



# Annual Report 2010

## National Drug and Alcohol Research Centre

Medicine

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
Foreword	5
Acting Directors' Report	6
Management Structure	7
From the Executive	8
Year in Review	11
Postgraduate Program	20
Funding and Communication	21
Current Projects	22
Completed Projects	47
Appendix A – Staff and Student List	61
Appendix B – External Appointments	63
Appendix C – Postgraduate Students	65
Appendix D – Research Grants and Funding	67
Appendix E – Seminars	71
Appendix F – Publications	73
Appendix G – Conference Presentations	80
Appendix H – Workshops and Presentations	88
Acronyms	91

# 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 research community 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 total dedication to such an outcome.



**During the past twelve months our management team so ably led by Maree Teesson and Alison Ritter has continued to guide the Centre while we await the arrival of our new Director.**

Late in 2009 a university panel selected Professor Michael Farrell, from the Institute of Psychiatry, King's College London, as Director and he accepted the position in 2010. Unfortunately the necessary arrangements to wind up his activities in London and finalise matters for his relocation to Australia have taken longer than we thought, placing considerable demands on Maree and Alison. Both have considerable workloads in their substantive positions. None the less they have risen to the task magnificently. We are greatly indebted to them.

Professor Farrell will take up his position early in 2011. In the meantime he has kept in constant touch with the management team and during his visits to Australia has had numerous meetings with key staff members. I am sure that on his arrival he will be well placed to take up his new role.

While researchers at NDARC have maintained the high benchmark achieved in past years, further consolidating its position as one of the leading drug and alcohol research centres in the world, there is no room for complacency. Following my discussions with Professor Farrell we have identified an update of our strategic plan as foremost on our agenda. He brings with him a wealth of knowledge of trends in the UK, Europe and the US which will not only assist our focus nationally but help immensely to further build our international role and reputation. From this we can build an increasingly powerful and apposite knowledge base to underpin the future of our research program.

Increasing our ability to forge linkages internationally can help break down the randomness that so often exists within the paths of discovery. Working ever closer in a spirit of close communication must make it easier to find appropriate answers to the many still outstanding questions. Our research and our future direction must reflect these elements so the best knowledge base exists for policy makers to make effective decisions.

Finding out what works and what doesn't will bring real benefits to a world sorely stressed by substance abuse and the associated criminal activities. 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 total dedication to such an outcome.

Once again it is my pleasure to acknowledge the wonderful work of our researchers who do such outstanding work, and the administration staff who keep the wheels turning. I wish to also thank the Dean, Professor Peter Smith, and the UNSW Faculty of Medicine staff for their continued support. To our many partners and stakeholders I extend my gratitude for their continued support and cooperation.

I believe that under our new Director the Centre is poised for a bright and productive future, ensuring we remain at the cutting edge of drug and alcohol research.

I commend this report. It provides an excellent summary of the work of the Centre.



**The Hon. Kevin Rozzoli AM**  
Chairman, NDARC Board of Management

# ACTING DIRECTORS' REPORT

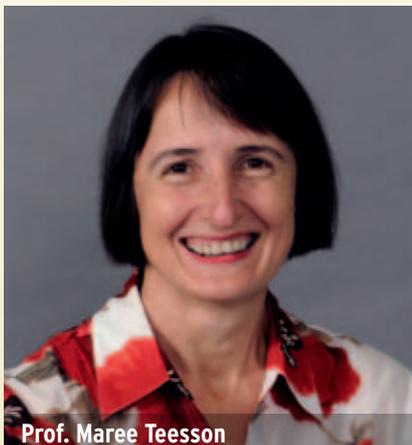


**A/Prof. Alison Ritter**

*Acting Director from 9 June 2009 to 25 February 2010 and from 1 September 2010*



More than a third of individuals with a drug and alcohol use disorder have at least one co-occurring affective or anxiety disorder and the Centre has continued to produce world leading research in the field of comorbidity.



**Prof. Maree Teesson**

*Acting Director from 26 February 2010 to 31 August 2010*

**Throughout 2010 NDARC has provided Australia with a strong research base to address drug and alcohol problems.**

The Centre's staff has continued to grow and our research areas have developed to produce some of the most innovative and groundbreaking research internationally, including new prevention interventions, new treatments, internet-based interventions and economic modelling. Our research is conducted in collaboration with over 100 clinicians, policy makers and fellow researchers at institutions across Australia and overseas.

The success of NDARC is built on our continuing and strong support from the federal government. We have also been extremely successful in the 2010 competitive research funding rounds - NDARC had a success