of young vulnerable drug users, e.g: improvements in physical and mental health; safe sex; sense of well-being and social inclusion; reductions in relapse; drug use and sexual risk behaviours; transitioning to injecting; crime and placement in closed settings
- Developing a set of minimally required components for a policy environment which facilitates effective scaling up of youth-friendly harm reduction services.
- Building the capacity of the harm reduction workforce in Asia and support the scaling up of high quality low threshold services for young people who inject drug or who are at risk of doing so.
- Demonstrating the feasibility of programs to reduce initiation to injecting.
- Demonstration of the utility of providing comprehensive youth-friendly services to reduce the likelihood of placement of young drug users in closed settings (eg compulsory drug treatment centres, work camps, prisons and other places of detention) and return to such closed settings following release.

Date Commenced: September 2009

Expected Date of Completion: September 2011

Funding: AIDSFonds Netherlands

Development of a sexual health and contraception intervention for women who are drug dependent

NDARC Staff: Dr Lucy Burns and Ms Elizabeth Conroy

Other Investigators: Paul Haber and Christine Stephens, SSWAHS; Kirsten Black, Sydney University

Rationale: Substance use is correlated with high rates of unplanned pregnancies and associated infant morbidity such as pre-term delivery, small-for-gestational age infants, neonatal abstinence syndrome, sudden infant death syndrome and child abuse. Approximately 1,000 babies will be born to opioid-dependent women in NSW in any one year. Recent research has shown that these babies have approximately a six-fold increased risk of dying in infancy relative to infants born to non-opioid-dependent women. Whilst it is commonly perceived that pregnancy is an opportunity to make positive lifestyle changes, women with established substance use problems need intensive and long-term interventions to achieve favourable outcomes. Prevention efforts could circumvent the need for these comprehensive interventions.

In a recent NSW Health funded pilot study of 26 pregnant women accessing the RPAH antenatal clinic, the majority of pregnancies to women with a known substance use problem were unplanned and there was low use of birth control practices. Other studies have found similar low rates of contraceptive use among opioid-dependent women. A number of women in the RPAH pilot study

commented that they did not think they could get pregnant, a finding that is consistent with previous Australian research and possibly related to the high rate of menstrual dysfunction among opioid-dependent females. In particular, methadone is associated with increased variability in cycle length and greater risk for amenorrhea. Additionally, lifestyle-associated factors, such as poor nutritional status and severe psychological distress, may negatively impact on menstrual functioning in these women. Nonetheless, these women are both sexually active and fertile. There appears, therefore, to be a need for targeted education regarding the importance of birth control in the context of absent or irregular menses. In particular, cost-efficient strategies to increase the use of effective methods of contraception in this population need to be developed and implemented.

In other populations, successful interventions to reduce unplanned conceptions have adopted strategies that combine programs of education with client appropriate services. Women attending services for treatment of drug dependence often lead chaotic lives and may not prioritise their reproductive health nor recognise the need for contraception. Thus, looking at ways to assist women being treated for drug dependence to make informed choices about the contraceptive options available to them and exploring the opportunities to facilitate access to contraceptive services, will potentially benefit not only the women themselves, but reduce the morbidity and mortality associated with unplanned conceptions and births. In particular, access to information about long-acting contraceptive methods, which are less user-dependent but reliable and reversible, may be of particular importance to women in drug health services who may find daily adherence to an oral or barrier method difficult.

Aims: This study will explore how best to integrate contraceptive education and services into the drug health clinic setting. The project has the following specific aims:

- Identify the barriers to effective contraceptive use among opioid-dependent women
- Identify the need for staff training and education in the area of contraception
- Develop an effective contraception intervention that is both acceptable to opioid-dependent women and feasible to implement within a clinic setting.

Design and Method: This is a cross-sectional, qualitative study. In-depth interviews will be conducted with 21 female clients from drug and alcohol services at three different locations. A focus group will also be conducted at each site and comprise staff from drug and alcohol, sexual health and obstetrics and gynaecology.

Progress: Ethics approval has been granted and site specific approval is currently being organised.

Date Commenced: July 2009

Expected date of completion: August 2010

Funding: NSW Department of Health, Drug and Alcohol Research Grants Program

Homelessness and services and system integration

NDARC Staff: Dr Lucy Burns and Ms Elizabeth Conroy

Other Investigators: Paul Flatau and Anne Clear, Murdoch University

Rationale: Prevalence rates of substance use and other mental disorder among homeless persons typically exceed general population estimates yet access to appropriate services is limited. Previous research has clearly demonstrated a need for better integration of homelessness, mental health, and alcohol and drug services to address the multiple and complex needs of homeless persons. Loosely defined, integration refers to linkages amongst policies, sectors, organisations and programs. The aim of integration is to improve client outcomes, enhance client access, create greater equity and consistency, increase efficiency, accountability and control. Integration across homelessness, mental health and drug and alcohol services was a key recommendation of the Australian Government's White Paper on Homelessness. Although Australia has a number of cross-sectoral approaches currently in existence, the evidence regarding the most effective mechanism for such integration is currently lacking.

Aims: This project aims to increase our understanding of the ways in which homelessness, mental health and drug and alcohol services can be effectively coordinated or integrated, and the extent to which system and service integration is occurring in Australia at present. The project also seeks to provide case study evidence in relation to the purported benefits of different models of integrated care in the Australian context.

Design and Method: This study utilises a mixed-methods approach. Case studies will be undertaken with approximately 6-9 homelessness agencies, drug and alcohol services and mental health services that demonstrate a range of integration models and mechanisms. A quantitative survey will be used to measure the extent of system- and service-level integration currently occurring among homelessness, drug and alcohol and mental health services within discrete geographical areas. The study will be conducted in Sydney, Melbourne and Perth.

Progress: Three case studies (a homelessness agency in each of Sydney, Melbourne and Perth) have been completed. Three additional case studies involving mainstream health services will be undertaken during 2010. The quantitative survey is currently being developed and it is anticipated to be in the field early 2010.

Date Commenced: May 2009

Expected date of completion: February 2011

Funding: Australian Housing and Urban Research Institute

CURRENT PROJECTS

INFORMATION AND TRAINING

Program of International Research and Training (PIRT)

NDARC Staff: A/Prof. Kate Dolan, Dr Alex Wodak, Professor Richard Mattick and Ms Sarah Larney

Rationale: In 2002, NDARC established the Program of International Research and Training (PIRT) under the management of Associate Professor Kate Dolan. PIRT functions as the international arm of NDARC's core business. To date the activities of this program have focused on developing and transitional countries.

Aims: To facilitate research and training to minimise the harms from drug use and to increase the effectiveness of drug treatment internationally by:

- Building capacity into research in drug treatment within developing countries
- Building capacity for monitoring drug use and drug problems in developing countries
- Building alliances between Australia and developing countries in terms of understanding drug trends and law enforcement
- Encouraging policy-relevant research consistent with national strategies and cultures.

Design and Method: PIRT works on a range of issues encompassing licit and illicit drug use and related harms. The geographical focus of our work is the Asia-Pacific region. Particular areas of specialisation include:

- HIV prevention for injecting drug users
- Methadone maintenance treatment in community and prison settings
- HIV prevention in prisons and other closed settings.

Research:

PIRT conducts original research and encourages collaboration with international partner organisations. PIRT staff have conducted rapid assessments of drug use and HIV in community and prison settings. Examples of past and current research projects include:

- A literature review to identify 50 key documents on HIV prevention, treatment and care for injecting drug users. This project was conducted for the International Harm Reduction Association (IHRA), with funding from AVERT
- A qualitative study of the process by which We Help Ourselves, an abstinence-based therapeutic community, introduced harm reduction strategies into their service model. This project was funded by the World Health Organization Western Pacific Regional Office
- A rapid assessment of drug use, HIV prevalence and HIV risk behaviours in prisons in Jakarta, Indonesia in 2005
- A rapid assessment of HIV/AIDS and drug use in Mongolia in 2006
- A report on drug demand reduction strategies in closed settings in China, Indonesia and Vietnam. 'Closed settings' is a term encompassing prisons, work camps and compulsory drug treatment centres. This report will identify the various drug

education and treatment programs available to detainees of closed settings in these three countries. This project is funded by the United Nations Office on Drugs and Crime Regional Centre (UNODC) for East Asia

- A report on HIV prevention, treatment and care (PTC) in prisons in India, Indonesia, Thailand and Nepal. This comprehensive report includes an introduction to the issues of HIV PTC in prison; an analysis of HIV PTC in prisons in each of the above countries; a regional summary of HIV PTC; and recommendations for improving HIV PTC in prisons. This project was funded by the World Health Organization South-East Asia Regional Office
- Production of a training manual on harm reduction, drug use and HIV prevention for the World Health Organization Western Pacific Regional Office (WHO WPRO)
- Funded by the Drosos Foundation and in collaboration with the Iran Prisons Organisation, the Persepolis Centre and the Iran National Centre of Addiction Studies, the establishment of a primary health care centre with Methadone Maintenance Treatment (MMT) for female IDUs in Tehran, Iran, in 2007
- Development of guidelines for drug detoxification management and drug dependency treatment in closed settings in South-East Asia. This project is funded by WHO WPRO and completion is expected by mid-2007.

Training:

PIRT is actively involved in providing training to health care workers, law enforcement personnel and researchers. PIRT trainers have conducted courses in Australia, Indonesia, Iran, Taiwan and Cambodia. Broadly, training programs focus on HIV prevention and harm reduction for injecting drug users. Areas of training expertise include:

- Drug treatment - in particular, substitution treatment
- Needle and syringe programs
- Outreach to injecting drug users
- HIV prevention and harm reduction in prison
- Monitoring and evaluation
- Research dissemination.

Progress: PIRT is building capacity among researchers in Myanmar. In this project we are assisting on a seroincidence study of HIV among drug injectors in Lashio in the Northern Shan state. One visit to Myanmar has been made and two more are scheduled in the coming months.

The Global Network of People Living with HIV (GNP+) commissioned PIRT to produce a set of guidelines called 'Advancing the sexual and reproductive health and human rights of prisoners living with HIV.'

The United Nations Office on Drugs and Crime has requested PIRT provide training on women and HIV to service providers in Iran. We will also present the findings of the Iranian women's Clinic at the International Congress on Environmental effects on reproductive health, Tehran, Feb 2011.

Finally, PIRT has been assisting Iranian colleagues with secondary analysis of their National Survey on Drug Dependence which was conducted in 2007.

Date Commenced: March 2003

Expected Date of Completion: Ongoing

Funding: Australian Government Department of Health and Ageing. Additional project funding from various international sources including United Nations Office on Drugs and Crime, World Health Organization, Family Health International and the Drosos Foundation

Guidelines on the management of co-occurring alcohol and other drug and mental health conditions in alcohol and other drug treatment settings (National Comorbidity Clinical Guidelines)

NDARC Staff: Dr Katherine Mills, Mr Mark Deady, Dr Heather Proudfoot, Dr Claudia Sannibale, Professor Richard Mattick, Professor Maree Teesson and Dr Lucy Burns

Aims: In 2007, the Australian Government Department of Health and Ageing funded NDARC to develop guidelines on the management of comorbid mental health conditions in AOD treatment settings. The purpose of these Guidelines is to provide AOD workers with up-to-date, evidence-based information on the management of comorbid mental health conditions in AOD treatment settings. They are based on the best available evidence and draw upon the experience and knowledge of clinicians, researchers, consumers and carers.

The guidelines aim to:

- Increase AOD workers' knowledge and awareness of mental health conditions
- Improve the confidence and skills of AOD workers working with clients with comorbid mental health conditions
- Provide guiding principles for working with clients with comorbid mental health conditions
- Improve AOD workers' ability to identify mental health conditions
- Provide practical information on the management of comorbid mental health conditions
- Provide information regarding the treatment of comorbid mental health conditions
- Provide information regarding referral processes
- Provide resources that may be used to facilitate all of the above.

Design and Method: The Guidelines are based on a comprehensive review of the best available evidence and the experience of an expert panel of academic researchers, clinicians, consumers and carers. In developing these Guidelines, we have relied where possible on evidence from well-designed research studies. Where this evidence was not available, recommendations are based upon appropriate clinical experience. Prior to publication, the Guidelines were reviewed by a number of key stakeholders with expertise in the field and pilot tested in non-government AOD treatment services across Australia.

Progress: This Guidelines have been completed and hard copies were distributed to AOD treatment services across Australia in December 2009. The Guidelines, and other resources, are also available for download from <http://ndarc.med.unsw.edu.au/comorbidity>

A number of training seminars for implementing the Guidelines in clinical practice will be conducted around Australia.

Date Commenced: January 2008

Expected Date of Completion: April 2010

Funding: Australian Commonwealth Department of Health and Ageing

DRUG POLICY MODELLING PROGRAM (DPMP)

NDARC Staff: A/Prof. Alison Ritter, Dr David Bright, Dr Jenny Chalmers, Ms Colleen Faes, Ms Katrina Grech, Dr Wendy Gong, Dr Caitlin Hughes, Ms Kari Lancaster, Mr Michael Lodge, Ms Rachel Ngui, Ms Marian Shanahan, Mr Francis Matthew-Simmons, Ms Bridget Spicer

Other Investigators: Gabriele Bammer (Australian National University), Lorraine Mazerolle (Griffith University), Paul Dietze (Burnet Institute), Pascal Perez (HEMA Consulting)

Technical Advisors: Peter Reuter (University of Maryland, USA), Jonathan P. Caulkins (Carnegie Mellon University, USA), Margaret Hamilton (University of Melbourne)

Aims: The goal of DPMP is to create valuable new drug policy insights, ideas and interventions that will allow Australia to respond with alacrity and success to illicit drug use. DPMP focuses on a comprehensive approach to drug policy that explores dynamic interactions between law enforcement, prevention, treatment and harm reduction. The work includes development of the evidence base for policy; developing and using dynamic models of drug issues to better inform policy decision-making; and ongoing study of the policy-making processes in Australia. The aims of DPMP are to:

- Build systems and approaches to enhance evidence-informed illicit drug policy
- Develop and adapt new tools and methods for policy-makers
- Show the value of these tools by dealing with specific problems raised by policy-makers
- Create new ideas and insights for new policy
- Conduct rigorous research that provides independent, balanced, non-partisan analysis and improves the quality of the evidence
- Evaluate the effectiveness of the tools, methods, policy support and new interventions.

Design and Method: DPMP is a broad program of research comprising a large number of smaller projects. Research teams are located at the ANU, Griffith University and the Burnet Institute, with the core team located at NDARC. Our team spans multiple disciplines: Complex Systems Science, Criminology, Economics, Epidemiology, Integration and Implementation Sciences, Public Health and Medicine, Public Policy and Political Science, Psychology, Sociology and Systems Thinking.

Progress: Work across the DPMP teams can be categorised under three areas: generating new evidence for illicit drugs policy; translating the evidence; and studying policy-making.

1. Generating new evidence for illicit drugs policy

DPMP is undertaking sound innovative research to improve the evidence base for illicit drugs policy. We are particularly interested in generating evidence that facilitates comparisons across the four streams that make up illicit drugs policy: reducing the supply of drugs, preventing uptake of drug use, treatments for drug dependent

CURRENT PROJECTS

people and reducing the harms to drug users and the community. There are many current projects within DPMP concerned with generating new evidence, including:

- Melbourne Injecting Drug User Cohort Study (MICS) (Burnet Institute/DPMP Team)
- Problem-Oriented and Partnership Policing: an evaluation of the LEAPS (Liquor Enforcement and Proactive Strategies) (Griffith and UQ/DPMP teams)
- Reducing the Methamphetamine Problem in Australia: evaluating innovative partnerships between police, pharmacies and other third parties (Griffith and UQ/DPMP teams)
- Integration and Implementation Sciences: providing concepts and methods for synthesising disciplinary and practice-based knowledge and connecting research with practice (ANU/DPMP team)
- Structural analysis of the Australian heroin drought (Overseas DPMP team)
- Australian Drug Policy: an overview report on drug use and harms and their relationship to policy (NDARC/DPMP team)
- Exploring socio-demographics and drug use (NDARC/DPMP team)
- Cocaine Epidemic in Australia: a real or illusionary threat? (NDARC/DPMP team)
- Media Reporting of Illicit Drug use in Australia: trends and impacts on attitudes to illicit drugs (NDARC/DPMP team and Drug and Alcohol Research and Training Australia (DARTA))
- A comparative analysis of drug court processes and outcomes in Sydney and London (NDARC/DPMP team)
- Australia government spending on drugs (drug budgets) (NDARC/DPMP team)
- The impact of macroeconomic factors (GFC) on alcohol and drug use and harms (NDARC/DPMP team).

2. Translating the evidence

Projects in this area are designed to translate research evidence for the policy community. One central tool in translating evidence is the use of models; models in DPMP allow exploration of 'what if' scenarios to aid decision making. Different types of modelling, including system dynamics and agent-based modelling, are used as part of DPMP. In addition, another aspect of evidence translation is working directly with policy-makers around Australia on current policy problems. The DPMP projects in this category include:

- Interactive modelling platform for drug policy problems (Human Ecosystems Modelling with Agents Consulting)
- Assessing the economic consequences of cannabis policy options (NDARC/DPMP team)
- Examining the relative cost effectiveness of different types of law enforcement interventions directed towards methamphetamine (NDARC/DPMP team)
- Bibliography of grey literature in the drugs policy areas (online) (NDARC/DPMP team and ISSDP)
- Support for Phase 2 of the evaluation of the Cannabis Infringement Notice Scheme in Western Australia (NDRI)
- Identifying current and alternate police options for intervening with MDMA (NDARC/DPMP team)

- Consultation and modelling in relation to the ACT AOD treatment service system (NDARC/DPMP team, HEMA Consulting and Critical Connections)
- Building a Queensland Cannabis Diversion Model (NDARC/DPMP team)
- Modelling policies for licensed venues in Perth for WA Police (NDARC/DPMP team, HEMA Consulting, and Turning Point)
- The ontology of deviance (Charles Sturt/DPMP team).

3. Studying policy-making

Finally, having evidence and usable models is not enough to influence policy. We know that evidence is only one input into the policy processes. DPMP is therefore also studying how policy is developed and ways to improve our understanding of the threats to evidence-informed policy. Projects within this area include:

- Public opinion, the media, and illicit drug policy in Australia (NDARC/DPMP team)
- The Australian (illicit) drug policy timeline: 1985-2009 (online) (NDARC/DPMP team)
- Track Marks (Australian Injecting and Illicit Drug Users' League)
- Conceptualising the 'balance' in drug policy (NDARC/DPMP team)
- Comparative policy analysis: a review of methods and approaches (NDARC/DPMP team).

For full details of our current projects including aims and methods, please see our website: www.dpmp.unsw.edu.au.

Date Commenced: July 2007

Expected Date of Completion: July 2011

Funding: DPMP is funded by a core grant from the Colonial Foundation Trust and receives specific project funding from other sources: NHMRC Researcher Support, ANCD, NDLERF, and the ARC.

COMPLETED PROJECTS

EPIDEMIOLOGY

Mortality among opioid dependent persons in pharmacotherapy, NSW 1985-2006

NDARC Staff: Professor Louisa Degenhardt, Dr Lucy Burns, Ms Deborah Randall, Ms Amy Gibson and Professor Richard Mattick

Other Investigators: Wayne Hall (School of Population Health, University of Queensland), Matthew Law (National Centre in HIV Epidemiology and Clinical Research, UNSW), Tony Butler (National Drug Research Institute, Curtin University of Technology) and Janaki Amin (Justice Health, NSW Health)

Aims: The aims of this project are to:

- Examine overall mortality rates of persons enrolled in NSW opioid maintenance treatment (methadone or buprenorphine) between 1985 and 2006
- Examine possible changes in both the rates and causes of mortality over this period
- Examine the rates and causes of mortality according to factors such as age and gender
- Examine the impact of opioid maintenance treatment on rates and causes of mortality among this cohort.

Design and Method: The study involves an historical cohort linking identified individuals in existing datasets on opioid maintenance treatment and mortality. All people who commenced an episode of methadone or buprenorphine treatment in NSW between 1985 and 2006 (approximately 45,000 people) have been included in the study. Data on all patients entering methadone or buprenorphine treatment since 1985 are kept by NSW Health; these data have been linked to mortality and causes of death data managed by the Australian Institute of Health and Welfare.

Predictors of mortality have been examined using Poisson regression, stratified according to the different causes of death. Other analyses include: predictors of treatment retention, analysed using survival analysis; whether the incidence of any cause of death has changed over time; and how treatment exposure has impacted on mortality rates.

Findings: Rates and causes of mortality were examined in the opioid maintenance treatment cohort. Overall we found that mortality rates for the cohort had changed dramatically over study time, increasing until 1999-2000 and then falling from 2001 to 2006.

In-treatment and out-of-treatment mortality was examined, and treatment was found to be protective overall. We estimate that 29% more deaths would have occurred in the cohort had they not accessed the treatment program.

The highest mortality risk was found in the induction period (first two weeks) of those on methadone. Mortality at induction was at its highest in the 1990-1994 period, but has steadily improved since then, highlighting that efforts to deal with the higher risk of mortality in the treatment induction phase are working, but that there is still significant work to be done.

From examining causes of death over time it became apparent that chronic diseases mortality (e.g. cardiovascular disease, cancer and

hepatitis-related illnesses) was an emerging public health concern among this cohort.

Investigation of treatment retention indicated that those in buprenorphine treatment are less likely to be retained in treatment. However, the induction mortality risk was not as high as methadone.

Benefits:

- Confirmed the protective effects of methadone and buprenorphine treatment in a real-world clinical context. This provides further evidence for the expansion of the opioid-replacement treatment program in Australia and overseas
- Comparison of methadone and buprenorphine treatment in real-world context. Both reduce mortality in the cohort. Buprenorphine does not retain patients in treatment as well, but methadone continues to have a high risk of mortality in the induction phase
- Evidence of improvements in induction risk for methadone patients over time, but a need for further improvements to protect those entering their first episode, as risk is still elevated
- Identification of chronic diseases such as cancer as emerging public health concerns for this marginalised population. Research can be used to argue for interventions such as smoking cessation, alcohol interventions and hepatitis C treatment at points of opioid replacement treatment.

Date Commenced: July 2007

Funding: National Health and Medical Research Council

The health and psychological consequences of ecstasy use

NDARC Staff: Professor Louisa Degenhardt, Mr Edmund Silins and Ms Natasha Sindich

Aims: Despite increasing attention by the media and community, there has never been a comprehensive synthetic review of the existing literature on the characteristics, use and harms related to ecstasy (MDMA). This review examined a range of issues that constituted a repeated source of debate in the community which included: the effects of MDMA; the role of uncertain purity and contents of 'ecstasy' tablets; patterns of ecstasy use worldwide; correlates of ecstasy use; the acute and long-term effects of the drug; the potential neurotoxicity of MDMA; the issues of ecstasy 'dependence'; potential effects upon physical and cognitive functioning; and evidence on the association between ecstasy use and mental health.

Design and Method: To identify the relevant literature, a comprehensive search strategy was applied. The following electronic databases were searched: Medline, Embase, PsycInfo, Science Citation Index, Ovid and International Bibliography of the Social Sciences. 'Grey literature' and the journals not indexed in the above databases were searched comprehensively through specialist addiction libraries and websites.

Benefits: This work arose out of the increasing perception that there needed to be a summary of existing research on the epidemiology and possible effects of "ecstasy" (MDMA) use, given its increasing prevalence among young adults, and understandable concerns about studies reporting on various adverse consequences of this use. The

COMPLETED PROJECTS

monograph provides a synthetic review of the existing evidence on the epidemiology of “ecstasy” (MDMA) use and its putative adverse health and psychological consequences.

Findings: This monograph considers a wide range of possible consequences of ecstasy use. Evidence on the association between ecstasy and the outcome of interest is presented, with critical evaluation of the evidence that can be brought to bear on the nature of the relationship. It is clear that the state of the evidence in many areas has not yet moved beyond documenting associations between MDMA use and adverse outcomes. This monograph therefore identifies important future research which needs to be done to more definitively answer questions about whether ecstasy has adverse effects on health.

Date Commenced: December 2006

Funding: Australian Government Department of Health and Ageing

Monograph of the InterGovernmental Committee on Drugs Working Party on Fetal Alcohol Spectrum Disorders

NDARC Staff: Dr Lucy Burns, Ms Emma Black

Other Investigators: Elizabeth Elliott (University of Sydney)

Rationale: The Intergovernmental Committee on Drugs (IGCD) Fetal Alcohol Spectrum Disorder (FASD) Working Party was first established in 2006, at the request of the Ministerial Council on Drug Strategy, to advise on the developments in Australia and overseas in regard to FASD and to identify best practice approaches to reduce the incidence of FASD, particularly in Indigenous communities. The Working Party commissioned a monograph to examine the status of research, policy and practice regarding alcohol use in pregnancy in Australia.

Aims: This project aimed to examine the current status of research, policy and practice regarding alcohol use in pregnancy in Australia, particularly in relation to fetal alcohol spectrum disorder (FASD). The findings identified areas where additional attention was required and where enhancements to existing practices might improve the current situation with regard to prevention, early intervention and long-term management of this preventable condition.

Design and Method: The existing research was identified and reviewed, the findings were analysed, and information was systematically grouped and compiled into one cohesive body and published as a monograph. Topic areas included: the prevalence and correlates of alcohol use in pregnancy; services available for pregnant women; the effects of alcohol exposure during pregnancy; the epidemiology of FASD, prevention; health professionals’ knowledge and practice; professional education and workforce development; services and interventions; policy; and the economic impact of FASD in Australia.

Benefits: This document provides a clear and comprehensive picture of alcohol use in pregnancy in Australia.

Date Commenced: 2007

Funding: Australian Government Department of Health and Ageing; Drug and Alcohol Services South Australia.

IDENTIFICATION OF POTENTIAL HARMS

Review of adolescents and substance use in WHO’s Western Pacific Region

NDARC Staff: Dr John Howard, Dr Hammad Ali and Ms Lisa Robins

Rationale: Substance use amongst adolescents (those in the age group of 10-19) is an important public health issue in many countries of the region. For effective program development and support, it is necessary to get a sense of situation and determinants to develop appropriate strategies so that the health sector (including school health or youth friendly services) can respond to the problems in a meaningful manner.

Aims: The aim of the regional review was to understand the issues in the area of adolescents and substance use within the Western Pacific Region (WPR). The review was to identify what substances are used, how large a problem is it, who is using the substances, why are they using them and what is currently done about it? In addition the review needs to focus upon what kind of prevention efforts, policies and strategies have countries put in place to prevent or limit substance use among adolescents, what evidence do we have for the effectiveness of different methods/interventions, and how is the health sector involved in this area?

Design and Method: Desk review of white and grey literature, websites and interviews with key informants.

Benefits: The identification of substance use by adolescents and young people in the WPR, despite serious availability and quality of data issues. Key issues for prevention and treatment were canvassed, in addition to suggestions for improvements in data. Recommendations are leading to more concentrated focus on targeted prevention and treatment interventions and programming, and what role the health sector must plan.

Date Commenced: August 2009

Funding: WHO

PREVENTION AND EARLY INTERVENTIONS

CLIMATE Schools: the development and evaluation of an interactive computer-based prevention program for cannabis and psychostimulants

NDARC Staff: Dr Laura Vogl, Professor Maree Teesson, Dr Nicola Newton, Ms Catherine Deans, Ms Aspasia Karageorge, Dr Wendy Swift, Ms Alys Havard, Mr Paul Dillon, and Dr Rebecca McKetin

Other Investigators: Gavin Andrews (University of NSW)

Rationale: Early initiation to drug use is associated with a range of negative consequences including substance use disorders, comorbid mental health problems, juvenile offending, impaired educational performance and early school drop-out, resulting in negative impacts on both current functioning and future life options. As such, school-based prevention programs are ideally placed to access a

vulnerable population of young persons before significant drug use problems develop. Such programs do exist but have not been widely implemented or evaluated. When implementation does occur, insufficient ongoing teacher training, inadequate resources and problems with adherence to existing guidelines often compromise program efficacy. This problem is further compounded with many prevention programs being widely disseminated to schools without sufficient evaluation of their effectiveness.

In order to address these limitations, a computer-based intervention aimed at reducing alcohol consumption and harms among young people, titled CLIMATE Schools: alcohol module, has been developed, implemented and evaluated up to 24 months post-intervention. The CLIMATE Schools: alcohol module was more effective than usual classes in increasing alcohol related knowledge of facts that would inform safer drinking choices and decreasing the positive social expectations which students believed alcohol may afford. For females it was effective in decreasing average alcohol consumption, alcohol-related harms and the frequency of drinking to excess (> 4 standard drinks; 10g ethanol). For males the behavioural effects were not significant. Both teachers and students found the alcohol module to be a useful and enjoyable resource and that they would like to learn about other Personal Development Health and Physical Exercise topics in this format.

Psychostimulants and cannabis have emerged as two of the three most commonly used illicit drugs among Australian school students (inhalants is the third), providing a compelling argument to develop a new CLIMATE Schools module for these substances, based on the same principles as the alcohol module. The CLIMATE Schools: Psychostimulant and Cannabis Module would also be computer-based to retain three major advantages over previous prevention programs: it requires limited staff training and preparation time; it guarantees consistent and easy delivery of the content; and the education is placed in the context of a teenage drama to maintain student interest and engagement. The module would be curriculum based and would complement the wider CLIMATE Schools program, which currently includes alcohol and mental health modules. Positive feedback from the CLIMATE Schools Alcohol Module indicates a CLIMATE Schools: Psychostimulants and Cannabis Module would be welcomed by both secondary teachers and students.

Aims: To develop and evaluate the effectiveness of an evidence-based, computer-driven, prevention program to reduce use and harms associated with psychostimulants and cannabis, in order to build on the advantages demonstrated by the CLIMATE Schools: alcohol module.

Design and Method: An interactive computer-based prevention program for cannabis and psychostimulants was developed and evaluated in Year 10 students. The CLIMATE Schools: Psychostimulant and Cannabis Module was developed in collaboration with students, teachers and experts in the areas of alcohol, cannabis and psychostimulants.

The program was evaluated utilising a cluster randomised controlled trial. This RCT involved 21 schools across New South Wales and the Australian Capital Territory. The aim of this trial was to assess the impact of the CLIMATE intervention on students' knowledge of cannabis and psychostimulants, attitudes towards their use, drug use behaviour (e.g. lifetime use, recent use and frequency of use) and intention to use cannabis and psychostimulants in the future.

Benefits: The CLIMATE Schools: Psychostimulant and Cannabis Module was also evaluated using a RCT in 21 NSW and ACT schools with a total of 1,734 students. The mean age of students at baseline was 15.44 years (SD=0.41) and 66.2% were male. Eleven schools were allocated to the control group and 10 schools to the intervention group. The evaluation revealed that the CLIMATE Schools: Psychostimulant and Cannabis Module was effective in increasing knowledge of cannabis and psychostimulants and decreasing pro-drug attitudes. In the short-term the module was effective in subduing the uptake of ecstasy and decreasing the frequency of use. Females who received the CLIMATE Schools: Psychostimulant and Cannabis Module also used cannabis significantly less frequently than students who received drug education as usual. There were no changes in meth/amphetamine use or harms resulting from cannabis or psychostimulant use in general. The low prevalence of use is the most likely reason for why the CLIMATE intervention did not impact on drug-related harms. The intention to use such drugs in the future, however, was significantly subdued in the CLIMATE group. The mode of delivery was once again welcomed by both students and teachers, with the latter rating this program as superior to other drug prevention approaches and reporting that they would be likely to continue using this program in the future.

Date Commenced: April 2007

Funding: Australian Government Department of Health and Ageing, Australian Research Council and National Health and Medical Research Council

Alcohol use during pregnancy: formative intervention research

NDARC Staff: Dr Delyse Hutchinson

Other Investigators: Nyanda McBride and Susan Carruthers (National Drug Research Institute) and Carol Bower (Telethon Institute for Child Health Research)

Rationale: Exposure to alcohol during the prenatal period remains the leading cause of preventable birth defects and developmental problems in Australia and as such has generated increased attention from policy, research and health practitioners. A large proportion of women reduce or stop alcohol use when they find out that they are pregnant; however, there is a proportion of women who continue to drink in moderation, and an additional group who continue to drink to risky levels while pregnant. The Alcohol use during pregnancy: formative intervention research study is an explorative, descriptive study using both quantitative and qualitative methods. The study is designed to assess factors that contribute to alcohol consumption during pregnancy, and to identify potential intervention strategies to reduce alcohol consumption during pregnancy. The study targets pregnant women who attend public hospitals in Perth, Western Australia, and who are in their second or third trimester of pregnancy. Participants have identified themselves as current alcohol drinkers, 18 years of age or older, and who have English as their primary language.

Aims: The aims of this formative research study were to:

- Collect qualitative and quantitative information from women attending public hospital antenatal clinics in Perth, Western Australia, about their pregnancy and antenatal alcohol-related experiences

COMPLETED PROJECTS

- Identify potential intervention targets, strategies and components that may impact on alcohol use during pregnancy for use in future intervention research

Design and Method: There were two components to this study:

- Part A (Quantitative Project): this survey of approximately 400 pregnant women who consume alcohol will provide information about frequency and quantity of alcohol use, details of pregnancy history and insights into potential intervention components, targets and strategies.
- Part B (Qualitative Project): this research involves focus groups with pregnant women who consume alcohol. The primary aim of the focus groups is to identify potential intervention components, targets and strategies.

Benefits: The study identifies factors that contribute to alcohol consumption during pregnancy, and potential intervention strategies to reduce alcohol consumption during pregnancy.

Date Commenced: October 2006

Funding: National Drug Research Institute

Effects of repeated exposure to a graphic smoking warning image

NDARC Staff: Ms Sally Rooke and Professor Jan Copeland

Rationale: Graphic warning images aimed at discouraging smoking have been introduced in several countries. However, the images appear subject to a 'wear-out' effect. The impact of graphic images and the speed and extent of wear-out have not been experimentally assessed.

Aim: To quantify the overall effectiveness of computer-delivered interventions for substance use. In addition to determining the overall effectiveness of the interventions, the findings could suggest directions for future computer-delivered substance use interventions.

Design and Method: This study examined the effects of repeated exposure to an image of smoking-related mouth cancer among 83 university students. Rational and emotive cognitive variables were assessed. Participants viewed the warning image seven times over 7 to 14 days.

Findings: The image exerted an immediate effect on both emotive and rational cognitions relating to smoking and mouth cancer. However, effects on emotive cognitions became nonsignificant after a few exposures. Effects on rational cognitions remained significant after the seventh exposure.

Benefits: The results suggest that changes in rational/expectancy cognitions brought about by exposure to graphic warning images may be more resistant to wear-out effects than are changes in emotive cognitions.

Date commenced: July 2008

Funding: Australian Government Department of Health and Ageing

TREATMENT AND OTHER INTERVENTIONS

Methamphetamine Treatment Evaluation Study (MATES)

NDARC Staff: Dr Rebecca McKetin, Professor Richard Mattick, Dr Joanne Ross and Ms Erin Kelly

Other Investigators: Jake Najman (QADREC, University of Queensland), Robert Ali (DASSA and the University of Adelaide), Dan Lubman (University of Melbourne), Amanda Baker (University of Newcastle), Nicole Lee (Turning Point Alcohol and Drug Centre), Sharon Dawe (Griffith University) and Abdullah Mamun (University of Queensland)

Rationale: Evidence-based treatment options for methamphetamine dependence remain scarce, yet over 15,000 people enter treatment for methamphetamine use each year in Australia. The purpose of this study was to determine whether the treatment that they receive is effective in reducing methamphetamine use and related harms. The study has a particular focus on comorbid mental health issues, such as psychosis, depression and anxiety.

Aims: To conduct the first Australian treatment cohort study of dependent methamphetamine users, examining:

- Rates of psychiatric disorders (Major Depression, Panic Disorder, Agoraphobia, Social Phobia, and Generalized Anxiety Disorder) and psychotic symptoms among people seeking treatment for methamphetamine dependence
- The characteristics of those entering treatment for methamphetamine dependence, in terms of abstinence rates, criminal involvement, general health functioning, and contact with health services and the criminal justice system
- Differences between the characteristics of those entering treatment and dependent methamphetamine users not seeking treatment in terms of their level of drug use, psychiatric morbidity, criminal involvement and general health functioning
- Factors predictive of abstinence, psychiatric morbidity, criminal involvement and contact with the health and criminal justice systems.

Design and Method: A prospective longitudinal cohort study of 501 methamphetamine users: 400 people receiving treatment for methamphetamine use and a comparison group of 101 out-of-treatment dependent methamphetamine users. Participants were interviewed at baseline (treatment entry) and subsequently at 3 months (n = 404) and 12 months (n = 376) post-treatment. Treatment modalities included were counselling, residential rehabilitation and withdrawal management. Methamphetamine use at follow-up was examined by exposure to drug treatment. Other variables examined in the study included psychiatric disorders, psychotic symptoms, crime, HIV risk, health service utilisation and general health and well-being.

Benefits: The project has documented the level of psychiatric comorbidity among methamphetamine treatment entrants and it has demonstrated the effectiveness of community-based treatment options for reducing methamphetamine use and related health and social problems.

Date Commenced: June 2005

Funding: National Health and Medical Research Council Project Grant ID No. 350974(\$709,500) and the Australian Government Department of Health and Ageing (\$175,000)

The introduction of buprenorphine-naloxone (Suboxone®) in Australia: monitoring the extent of diversion and related harms

NDARC Staff: Professor Louisa Degenhardt, Professor Richard Mattick and Ms Briony Laranee

Other Investigators: Robert Ali (DASSA); James Bell (South East Sydney and Illawarra Area Health Service); Adam Winstock (Sydney South West Area Health Service); and Nick Lintzeris (Sydney South West Area Health Service)

Rationale: There is growing concern about the injection of opioid agonist medications, particularly buprenorphine, prescribed for the treatment of opioid dependence. To address concerns about diversion and injection, many countries, including the United States, Australia, Finland and Malaysia, have introduced the opioid agonist-antagonist formulation, buprenorphine-naloxone. There is only limited post-marketing data examining the impact of this combination medication upon injecting practices.

Aims: Buprenorphine-naloxone (Suboxone®) was registered in Australia in 2005 by the Therapeutic Goods Administration and has been available on the Pharmaceutical Benefits Scheme since April 2006. The post-marketing surveillance studies monitored the extent of diversion and injection of buprenorphine-naloxone over the three years following its release.

Design and Method: The post-marketing surveillance studies (2006-2009) drew on multiple data sources, including:

- Interviews with approximately 900 regular injecting drug users (through the Illicit Drug Reporting System)
- Interviews with 399 and 440 pharmacotherapy clients in 2008 and 2009 respectively (methadone, buprenorphine and buprenorphine-naloxone clients)
- Interviews with approximately 30 key experts (e.g. clinicians, pharmacists, NSP workers, outreach workers)
- A census of all authorised opioid substitution therapy prescribers
- Sales data
- Secondary indicators of diversion and injection (needle and syringe program data).

These data sources were triangulated and comparisons were made between methadone, buprenorphine and buprenorphine-naloxone.

Benefits: The results of these studies have very important implications for treatment delivery and for general practitioners prescribing opioid substitution therapy, but also for those interested and involved in health care policy.

Steps through amphetamines: cognitive behaviour therapy for regular amphetamine use and depression - a stepped care approach

NDARC Staff: Dr Frances Kay-Lambkin, Dr Rebecca McKetin and Professor Maree Teesson

Other Investigators: Amanda Baker, Robert Batey and Nicole Lee

Rationale: There is clear evidence to suggest that amphetamine use is common and increasing both in Australia and internationally, and has also been associated with increased psychological and social problems. An Australian study [1, 2], found high rates of mood disorder among amphetamine users, with at least three-quarters of the sample reporting symptoms of anxiety or depression.

A stepped care approach has been recommended in several mental health areas, and has recently been suggested as the optimal strategy for addressing amphetamine use [3]. Baker and Dawe [4] have further suggested that a guide to stepped care among people with alcohol problems could be adapted among amphetamine users and should include the following factors: (i) competent assessment, considering triage factors such as suicidality, risk of harm to others, intoxication, etc.; (ii) brief outpatient intervention with progress closely monitored; and (iii) if unsatisfactory response to treatment, step up treatment by using a different treatment and or a quantitative increase in treatment. This model was tested in the current study.

Aims: This pilot study aims to assess the efficacy of a stepped care CBT intervention among regular amphetamine users with comorbid depression. Specifically, this includes:

- Formalise a stepped care model of treatment incorporating a range of psychological interventions shown in previous research to be effective in reducing amphetamine use and depressive symptomatology.
- Trial the stepped care model of treatment among a target group of 20 people who are both regular users of amphetamines and who currently report moderate symptoms of depression. Provision of treatment in this group will be contingent on their response (amphetamine use and depression) to a previously provided step in treatment.
- Compare the 'stepped care' group with a 'standard' treatment group of 20 people who are both regular users of amphetamines and who currently report moderate symptoms of depression. All people in this group will receive all components of treatment regardless of response.
- Compare outcomes for amphetamine use, depression, general functioning, etc. between groups.

Design and Method: Regular amphetamine users with comorbid depression were recruited across two sites (Sydney and Newcastle). Participants had to be using amphetamine at least once a week for the month prior to entry to the study, and reporting moderate levels of depression for the two weeks prior to entry.

Sydney site:

All participants had access to integrated psychological treatment with a dual focus on depression and amphetamine use according to the following schedule:

COMPLETED PROJECTS

- A detailed mental health and drug/alcohol assessment (initial assessment)
- A brief (1-session) feedback and goal setting treatment session and the provision of self-help material [Step 1 as per the control treatment in 5]
- A 5-week assessment (5 weeks post-initial assessment)
- Up to 4 sessions of intervention with an integrated focus [Step 2, as per 6]
- A 10-week assessment (10 weeks post-initial assessment)
- Up to 4 sessions of intervention with an integrated focus [Step 3, using 5]
- A 15-week assessment (15 weeks post-initial assessment)
- Up to 4 sessions of intervention with an integrated focus [Step 4, using 5]
- A 20-week assessment (20 weeks post-initial assessment).

Newcastle site:

Trial of a stepped care intervention with provision of treatment contingent on response to a previous intervention:

- Initial assessment
- Provision of the Step 1 intervention to all participants [as per 5]
- A 5-week assessment
- Provision of Step 2 intervention where indicated, with an amphetamine, depression or integrated focus [as per 6]. Those who 'responded' to Step 1 had the option of entering the monitoring phase and proceeding straight to the next assessment
- A 10-week assessment
- Provision of Step 3 intervention where indicated, with an amphetamine, depression or integrated focus [as per 6]. 'Responders' had the option of entering the monitoring phase and proceeding straight to the next assessment
- A 15-week assessment
- Provision of Step 4 intervention and/or referral to other services where indicated, with an amphetamine, depression or integrated focus [as per 6]. 'Responders' had the option of entering the monitoring phase and proceeding straight to the next assessment
- A 20-week assessment.

Stepping up and stepping down:

The decision to step treatment up (offer the next level) or down (offer a previous step or move onto monitoring) was based on the following factors:

- Client preference
- Clinical judgement
- Assessment results relative to baseline and/or previous assessment
 - Improvements or otherwise in amphetamine use only
 - Improvements or otherwise in depression only, or
 - Improvements or otherwise in both depression and amphetamine use.

Participants at the Newcastle site could also elect a singular focus on amphetamine use, on depression or an integrated treatment

targeting both depression and amphetamine use.

Benefits: This pilot study has provided important information regarding the willingness of amphetamine users with depression to participate in a stepped care intervention. In general, participants did not like receiving the one-session Step 1 intervention and then no contact until the 5-week interim assessment. Much of the study dropout occurred at this point. Future replications should consider altering this first step to incorporate more sessions.

Given the choice, Newcastle participants selected a sole focus on amphetamine use as their Step 2 intervention, and then opted for integrated treatment targeting both amphetamine use and depression simultaneously as subsequent steps in treatment. Depression was never selected as the singular focus of treatment, despite reported levels of depression in the severe range at the initial assessment for this group. Although not statistically significant, this approach seemed to benefit the Newcastle participants, who reported lower depression and amphetamine use relative to their Sydney counterparts who received a predetermined integrated treatment at every step.

On average, participants at both sites attended three treatment sessions and three assessment occasions over the study period. Higher (although not statically significantly higher) attendance occurred at the Newcastle site where participants and clinicians were able to tailor the focus and frequency of sessions within the stepped care framework. In general, heavier amphetamine users attended (and reported benefit from) a higher number of sessions across both sites.

It would appear that stepped care is feasible within this population; however, a flexible schedule of sessions over a lengthy period may be helpful to heavier users with co-existing depression. Amphetamine users with depression will attend treatment over the longer term, although flexibility and assertive outreach is required by treatment providers.

Date Commenced: November 2007

Funding: NSW Health 2006/07 NSW Comorbidity Research Grants Program

Identification of barriers and facilitators to cannabis treatment

NDARC Staff: Professor Jan Copeland, Mr Peter Gates, Dr Stephanie Taplin, Dr Greg Martin and Dr Wendy Swift

Rationale: Given the under-representation of individuals with cannabis-related problems in specialist treatment services, and the levels of problems they are experiencing by the time they enter treatment, it is vital to identify factors that act as barriers to treatment seeking and those influences that facilitate entry into treatment. Policy and clinical practices that address these issues will promote earlier entry to treatment and a reduction in cannabis-related harms for individuals, their families and the Australian community.

Aims: The aims of the project are to examine barriers and facilitators to entry into cannabis treatment in Australia from the perspectives of cannabis users in treatment, cannabis users in the community, and their families.

Design and Method: The study design has four components:

- Examination of the published research literature on the facilitators and barriers to treatment entry into illicit drug treatment in general, and cannabis treatment in particular, to inform development of the survey instrument. This was presented as a brief literature review of 2,500 words
- The conduct of a face-to-face survey of a total of 100 adolescents and adults in cannabis treatment in the Greater Sydney area. No more than 20% of the sample had comorbid dependence on other drugs
- The conduct of a face-to-face survey of 100 adults and adolescents in the greater Sydney community stratified by levels of cannabis use (50 being daily or near daily users in the past 3 months and 50 being weekly or more frequent users in that time period). No more than 20% of the sample had comorbid dependence on other drugs
- The conduct of two secure on-line surveys on the NDARC and UNSW website that will target families of cannabis users, who may have attempted to gain access to treatment for their family members, and frequent cannabis users across Australia, for their views of the barriers and facilitators into treatment and information sources.

Benefits: The findings from this study will assist in formulating policy and clinical practices that address issues related to barriers and facilitators into cannabis treatment. These new policies and practices should, in turn, promote earlier entry to treatment and a reduction in cannabis-related harms for individuals, their families and the Australian community

This project relates to NDARC's goal to increase knowledge on the range and effectiveness of treatment and other interventions that are aimed at reducing forms of alcohol and other drug related harm.

Date Commenced: July 2007

Funding: Australian Government Department of Health and Ageing

Clinical Guidelines for the Management of Cannabis Use Disorder

NDARC Staff: Professor Jan Copeland and Ms Amie Frewen

Rationale: To develop clinical guidelines for the management of cannabis use disorder, the first such guidelines internationally.

Design and Method: The Cannabis Guidelines were developed in accordance with the NHMRC Clinical Practice Guidelines, and a process influenced by Finnish Researcher Kettil Bruun, to reach clinical consensus. They are based, therefore, on a synthesis of the best available evidence (as identified by a background literature review and a further paper that makes clinical recommendations based on the evidence) and a consensus among a multidisciplinary panel of experts (including academics and clinicians).

Benefits: Clinicians will have access to evidence-based interventions for cannabis use disorder.

Output: The guidelines and background papers can be found, and hard copies ordered at the NCPIC website (www.ncpic.org.au). A national dissemination of the guidelines is being undertaken in 2010. Please also see the NCPIC website to request free training.

Date Commenced: August 2007

Funding: Australian Government Department of Health and Ageing

Evaluation of the Connections Project

NDARC Staff: Dr Kristy Martire

Rationale: NDARC was commissioned by Justice Health to describe and evaluate various aspects of the Connections Project to inform future operational and funding decisions.

Aims: To analyse existing Connections Project data to:

- Describe Connections patients and change over time
- Describe major domains of service delivery
- Report characteristics and predictors of project completers and non-completers
- To report on re-incarceration and participation in community Opioid Treatment Programs (OTP).

Design and Method: Analysis of the existing Connections dataset was undertaken in order to fulfill the aims of the project. The report was based upon data available from 829 patients assessed for Connections eligibility, 285 of whom also completed post-participation questionnaires. Re-incarceration and OTP participation data were also available for 843 and 725 of these patients respectively. Results were reported on the basis of gender and Indigenous status, as well as program completion status. Regression analyses were conducted to predict completion status and amount of time spent in the community post-release.

Benefits: The evaluation identified key barriers to successful reintegration for offenders with histories of substance use, and points to the priority service needs for this group.

Date Commenced: July 2008

Funding: Justice Health, NSW Health

Fine-related debt among substance-using offenders

NDARC Staff: Dr Kristy Martire

Other Investigators: Sandra Sunjic, Libby Topp and Devon Indig

Rationale: Little is known about the financial functioning of prisoners in NSW, or its impact on successful substance use treatment and community reintegration. This project examines the financial obligations in a broad sense, with particular attention directed at the debts arising from unpaid fines.

Aims: To investigate the prevalence and magnitude of fine-related debt among substance-using offenders, and the physical and psychological impact of these debts (and associated sanctions) upon the broader social functioning of these individuals.

Design and Method: Participants in the Justice Health Connections program were recruited for participation in the debt study. Participants were asked about the presence and magnitude of various forms of debt, as well as fines specifically. They were also asked to rate the stress, significance and impact of the various forms of debt. With consent, this information was then linked to State Debt Recovery Office records of outstanding fines, as well as the Connections participant database. Descriptive analyses will be conducted relating to the prevalence, magnitude and impact of fine-related debt. Comparisons will be made between the broader social functioning of those with no or low levels of debt, or with low or no concern regarding their debt, as opposed to those with high levels of

COMPLETED PROJECTS

debt or debt-related stress.

Benefits: This project provides the most in-depth exploration of the debt burdens of Australian offenders to date. The research highlights the significant impact of legislation surrounding the issuing and collection of overdue fines and points to financial issues as a considerable issue for the reintegration of prisoners into the community. This research provides the information necessary to inform and evaluate policy changes proposed in NSW.

Date Commenced: October 2008

Funding: NSW Health Drug and Alcohol Research Grants Program 2007/08

Magistrates Early Referral into Treatment (MERIT) Research Bulletins

NDARC Staff: Dr Kristy Martire and Ms Sarah Larney

Rationale: Information regarding the current operational aspects of MERIT and patient outcomes are necessary to inform policy, stakeholders and the public. It is also vital for the development of best practice diversionary approaches.

Aims: To conduct three research studies relating to the MERIT program, participant characteristics, and health/criminal justice outcomes.

Design and Method: Analysis of existing datasets was undertaken in order to explore three issues identified by the Crime Prevention Division and the MERIT steering committee: 1) Aboriginal participation in MERIT; 2) Women and the MERIT program; 3) Principal drug of concern and MERIT/RAD outcomes. Overall program activity data was analysed for approximately 10, 500 individuals referred to MERIT between August 2004 and June 2008. In addition, referral, service provision, health outcomes and criminal justice data was analysed for various subsets of this total population. Statistical comparisons were made both between groups of interest (i.e. by gender, Indigenous status and principal drug type), as well as pre and post MERIT participation.

Benefits: MERIT research bulletins provide in-depth information to the public, participants and stakeholders regarding participant characteristics and program outcomes. This information is vital for ensuring iterative and evidence-based improvement to both the program and to policy.

Date Commenced: July 2008

Funding: Crime Prevention Division, NSW Attorney Generals' Department

Self-managed change from problematic cannabis use: a web-based survey

NDARC Staff: Dr Anthony Arcuri, Dr John Howard and Professor Jan Copeland

Other Investigators: Angela Kwong (UNSW Medicine student)

Rationale: Cannabis is the world's most widely used illicit drug and in Australia one in three have tried it, and almost one in ten have used it in the past year. While the majority of cannabis use is intermittent and self-limiting, a significant minority will use it more often, for a longer period of time, and develop cannabis dependence. Research

on problematic cannabis use has remained a relatively neglected area compared to other substance use problems, especially within the context of self-managed change. This qualitative study examined the processes involved in self-managed change from problematic cannabis use through an online survey of Australians who had ceased or significantly reduced their use of cannabis for at least six months, without utilising formal treatments.

Aims: To determine how people achieve change (either reduction or cessation) from self-defined problematic cannabis use without the assistance of formal treatments.

Design and Method: The study investigated:

- Cannabis use history and related physical and psychological symptoms
- The decision to change cannabis use
- Initial attempts to change cannabis use (and to manage withdrawal, if present)
- Sustained attempts to change cannabis use
- Associated life changes (including physical and psychological symptoms) and lapses since changing cannabis use.

Given the exploratory nature of this study, survey items were a combination of forced-choice and open-ended questions.

Benefits: Common themes arose from their responses, pertaining to pathways into and from cannabis use; effects of use; influences on the individual's decision to stop or reduce use; the experience of withdrawal; techniques used to initiate and maintain behaviour change; changes associated with changes in cannabis use; and reflections of knowledge gained in the process. The study suggests a number of issues that might be considered to aid those desiring cessation or reduction of cannabis use. The incorporation of these findings and strategies into clinical practice and into web and print based information may assist and encourage those preparing to manage their own cessation or reduction of cannabis use.

Output: Report is being edited for a NCPIC Bulletin

Date Commenced: 2009

Funding: NCPIC core funding

Magistrates Early Referral into Treatment (MERIT) Annual Report 2007

NDARC Staff: Dr Kristy Martire and Ms Sarah Larney

Rationale: The Magistrates Early Referral Into Treatment (MERIT) program reports operational and outcomes data annually for the benefit of the public, participants and stakeholders.

Aims: Produce the 2007 Annual Report for the MERIT program.

Design and Method: The 2007 Annual Report describes program activity, program exits, health outcomes, factors associated with program completion and criminal justice outcomes for those individuals referred to the MERIT program during 2007. Analysis was conducted on an existing dataset of 2,949 referred defendants.

Benefits: MERIT Annual Report documents provide the public, participants and stakeholders with current information regarding

the operation and outcomes of the MERIT program. The Annual Reports also make it possible to track changes in the program or its participants over time.

Funding: Crime Prevention Division, NSW Attorney Generals' Department

Date Commenced: December 2008

Computer-delivered interventions for alcohol and tobacco use: a meta-analysis

NDARC Staff: Ms Sally Rooke, Professor Jan Copeland and Dr David Allsop

Rationale: Computer-delivered treatments for alcohol and tobacco use are becoming increasingly common. However, the overall effectiveness of these treatments and the impact of various treatment characteristics are not known.

Aim: To quantify the overall effectiveness of computer-delivered interventions for substance use. In addition to determining the overall effectiveness of the interventions, the findings could suggest directions for future computer-delivered substance use interventions.

Design and Method: Meta-analysis of 44 effect sizes from randomised controlled trials, based on the responses of 10,773 individuals. Moderator variables included age; gender; substance type; methodological quality; outcome variable; treatment location; treatment format (web or offline); inclusion of entertaining elements; provision of normative feedback; availability of a discussion feature; number of treatment sessions; emphasis on relapse prevention; level of therapist involvement; and follow-up period.

Findings: The weighted average effect size (d) was 0.20, $p < .001$. Lower effect sizes were associated with studies addressing tobacco use ($d = 0.14$). Effect sizes did not vary significantly as a function of treatment location; inclusion of entertaining elements; provision of normative feedback; availability of a discussion feature; number of treatment sessions; emphasis on relapse prevention; level of therapist involvement; or follow-up period.

Benefits: Findings of the meta-analysis suggest that minimal contact computer-delivered treatments that can be accessed via the Internet may represent a cost-effective means of treating uncomplicated substance use and related problems.

Date Commenced: November 2008

Funding: Australian Government Department of Health and Ageing

DRUG POLICY MODELLING PROGRAM (DPMP)

NDARC Staff: A/Prof. Alison Ritter, Dr David Bright, Dr Jenny Chalmers, Ms Colleen Faes, Ms Katrina Grech, Dr Wendy Gong, Dr Caitlin Hughes, Ms Kari Lancaster, Mr Michael Lodge, Ms Rachel Ngui, Ms Marian Shanahan, Mr Francis Matthew-Simmons, Ms Bridget Spicer

Other Investigators: Gabriele Bammer (Australian National University), Lorraine Mazerolle (Griffith University), Paul Dietze (Burnet Institute), Pascal Perez (HEMA Consulting)

Technical Advisors: Peter Reuter (University of Maryland, USA), Jonathan P. Caulkins (Carnegie Mellon University, USA), Margaret Hamilton (University of Melbourne)

While the broader program continues (see p. 41), the following component projects have been completed:

- Opioid pharmacotherapy review (NDARC/DPMP Team)
- Optimal allocation of treatment for hepatitis C virus among injecting drug users in and out of methadone maintenance treatment (NDARC/DPMP team)
- Working with NSW Health on pharmacotherapies modelling (NDARC/DPMP team)
- The influence of drug prices on the patterns of drug consumption of methamphetamine users (NDARC/DPMP team with BOCSAR)
- An analysis of Australian illicit drug policy coordination (NDARC/DPMP team)
- Drug law enforcement performance monitoring: the persistence of simplistic measures and barriers to moving forward (NDARC/DPMP team)
- Social network analysis in illicit drug markets: evaluating the feasibility of an innovative methodology (NDARC/DPMP team)
- The development of a Harm Index for use by Victoria Police (NDARC/DPMP team).

For full details of our completed projects including aims, methods and results, please see our website: www.dpmp.unsw.edu.au

Funding: DPMP is funded by a core grant from the Colonial Foundation Trust and receives specific project funding from other sources: NHMRC Researcher Support, ANCD, NDLERF, and the ARC.

STAFF LIST

Director to 04 June 2009

Richard Mattick Professor

Acting Director from 05 June 2009

Alison Ritter Associate Professor, Director of DPMP

Executive Committee

Jan Copeland Professor, Assistant Director, Director of NCPIC

Louisa Degenhardt Professor, Senior NHMRC Research Fellow, Assistant Director

Christopher Doran Associate Professor, Assistant Director from 10/10/2009

Shale Preston Executive Officer

Anthony Shakeshaft Associate Professor, Assistant Director to 10/10/2009

Maree Teesson Professor, Senior NHMRC Research Fellow, Assistant Director

Academic Staff

David Allsop Lecturer, NCPIC

David Bright Research Fellow

Lucy Burns Senior Lecturer

Natacha Carragher Post-Doctoral Research Fellow

Jenny Chalmers Senior Research Fellow

Anton Clifford Research Fellow

Anjalee Cohen Research Fellow

Suzanne Czech Lecturer

Shane Darke Professor, Convenor - Research Staff Professional Development Program

Erol Digiusto Senior Research Fellow

Kate Dolan Associate Professor

Matthew Dunn Lecturer

Wendy Gong Research Fellow

John Howard Senior Lecturer, NCPIC/NDARC

Caitlin Hughes Research Fellow

Delyse Hutchinson Research Fellow

Amy Johnston Research Associate

Sharlene Kaye Research Fellow

Frances Kay-Lambkin NHMRC Post-Doctoral Research Fellow

Jim Lemon Research Fellow

Elizabeth Maloney Research Fellow

Kristy Martire Research Fellow

Rebecca McKetin Senior Research Fellow

Katherine Mills Senior Lecturer

Nicola Newton Research Fellow

Melissa Norberg Senior Lecturer, National Clinical Services and Evaluation Manager, NCPIC

Heather Proudfoot Research Fellow

Miranda Rose Lecturer

Joanne Ross Senior Lecturer

Claudia Sannibale Research Fellow

Rob Sanson-Fisher Professor - Behavioural Science

Tim Slade Senior Research Fellow

Kylie Sutherland Research Associate

Wendy Swift Senior Lecturer

Stephanie Taplin Research Fellow

Laura Vogl Research Fellow

Professional and Technical Staff - Research

Hammad Ali Senior Research Officer

Dion Alperstein Research Assistant, NCPIC

Anthony Arcuri Senior Research Officer, NCPIC

Annie Banbury Project Coordinator, NCPIC

Emma Barrett Research Officer/Doctoral Candidate

Robert Battisti Senior Research Officer, NCPIC

Ansari Bin Jainullabudeen Senior Research Officer (Health Economist)

Emma Black Senior Research Officer

Delphine Bostock Matusko Research Officer

Desiree Boughtwood Senior Research Officer, NCPIC

Courtney Breen Senior Research Officer/Doctoral Candidate

Chiara Bucello Research Officer

Joshua Byrnes Senior Research Officer/Doctoral Candidate

Bianca Calabria Senior Research Officer

Joanne Cassar Research Officer

Elizabeth Conroy Senior Research Officer/Doctoral Candidate

Mark Deady Research Officer

Catherine Deans Project Officer

Philippa Farrugia Research Officer

Amie Frewen Senior Research Officer, NCPIC

Peter Gates Senior Project Coordinator/Doctoral Candidate, NCPIC

Amy Gibson Senior Research Officer/Doctoral Candidate

Katrina Grech Research Officer

Rachel Grove Research Officer

Kate Hetherington Senior Research Officer

Karina Hickey Research Assistant, NCPIC

Leonie Jefferson Project Officer, NCPIC

Mary Joy Project Officer

Aspasia Karageorge Research Officer

Erin Kelly Research Officer

Laila Khawar Research Officer, NCPIC

Kari Lancaster Research Assistant

Briony Larence Senior Research Officer/Doctoral Candidate

Sarah Larney	Research Officer/Doctoral Candidate
Stephanie Love	Senior Research Officer
Jennifer Mackenzie	Research Officer, NCPIC
Bradley Mathers	Senior Research Officer
Francis Matthew-Simmons	Research Officer/Doctoral Candidate
Jennifer McLaren	Senior Research Officer
Sonja Memedovic	Research Officer
Sabine Merz	Research Psychologist
Hector Navarro	Senior Research Officer/Doctoral Candidate
Paul Nelson	Research Officer/Doctoral Candidate
Rachel Ngui	Senior Research Officer
Susannah O'Brien	Senior Research Officer
Marie-Andree Peek-O'Leary	Research Officer
Judit O'Vari	Research Officer
Michael Otim	Senior Research Officer
Ursula Perry	Research Officer, NCPIC
Benjamin Phillips	Research Officer
Julia Purchas	Research Officer
Deborah Randall	Senior Research Officer/Biostatistician
John Redmond	Research Assistant, NCPIC
Anna Roberts	Research Officer
Lisa Robins	Research Officer
Ana Rodas	Research Officer
Sally Rooke	Senior Research Officer, NCPIC
Julia Rosenfeld	Research Psychologist
Amanda Roxburgh	Senior Research Officer
Laura Scott	Research Officer
Marian Shanahan	Health Economist/Doctoral Candidate
Fiona Shand	Senior Research Officer/Doctoral Candidate
Edmund Silins	Senior Research Officer/Doctoral Candidate
Melanie Simpson	Senior Research Officer/Doctoral Candidate, NCPIC
Natasha Sindich	Senior Research Officer
Bridget Spicer	Research Officer
Jennifer Stafford	Senior Research Officer
Kirsty Taylor	Research Psychologist
Johanna Thomas	Research Officer
Michelle Torok	Research Officer
Erica Valpiani	Research Officer
Tracey Wright	Senior Research Officer, NCPIC

Professional and Technical Staff - Administrative

Eva-Marie Alis	Executive Assistant
Annie Bleeker	National Community Training Manager, NCPIC
Clare Chenoweth	Communications Officer, NCPIC
Lin Chin	Senior Finance Officer
Eva Congreve	Archivist
Crisanta Corpus	Finance Manager
Paul Dillon	National Communications Manager, NCPIC
Marion Downey	Communications and Media Manager
Jackie Du	Finance Officer, NCPIC/NDARC
Colleen Faes	Administrative Officer
Carly Harris	Executive Assistant, NCPIC
Julie Hodge	Administrative Officer
Mary Kumvaj	Librarian
Michael Lodge	Senior Research Policy Officer
Etty Matalon	National Clinical Training Manager, NCPIC
Gem Mathieu	Executive Assistant, NCPIC
Morag Millington	Communications Assistant, NCPIC
Carla Santos	Administrative Officer
Caroline Santoso	Administrative Assistant
Barbara Toson	Statistician/Biostatistician
Michaela Turner	Administrative Officer

Conjoint Appointments

Amanda Baker	Conjoint Associate Professor
James Bell	Conjoint Associate Professor
Katherine Conigrave	Conjoint Associate Professor
Jagdish Dua	Conjoint Associate Professor
Johan Duflou	Conjoint Associate Professor
Paul Haber	Conjoint Professor
Wayne Hall	Conjoint Professor
Andrea Mant	Conjoint Associate Professor
Ingrid Van Beek	Conjoint Senior Lecturer
Jeffery Ward	Conjoint Senior Lecturer
Adam Winstock	Conjoint Senior Lecturer

Visiting Researchers

Robert Ali	Visiting Fellow
------------	-----------------

POSTGRADUATE STUDENTS

Barrett, Emma (2007-present)

Aggression and violent crime among substance users with posttraumatic stress disorder.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Dr Katherine Mills, Professor Maree Teesson.

Expected date of submission: December 2010.

Breen, Courtney (2004-present)

Alcohol-related harm in rural NSW.

Part-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: A/Prof. Anthony Shakeshaft, Professor Richard Mattick.

Expected date of submission: December 2010.

Byrnes, Joshua (2008-present)

Assessing the social, health and economic aspects of alcohol in Australia.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: A/Prof. Chris Doran, A/Prof. Anthony Shakeshaft.

Expected date of submission: June 2011.

Conroy, Elizabeth (2005-present)

The importance of child maltreatment as a risk factor for mental disorder among opioid-dependent persons.

Part-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Louisa Degenhardt, Dr Tim Slade.

Expected date of submission: March 2010.

Gates, Peter (2008-present)

The Cannabis Information and Helpline: evaluation and randomised controlled trial.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Jan Copeland, Dr Erol Digiusto, Dr Melissa Norberg.

Expected date of submission: August 2011.

Gibson, Amy (2005-2009)

Mortality among the recipients of methadone, buprenorphine and naltrexone maintenance for the treatment of opioid dependence: the levels, predictors and causes of mortality.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Louisa Degenhardt, Dr Lucy Burns.

Awarded in 2009.

Havard, Alys (2007-present)

Alcohol-related emergency department presentations in rural NSW.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: A/Prof. Anthony Shakeshaft, A/Prof. Kate Conigrave.

Expected date of submission: January 2011.

Indig, Devon (2005-2009)

Detection of alcohol-related emergency department presentations.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Jan Copeland, A/Prof. Kate Conigrave.

Awarded in 2009.

Johnston, Amy (2008-present)

Suicidality in the general population.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Shane Darke, Dr Tim Slade, Dr Joanne Ross.

Expected date of submission: December 2011.

Karageorge, Aspasia (2009-discontinued in 2009)

Developing and evaluating a treatment and relapse prevention program for juvenile offenders aimed at reducing substance use relapse and recidivism.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Dr Laura Vogl, Dr Richard Kemp.

Larance, Briony (2006-present)

A comparative study of the diversion and injection of methadone, buprenorphine and buprenorphine-naloxone.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Louisa Degenhardt, Professor Richard Mattick.

Expected date of submission: March 2010.

Larney, Sarah (2007-present)

Opioid substitution treatment in prisons and post-release.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: A/Prof. Kate Dolan, Dr Lucy Burns, Dr Alex Wodak.

Expected date of submission: December 2010.

Magor-Blatch, Lynne (2009-present)

Testing the usefulness of a social cognition model of treatment within a therapeutic community setting.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Jan Copeland, Dr John Howard.

Expected date of submission: June 2013.

Mammen, Kristie (2006-present)

Monitoring the implementation of buprenorphine-naloxone (Suboxone®) in Australia.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: A/Prof. James Bell, Professor Richard Mattick.

Expected date of submission: January 2010.

Matthew-Simmons, Francis (2007-present)

The impact of public opinion on illicit drug policy.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: A/Prof. Alison Ritter, Dr Katherine Mills.

Expected date of submission: January 2011.

McSweeney, Tim (2009-present)

A comparative analysis of drug court processes and outcomes in Sydney and London.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Dr Caitlin Hughes, A/Prof. Alison Ritter, Mr Paul Turnbull.

Expected date of submission: June 2013.

Mewton, Louise (2008-present)

Mental disorders in young people: evidence from the 2nd Australian National Survey of Mental Health and Wellbeing.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Maree Teesson, Dr Tim Slade.

Expected date of submission: June 2011.

Navarro, Hector (2008-present)

Economic evaluations of community action interventions to reduce alcohol-related harm in rural communities in New South Wales.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: A/Prof. Chris Doran, A/Prof. Anthony Shakeshaft.

Expected date of submission: November 2011.

Nelson, Paul (2008-present)

Longitudinal study of drug use, health and offending outcomes for young offenders.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Louisa Degenhardt, Professor Dianna Kenny.

Expected date of submission: June 2011.

Newton, Nicola (2006-2009)

CLIMATE Schools: the development of a computer-based drug and alcohol prevention program for Year 8 students.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Maree Teesson, Professor Gavin Andrews.

Awarded in 2009.

Savage, Stewart (2008-present)

An investigation of alternate substitution pharmacotherapies for the treatment of opioid dependence.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Dr Nicholas Lintzeris, Professor Richard Mattick.

Expected date of submission: June 2011.

Shanahan, Marian (2007-present)

Assessing the economic consequences of cannabis policy options.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: A/Prof. Alison Ritter, Professor Glenn Salked, Dr Karen Gerard.

Expected date of submission: January 2011.

Shand, Fiona (2007-present)

Patterns of substance abuse and mental health comorbidity in a heroin dependent group.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Louisa Degenhardt, Dr Tim Slade.

Expected date of submission: June 2010.

Shearer, James (2005-2009)

Agonist pharmacotherapy for psychostimulant dependence.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Shane Darke, Dr Alex Wodak.

Awarded in 2009.

Silins, Edmund (2008-present)

Initiation, persistence and cessation of cannabis use and subsequent mental health outcomes.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Dr Delyse Hutchinson, Dr Tim Slade, Dr Wendy Swift.

Expected date of submission: June 2011.

Simpson, Melanie (2008-present)

Exploring the relationship between cannabis use and criminal offending among adolescents.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Professor Jan Copeland, Dr John Howard.

Expected date of submission: November 2011.

Tran, Dam Anh (2009-present)

Accessibility to anti retroviral (ARV) treatment in Vietnam.

Full-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: A/Prof. Chris Doran, A/Prof. Anthony Shakeshaft, Dr Duc Anh Ngo.

Expected date of submission: June 2013.

Wallace, Catherine (2006 - discontinued in 2009)

Treatment of drug use in pregnancy.

Part-time PhD in the School of Public Health and Community Medicine, UNSW.

Supervisor/s: Dr Lucy Burns, A/Prof. Kate Conigrave

RESEARCH GRANTS AND FUNDING

PROJECTS	FUNDING SOURCE	TOTAL AWARD	EXPENDITURE 2008	EXPENDITURE 2009
New centre core funding (disaggregated multi-schedule agreement)	AGDHA	\$8,818,029	\$0	\$2,652,120
Old centre core funding	AGDHA	\$8,149,235 (5.5 years)	\$2,915,708	\$23,460
Schedule 4 - Fetal alcohol spectrum disorder monograph	AGDHA	\$5,818 (1 year)	\$0	\$3,796
Schedule 5 - CLIMATE Schools ecstasy module - the development and evaluation of an interactive computer based prevention program for ecstasy	AGDHA	\$187,614 (2 years)	\$0	\$39,313
Schedule 7 - Ecstasy and Related Drugs Reporting System (EDRS)	AGDHA	\$924,902 (2 years)	\$0	\$205,894
Schedule 8 - Brief intervention - the ecstasy check-up	AGDHA	\$198,655 (2 years)	\$0	\$51,210
Schedule 9 - Redevelopment and reprint of <i>On Thin Ice: a users guide</i>	AGDHA	\$54,540 (2 years)	\$0	\$119
Schedule 10 - Evaluation of treatment outcomes for methamphetamines (MATES) - follow-up study	AGDHA	\$126,000 (2 years)	\$0	\$23,533
Schedule 11 - Illicit drugs and the media	AGDHA	\$149,473 (2 years)	\$0	\$33,004
Core Illicit Drug Reporting System (IDRS)	AGDHA	\$735,025 (4 years)	\$346,493	\$82,328
Monitoring party drug markets in Australia (EDRS)	AGDHA	\$1,417,582 (5 years)	\$491,634	\$39,100
Reducing alcohol-related harm in rural communities: a randomised control trial	AERF (via UNEWC)	\$1,200,000 (5 years)	\$432,942	\$532,841
Drug Policy Modelling Program - Stage Two	CF	\$7,661,973 (5 years)	\$1,374,183	\$1,163,277
Evaluation of the MDECC parents' prepared program	MDECC	\$34,722 (3 years)	\$3,137	\$9,644
Using population health data to improve health services, policy and planning	NHMRC	\$497,367 (5 years)	\$133,098	\$12,790
Longitudinal treatment outcomes for methamphetamine dependence: a treatment cohort study	NHMRC	\$720,500 (4 years)	\$120,030	\$77,233
An empirical investigation of psychosis proneness in amphetamine users	NHMRC (via GU)	\$160,750 (3 years)	\$35,056	\$9,575
CLIMATE Schools: psychostimulant and cannabis module	AGDHA	\$250,046 (3 years)	\$1,887	\$67,114
Illicit drug use in Australia-epidemiology, use patterns and associated harm	AGDHA	\$23,400	\$6,503	\$102
Development of clinical guidelines for the management of cannabis use disorder	AGDHA	\$238,631 (2 years)	\$72,364	\$73,924
Review of literature on the secondary supply of alcohol to minors	AGDHA	\$36,140	\$27,800	\$2,422
Establishment of the National Cannabis Prevention and Intervention Centre (NCPIC)	AGDHA	\$11,579,090 (4 years)	\$3,180,006	\$4,822,555
Fear, sadness and alcohol use in adolescence: a test of new curriculum models to prevent adverse outcomes	ARC	\$270,000 (3 years)	\$101,627	\$137,597
Development and evaluation of specialist services for female drug users in Iran	DROSOS	\$277,778 (2 years)	\$114,386	\$131,303
Comparative rates of violent crime amongst methamphetamine and opioid users	NDLERF	\$194,051 (3 years)	\$77,761	\$48,100
The efficacy of an intervention for PTSD among illicit drug users	NHMRC	\$558,125 (3 years)	\$192,074	\$249,627
Integrating treatment for alcohol use problems and comorbid PTSD	NHMRC	\$651,725 (3 years)	\$211,935	\$236,011
Longitudinal study of opioid maintenance treatment in NSW: mortality among opioid dependent persons in pharmacotherapy 1985-2006	NHMRC	\$144,500 (2 years)	\$66,488	\$17,686

PROJECTS	FUNDING SOURCE	TOTAL AWARD	EXPENDITURE 2008	EXPENDITURE 2009
Investigating the availability and nature of hepatitis C antiviral therapy in NSW, particularly for illicit drug users	SCHER	\$6,097	\$1,467	\$140
Secretariat for the United Nations Reference Group on HIV/AIDS and injecting drug use	UNOV	\$118,761	\$11,956	\$350,800
Developing a model to assess the economic consequences of cannabis policy options	ARC	\$244,310 (3 years)	\$53,064	\$97,033
Organic brain damage after non-fatal opioid overdose	NHMRC	\$235,500 (3 years)	\$35,485	\$66,653
Using epidemiology to inform psychiatric classification	NHMRC	\$363,300 (3 years)	\$89,649	\$159,493
The statistical relationship between alcohol-related crime and liquor outlets in the City of Sydney	CCS	\$16,063 (5 years)	\$7,090	\$1,372
Examining the relative cost effectiveness of different types of law enforcement directed towards methamphetamine	NDLRF	\$377,813 (3 years)	\$88,508	\$202,129
Enhancing the management of alcohol-related problems among Indigenous Australians	AGDHA	\$142,295 (2 years)	\$55,298	\$68,887
Alcohol use in pregnancy	HAC	\$99,710 (2 years)	\$26,256	\$75,707
Athletes and illicit drug use	AGDHA	\$240,454 (2 years)	\$111,225	\$241,030
The long-term impact of methadone maintenance treatment on criminal behaviour and imprisonment	NDLRF	\$54,353 (2 years)	\$13,953	\$10,269
Building capacity in health economic evaluation	NHMRC	\$1,502,000 (4 years)	\$249,919	\$162,781
Michael Project	MA	\$114,266 (3 years)	\$9,735	\$62,010
Foetal alcohol spectrum disorder monograph	DASSA	\$12,430 (2 years)	\$6,715	\$5,715
Improving hepatitis C and methadone treatment services	NSW Health	\$57,837 (1 year)	\$0	\$38,366
Second national survey of mental health and wellbeing	AGDHA	\$220,480 (2 years)	\$17,612	\$103,352
CBT intervention for regular amphetamine use and depression: a stepped care approach	HAC (via UNEWC)	\$18,000 (1 year)	\$0	\$18,000
The diversion and misuse of stimulant medication for Attention Deficit Hyperactivity Disorder (ADHD) among illicit psychostimulant users	NHMRC	\$148,000 (2 years)	\$0	\$44,954
Suicide risk assessment and intervention strategies: current practice among drug and alcohol treatment providers	AGDHA	\$160,042 (2 years)	\$9,948	\$110,903
The range and magnitude of alcohol's harm to others	AERF	\$94,174 (2 years)	\$2,568	\$6,072
Cannabis Cohort Research Consortium: fostering collaborative partnerships to investigate the causes and consequences of cannabis and other drug use	ARACY	\$43,667 (1 year)	\$0	\$23,118
Comorbidity Stage 1 and 2 - pilot, print and disseminate the National Comorbidity Guidelines	AGDHA	\$203,238 (2 years)	\$0	\$115,929
Homelessness and services and system integration	AHURI	\$105,450 (2 years)	\$0	\$17,512
Secretariat for the United Nations Reference Group on HIV/AIDS and injecting drug use, particularly in developing and transitional countries	UNODC	\$149,996 (2 years)	\$0	\$6,321
Alcohol action in rural communities (NHMRC Newcastle)	NHMRC (via UNEWC)	\$126,000 (3 years)	\$25,051	\$651
Stepped-care for patients with alcoholism and panic disorder	NSW Health	\$36,000 (1 year)	\$0	\$23,068
Improving shared care hepatitis C antiviral and methadone services	SWSAHS	\$92,565 (3 years)	\$0	\$90,394

RESEARCH GRANTS AND FUNDING

PROJECTS	FUNDING SOURCE	TOTAL AWARD	EXPENDITURE 2008	EXPENDITURE 2009
Intergenerational homelessness	AHURI	\$16,578 (3 years)		\$13,032
Development of a sexual health and contraception intervention for woman who are drug dependent	NSW Health	\$19,000 (1 year)		\$4,384
SUB-TOTAL FOR PROJECTS		\$50,284,050	\$10,720,611	\$12,865,753

SCHOLARSHIPS AND FELLOWSHIPS	FUNDING SOURCE	TOTAL AWARD	EXPENDITURE 2008	EXPENDITURE 2009
Career Development Award - Responding to illicit drugs in Australia: towards evidence-based strategic policy	NHMRC	\$441,250 (5 years)	\$161,048	\$97,768
Public Health Fellowship - Developing and disseminating effective treatments for depression and substance use comorbidity	NHMRC	\$269,000 (4 years)	\$40,734	\$102,964
Senior Research Fellowship for Maree Teesson	NHMRC	\$607,500 (5 years)	\$121,500	\$203,403
Senior Research Fellowship for Louisa Degenhardt	NHMRC	\$607,500 (5 years)	\$121,500	\$203,131
Reducing alcohol-related harm in rural Aboriginal communities	NHMRC	\$259,000 (4 years)	\$57,995	\$94,873
Child protection and mothers in substance abuse treatment - Fellowship	DOCS	\$201,000 (3 years)	\$61,686	\$70,727
Vice-Chancellor's Postdoctoral Fellowship	UNSW	\$288,000 (3 years)	\$96,966	\$103,689
PhD Scholarship	AERF	\$121,709 (4 years)	\$38,751	\$5,549
PhD Scholarship	DH	\$133,653 (3 years)	\$32,501	\$4,446
PhD Scholarship	NDARC	\$484,735	\$0	\$304,954
NHMRC PhD Scholarship	NHMRC	\$62,043	\$20,007	\$4,797
APA (3)	DEST	\$235,602	\$60,021	\$79,315
Faculty Support for Research Fellow Projects	UNSW	\$165,329	\$134,979	\$165,329
SUB-TOTAL FOR SCHOLARSHIPS AND FELLOWSHIPS		\$3,876,321	\$947,688	\$1,440,946

FACULTY RESEARCH	FUNDING SOURCE	TOTAL AWARD	EXPENDITURE 2008	EXPENDITURE 2009
Research Suspense NDARC	NDARC	\$500,000	\$0	\$160,387
Research Surplus NDARC	NDARC	\$81,337	\$0	\$71,693
Research Initiatives	NDARC	\$883,769	\$0	\$485,407
NDARC External Consultancy Research	NDARC	\$4,220	\$0	\$3,408
SUB-TOTAL FOR FACULTY RESEARCH		\$1,469,326		\$720,895

INFRASTRUCTURE	FUNDING SOURCE	ANNUAL AWARD	EXPENDITURE 2008	EXPENDITURE 2009
Faculty Support for Research Infrastructure	UNSW	\$784,619 (for 2009)	\$997,929	\$784,619
DVC Strategic Support for Research Infrastructure	UNSW	\$432,950 (for 2009)	\$758,616	\$432,949
SUB-TOTAL FOR INFRASTRUCTURE		\$1,217,569	\$1,756,545	\$1,217,568

GRAND TOTAL OF RESEARCH AWARDS TO NDARC		\$56,847,266	\$13,424,844	\$16,245,162
--	--	---------------------	---------------------	---------------------

SEMINARS

In House Seminars

February 12

The comparative toxicology and major organ pathology of fatal methadone and heroin toxicity cases - **Professor Shane Darke**

February 19

Patterns of polydrug use in an opioid dependent sample - **Ms Fiona Shand**

February 26

Understanding comorbidity: broadening the base **Professor Maree Teesson**

March 12

Is there a relationship between symptoms of substance withdrawal and post traumatic stress disorder? - **Ms Pip Farrugia**

March 19

Suicidal thoughts and behaviours among Australian adults: findings from the 2007 National Survey of Mental Health and Wellbeing - **Ms Amy Johnston**

March 19

Exploring the consumer response to drug price changes: a case-study of the interplay between methamphetamine and heroin **Dr Jenny Chalmers**

April 09

Can parents teach their children to drink responsibly? Or is one drop too many? **Dr Laura Vogl**

April 16

Categorisation of variables: pitfalls and benefits **Dr Jim Lemon**

April 30

Drug crime research with a highly vulnerable and neglected population: methodological challenges and first (tentative) longitudinal results **Mr Paul Nelson**

May 21

Methamphetamine use and mental health at dance events: developing an evidence-based peer education message - **Dr Rebecca McKetin**

May 28

Suicide risk among illicit drug users: an introduction to the Suicide Risk Assessment Study **Ms Erin Kelly**

May 28

Aggression and violent crime among substance users with PTSD - **Ms Emma Barrett**

June 11

Does funding influence research? **A/Prof. Anthony Shakeshaft**

June 18

Overview of findings from the Reference Group to the UN on HIV and injecting drug use **Dr Brad Mathers**

July 16

The causes and consequences of cannabis use moderation in young adults - **Mr Ed Silins**

July 23

Estimating trends in the prevalence of drug use over time amongst regular injecting drug users - avoiding Type 1 errors - **Dr Tim Slade**

July 09

Attitudes toward, knowledge of, and prevalence of illicit drug use among elite athletes in Australia **Dr Matthew Dunn**

August 13

The Cannabis Information and Helpline. What is it and does it work? - **Mr Peter Gates**

August 20

Climate Schools Cannabis and Psychostimulant Module - **Dr Laura Vogl**

August 20

Drug use by women in Iran - **A/Prof. Kate Dolan**

September 24

Conduct Disorder: a risk for violent offending and victimisation amongst illicit drug users **Ms Michelle Torok**

September 24

Dissemination of alcohol screening and brief intervention in Indigenous Primary Health Care **Ms Catherine Deans**

October 08

Diversion and misuse of pharmaceutical stimulants among illicit psychostimulant users **Dr Sharlene Kaye**

October 15

The classification of alcohol use disorders in young adults - **Ms Louise Newton**

October 29

The diversion and injection of the medications used in opioid substitution treatment: key findings from the post-marketing surveillance studies of buprenorphine-naloxone, 2006-2008 **Ms Briony Larence**

October 29

Child protection and mothers in the NSW Opioid Treatment Program study - **Dr Stephanie Taplin**

November 12

Alcohol use during pregnancy - **Dr Lucy Burns**

Invited Seminars

March 26

Alcohol and drug non-government organisations: structural and reform issues - **Mr Larry Pearce, CEO, Network of Alcohol and Other Drug Agencies**

April 23

Effects of a restriction of pub trading hours on late night assaults in Newcastle - **Mr Craig Jones, NSW Bureau of Crime Statistics and Research**

May 14

Research, government and drug policy: lessons from cannabis - **Professor Steve Allsop, Director, National Drug Research Institute, Perth**

July 30

Changing HIV risk-taking behaviours using a reinforcing approach: results from a 4 city study **Professor Martin Iguchi, Department of Public Health, University of California, Los Angeles**

August 27

Lessons from history? What is the contemporary relevance for drug policy, if any, of the US experience with alcohol prohibition 1920-1932? **Professor Wayne Hall, School of Population Health, University of Queensland**

September 10

Developing evidence-based, web-delivered interventions focused on the prevention and treatment of substance use disorders and related issues - **Dr Lisa Marsch, Director, for Technology and Health National Development and Research Institutes, New York**

September 17

Estimating the global burden of disease: are we addressing the concerns raised about previous studies through GBD 2005? - **Professor Theo Vos, Director, Centre for Burden of Disease and Cost-Effectiveness, University of Queensland**

October 22

Oxytocin and addiction - **Professor Iain McGregor, School of Psychology, University of Sydney**

November 19

NSW SmokeCheck Aboriginal and Torres Strait Islander Tobacco prevention project - **Ms Luciana Massi, School of Public Health, University of Sydney**

November 26

The prevention of HIV Infection - **Professor John Kaldor, National Centre in HIV Epidemiology and Clinical Research, University of NSW**

PUBLICATIONS

NDARC TECHNICAL REPORTS

- 299. Bleeker, A., Silins, E., Dillon, P., Simpson, M., Copeland, J. & Hickey, K.** (2009). *The feasibility of peer-led interventions to deliver health information to ecstasy and related drug (ERDs) users*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 300. Mathers, B., Wodak, A., Shakeshaft, A., Khoei, E.M. & Dolan, K.** (2009). *A rapid assessment and response to HIV and drug use in Mongolia*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 301. Randall D., Roxburgh A.D., Gibson A.E. & Degenhardt L.J.** (2009). *Mortality among people who use illicit drugs*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 302. Larance, B., Degenhardt, L., Mattick, R.P., O'Brien, S., Lintzeris, N., Bell, J., ... Ali, R.** (2009). *The diversion and injection of the pharmaceutical opioids used in opioid substitution treatment (OST)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.
- 303. Darke, S., Torok, M., Kaye, S. & Duflou, J.** (2009). *Cardiovascular disease risk factors and symptoms amongst regular psychostimulant users*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.
- 304. Bailey, K. & Baker, A.** (2009). *Manual for Brief Alcohol Intervention Group for Young People*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 305. Dunn, M., Thomas, J.O., Burns, L., Swift, W., Price, K. & Mattick, R.P.** (2009). *Attitudes toward, knowledge of, prevalence of illicit substance use among elite athletes in Australia*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

NCPIC TECHNICAL REPORT

- 1. Gates, P., Taplin, S., Copeland, J., Swift, W. & Martin, G.** (2009). *Barriers and facilitators to cannabis treatment*. Sydney, NSW: National Cannabis Prevention and Information Centre, University of New South Wales.

AUSTRALIAN DRUG TRENDS SERIES

- 19. Stafford J.A., Sindicich N., Burns L.A., Cassar J., Cogger S., De Graaff B., ... White, N.** (2009). *Australian Drug Trends 2008: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 20. Phillips B. & Burns L.A.** (2009). *NSW Drug Trends 2008: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug

and Alcohol Research Centre, University of New South Wales.

- 21. Cassar J., Stafford J. & Burns, L.A.** (2009). *ACT Drug Trends 2008 Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 22. Quinn, B.** (2009). *Victorian Drug Trends 2008: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 23. De Graaff, B. & Bruno, R.** (2009). *Tasmanian Drug Trends 2008: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 24. White, N., Vial, R. & Ali, R.** (2009). *SA Drug Trends 2008: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 25. George, J., Fetherston, J., Lenton, S. & Santana, L.** (2009). *WA Drug Trends 2008: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 26. Moon, C.** (2009). *NT Drug Trends 2008: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 27. Cogger, S. & Kinner, S.A.** (2009). *Queensland Drug Trends 2008: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 28. Sindicich, N., Burns, L., Stafford, J., George, J., Kong, F., Matthews, A., Rainsford, C., Rowe, P., Scott, L. & White, N.** (2009). *Australian Trends in Ecstasy and related Drugs Markets 2008: Findings from the Ecstasy and Related Drugs Reporting System (EDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 29. Scott L. & Burns L.A.** (2009). *NSW Trends in Ecstasy and related Drug Markets 2008: Findings from the Ecstasy and Related Drugs Reporting System (EDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 30. Rowe, P. & Burns, L.A.** (2009). *ACT Trends in Ecstasy and Related Drug Markets 2008: Findings from the Ecstasy and related Drugs Reporting System*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 31. Kong, F.** (2009). *Victorian Trends in Ecstasy and Related Drug Markets 2008: Findings from the Ecstasy and related Drugs Reporting System (EDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 32. Matthews, A. & Bruno, R.** (2009). *Tasmanian Trends in Ecstasy and Related Drug Markets 2008: Findings from the Ecstasy and related Drugs Reporting System (EDRS)*. Sydney: National Drug

and Alcohol Research Centre, University of New South Wales.

- 33. White, N., Vial, R. & Ali, R.** (2009). *SA Trends in Ecstasy and Related Drug Markets 2008: Findings from the Ecstasy and related Drugs Reporting System (EDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 34. Rainsford, C., Fetherston, J. & Lenton, S.** (2009). *WA Trends in Ecstasy and Related Drug Markets 2008: Findings from the Ecstasy and related Drugs Reporting System (EDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 35. Scott, L. & Burns, L.A.** (2009). *NT Trends in Ecstasy and Related Drug Markets 2008: Findings from the Ecstasy and related Drug Reporting System (EDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- 36. George, J. & Kinner, S.A.** (2009). *Queensland Trends in Ecstasy and Related Drug Markets 2008: Findings from the Ecstasy and related Drugs Reporting System (EDRS)*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

OTHER REPORTS

- Bull, D., Arcuri, A.J. & Dillon, P.G.** (2009). *Cannabis use prevention methods in Australian schools. NCPIC Bulletin, 6*. Sydney: National Cannabis Prevention and Information Centre, University of New South Wales.
- Calabria, B., Degenhardt, L.J., Nelson, P., Bucello, C., Lynskey, M., Hall, W., ... McLaren, J.** (2009). *Methodology used in a systematic review of evidence on the prevalence of cannabis use and dependence. Illicit drugs discussion paper no. 14*. Global Burden of Disease Mental Disorders and Illicit Drug Use Expert group. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Cassar, J., Sindicich, N. & Burns, L.** (2009). *Methamphetamine use and associated risks amongst regular ecstasy users in the Australian Capital Territory and nationally. EDRS Drug Trends Bulletin, July 2009*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Cassar, J., Stafford, J. & Burns, L.** (2009). *Examining differences between younger and older injecting drug users in the 2009 National Illicit Drug Reporting System sample. Drug Trends Bulletin, December 2009*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Chalmers, J.J., Ritter, A., Heffernan, M. & McDonnell, G.D.** Modelling pharmacotherapy maintenance in Australia: Exploring affordability, availability, accessibility and quality using system dynamics. Canberra: Australian National Council on Drugs.
- Copeland, J.** (2009). *Cannabis use disorder: Epidemiology and management. Directions in*

Psychiatry. Hatherleigh Medical Education.

Copeland, J. (2009). *Topic 2. Counselling skills*. In Australian Chapter of Addiction Medicine's online Opportunistic Intervention Module (NSW Health).

Copeland, J. (2009). *Topic 5. Cannabis*. In Australian Chapter of Addiction Medicine's online Opportunistic Intervention Module (NSW Health).

Copeland, J. & Boughtwood, D. (2009). Cannabis use and related harms. *PharMAGazine* (International Pharmacy Misuse Advisory Group), 10(2) 1-2.

Degenhardt, L.J., Calabria, B., Nelson, P., Bucello, C., Roberts, A., Thomas J. & Hall, W. (2009). *Methodology used in a systematic review of evidence on the prevalence of amphetamine use and dependence. Illicit drugs discussion paper no. 13*. Global Burden of Disease Mental Disorders and Illicit Drug Use Expert group. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Bucello, C., Degenhardt, L., Calabria, B., Nelson, P., Roberts, A. & Medina-Mora, M. (2009). *Methodology used in a systematic review of evidence on the prevalence of cocaine use and dependence. Illicit drugs discussion paper No. 15*. Global Burden of Disease Mental Disorders and Illicit Drug Use Expert group. Sydney: National Drug and Alcohol Research Centre, University of NSW.

Degenhardt, L.J., Hallam, C. & Bewley-Taylor, D. (2009). *Comparing the drug situation across countries: Problems, pitfalls and possibilities*. London: Beckley Foundation Drug Policy Programme.

Doran, C. (2009). *Report on the cost-effectiveness analysis of tobacco control in Singapore*. Singapore: Health Promotion Board, Ministry of Health.

Howard, J. (2009). *Building capacity for community-based treatment and continuing care of young drug users in the Greater Mekong Subregion*. Bangkok: UNESCAP.

Howard, J., Ali, H. & Robins, L. (2009). *Review of adolescent substance use and responses in the WHO Western Pacific Region*. Manila: WHO WPRO.

Kong, F. & Dietze, P. (2009). *The personal wellbeing of regular ecstasy users in Australia. EDRS Drug Trends Bulletin, December 2009*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

McKetin, R. *Methamphetamine – a new drug or an old problem? Victorian Drug Statistics Handbook 2007: Patterns of drug use and related harm in Victoria*. Melbourne: Victorian Government Publishing Service, 2009; pp 97-99.

Nelson, P., McLaren, J., Degenhardt, L., Bucello, C., Calabria, B., Roberts, A., Briegleb, C., Clark, N. & Wiessing, L. (2009). *Methodology used in a systematic review of evidence on the prevalence of heroin/opioid use and dependence. Illicit drugs discussion paper No. 16*. Global Burden of Disease Mental Disorders and Illicit Drug Use Expert group. Sydney: National Drug and Alcohol

Research Centre, University of NSW.

Ogilvie, J. & Willis, K. (2009). *Police diversion in Australia*. Criminal Justice Bulletin, series 3, March 2009.

Petrie, D., Doran, C., Shakeshaft, A. & Sanson-Fisher, R. *The demand for intensity versus frequency of alcohol consumption: evidence from rural Australia*. Dundee Discussion Papers in Economics, University of Dundee, Working paper no. 222, January 2009.

Ritter A. & Chalmers J.J. (2009). *Polygon: The many sides to the Australian opioid pharmacotherapy maintenance system*. Canberra: Australian National Council on Drugs.

Roxburgh, A. & Burns, L. (2009). *Drug-induced deaths in Australia, 2006 Edition*. Sydney: National Drug and Alcohol Research Centre.

Roxburgh, A. & Burns, L. (2009). *Drug-related hospital stays in Australia, 1993-2007*. Sydney: National Drug and Alcohol Research Centre.

Scott, L., Phillips, B. & Burns, L. (2009) *High risk alcohol use among a group who regularly inject drugs in Australia. Drug Trends Bulletin, April 2009*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Simpson, M.A., Howard, J., Copeland, J. & Arcuri, A.J. (2009). *The need to monitor and reduce cannabis use among young offenders. NCPIC Bulletin 5*. Sydney: National Cannabis Prevention and Information Centre, University of New South Wales.

Sindicich, N., Stafford, J. & Burns, L. (2009). *An overview of the 2009 EDRS: The regular ecstasy user survey findings. EDRS Drug Trends Bulletin, October 2009*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Slade, T., Johnston, A., Teesson, M., Henderson, S., Whiteford, H., Burgess P., ... Saw, S. (2009) *The mental health of Australians 2: Report of the 2007 National Survey of Mental Health and Wellbeing*. Canberra: Commonwealth Department of Health and Ageing.

Stafford, J. & Burns, L. (2009). *An overview of the 2009 IDRS: The Injecting Drug User survey preliminary findings. Drug Trends Bulletin, October 2009*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

White, N., Vial, R. & Ali, R. (2009). *Gambling practices among regular ecstasy users in South Australia. EDRS Drug Trends Bulletin, April 2009*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Willis, K. & Ahmad, J. (2009). *Immediate court-based diversion in Australia*. Criminal Justice Bulletin, series 4, April 2009.

PUBLISHED BOOKS

Copeland, J., Frewen, A. & Elkins, K. (2009). *Management of cannabis use disorder and related issues*. Sydney: National Cannabis Prevention and Information Centre, University of New South Wales.

Mattick, R.P., Ali R. & Lintzeris, N., (ed.) (2009). *Pharmacotherapies for opioid dependence treatment*. London: Informa.

Mills, K.L., Deady, M., Proudfoot, H., Sannibale, C., Teesson M., Mattick R. & Burns L. (2009). *Guidelines on the management of co-occurring alcohol and other drug and mental health conditions in alcohol and other drug treatment settings*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

BOOK CHAPTERS

Bell, J., Kimber, J., Lintzeris, N., White, J., Mattick, R. P. & Ritter, A. (2009). Clinical guidelines and procedures for the use of naltrexone in opioid dependence. In R.P. Mattick, R. Ali and N.E. Lintzeris (eds.), *Pharmacotherapies for opioid dependence treatment* (pp. 466-474). London: Informa.

Byrnes, J., Doran, C. & Shakeshaft, A. Taxation and the rise of alcopops in Australia. In *Alcohol Taxation Policy*. Nova: NY, 2009 (In press).

Degenhardt, L. (2009). Epidemiology of substance use. In Latt, N. Conigrave, K., Saunders, J.B., Marshall, E.J., Nutt, D., *Addiction medicine* (pp. 3-17). Oxford: Oxford University Press.

Degenhardt, L., Mattick, R. P. & Gibson, A. E. (2009). Opioid dependence and management. In R.P. Mattick, R. Ali and N.E. Lintzeris (eds.), *Pharmacotherapies for opioid dependence treatment* (pp. 1-14). London: Informa.

Gibson, A. E. & Ritter, A. (2009). Naltrexone maintenance treatment. In R.P. Mattick, R. Ali and N.E. Lintzeris (eds.), *Pharmacotherapies for opioid dependence treatment* (pp. 252-281). London: Informa.

Hall, W. & Degenhardt, L. (2009). Cannabis-related disorders. In B.J. Sadock, and V.A. Sadock (eds.), *Kaplan and Sadock's comprehensive textbook of psychiatry volume 1* (9th Edition) (pp. 1309-1318). Philadelphia, PA: Lippincott Williams and Wilkins.

Henry-Edwards, S., Gowing, L., White, J., Ali, R., Lintzeris, N., Ritter, A. & Quigley, A. (2009). Clinical guidelines and procedures for the use of methadone in the maintenance treatment of opioid dependence. In R.P. Mattick, R. Ali and N.E. Lintzeris (eds.), *Pharmacotherapies for opioid dependence treatment* (pp. 354-389). London: Informa.

Lintzeris, N., Clark, N., Muhleisen, P., Ritter, A. & Mattick, R.P. (2009). National clinical guidelines and procedures for the use of buprenorphine in the treatment of heroin dependence. In R.P. Mattick, R. Ali & N.E. Lintzeris (eds.), *Pharmacotherapies for opioid dependence*

PUBLICATIONS

treatment (pp. 390-445). London: Informa.

Mattick, R.P., Breen, C. & Gibson, A.E. (2009). The place of buprenorphine in the management of opioid dependence. In R.P. Mattick, R. Ali and N.E. Lintzeris (eds.), *Pharmacotherapies for opioid dependence treatment* (pp. 196-226). London: Informa.

Shanahan, M. & Mattick, R.P. (2009). Choosing treatments: The role of economics in informing future decisions. In R.P. Mattick, R. Ali and N.E. Lintzeris (eds.), *Pharmacotherapies for opioid dependence treatment* (pp. 475-488). London: Informa.

JOURNAL ARTICLES

Adam, P.C.G., de Wit, J.B.F., Toskin, I., Mathers, B.M., Nashkoev, M., Zablotska, ... Rugg, D. (2009). Estimating levels of HIV testing, HIV prevention coverage, HIV knowledge, and condom use among men who have sex with men (MSM) in low-income and middle-income countries. *JAIDS: Journal of Acquired Immune Deficiency Syndromes*, 52, S143-S151.

Anderson T., Slade T., Andrews J.G. & Sachdev P. (2009). DSM-IV Major Depressive Episode in the elderly: The relationship between the number and the type of depressive symptoms and impairment. *Journal of Affective Disorders*, 117, 55-62.

Baker, A., Turner, A.J., Kay-Lambkin, F. & Lewin, T.J. (2009). The long and the short of treatments for alcohol or cannabis misuse among people with severe mental disorders. *Addictive Behaviors*, 34(10), 852-858.

Bammer, G., Ritter, A., Kutin, J. & Lintzeris, N. (2009). Fast-tracking implementation through trial design: the case of buprenorphine treatment in Victoria. *Australian and New Zealand Journal of Public Health*, 33(1), 34-39.

Bell, J., Trinh, L., Butler, B., Randall, D. & Rubin, G. (2009). Comparing retention in treatment and mortality in people after initial entry to methadone and buprenorphine treatment. *Addiction*, 104(7), 1193-1200.

Bruno, R., Matthew, A. J., Topp, L., Degenhardt, L., Gomez, R. & Dunn, M. (2009). Can the severity of dependence scale be usefully applied to 'ecstasy'? *Neuropsychobiology*, 60(3-4), 137-147.

Burgess, P., Pirkis, J., Slade, T.N., Johnston, A.K., Meadow, G. & Gunn J. (2009). Service use for mental health problems: Findings from the 2007 National Survey of Mental Health and Wellbeing. (2009). *Australian and New Zealand Journal of Psychiatry*, 43(7), 615-623.

Burns, L.A., Randall D., Hall, W.D., Law, M.G., Butler, T. & Bell, J. (2009). Opioid agonist pharmacotherapy in New South Wales from 1985 to 2006: Patient characteristics and patterns and predictors of treatment retention. *Addiction*, 104(8), 1363-1372.

Chalmers, J.J., Bradford, D. & Jones, C.G. (2009). How do amphetamine users respond to changes in methamphetamine price? *Crime and Justice Bulletin*, 134, 408-409.

Charlson, F., Degenhardt, L., MacLaren, J., Hall, W. & Lynskey, M. (2009). A systematic review of research examining benzodiazepine-related mortality. *Pharmacoepidemiology and Drug Safety*, 18(3), 93-103.

Clifford, A., Jackson Pulver, L., Richmond, R., Shakeshaft, A. & Ivers, R. (2009). Disseminating best-evidence health-care to Indigenous healthcare settings and programs in Australia: identifying the gaps. *Health Promotion International*, 24(4), 404-415.

Cobiac, L., Vos, T., Doran, C. & Wallace, A. (2009). Cost-effectiveness of interventions to prevent alcohol-related disease and injury in Australia. *Addiction*, 104, 1646-1655.

Conroy, E., Degenhardt, L., Mattick, R.P. & Nelson, E.C. (2009). Child maltreatment as a risk factor for opioid dependence: Comparison of family characteristics and type and severity of child maltreatment with a matched control group. *Child Abuse and Neglect*, 33(6), 343-352.

Copeland, J. & Swift, W. (2009). Cannabis use disorder: epidemiology and management. *International Review of Psychiatry*, 21, 96-103.

Darke, S. (2009). Substance use and violent death, a case for the 'too hard' basket? *Addiction*, 104, 1063-1064.

Darke, S., Dufou, J. & Torok, M. (2009). Drugs and violent death, comparative toxicology of homicide and non-substance toxicity suicide victims. *Addiction*, 104, 1000-1005.

Darke, S., Dufou, J. & Torok, M. (2009). Toxicology and circumstances of completed suicide by means other than overdose. *Journal of Forensic Sciences*, 54, 490-494.

Darke, S., Mills, K. L., Ross, J., Williamson, A., Havard, A. & Teesson, M. (2009). The ageing heroin user: Career length, clinical profile and outcomes across 36 months. *Drug and Alcohol Review*, 28, 243-249.

Darke, S., Mills, K., Teesson, M., Ross, J., Williamson, A. & Havard, A. (2009). Patterns of major depression and drug-related problems amongst heroin users across 36 months. *Psychiatry Research*, 166, 7-14.

Dawe, S., Davis, P.J., Lapworth, K. & McKetin, R. (2009). Mechanisms underlying aggressive and hostile behavior in amphetamine users. *Current Opinion in Psychiatry*, 22(3), 269-273.

Degenhardt, L., Chiu, W.T., Conway, K., Dieker, L., Glantz, M., Kalaydjian, A., ... Kessler, R.C. (2009). Does the 'gateway' matter? Associations between the order of drug use initiation and the development of drug dependence in the National Comorbidity Study Replication. *Psychological Medicine*, 39(1), 157-167.

Degenhardt, L., Hall, W., Lynskey, M., McGrath, J., McLaren J., Calabria B., ... Vos, T. (2009). Should burden of disease estimates include cannabis use as a risk factor for psychosis? *PLoS Medicine*, 6(9), e1000133.

Degenhardt, L., Larance, B., Bell, J., Winstock, A.R., Lintzeris, N., Ali, R.L., ... Mattick, R.P. (2009). Injection of medications used in opioid substitution treatment in Australia after the introduction of a mixed partial agonist-antagonist formulation. *Medical Journal Australia*, 191(3), 161-165.

Degenhardt, L., Randall, D., Hall W., Law, M., Butler, T. & Burns, L. (2009). Mortality among clients of a state-wide opioid pharmacotherapy program over 20 years: Risk factors and lives saved. *Drug and Alcohol Dependence*, 105(1-2), 9-15.

Degenhardt, L., Roxburgh, A., Dunn, M., Campbell, G., Bruno, R., Kinner, S. A., ... Topp, L. (2009). The epidemiology of ecstasy use and harms in Australia. *Neuropsychobiology*, 60(3-4), 176-187.

Degenhardt, L.J., Swendsen, J., Conway, K., Dierker, L., Glantz, M., Jin, R., ... Kessler, R.C. (2009). Socio-demographic risk factors for alcohol and drug dependence: the 10-year follow-up of the national comorbidity survey. *Addiction*, 104, 1346-1355.

Degenhardt, L.J., Whiteford, H., Hall, W.D. & Vos, T. (2009). Estimating the burden of disease attributable to illicit drug use and mental disorders: What is 'Global Burden of Disease 2005' and why does it matter? *Addiction*, 104, 1466-1471.

Dolan, K. (2009). Prison research. *Addiction*, 104(2), 223-223.

Dolan, K. & Larney, S. (2009). A review of HIV in prisons in Nepal. *Kathmandu University Medical Journal*, 7, 351-354.

Dolan, K., Larney, S., Jacka, B. & Rawlinson, W. (2009). Presence of hepatitis C virus in syringes confiscated in prisons in Australia. *Journal of Gastroenterology and Hepatology*, 24(10), 1655-1657.

Doran, C.M., Shakeshaft, A.P., Hall, W. & Petrie, D. (2009). Alcohol industry and government revenue derived from underage drinking by Australian adolescents 2005. *Addictive Behaviors*, 34, 75-81.

Dufou, J., Darke, S. & Easson, J. (2009). Morphine concentrations in stomach contents of intravenous opioid overdose deaths. *Journal of Forensic Sciences*, 54, 1181-1184.

Dunn, M. (2009). Are anabolic-androgenic steroid users polysubstance users? *Journal of Science and Medicine in Sport*, 12(6), 3.

Dunn, M. (2009). The substance use profiles of a sample of obligatory and non-obligatory exercisers. *Australian and New Zealand Journal of Public Health*, 33(5), 495.

Dunn, M. & Degenhardt, L. (2009). The use of drug detection dogs in Sydney, Australia. *Drug and Alcohol Review*, 28(6), 658-662.

- Dunn M., Mazanov J. & Sitharthan G.** (2009). Predicting future anabolic-androgenic steroid use intentions with current substance use: Findings from an internet-based survey. *Clinical Journal of Sport Medicine*, 19(3), 222-227.
- Dunn, M., Topp, L. & Degenhardt, L.** (2009). GHB in Sydney, Australia, 2000-2006: A case study of the EDRS as a strategic early warning system. *International Journal of Drug Policy*, 20, 413-417.
- Edwards, G., Babor, T., Darke, S., Hall, W., Marsden, J., Miller, P. & West, R.** (2009). Drug trafficking, time to abolish the death penalty. *Addiction*, 104, 1267-1269.
- Ghaffari, S., Doran, C., Wilson, A., Aisbett, C. & Jackson, T.** (2009). Investigating DRG cost weights for hospitals in middle income countries. *International Journal of Health Planning and Management*, 24, 251-264.
- Girgis, A., Cockburn, J., Butow, P., Bowman, D., Schofield, P., Stojanovski, E., D'Este, C., Tattersall, M., DORAN, C. & Turner, J.** (2009). Improving patient emotional functioning and psychological morbidity: Evaluation of a consultation skills training program for oncologists. *Patient Education and Counselling*, 77(3): 456-62.
- Glantz, M., Anthony, J.C., Berglund, P.A., Degenhardt, L., Dierker, L., Kalaydjian, A., ... Kessler, R.C.** (2009). Mental disorders as risk factors for later substance dependence: estimates of optimal prevention and treatment benefits. *Psychological Medicine*, 39(8), 1365-1377.
- Hall, W.D. & Degenhardt, L.J.** (2009). Adverse health effects of non-medical cannabis use. *Lancet*, 374, 1383-1391.
- Hall, W.D. & Degenhardt, L.J.** (2009). The Australian Illicit Drug Reporting System: monitoring trends in illicit drug availability, use and drug-related harm in Australia 1996-2006. *Contemporary Drug Problems*, 36, 643-661.
- Hall, W.D., Degenhardt, L.J. & Teesson, M.** (2009). Understanding comorbidity between substance use, anxiety and affective disorders: broadening the research base. *Addictive Behaviors*, 34(6-7), 526-530.
- Hawkins, N., Sanson-Fisher, R., Shakeshaft, A. & Webb, G.** (2009). Differences in licensee, police and public opinions regarding interventions to reduce alcohol-related harm associated with licensed premises. *Australian and New Zealand Journal of Public Health*, 33(2), 160-166.
- Hughes, C.E.** (2009). Capitalising upon political opportunities to reform drug policy: A case study into the development of the Australian "Tough on Drugs-Illicit Drug Diversion Initiative". *International Journal of Drug Policy*, 20(5), 431-437.
- Hughes, K., Downing, J., Bellis, M.A., Dillon, P. & Copeland, J.** (2009). The sexual behaviour of British backpackers in Australia. *Sexually Transmitted Infections*, 85, 477-482.
- Indig, D., Copeland, J., Conigrave, K.M. & Rotenko, I.** (2009). Attitudes and beliefs of emergency department staff regarding alcohol-related presentations. *International Emergency Nursing*, 17, 23-30.
- Indig, D., Copeland, J. & Conigrave, K.** (2009). Comparing methods of detecting alcohol-related emergency department presentations. *Emergency Medicine Journal*, 26, 596-600.
- Johnston, A.K., Pirkis J. & Burgess P.M.** (2009). Suicidal thoughts and behaviours among Australian adults: Findings from the 2007 National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*, 43(7), 635-643.
- Kalaydjian, A., Swendsen, J., Chiu, W., Dierker, L., Degenhardt, L.J., Glantz M., ... Kessler, R.C.** (2009). Sociodemographic predictors of transitions across stages of alcohol use, disorders, and remission in the National Comorbidity Survey Replication. *Comprehensive Psychiatry*, 50, 299-306.
- Kay-Lambkin, F., Baker, A., Lewin, T.J. & Carr, V.J.** (2009). Computer-based psychological treatment for comorbid depression and problematic alcohol and/or cannabis use: A randomized controlled trial of clinical efficacy. *Addiction*, 104(3), 378-388.
- Kaye, S., Darke, S. & Duflou, J.** (2009). Methylenedioxymethamphetamine (MDMA)-related fatalities in Australia, demographics, circumstances, toxicology and major organ pathology. *Drug and Alcohol Dependence*, 104, 254-261.
- Kinner, S.A., George, J., Campbell, G. & Degenhardt, L.** (2009). Crime, drugs and distress: patterns of drug use and harm among criminally involved injecting drug users in Australia. *Australian and New Zealand Journal of Public Health*, 33(3), 223-227.
- Large, M., Farooq, S., Nielssen, O. & Slade, T.N.** (2009). Duration of untreated psychosis in LAMI countries Reply. *British Journal of Psychiatry*, 194, 189.
- Larney, S. & Dolan, K.** (2009). A literature review of international implementation of opioid substitution treatment in prisons: Equivalence of care. *European Addiction Research*, 15(2), 107-112.
- Larney, S. & Dolan, K.** (2009) Compulsory detoxification is a major challenge to harm reduction in China. *International Journal of Drug Policy*, 21:165-166.
- Larney S., Conroy E.J., Mills K., Burns L. & Teesson M.** (2009). Factors associated with violent victimisation among homeless adults in Sydney, Australia. *Australian and New Zealand Journal of Public Health*, 33(4), 347-351.
- Lawrinson, P., Roche, A. & Copeland, J.** (2009). Optimizing clinical care through implementation of outcome monitoring systems. *Drugs - Education Prevention and Policy*, 16, 250-259.
- Lemon, J. & Tyagi, A.** (2009). The Fan Plot: A technique for displaying relative quantities and differences. *Statistical Computing and Graphics Newsletter*, 20(1), 8-10.
- Lenton, S., Dietze, P., Degenhardt, L., Darke, S. & Butler, T.** (2009). Now is the time to take steps to allow peer access to naloxone for heroin overdose in Australia. *Drug and Alcohol Review*, 28, 583-585.
- Lenton, S.R., Dietze, P.M., Degenhardt, L., Darke, S. & Butler, T.G.** (2009). Naloxone for administration by peers in cases of heroin overdose. *Medical Journal of Australia*, 191, 469.
- Lynagh, M., Sanson-Fisher, R. & Shakeshaft, A.** (2009). Reducing alcohol-related harm: the untapped potential of pre-hospital care workers. *International Journal of Emergency Medicine*, 2, 237-40.
- Maloney, E., Degenhardt, L., Darke, S. & Nelson, E.** (2009). Are non-fatal opioid overdoses misclassified suicide attempts? Comparing the associated correlates. *Addictive Behaviors*, 34, 723-729.
- Maloney, E., Degenhardt, L., Darke, S. & Nelson, E.** (2009). Impulsivity and borderline personality as risk factors for suicide attempts among opioid-dependent individuals. *Psychiatry Research*, 169, 16-21.
- Martire, K.A. & Larney, S.** (2009). Inadequate data collection prevents health planning for released prisoners. *Medical Journal of Australia*, 191(7), 408-409.
- Mathers, B.M., Degenhardt, L.J., Adam, P., Toskin, I., Nashkoev, M., Lyerla, R. & Rugg, D.** (2009). Estimating the level of HIV prevention coverage, knowledge and protective behavior among injecting drug users: what does the 2008 UNGASS reporting round tell us? *JAIDS: Journal of Acquired Immune Deficiency Syndromes*, 52(Suppl 2), s132-s142.
- Matthews, A., Bruno, R., Johnson, J., Black, E., Degenhardt, L. & Dunn, M.** (2009). Factors associated with driving under the influence of alcohol and drugs among an Australian sample of regular ecstasy users. *Drug and Alcohol Dependence*, 100(1-2), 24-31.
- Mattick, R.P., Breen, C.L., Kimber, J. & Davoli, M.** (2009). Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. *Cochrane Database of Systematic Reviews*, 3.
- McBride, O., Teesson, M., Slade, T., Hains, D., Degenhardt, L. & Baillie, A.** (2009). Further evidence of differences in substance use and dependence between Australia and the United States. *Drug and Alcohol Dependence*, 100(3), 258-264.
- McKetin, R.** (2009). The Holy Grail of supply control: have we found the evidence? *Addiction*, 104(3), 455-456.

PUBLICATIONS

- McKetin, R., McLaren, J.A. & Kelly, E.V.** (2009). The validity of street terms used to monitor the Australian methamphetamine market. *The Open Addiction Journal*, 2, 30-33.
- McKetin, R., McLaren, J.A., Kelly, E.V. & Chalmers, J.J.** (2009). The market for crystalline methamphetamine in Sydney, Australia. *Global Crime*, 10(1-2), 113-123.
- Miller, P. & Degenhardt, L.** (2009). The Global Diversion of Pharmaceutical Drugs series. *Addiction*, 104(3), 333-334.
- Miller, P., Kypri, K., Chikritzhs, T., Skov S., Rubin, G., et al.** (2009). Health experts reject industry-backed funding for alcohol research. *Medical Journal of Australia*, 190, 713-4.
- Mills, K.** (2009). 'Between pain and nothing, I choose nothing': trauma, posttraumatic stress disorder and substance use. *Addiction*, 104(10), 1607-1609.
- Morley, K.C., Teesson, M., Sannibale, C. & Haber, P.S.** (2009). Sample bias from different recruitment strategies in a randomised controlled trial for alcohol dependence. *Drug and Alcohol Review*, 28, 222-229.
- Newton, N.C., Andrews, G., Teesson, M. & Vogl, L.E.** (2009). Delivering prevention for alcohol and cannabis using the internet: a cluster randomised controlled trial. *Preventive Medicine*, 48(6), 579-584.
- Newton, N.C., Vogl, L., Teesson, M. & Andrews, G.** (2009). Climate Schools: Alcohol module: Cross-validation of a school-based prevention programme for alcohol misuse. *Australian and New Zealand Journal of Psychiatry*, 43(3), 201-207.
- Norberg, M.M., Norton, A. & Olivier, J.** (2009). Refining measurement in the study of social anxiety and student drinking: who you are and why you drink determines your outcomes. *Psychology of Addictive Behaviors*, 23(4), 586-597.
- Parrott, A.C., Broadbear, J., Bruno, R., Degenhardt L., Morefield, K. & Scholey, A.B.** (2009). MDMA: neurohormonal, neurocognitive, and psychobiological aspects of recreational ecstasy. *The Open Addiction Journal*, 2, 24-27.
- Proudfoot, H. & Teesson, M.** (2009). The association of alcohol dependence with general practice attendance. *Drug and Alcohol Review*, 28(2), 154-159.
- Ritter, A.** (2009). How do drug policy makers access research evidence? *International Journal of Drug Policy*, 20(1), 70-75.
- Ritter A.** (2009). Methods for comparing drug policies: The utility of composite Drug Harm Indexes. *International Journal of Drug Policy*, 20(6), 475-479.
- Shakeshaft, A., Doran, C.M. & Byrnes, J.** (2009). The role of research in the failure of the alcopops excise in Australia. *Medical Journal of Australia*, 191, 223-225.
- Shearer, J., Darke, S., Rodgers, C., Slade, T., van Beek, I., Lewis, J., Brady, D., McKetin, R., Mattick, R.P. & Wodak, A.** (2009). A double blind, placebo-controlled trial of modafinil (200mg/day) for methamphetamine dependence. *Addiction*, 104, 224-233.
- Silins, E., Copeland, J. & Dillon, P.** (2009). Patterns and harms of pharmaceutical drug use among ecstasy users in Australia. *Adicciones*, 21, 347-362.
- Simpson, M., Lawrinson, P., Copeland, J. & Gates, P.** (2009). The Alcohol Treatment Outcome Measure (ATOM), a new clinical tool for standardising outcome measurement for alcohol treatment. *Addictive Behaviors*, 34, 121-124.
- Singleton, J., Degenhardt, L., Hall, W. & Zabransky, T.** (2009). Mortality among amphetamine users: A systematic review of cohort studies. *Drug and Alcohol Dependence*, 105(1-2), 1-8.
- Slade, T. & Grisham, J.** (2009). A taxometric investigation of agoraphobia in a clinical and a community sample. *Journal of Anxiety Disorder*, 23, 799-805.
- Slade, T., Grove, R. & Teesson, M.** (2009). A taxometric study of alcohol abuse and dependence in a general population sample: evidence of dimensional latent structure and implications for DSM-V. *Addiction*, 104(5), 742-751.
- Slade, T., Johnston, A.K., Oakley Browne, M., Andrews, J.G. & Whiteford, H.** (2009). 2007 National Survey of Mental Health and Wellbeing: methods and key findings. *Australian and New Zealand Journal of Psychiatry*, 49(7), 594-605.
- Swift, W., Coffey, C., Carlin, J.B., Degenhardt, L., Calabria, B. & Patton, G.C.** (2009). Are adolescents who moderate their cannabis use at lower risk of later regular and dependent cannabis use? *Addiction*, 104(5), 806-814.
- Teesson, M., Slade, T. & Mills, K.** (2009). Comorbidity in Australia: findings of the 2007 National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*, 43(7), 606-614.
- Thomson, N., Reid, G. & Dolan, K.** (2009). Examining HIV, drug use and risk behaviours: A case study in the custodial settings of Thailand and Indonesia. *International Journal of Prisoner Health*, 5(4), 180-191.
- Torok, M., Darke, S., Kaye, S., Ross, J. & McKetin, R.** (2009). Comparative rates of violent crime amongst methamphetamine and opioid users: victimisation and offending. *National Drug Law Enforcement Research Fund Monograph Series No. 32*.
- Vogl, L., Teesson, M., Andrews, G., Bird, K., Steadman, B. & Dillon, P.** (2009). A computerized harm minimization prevention program for alcohol misuse and related harms: randomized controlled trial. *Addiction*, 104(4), 564-575.
- Wallace, C., Galloway, T., McKetin, R., Kelly, E.V. & Leary, J.** (2009). Methamphetamine use, dependence and treatment access in rural and regional North Coast of New South Wales, Australia. *Drug and Alcohol Review*, 28, 592-599.
- Webb, G., Shakeshaft, A., Sanson-Fisher, R. & Havard, A.** (2009). A systematic review of workplace interventions for alcohol-related problems. *Addiction*, 104(3), 365-377.
- Wells, J.E., Degenhardt, L., Bohnert, K. M., Anthony, J.C. & Scott, K.M.** (2009). Geographical clustering of cannabis use: Results from the New Zealand Mental Health Survey 2003-2004. *Drug and Alcohol Dependence*, 99(1-3), 209-316.
- Williamson, A., Darke, S., Ross, J. & Teesson, M.** (2009). Changes and predictors of change in the physical health status of heroin users over 24 months. *Addiction*, 104, 465-470.
- Winstock, A.R., Lea, T. & Copeland, J.** (2009). Lithium carbonate in the management of cannabis withdrawal in humans: An open-label study. *Journal of Psychopharmacology*, 23, 84-93.
- Winstock, A.R., Nittis, M. & Lea, T.** (2009). Opioid dependent patients' experiences of and attitudes towards having their injecting sites examined. *International Journal of Drug Policy*, 20(1), 85-89.

CONFERENCE PRESENTATIONS

Barrett, E., Mills, K. & Teesson, M. *Posttraumatic stress disorder, substance use and violent crime: Is there a relationship?* Poster presented at the NSW Bureau of Crime Statistics and Research 40th Anniversary Symposium, Sydney, 18-19 February.

Barrett, E., Mills, K. & Teesson, M. *Posttraumatic stress disorder, substance use and violent crime.* Poster presented at the Australian Psychological Society College of Forensic Psychologists Conference, Melbourne, 25-28 February.

Barrett, E., Mills, K. & Teesson, M. *Substance use, posttraumatic stress disorder and violent crime.* Paper presented at the College on Problems of Drug Dependence, Reno, USA, 20-25 June.

Barrett, E., Mills, K. & Teesson, M. *From victim to victimiser: Violent crime among substance users with PTSD.* Poster presented at the School of Public Health and Community Medicine (SPHCM) Postgraduate Research Student Conference, Sydney, 23 November.

Battisti, R.A., Norberg, M.M., Hermens, D.F., Hickie, K. & Copeland, J. *The Cannabis Check-up+ for young outpatient adults: A prospective study.* Poster presented at the 1st National Cannabis Conference, Sydney, 7-8 September.

Battisti, R.A., Roodenrys, S., Johnstone, S. J., Pesa, N., Hermens, D.F. & Solowij, N. *Chronic cannabis use alters neurophysiological functioning during the Stroop colour-naming task.* Paper presented at the 19th Australasian Psychophysiology Society Conference, Newcastle, 28-30 November.

Battisti, R.A., Roodenrys, S., Johnstone, S.J. & Solowij, N. *Event-related potential subsequent memory effect dysfunction in chronic cannabis users.* Paper presented at the 9th World Congress of Biological Psychiatry, Paris, 28 June-2 July.

Battisti, R.A., Roodenrys, S., Johnstone, S.J. & Solowij, N. *Subsequent memory effect dysfunction in chronic cannabis users.* Paper presented at the Experimental Psychology Conference, Wollongong, 17-19 April.

Breen, C., Shakeshaft, A., Mattick, R., Sanson-Fisher, R. & D'Este, C. *Alcohol use in NSW country towns: Exploring the individual and community factors associated with harmful consumption.* Paper presented at the Australasian Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Bright, D.A. *Interviews with incarcerated high level drug dealers: benefits, challenges, and methodologies.* Paper presented at the 31st International Congress on Law and Mental Health, New York, USA, 28 June-4 July.

Bright, D.A. *The psychology of high level drug dealers: How well do dealers evaluate their risk of detection by law enforcement agencies?* Paper presented at the Australian Psychological Society College of Forensic Psychologists Conference, Melbourne, 25-28 February.

Bright, D.A. *Underbelly versus the risks and prices*

framework: implications for drug markets research. Paper presented at the NDARC Annual Symposium, Sydney, 28-29 September.

Bright, D.A. & Goodman-Delahunty, J. *Civil Juries: The impact of gruesome evidence and plaintiff injury severity.* Paper presented at the 31st International Congress on Law and Mental Health, New York, USA, 28 June-4 July.

Bright, D.A., Hughes, C., Chalmers, J. & Grech, K. *Social network analysis in illicit drug markets: an innovative methodology.* Paper presented at the Illicit Networks Workshop, Wollongong, 14-15 December.

Bright, D.A. & Ritter, A. *A conceptual framework for illicit drug seizures: what do seizures really mean?* Poster presented at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Burns, L. *Opioid agonist pharmacotherapy in New South Wales from 1985 to 2006: Patient characteristics and patterns and predictors of treatment retention.* Paper presented by A. Roxburgh at The Australasian Epidemiological Association Annual Scientific Meeting, Dunedin, New Zealand, 30 August-1 September.

Burns, L. *Substance use in marginalised populations.* Paper presented at the National Addiction Centre, London, 15 July.

Burns, L. *Substance use in marginalised populations: The homeless and pregnant women.* Paper presented at the Mental Health Services Conference Double Trouble workshop, Perth, 1-4 September.

Burns, L. *Substance use in pregnancy, an Australian perspective.* Paper presented at the College on problems of drug dependence. NIDA International Forum, Reno, Nevada, June 20-25.

Burns, L. *Substance use and violence: an Australian perspective.* Paper presented at the College on problems of drug dependence. NIDA International Forum for Women, Reno, Nevada, June 20-25.

Burns, L. & Conroy, E. *Substance use in marginalised populations.* Paper presented at the National Drug and Alcohol Research Centre Annual Symposium, Sydney, September 2009.

Burns, L., Randall, D., Hall, W., Law, M., Butler, T., Bell, J. & Degenhardt, L. *Opioid agonist pharmacotherapy in New South Wales from 1985 to 2006: Patient characteristics and patterns and predictors of treatment retention.* Paper presented at the Australasian Epidemiological Association, Auckland, New Zealand, 30 August-1 September.

Burns L. *Overview of alcohol use in pregnancy.* Paper presented at the Australian Professional Society on Alcohol and Other Drugs, Perth, 1-4 November.

Burns, L. & Conroy, E. *Alcohol related hospital admissions during pregnancy.* Poster presented at the Australian Professional Society on Alcohol and

Other Drugs, Darwin, 1-4 November.

Burns, L., Conroy, E., Maloney, E., Hutchinson, D. & Haber, P. *Substance use in marginalised populations: pregnant women and the homeless.* Paper presented at the Australian Professional Society on Alcohol and Other Drugs, Perth, 1-4 November.

Burns, L. *Preliminary findings from the Illicit Drug Reporting System (IDRS).* Presented at the National Drug Trends Conference, Sydney, 29 September.

Burns L. *Key findings of the 2009 Illicit Drug Reporting System (IDRS).* Presented at the National Drug Trends Conference, Sydney 29 September.

Carragher, N., Mills, K., Slade, T. & Teesson, M. *The factor structure of posttraumatic stress symptoms: Findings from the 2007 National Survey of Mental Health and Well-Being.* Paper presented at the Australasian Society for Psychiatric Research Annual Conference, Canberra, 2-4 December.

Cassar, J. *Risk taking and health issues amongst people who inject drugs nationally in 2009.* Presented at the National Drug Trends Conference, Sydney, 29 September.

Chalmers, J. *Riding out the global financial crisis? The implications of the economic downturn for alcohol and drug use and harms.* Presentation at the UNSW Wellbeing Research Showcase, Sydney, 20 August.

Chenoweth, C. & Dillon, P. *Developing and promoting NCPC's website: Challenges and successes.* Presentation to the Australian Health Promotion Association 18th National Conference, Perth, 18 May.

Clifford, A., Shakeshaft, A. & Deans, C. *The Integration of evidence-based screening and brief intervention for alcohol in Aboriginal Community Controlled Health Services.* Paper presented at the Australasian Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Clifford, A., Shakeshaft, A. & Deans, C. *Integrating evidence-based screening and brief intervention for alcohol in Aboriginal Community Controlled Health Services.* Presentation at the UNSW Indigenous Research Showcase, Sydney, 11 November.

Conroy, E. & Flatau, P. *The social, health and housing histories and service needs of homeless men accessing an integrated accommodation support service: Baseline data from the Mission Australia Michael project.* 6th National Housing Conference, Melbourne, 25-27 November.

Copeland, J. *Addressing cannabis-related problems among Indigenous communities.* Invited address to the Aboriginal Health and Medical Research Council GP Forum and Clinical Update, Sydney, 24 May.

Copeland, J. *An Australian policy response: The National Cannabis Prevention and Information Centre.* National Institute on Drug Abuse (NIDA) International Research Meeting, Reno, Nevada, 22 June.

CONFERENCE PRESENTATIONS

Copeland, J. *Interventions for cannabis-related problems: the workplace and beyond.* Annual Meeting of the Royal Australian College of Physicians "Physician's Week", Sydney, 20 May.

Copeland, J. *Setting the cannabis scene.* Opening address to the 1st National Cannabis Conference, Sydney, 7-8 September.

Copeland, J. *The Australian National Cannabis Prevention and Information Centre.* Collegium Internationale Neuro-Psychopharmacologicum, Edinburgh, UK, 26 April.

Copeland, J. & Norberg, M. *Alternative delivery models for cannabis treatment: an overview.* Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 2 November.

Czech, S. *Adolescent antisocial attitudes: is psychopathy a developmental feature of adolescence?* 29th Annual Australian and New Zealand Association of Psychiatry, Psychology and Law (ANZAPPL) Congress, Families in Law: Investigation, intervention and protection, Fremantle, 26-29 November.

Czech, S. *The development of antisocial behaviour in adolescents and young adults.* 19th Conference of the European Association of Psychology and Law, Sorrento, Italy, September 2009.

Deans, C., Clifford, A. & Shakeshaft, A. *The Talking about Alcohol Project; the Integration of evidence-based screening and brief intervention for alcohol in Aboriginal Community Controlled Health Services.* Paper presented at the NDARC Annual Symposium, Sydney, 28-29 September.

Degenhardt, L. *Methamphetamine use in Australia.* Paper presented at the 20th International Conference on the Reduction of Drug Related Harm, Bangkok, Thailand, 20-23 April.

Degenhardt, L. *Update: Progress on the work of the Mental Disorders and Illicit Drug Use Expert Group.* Global Burden of Disease Expert Group Meeting, Seattle, 21-22 February.

Degenhardt, L. *What do we know about the global epidemiology of injecting drug use and illicit drug dependence?* Invited paper presented at the 71st Meeting of the College on Problems of Drug Dependence, Reno, USA, 20-23 June.

Degenhardt, L. *What do we know about the size of the world's drug problem?* Invited paper presented at the International Society for the Study of Drug Policy (ISSDP) Conference, Vienna, 3-5 March.

Degenhardt, L. & Mathers, B. *Thinking globally: Findings from the Reference Group to the United Nations on HIV and Injecting Drug Use.* Paper presented at the 2009 NDARC Annual Symposium, Sydney, 29 September.

Dillon, P. *Drugs and mental health: Current trends and issues.* Keynote presentation to Primary Mental Health Care Divisions National Forum, Bondi Beach, Sydney, May 12.

Dillon, P. *Prevalence and impact of the use of cannabis in adolescence: What's the situation and what are we doing about it?* Keynote presentation to the DANA Conference, Gold Coast, 26 June.

Dillon, P. *Current trends in drug use.* Presentation to the Local Court of NSW Annual Conference, Sydney, 1 July.

Dillon, P. *Myths and legends: What's really happening with young people and alcohol and other drugs.* Presentation to 'Beyond Booze and Bongs', Youth Health Forum, Westmead Hospital, Sydney, 12 August.

Dillon, P. *Cannabis prevention and overview.* Presentation to the 1st National Cannabis Conference, Sydney, 8 September.

Dolan, K. *Prison methadone treatment and the impact on drug use, HIV and HCV incidence, overdose and re-incarceration.* Invited keynote address at the First Conference of the Connections Project 2009: Joining the Dots: criminal justice, treatment and harm reduction, Krakow, Poland, 25-27 March.

Doran, C.M. *An economic evaluation of the Singapore National Tobacco Control Program.* Presentation made to New South Wales Consortium of Health Economists, Sydney, April 2009.

Doran, C.M. *The economic and political influence of the illicit drug industry.* Presentation made at The Illicit Drug Market conference, Rome, Italy, September 2009.

Dunlop, A., McKetin, R., Salmon, A., Holland, R. & Baker, A. *The Stimulant Treatment Program Evaluation: Client characteristics and preliminary outcomes.* Annual Conference of the Australasian Professional Society on Alcohol and other Drugs, Darwin, 1-4 November.

Dunn, M., Thomas, J., Burns, L., Swift, W., Price, K. & Mattick, R.P. *The perceptions of athletes and support staff regarding policies that regulate drugs in sport.* Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Dunn, M., Thomas, J., Burns, L., Swift, W., Price, K. & Mattick, R.P. *The prevalence and patterns of illicit drug use among elite Australian athletes.* Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Dunn, M., Thomas, J., Burns, L., Swift, W., Price, K. & Mattick, R.P. *The prevalence and patterns of illicit drug use among elite Australian athletes.* Australian Conference of Science and Medicine in Sport, the Seventh National Physical Activity Conference and the Sixth National Sports Injury Prevention Conference, Brisbane, 14-17 October.

Farrugia, P., Mills, K., Dore, G., Barrett, E., Teesson, M., Back, S. & Brady, K. *Are symptoms of post traumatic stress disorder elevated during withdrawal?* Conference of the Australasian Professional Society of Alcohol and Other Drugs, Darwin, November 2009.

Frewen, A., Copeland, J. *A survey of attitudes and experiences of cannabis treatment providers in Australia.* National Institute on Drug Abuse (NIDA) International Research Meeting, Reno, Nevada, 22 June.

Frewen, A., Copeland, J. *Clinical guidelines for the management of cannabis use disorder.* 71st College on Problems of Drug Dependence (CPDD) Annual Scientific Meeting, Reno, Nevada, 24 June.

Gates, P., Norberg, M.M., Copeland, J., & Digiusto, E. *Evaluation of the Cannabis Information and Helpline.* Poster presented at the 1st National Cannabis Conference, Sydney, 7-8 September.

Gilliam, C.M., Hannan, S.E., Norberg, M.M., Morrison, S., Villavicencio, A., & Dufresne, D. *Group CBT for compulsive hoarding: An effectiveness study.* Poster presented at the annual convention of the Association for Behavior and Cognitive Therapies, New York, 19-22 November.

Gilliam, C. M., Norberg, M. M., Ryan, C. E., Whiting, S. E., & Tolin, D. T. *Improving treatment acceptance among Iraq and Afghanistan veterans: Understanding perceptions of treatment expectancy and stigma.* Poster presented at the annual convention of the Association for Behavior and Cognitive Therapies, New York, 19-22 November.

Gong, W., Ritter, A., Bright, D., & Doran, C. *Review of economic evaluation methods of law enforcement against drugs.* Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Grech, K. *Estimating government expenditure.* Poster presentation at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Ham, L.S., & Norberg, M.M. (Chairs) *Drinking to cope with social anxiety as a vulnerability for hazardous drinking behavior.* Symposium presented at the annual convention of the Association for Behavior and Cognitive Therapies, New York, 19-22 November.

Havard, A. *Mailed feedback for at-risk drinkers presenting to rural emergency departments: preliminary results.* School of Public Health and Community Medicine (SPHCM) Postgraduate Research Student Conference, Sydney, 23 November.

Havard, A. *Mailed feedback for at-risk drinkers presenting to rural emergency departments.* Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 2 November.

Horyniak, D., Larance, B., Winstock, A., Dietze, P., & Degenhardt, L. *The prevalence and correlates of buprenorphine smoking and snorting among opioid substitution therapy (OST) clients in Australia.* Presented at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Howard, J. *Assisting young people to change their cannabis use.* Paper presented to NSW Youth Work Conference, Sydney, 11 September.

Howard, J. *Building capacity for community-based treatment for young drug users in the Greater Mekong Sub-region.* Paper presented to Centre for Health Evaluation and Outcome Sciences, University of British Columbia, Vancouver, Canada. Workshop: Traditional and Innovative Asian Approaches to Addiction, 10-11 July.

Howard, J. *Cannabis and vulnerable young people.* Paper presented at the 1st National Cannabis Conference, Sydney, 7-8 September.

Howard, J. *Young people and drugs.* Paper presented to: Policing Youth Substance Use and Public Space, Institute of Criminology, University of Sydney Law School, Sydney, 10 February.

Howard J. *Young people, sexuality and substance use.* Paper presented to International Association of Adolescent Health conference, Kuala Lumpur, Malaysia, 28-30 October.

Howard, J., Arcuri, A. & Copeland, J. *Are the mental health and crime profiles of young cannabis users similar to those who prefer other substances?* Paper presented to International Association of Law and Mental Health Conference, New York, USA, 27 June-4 July.

Howard, J., Copeland, J., Boughtwood, D. & Rooke, S. *How NCPIC can assist TC staff increase options for TC participants with problematic cannabis use.* Paper presented to ATCA Annual Conference, Canberra, 15-17 September.

Howard, J., Dillon, P. & Chenoweth, C. *'Cannabis: it's not our culture' - engaging with Indigenous Australians around cannabis.* Paper and Poster presented at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November

Howard, J. & Roncarati, M. *Building capacity for community-based treatment for young drug users in the Greater Mekong Sub-region.* Paper presented to 20th International Conference on the Reduction of Drug Related Harm, Bangkok, Thailand, 19-23 April.

Hughes, C. *Cannabis decriminalisation and criminalisation in Australia: Two sides of the one coin?* The Australian and New Zealand Critical Criminology Conference, Melbourne, 8-9 July.

Hughes, C. & Shanahan, M. *Workshop: Using Modelling to Inform Cannabis Policy.* 1st National Cannabis Conference, Sydney, 7-8 September.

Johnston, A., Darke, S., Slade, T. & Pirkis, J., Ross, J. *Temporal trends in suicidality in Australia 1997 to 2007.* Annual conference of the Australasian Society for Psychiatric Research (ASPR), Canberra, 2-4 December.

Johnston, A., Darke, S., Slade, T., Ross, J. & Pirkis, J. *Trends in suicide, suicidal ideation and attempts in Australia, 1997 to 2007.* XXV World Congress on Suicide Prevention of the International Association for Suicide Prevention, Montevideo, Uruguay, 27-31 October.

Karageorge, A., Vogl, L., Wilkinson, G., Kemp, R. & Howard, J. *Development of an AOD treatment and relapse prevention program for juvenile offenders in NSW.* Poster presented at Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Kay-Lambkin, F., Teesson, M., Baker, A. & Kavanagh, D. *Binge drinking and comorbidity.* Reconnexion National Conference 2009, Melbourne, 27-29 May.

Larance, B., Degenhardt, L., Mattick, R., Bell, J. & Winstock, A. *Characteristics of the illicit market for the pharmaceutical opioids used in opioid substitution treatment in Australia.* Presented at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Larance, B., Degenhardt, L., Mattick, R. & Winstock, A. *Non-adherence among opioid substitution treatment clients: how often does it occur, and why?* Presented at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Larney, S., Conroy, E., Mills, K., Burns, L., & Teesson, M. *Factors associated with violent victimisation of homeless adults.* Poster presented at the Justice Health Conference of the Public Health Association of Australia, Melbourne, 6-7 April.

Lloyd, A., Dore, G. Maher, L., Dolan, K., Rawlinson, W., White, P. & Zekry, A. *Hepatitis C vaccine preparedness: Characterising cohorts at risk.* World Congress of Vaccines, Foshan, China 2009. (invited oral presentation).

Love, S. & Shakeshaft, A. *The impact of a community wide approach to reducing alcohol-related harm in rural NSW, Australia: A randomised controlled trial.* Poster presented at The Interagency National Conference-Alcohol and Other Drugs, Alice Springs, 11-13 August.

Matalon, E. *ACCU - The Adolescent Cannabis Check-Up.* Presentation to: Alcohol and Drug Foundation of Queensland Winter School Conference, Brisbane, 27 May.

Matalon, E. *ACCU - The Adolescent Cannabis Check-Up.* Presentation to: 10th International Mental Health Conference, Surfers Paradise, 13 August.

Matalon, E. *Quitting Cannabis: Brief Intervention for cannabis use disorder.* Presentation to: Network of Alcohol and Other Drug Agencies/Mental Health Coordinating Council 'Outside In' Conference, Sydney, 8 May.

Matalon, E. *Quitting Cannabis: Brief Intervention for cannabis use disorder.* Presentation to: Drug and Alcohol Nurses of Australasia Conference, 25 June.

Matalon, E. *Quitting Cannabis: Brief Intervention for cannabis use disorder.* Presentation to: 10th International Mental Health Conference, Surfers Paradise, 13 August.

Matalon, E. *Guidelines on the Management of Cannabis Use Disorder.* Presentation to: 10th International Mental Health Conference, Surfers Paradise, 13 August.

Matalon, E. *Guidelines on the Management of Cannabis Use Disorder.* Presentation to: Australian Therapeutic Communities Association Conference, Canberra, 16 September.

Martire, K.A., Howard, M. & Sunjic, S. *Evaluation of the Connections Project: a reintegration service for NSW offenders with a history of drug and alcohol problems.* Paper presented to International Association of Law and Mental Health Conference, New York, USA, 27 June-4 July.

Martire, K.A. & Kemp, R.I. *Does expert testimony help jurors evaluate eyewitness reports?* Conference of the Australian Psychological Society College of Forensic Psychologists, Melbourne, 25-28 February.

Mathers, B., Degenhardt, L. & Mattick, R. *Mortality among people who inject drugs: A meta-analytic review.* Paper presented at Harm Reduction 2009: IHRA's 20th International Conference, Bangkok, Thailand, 21 April.

Mathers, B., Degenhardt, L. & The Reference Group to the United Nations on HIV and Injecting Drug Use. *Global epidemiology of injecting drug use.* Paper presented at the Donor Conference on Harm Reduction, Amsterdam, The Netherlands, 28-30 January.

Matthew-Simmons, F. *Reported value of cannabis seizures in Australian newspapers: Are they accurate?* Presented at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Matthew-Simmons, F. *The media, public opinion, and illicit drug policy.* Poster presentation at the NDARC Annual Symposium, Sydney, 28-29 September.

Matthew-Simmons, F. *The media, public opinion, and illicit drug policy.* Poster presentation at the School Of Public Health And Community Medicine (SPHCM) Postgraduate Research Student Conference, Sydney, 23 November.

Mattick, R. & Degenhardt, L. *Can the formulation of opioid substitution therapy medication reduce diversion and injection?* New findings from a Suboxone post-marketing surveillance study. Paper presented at the 20th International

CONFERENCE PRESENTATIONS

Conference on the Reduction of Drug Related Harm, Bangkok, Thailand, 20-23 April.

McBride, O., Teesson, M. & Slade, T. *Theoretical and observed subtypes of DSM-IV alcohol abuse and dependence in the Australian population.* Paper presented at the 32nd Annual Scientific Meeting of the Research Society on Alcoholism, San Diego, USA, 20-24 June.

McKetin, R., Ross, R., Najman, J., Baker, A., Lubman, D., Dawe, S., Ali, R., Lee, N., Mattick, R. & Mamun, A. *Treatment outcomes for methamphetamine use: Finding from the Methamphetamine Treatment Evaluation Study (MATES).* Annual Conference of the Australasian Professional Society on Alcohol and other Drugs, Darwin, 1-4 November.

McKetin, R., Hickey, K., Devlin, C. & Lawrence K. *Methamphetamine use and mental health at dance events: Developing an evidence-based peer education message.* Annual Conference of the Australasian Professional Society on Alcohol and other Drugs, Darwin, 1-4 November.

McKetin, R. & Sutherland, R. *Bias in illicit drug offence data: A case study of methamphetamine-related charges among a community sample of methamphetamine users.* NSW Bureau of Crime Statistics and Research 40th Anniversary Symposium, Darling Harbour Convention Centre, Sydney, February 18-19.

McKetin, R., Ross, R., Najman, J., Baker, A., Lubman, D., Dawe, S., Ali, R., Lee, N., Mattick, R. & Mamun, A. *Finding from the Methamphetamine Treatment Evaluation Study (MATES).* Network of Drug Agencies (NADA) Annual Meeting, Sydney, Australia, 9 November.

Merz, S., Mills, K., Rosenfeld, J., Barrett, E., Teesson, E., Back, S., Sannibale, C., Baker, A., Hopwood, S. & Brady, K. *Concurrent treatment of substance use disorder and post traumatic stress disorder: A treatment that works for both genders?* Conference of the College on Problems of Drug Dependence, Reno, USA, June 2009.

Metcalf, A. & Howard J. *Young people, sexuality, gender and suicide.* Paper presented to International Association of Adolescent Health Conference, Kuala Lumpur, Malaysia, 28-30 October.

Mills, K., McFarlane, A., Slade, T., Creamer, M., Silove, D., Teesson, M. & Bryant, R. *Trauma and post traumatic stress disorder in the Australian general population.* Australian Society for Psychiatric Research Conference, Canberra, December 2009.

Mills, K., Barrett, E., Farrugia, P., Rosenfeld, J., Merz, S., Teesson, M., Baker, A., Sannibale, C., Hopwood, S., Back, S. & Brady, K. *Characteristics of clients with comorbid substance use and post traumatic stress disorder.* Conference of the Australasian Professional Society of Alcohol and Other Drugs, Darwin, November 2009.

Mills, K. *Challenges in treating AOD clients with comorbid mental health conditions* [Invited Keynote]. Australian Drug Foundation Winter School Conference, Brisbane, May 2009.

Mills, K. & Bell, A. *Feedback from AOD workers on the National Comorbidity Clinical Guidelines.* Conference of the Australasian Professional Society of Alcohol and Other Drugs, Darwin, November 2009.

Mills, K. *What is best practice in the treatment of co-occurring substance use and post traumatic stress disorder?* Conference of the College on Problems of Drug Dependence, Reno, USA, June 2009.

Mitchell, P., Johnston, A., Slade, T., Hadzi-Pavlovic, D., Frankland, A., Roberts, G., et al. *Bipolar disorder in Australia: The 2007 National Survey of Mental Health and Wellbeing.* Paper presented at the Annual Conference of the Australasian Society for Bipolar Disorders, Brisbane, 22-24 October.

Mohsenifar, S., Nassirimanesh, B., Salimi, S., Mokri, A. & Dolan, K. *Setting up a drug treatment service for female drug users in Iran.* The 20th International Conference on the Reduction of Drug Related Harm, Beirut, 2009.

Nelson, P. *Researching drug-crime relationships: Innovative methods for elusive populations.* Poster presented at Advances in Public Health and Health Services Research Symposium, Sydney, 1 May.

Nelson, P., Degenhardt, L., Kenny, D. & Lennings, C. *Diff'rent Strokes? Predicting drug use by young male and female offenders.* Poster presented at the NDARC Annual Symposium, Sydney, 28-29 September.

Nelson, P., Degenhardt, L., Kenny, D. & Lennings, C. *Predictors of drug use by young offenders in the community.* School of Public Health and Community Medicine (SPHCM) Postgraduate Research Student Conference, Sydney, 23 November.

Newton, N., Teesson, M., Andrews, G. & Vogl, L. *CLIMATE Schools: Delivering prevention for alcohol and cannabis over the internet.* Poster presented at the 71st Annual Scientific of the College on Problems of Drug Dependence, Reno, USA, 20-25 June.

Newton, N., Teesson, M., Vogl, L. & Andrews, G. *CLIMATE Schools: Delivering prevention for alcohol and cannabis over the internet.* Poster presented at the 1st National Cannabis Conference, Sydney, 7-8 September.

Newton, N., Teesson, M., Vogl, L. & Andrews, G. *CLIMATE Schools: Delivering prevention for alcohol and cannabis over the internet.* Poster presented at National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28-29 September.

Newton, N., Teesson, M., Vogl, L. E. & Andrews, G. *CLIMATE Schools: Delivering prevention for alcohol and cannabis over the internet.* Poster presented at the 32nd Annual Scientific Meeting of the Research Society on Alcoholism, San Diego, US, 20-24 June.

Newton, N., Teesson, M., Vogl, L. E. & Andrews, G. *CLIMATE Schools: Innovative internet-based universal drug prevention programs for secondary school students.* Poster presented at the UK Education Forum, London, UK, November 2009.

Newton, N., Teesson, M. & Vogl, L. *CLIMATE School: Cannabis and Alcohol, CDPP, Reno, June 2009.*

Norberg, M.M. *ACCU – The Adolescent Cannabis Check-Up.* Presentation to: GP09 – A Doctor For All Seasons, Perth, 4 October.

Norberg, M.M. *Adolescent Cannabis Check-Up (ACCU).* Paper presented at the annual convention for General Practice, Perth, 1-4 October.

Norberg, M.M. *Alternative modes of delivery for cannabis use disorders treatment.* Paper presented at the NDARC Annual Symposium, Sydney, 28-29 September.

Norberg, M.M. *Guidelines on the management of cannabis use disorder.* Paper presented at the Alcohol and Drug Foundation of Queensland Winter School Conference, Brisbane, 27 May.

Norberg, M.M. *Guidelines on the management of cannabis use disorder.* Paper presented at the Annual Convention of the Mental Health Services of Australia and New Zealand, Perth, 1-4 September.

Norberg, M.M., Marsch, L., Gates, P., Wright, T. & Rooke, S. *Examining alternative delivery modes in the treatment of substance misuse.* Panel discussion presented at 1st National Cannabis Conference, Sydney, 7-8 September.

Norberg, M.M. & Norton, A.R. *Alcohol-related problems in college women with social anxiety: The role of drinking to cope in aversive situations.* In L. S. Ham and M. M. Norberg (Chairs), *Drinking to cope with social anxiety as a vulnerability for hazardous drinking behavior.* Symposium presented at the annual convention of the Association for Behavior and Cognitive Therapies, New York, 19-22 November.

Norberg, M.M., Norton, A.R. & Olivier, J. *Improving measurement in the study of social anxiety and drinking.* Poster presented at Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Norberg, M.M., Rooke, S. & Wright, T. *Developing and evaluating alternative delivery modes in the treatment of cannabis use disorders.* Symposium presented at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

- Pirkis, J., Johnston, A. & Burgess, P.M.** *Suicidal thoughts and behaviours among Australian adults; preliminary findings of the 2007 National Survey of Mental Health and Wellbeing.* Suicide Prevention Conference, Hobart, 28-29 April.
- Proudfoot, H., Mills, K., Deady, M., Sannibale, C., Teesson, M. & Mattick, R.** *Guidelines on the management of co-morbidity: a new resource for alcohol and other drug workers.* Drug and Alcohol Nurses of Australasia Conference, Gold Coast, May 2009.
- Ritter, A.** *Workshop on illicit drug harm indexes.* Workshop at the 3rd Annual International Society for the Study of Drug Policy, Vienna, Austria, March 2009.
- Ritter, A.** *Cannabis policy: An international perspective.* Keynote address at the 1st National Cannabis Conference, Sydney, 7-8 September.
- Ritter, A.** *Illicit drug research in Australia: The research policy interface.* Keynote address at the Bridging the Research Gap in the Field of Illicit Drugs in the EU Conference, Brussels, September 2009.
- Ritter, A.** *Is 'down under' really on top of policy evidence? The use of research evidence in Australian drug policy.* 3rd Annual International Society for the Study of Drug Policy, Vienna, Austria, March 2009.
- Ritter, A.** *Journals and their sponsoring organisations.* Presentation at the annual meeting of the International Society for Addiction Journal Editors, Trieste, 24-27 September.
- Ritter, A.** *Policing illicit drugs.* Keynote address at the 2009 Centre of Excellence in Policing and Security (CEPS) Policing Symposium, Sydney, March 2009.
- Roxburgh, A., Dunn, M. & Miller, P.** *Rural and regional patterns of drug use and related harm in the Australian general population.* Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.
- Roxburgh, A., Hall, W., Degenhardt, L., McLaren, J., Black, E., Copeland, J. & Mattick, R.** *The epidemiology of cannabis use and cannabis-related harms in Australia 1993-2007.* The Australasian Epidemiological Association Annual Scientific Meeting, Dunedin, New Zealand, 30 August-1 September.
- Sannibale, C.** *Integrating Treatment for PTSD and Alcohol Use Problems.* Workshop presentation at the 2009 NSW/VIC CCLIN Conference, Facets of trauma: Understanding and treating complicated trauma cases, Sydney, 31 July.
- Sannibale, C., Sutherland, K., Taylor, K., Visser, A., Peek-O'Leary, M., Bostock-Matusko, D., Teesson, M., Mills, K., Sitharthan, S. & Creamer, M.** *Clinical characteristics of individuals seeking treatment for posttraumatic stress and alcohol problems.* Paper presented at the 44th Australian Psychological Society Annual Conference, Darwin, 30 September.
- Sannibale, C., Sutherland, K., Taylor, K., Visser, A., Peek-O'Leary, M., Bostock-Matusko, D., Teesson, M., Mills, K., Sitharthan, S. & Creamer, M.** *Integrating treatment for people with PTSD and alcohol problems: preliminary trial results.* Presentation at the NDARC Annual Symposium, Sydney, 28 September.
- Scott, L.** *Alcohol, aggression and gambling among regular ecstasy users in Australia.* Presented at the National Drug Trends Conference, Sydney, 29 September.
- Scott, L.** *The relationship between previous incarceration, crime, risk behaviours and health among IDU.* Presented at the Public Health Association of Australia conference – Justice Health in Australia: Beyond the Convict Era, Melbourne, 6 April.
- Scott, L. & Burns, L.** *The relationship between previous aggression, alcohol consumption and drug use among regular ecstasy users in Australia.* Poster presented at the Australasian Professional Society on Alcohol and other Drugs conference, Darwin, 1-4 November.
- Scott, L. & Burns, L.** *NSW EDRS 2009 Trends in Sydney.* Poster presented at the National Drug Trends Conference, Sydney, 29 September.
- Shakeshaft, A.** *Reducing drug and alcohol harm. Is better integration across communities and with research efforts the key?* Keynote address at the Australian Drug and Alcohol Synergy Conference, Wollongong, 2-3 July.
- Shakeshaft, A.** *The consolation of research: making it relevant to the public.* Keynote address at the Alcohol and Drug Foundation of Queensland Winter School Conference, Brisbane, 27 May.
- Shanahan, M.** *Using DCE to measure preferences for cannabis policies: A pilot study.* Australian Health Economics Society Conference, Hobart, October 2009.
- Shand, F., Degenhardt, L., Slade, T. & Nelson, E.** *The structure of polysubstance dependence and its correlates in a heroin dependent sample.* Presented at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.
- Shand, F., Slade, T., Degenhardt, L. & Nelson, E.C.** *The severity of heroin dependence: does it exist and is it clinically relevant?* Presented at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.
- Silins, E., Hutchinson, D., Mattick, R., et al.** *The Cannabis Cohort Research Consortium: Fostering collaborative partnerships to investigate the causes and consequences of cannabis and other drug use.* Paper presented at the Australian Research Alliance for Children and Youth (ARACY) Conference, Melbourne, 3 September.
- Silins, E., Hutchinson, D., Mattick, R., et al.** *The Cannabis Cohort Research Consortium: Fostering collaborative partnerships to investigate the causes and consequences of cannabis and other drug use.* Poster presented at the NDARC Annual Symposium, Sydney, 28-29 September.
- Silins, E., Hutchinson, D., Mattick, R., et al.** *Fostering collaborative partnerships to investigate the causes and consequences of cannabis and other drug use: The Cannabis Cohort Research Consortium.* Poster presented at the Australian Research Alliance for Children and Youth (ARACY) Conference, Melbourne, 3 September.
- Silins, E., Hutchinson, D., Mattick, R., et al.** *Fostering collaborative partnerships to investigate the causes and consequences of cannabis and other drug use: The Cannabis Cohort Research Consortium.* Poster presented at the 1st National Cannabis Conference, Sydney, 7-8 September.
- Silins, E., Hutchinson, D., Slade, T. & Swift, W.** *Causes and consequences of cannabis use moderation in young adults: methodological approach.* Poster presented at the NDARC Annual Symposium, Sydney, 28-29 September.
- Silins, E., Hutchinson, D., Slade, T. & Swift, W.** *Causes and consequences of cannabis use moderation in young adults: methodological approach.* Poster presented at the School of Public Health and Community Medicine (SPHCM) Postgraduate Research Student Conference, Sydney, 23 November.
- Simpson, M., Copeland, J. & Howard, J.** *Context and motivations for cannabis use initiation among young people who commit crime.* Poster presented at the 1st National Cannabis Conference, Sydney, 7-8 September.
- Simpson, M., Copeland, J. & Howard, J.** *Context and motivations for cannabis use initiation among young people who commit crime.* Poster presented at the NDARC Annual Symposium, Sydney, 28 September.
- Simpson, M., Copeland, J., Howard, J. & Rodas, A.** *Criminal offending and poly-substance use patterns among experimental and regular cannabis-using youth.* Paper presented to 22nd Australian and New Zealand Society of Criminology Conference, Perth, 22-25 November.
- Simpson, M., Howard, J. & Copeland, J.** *Substance use among detained youth: Why regular monitoring is important.* Poster presented at the NSW Bureau of Crime Statistics and Research 40th Annual Symposium, Powerhouse Museum, Sydney, 18-19 February.
- Simpson, M., Howard, J., Copeland, J. & Rodas, A.** *Familial substance use and offending among a sample of at-risk youth.* Poster presented at the Australian and New Zealand Association of Psychiatry, Psychology and Law (ANZAPPL) Conference, Fremantle, 26-29 November.

CONFERENCE PRESENTATIONS

Simpson, M., Howard, J., Nelson, P. & Copeland, J. *Substance use and associated risks among young offenders: why regular monitoring is important.* Paper presented to the Australian Psychological Society College of Forensic Psychologists Conference, Melbourne, 25-28 February.

Simpson, M., Rodas, A., Howard, J. & Kalmar, D. *Contributing to an NGO's attempt to monitor service effectiveness through improved data collection within a Youth Cannabis Clinic.* Poster presented at Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Simpson, M., Rodas, A., Howard, J. & Kalmar, D. *Contributing to improved data collection and service effectiveness within a youth cannabis clinic.* Poster presented at the Australasian Professional Society of Alcohol and other Drugs (APSAD) Conference, Darwin 1-4 November.

Sindicich, N. *The Australian Ecstasy and Related Drugs Market 2009.* Presented at the National Drug Trends Conference, Sydney, 29 September.

Slade, T. *Trends in the prevalence of mental disorders in Australia, 1997 to 2007: Results of the National Surveys of Mental Health and Wellbeing.* Paper presented at the 10th International Mental Health Conference, Surfers Paradise, 12-14 August.

Slade, T., Johnston, A., Grove, R., Burgess, P., Baillie, A. & Andrews, G. *Trends in the prevalence of mental disorders in Australia, 1997 to 2007: Results of the National Surveys of Mental Health and Wellbeing.* Paper presented at the Australasian Society for Psychiatric Research Annual Conference, Canberra, 2-4 December.

Slade, T., Teesson, M., Johnston, A. & Mills, K. *Epidemiology of substance use disorders in Australia: findings from the 2007 National Survey of Mental Health and Wellbeing.* Paper presented at the 32nd Annual Scientific Meeting of the Research Society on Alcoholism, San Diego, USA, 20-24 June.

Slade, T., Teesson, M. & Mills, K. *The epidemiology of drug and alcohol disorders in Australia.* Research Society on Alcoholism, San Diego, June 2009.

Stafford, J. *What is the IDRS? What is the EDRS?* Presented at the National Drug Trends Conference, Sydney, 29 September.

Sunjic, S. & Martire, K.A. *The Connections Project: Transitions for those in the too hard basket.* Presented at the Public Health Association of Australia (PHAA) Justice Health in Australia Conference, Melbourne, 6-7 April.

Swift, W. *Cannabis potency and adulterants: Research findings and implications.* Invited keynote address at the 1st National Cannabis Conference, Sydney, 7-8 September.

Swift, W. *Cannabis potency: Research findings and implications.* Paper presented to the 40th Anniversary Symposium of the NSW Bureau of Crime Statistics and Research, Sydney, 18-19 February.

Taplin, S. *How can child welfare and drug treatment services work better to improve outcomes for children?* Presented at the Australian Research Alliance for Children and Youth (ARACY) Conference, Melbourne, 2-4 September.

Teesson, M., Newton, N. & Vogl, L. *CLIMATE School: Cannabis and Alcohol.* Invited presentation MUSC, South Carolina, June 2009.

Teesson, M., Newton, N. & Vogl, L. *CLIMATE School: Cannabis and Alcohol.* Research Society on Alcoholism, San Diego, June 2009.

Teesson, M., Newton, N. C., Vogl, L. E. & Andrews, G. *Climate Schools: Delivering prevention for alcohol and cannabis delivered over the internet.* Presented at the European Association for Cognitive and Behavioural Therapy Annual Congress, Dubrovnik, Croatia, 16-19 September.

Thomas, J., Dunn, M., Burns, L., Swift, W., Price, K. & Mattick, R.P. *Illicit drug education and elite athletes: what do they know, what do they want to know, and how can we tell them?* Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Thomas, J., Dunn, M., Burns, L., Swift, W., Price, K. & Mattick, R.P. *Reasons for and against drug use among elite Australian athletes.* Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Thomas, J., Dunn, M., Burns, L., Swift, W., Price, K. & Mattick, R.P. *Reasons for and against illicit drug use among elite Australian athletes.* Australian Conference of Science and Medicine in Sport, the Seventh National Physical Activity Conference and the Sixth National Sports Injury Prevention Conference, Brisbane, 14-17 October.

Tolin, D.F., Gilliam, C.M., Norberg, M.M., Whiting, S., Villavicencio, A., Fabbro, A. & Pearson, G.D. *Does D-cycloserine augment ERP response in OCD patients who have not responded to ERP monotherapy?* Symposium presented at the annual convention of the Association for Behavior and Cognitive Therapies, New York, 19-22 November.

Wright, T., Norberg, M., Copeland, J. & Hickey, K. *A mail-based intervention for cannabis users.* Paper presented at the Australasian Professional Society of Alcohol and Other Drugs (APSAD) Conference, Darwin, 1-4 November.

Wright, T., Lennings, C. & Simpson-Young, V. *The impact of time limits on the practice of psychologists.* Paper presented at the 44th Australian Psychological Association (APS) Annual Conference, Darwin, 30 September-4 October.

WORKSHOPS & PRESENTATIONS

Bleeker, A. *Cannabis: Everything You Need To Know.*

Presentation to: Phoenix Unit Manly Hospital, Sydney, 29 January; ATODS/Ted Noffs Foundation, Palm Island, 4 February; Program for Adolescent Life Management - Ted Noffs Foundation, Coffs Harbour, 18 and 19 February; Frankston Integrated Community Health, Frankston, 26 February; Uniting Care, Moreland, 27 February; Canberra Hospital, 3 March, ACT Health, Canberra, 4 March; Youth Solutions, Macarthur, 31 March; Orange TAFE, 2 April; Ultimo TAFE, 7 April; Program for Adolescent Life Management - Ted Noffs Foundation, Dubbo, 21 April; Aboriginal Medical Service, Griffith, 24 April; ATODS Tasmania, Devonport, 28 April; ATODS Tasmania, Hobart, 30 April; Northside Mental Health, Caboolture, 11 May; Mental Health Service, Toowoomba, 12 May; Gold Coast Drug Council, West Burleigh, 13 May; Royal Darwin Hospital Alcohol and Other Drugs, Darwin, 10 June; Lifeline, Gordon, 24 June; Loseby Park Youth Centre, Bowral, 3 July; Community Health Centre, Taree, 8 July; Drug and Alcohol Services, Port Macquarie, 9 July; Royal Perth Hospital, Perth, 21 July; Kimberley Community Drug Service, Broome, 22 July; St John of God, Bunbury, 24 July; Tamworth TAFE, 30 July; Armidale TAFE, 31 July; Maari Ma Health, Broken Hill, 6 August; TAFE Broken Hill, 7 August; Croydon Community Health Centre, 17 August; AHMRC, Sydney, 19 August; Discipline of Addiction Medicine, University of Sydney, 20 August; Prince Charles Hospital, Chermiside, 24 August; Princess Alexandra Hospital, Buranda, 25 August; Community Links, Tahmoor, 20 October; Youth Pathways, Corrimall, 21 October; Tasmanian Aboriginal Service, Hobart, 3 November; Holyoake Drug and Alcohol Service, Hobart, 3 November; Tasmanian Aboriginal Service, Launceston, 5 November; Dandenong Hospital Addiction Medical Unit, 23 November; Australian Drug Foundation, Melbourne, 24, 25 and 26 November; Eastern Health Alcohol and Other Drug Service, Box Hill, 26 November; and Lifeline, Gordon, 16 December.

Bright, D.A. *Sex, drugs and natural selection: Substance use and addiction from the perspective of evolutionary psychology.* Paper presented at meeting of Evolutionary Psychology Interest Group, Australian Psychology Society, Sydney, July.

Cassar, J. *Key findings of the 2008 Australian Capital Territory (ACT) Illicit Drug Reporting System (IDRS) and Ecstasy and Related Drugs Reporting System (EDRS).* Presentation to the Australian National Council on Drugs (ANCD), Canberra, ACT, 27 February.

Cassar, J. *What are the Illicit Drug Reporting System and the Ecstasy and Related Drugs Reporting System?* Presentation to the Youth Coalition of the ACT, ACT AOD Sector Forum, Canberra, 28 May.

Chalmers, J. *Comparative policy analysis: methods and approaches.* DPMP Team Meeting, Sydney, 14-15 October.

Chalmers, J. *Exploring the consumer response to drug price changes: A case-study of the impact of methamphetamine price on drug consumption.* Presentation to the Bureau of Crime Statistics and Research Seminar Series, Sydney, April.

Chalmers, J. *Exploring the consumer response to drug price changes: A case-study of the interplay between methamphetamine and heroin.* Presentation at the NDARC Seminar Series, Sydney, March.

Chalmers, J. *Exploring the dynamics of the demand for drugs: A behavioural economics analysis of the effects of price on drug use in a sample of methamphetamine users.* DPMP Research Symposium, Sydney, 13 October.

Chalmers, J. *Workshop: Comparative policy evaluation: establishing a collaborative DPMP project.* DPMP Team Meeting, Sydney, 14-15 October.

Copeland, J. & Howard, J. *Cannabis, it's not our culture.* Paper presented to UNSW Indigenous Research showcase, Sydney, 11 November.

Degenhardt, L. *Mortality in and out of treatment among people who are in treatment for opioid dependence.* Talk presented at Bristol University, UK, 21 September.

Degenhardt, L. *Mortality in and out of treatment among people who are in treatment for opioid dependence.* Talk presented at the Burnet Institute, Melbourne, 8 October.

Degenhardt, L. *Thinking globally: The Global Burden of Disease project - and what we might learn about the burden of mental disorders and illicit drug use among young people.* Talk given to the Centre for Adolescent Health, Murdoch Children's Research Institute, Melbourne, 7 October.

Degenhardt, L. & Mathers, B. *HIV prevention among people who inject drugs.* Paper presented at the Lancet Special series on HIV and injecting drug use. The Lancet editorial offices, London, 22 September.

Diguisto, E. *Improving shared healthcare for methadone patients with hepatitis C.* Presented: Denison Street Methadone Clinic, Wollongong, 26 May; Bungora Methadone Clinic, Wollongong, 3 June; Kullaroo Drug and Alcohol Clinic, Gosford, 9 June; Wallama Drug and Alcohol Service, Wyong, 10 June and Drug and Alcohol Service, Port Macquarie, 18 June.

Diguisto, E. *Assessment and management of mental health, drug misuse, and other problems for methadone treatment clients with hepatitis C.* Presented at: Denison Street Methadone Clinic, Wollongong, 10 September, Bungora Methadone Clinic, Wollongong, 10 September, Kullaroo Drug and Alcohol Clinic, Gosford, 30 September, Wallama Drug and Alcohol Service, Wyong, 30 September and Drug and Alcohol Service, Port Macquarie, 16 October.

Doran, C.M. *An analysis and proposed methodology for measuring the impact of drugs, crime and corruption in the Lao PDR.* Invited speaker at the launch of the 2008 Opium Poppy Cultivation in South East Asia Survey. Hosted by Lao National Commission for Drug Control and Supervision and the United Nations Office on Drugs and Crime, Vientiane, February 2009.

Doran, C.M. *Economic role in measuring empowerment.* Presentation made at the Workshop: Linking Measures of Empowerment with Indicators of Health and Social Change, Cairns, April 2009.

Doran, C.M. Invited by the Australian Government to present to the Senate Affairs Committee Inquiry into Excise Tariff Amendment (2009 Measure No. 1) Bill 2009 and Customs Tariff Amendment (2009 Measure No. 1) Bill 2009, Canberra, March 2009.

Dunn, M. *Attitudes toward, knowledge of, and prevalence of illicit drug use among elite Australian athletes: First results.* Presented at National Rugby League, Sydney, September.

Dunn, M. *Ecstasy in New South Wales.* Presented at National Cannabis Prevention and Information Centre, Sydney, September.

Dunn, M., Burns, L. & Roxburgh, A. *Anabolic-androgenic steroid use in Australia: What do we know, why do we want to know, and how can we find out?* Presented at the University of New South Wales, Sydney, May.

Gong, W. & Bright, D. *Examining the cost effectiveness of different types of law enforcement interventions directed towards methamphetamine.* DPMP Team Meeting, Sydney, 14-15 October.

Grech, K. *Drug budgets.* DPMP Team Meeting, Sydney, 14-15 October.

Hickey, K. *Cannabis: Everything You Need to Know.* Presentation to: State Library of NSW, Sydney, 25 February and 5 March; Drug and Alcohol Services Hunter New England AHS, Newcastle, 18 May; Child and Youth Mental Health Service Royal Children's Hospital, Fortitude Valley, 25 May; Dubbo TAFE, 3 June, Blacktown TAFE, 4 June; Odyssey House, Campbelltown, 23 September; ATODS Toowoomba Hospital, 26 October; ATODS Nambour Hospital, 28 October; Liverpool Hospital, 10 November; Prince of Wales Hospital, 3 December; and SANDAS, Adelaide, 7 and 8 December.

Howard, J. *Young People and Cannabis.* Presentation to: Burdekin Association, Brookvale, 5 February; Crisis Centre, Wollongong, 12 March; Active Living Australia, Lismore, 27 March; Eastern Hume Dual Diagnosis, Wangaratta, 30 March; Eastern Hume Dual Diagnosis, Shepparton, 31 March; Drug and Alcohol Youth Service, East Perth, 15 May; Alcohol and Other Drugs, Geraldton, 18 May; Eastern Hume Dual Diagnosis, Wodonga, 29 May; Bridge Aftercare, Swansea, 22 June; Bridge Aftercare, Launceston, 23 June; Dept Education and Children's Services, Adelaide, 24 and 25 June; Maari Ma Health, Broken Hill, 6 August; Kimberley Region Drug Service, Kununurra, WA,

WORKSHOPS & PRESENTATIONS

21 August; Centacare, Esperance, WA, 24 August; Youth Action and Policy Association, Sydney, 11 September; Centacare, Canberra, 14 September; Youth Drug and Alcohol Service, Bendigo, 21 and 22 September; Dept Education and Children's Services, Adelaide, 23 September; Headspace Central Coast, Gosford, 6 November; and Bridge Aftercare, Hobart, 9 November.

Hughes, C. *Drug law enforcement performance monitoring: The persistence of simplistic measures and barriers to moving forward.* DPMP Team Meeting, Sydney, 14-15 October.

Hughes, C. *Ecstasy use in Australia: Trends and Implications for Policy Makers.* DPMP Research Symposium, Sydney, 13 October.

Hughes, C. *The Cannabis Diversion Model: QLD PPP.* DPMP Team Meeting, Sydney, 14-15 October.

Hughes, C. *Workshop: Policy practice projects and how do we make them better?* DPMP Team Meeting, Sydney, October 14-15.

Hughes, C. & Lodge, M. *The coordination of Australian illicit drug policy: A governance perspective.* DPMP Team Meeting, Sydney, 14-15 October.

Hughes, C., Lodge, M. Ritter, A. & Badham, J. *The National Cannabis Diversion Model.* Presentation to QLD Health, Police and Premiers, Brisbane, March.

Kaye, S. *Cocaine markets in Australia.* Australian Customs Cocaine Tradecraft Session, Sydney, February 2009.

Kaye, S. *EASP Study - Australia.* 6th Meeting of the International Collaboration on ADHD and Substance Abuse (ICASA). Stockholm, March 2009.

Martire, K.A. *Child abuse and neglect; Drugs and crime; Stalking, sexual harassment and bullying; Eyewitness evidence; and Impact of justice procedures.* Lectures presented in the School of Psychology, 28 July-20 October.

Matalon, E. *ACCU: The Adolescent Cannabis Check-Up.* Presentation to: North Coast Drug and Alcohol Services, Lismore 21 January; Program for Adolescent Life Management - Ted Noffs Foundation, Coffs Harbour, 18 and 19 February; Frankston Integrated Community Health, Frankston, 26 February; Uniting Care Moreland Hall, Moreland, 27 February; Mental Health Unit, Macquarie Hospital, Sydney, 9 March; NET Albion St, Sydney, 24 March; Ultimo TAFE, Sydney, 7 April; Get It Together (GIT) Forum DOCS, Sydney, 15 April; Program for Adolescent Life Management - Ted Noffs Foundation, Canberra, 16 April; Program for Adolescent Life Management - Ted Noffs Foundation, Dubbo, 21 April; ATODS Tasmania, Devonport, 28 April; ATODS Tasmania, Hobart, 30 April; Northside Mental Health, Caboolture, 11 May; Mental Health Service, Toowoomba, 12 May; Gold Coast Drug Council, West Burleigh, 13 May; Drug and Alcohol Services Hunter New England AHS, Newcastle, 18 May; Child and Youth Mental Health Service Royal Children's Hospital, Fortitude Valley, 25 May; Ipswich Hospital Acute Mental Health Unit,

Ipswich, 26 May; Blacktown TAFE, 4 June; Royal Darwin Hospital Alcohol and Other Drugs, Darwin, 10 June; Community Health Centre, Taree, 8 July; Drug and Alcohol Services, Port Macquarie, 9 July; Royal Perth Hospital, Perth, 21 July; St John of God, Bunbury, 24 July; Palmerstone Association, Albany, 29 July; Concord Centre for Mental Health, 3 August; Croydon Community Health Centre, 17 August; Prince Charles Hospital, Chermide, 24 August; Princess Alexandra Hospital, Buranda, 25 August; ATODS Toowoomba Hospital, 26 October; Sunshine Coast District Health, Maroochydore, 28 October; ATODS Nambour Hospital, 29 October; Liverpool Hospital, 10 November; Centacare, Canberra, 18 November; Australian Drug Foundation, Melbourne, 24 November; SANDAS, Adelaide, 7 December; and Prince of Wales Hospital, 10 December.

Matalon, E. *Cannabis: Everything You Need To Know.* Presentation to: Ipswich Hospital Acute Mental Health Unit, Ipswich, 26 May, Palmerstone Association, Albany, 29 July, Concord Centre for Mental Health 3 August and Manly Hospital, 26 August.

Matalon, E. *Quitting Cannabis 1-6 Brief Intervention for Cannabis Use.* Presentation to: Mona Vale Hospital, 11 February; Frankston Integrated Community Health, Frankston, 26 February; Uniting Care, Moreland, 27 February; NET Albion St, Sydney, 24 March; Ultimo TAFE, 7 April; Program for Adolescent Life Management - Ted Noffs Foundation, Canberra, 16 April; Blacktown TAFE, 4 June; Royal Perth Hospital, Perth, 21 July; St John of God, Bunbury, 24 July; Palmerstone Association, Albany, 29 July; Princess Alexandra Hospital, Buranda, 25 August; ATODS Toowoomba Hospital, 26 October; ATODS Nambour Hospital, 29 October; Centacare, Canberra, 18 November; Dandenong Hospital Addiction Medical Unit, 23 November; Australian Drug Foundation, Melbourne, 25 November; and SANDAS, Adelaide, 8 December.

Matthew-Simmons, F. *Cocaine epidemic in Australia: A real or illusionary threat?* DPMP Team Meeting, Sydney, 14-15 October.

Matthew-Simmons, F. *Do the numbers add up? Media reporting of cannabis seizure values.* DPMP Research Symposium, Sydney, 13 October.

Matthew-Simmons, F. *The media, public opinion, and illicit drug policy.* Poster presentation at the DPMP Team Meeting, Sydney, 14-15 October.

Mills K. *Comorbid mental health disorders among people with substance use disorders.* Invited keynote address at the ACT Directions GP's Workshop, Canberra, October.

Mills K. *Integrated treatment for substance use and post traumatic stress disorders.* Invited lecture at the Department of Psychiatry, Medical University of South Carolina, Charleston, USA June 2000.

Mills K. *Post traumatic stress disorder and substance use disorders.* Invited seminar, Grevillia House, Westmead Hospital Sexual Assault Service, Westmead, June.

Newton, N.C., Teesson, M., Vogl, L.E. & Andrews, G. *CLIMATE Schools: Innovative internet-based universal drug prevention programs for secondary school students.* Presented at the UK Drug Education Forum, London, UK, 16 November.

Ngui, R. *Cannabis use disorder treatment and other health care costs in New South Wales.* DPMP Team Meeting, Sydney, 14-15 October.

Ngui, R. *Calculating ICERs: an exercise.* Presented during the workshop: An introduction to the application of cost effectiveness analysis in health. University of Sydney, Sydney, May.

Ritter, A. *A stock take: Current data and emerging issues.* Presentation to IGCD Strategic Planning Workshop, Brisbane, July.

Ritter, A. *Australian drug policy: an overview report on drug use and harms and their relationship to policy.* DPMP Team Meeting, Sydney, October.

Ritter, A. *Developing, translating and using evidence to inform Australian drug policy: the Drug Policy Modelling Program.* Talking Point Seminar Series, Turning Point Alcohol and Drug Centre, Melbourne, July.

Ritter, A. *Discussant: Policy implications of weak evidence.* International Meeting: Assessing the operations of the global illicit drug market, Brussels, September.

Ritter, A. *Harm reduction: Thematic session - Intensive course on health, development and human rights.* UNSW, Sydney, December.

Ritter, A. *Illicit drugs policy through the lens of regulation.* Presentation to Families and Friends for Drug Law Reform Public Meeting, Canberra, April.

Ritter, A. *Modelling the allocation of hepatitis C treatment among injecting drug users and its relationship to methadone maintenance treatment.* DPMP Research Symposium, Sydney, October.

Ritter, A. *Pharmacotherapy maintenance treatment in Australia.* Presentation at the ANCD workshop Opioid Pharmacotherapy Maintenance (report launch), Sydney August.

Ritter, A. *Systems approaches to illicit drugs policy.* Presentation to Centre for Research in Complex Systems, Charles Sturt University, Bathurst, May.

Ritter, A. *The Australian experience: data and interpretation.* Presentation at the international meeting, The illicit drug market and its possible regulatory body, Rome, September.

Ross, J. *Suicide risk factors among illicit drug users.* Invited seminar at the Second Biannual ACT Comorbidity Forum, Canberra, December 2009.

Sannibale, C. *Substance use disorders: Assessment and treatment.* Workshop presented in the Advanced Adult Psychopathology Disorders lecture stream for Doctor of Clinical Psychology candidates, University of Sydney, 11 September.

Sannibale, C. *Treatment of PTSD and comorbid alcohol use disorder.* Presentation to Psychiatric Grand Rounds, Royal Prince Alfred Hospital, Sydney South Western Area Health Service, 4 May.

Scott, L. & Burns, L. *High risk alcohol use among a group of people who regularly inject drugs in Australia.* Presentation at the Milton Luger One Day Forum: presented by Odyssey House McGrath Foundation as part of Drug Action Week, Campbelltown, 23 June.

Shanahan, M. *An application of CEA: A cost-effectiveness analysis of modafinil therapy for psycho stimulant dependence.* Guest lecture at the School of Public Health, University of Sydney, September.

Shanahan, M. *Assessing the economic consequences of cannabis policy options.* Poster presentation. DPMP Team Meeting, Sydney, 14-15 October.

Shanahan, M. *The costs associated with cannabis law enforcement.* DPMP Research Symposium, Sydney, 13 October.

Shanahan, M. *Using discrete choice experiments to quantify preferences for cannabis policies: A pilot study.* DPMP Team Meeting, Sydney, 14-15 October.

Spicer, B. *Print media reporting on illicit drug use in Australia: trends and impacts on youth attitudes to illicit drug use.* DPMP Team Meeting, Sydney, 14-15 October.

Sutherland, K. & Mills, K. *Treating PTSD and substance use disorders.* Invited seminar, Mona Vale Drug and Alcohol Service, Mona Vale, May.

Swift, W. *Cannabis: An overview.* Lecture presented to the NSW Institute of Psychiatry students, Sydney, 18 March.

Swift, W. *Cannabis potency and contamination.* Paper presented to the National Addiction Centre, London, UK, 10 July.

Swift, W. *Senior Lecturer promotion: My experiences, 2008.* Talk presented to candidates for promotion to Senior Lecturer, The University of New South Wales, 20 February.



National Drug and Alcohol Research Centre Annual Report 2009

Editor: Marion Downey

Design: Melinda Hunt - Pro Bono Publico

Layout: Michaela Turner

Printed by: P³ PRINTPOSTplus



National Drug and Alcohol Research Centre
UNSW
Sydney NSW 2052
22-32 King Street
Randwick NSW 2031
Telephone: (02) 9385 0333
Facsimile: (02) 9385 0222
<http://ndarc.med.unsw.edu.au>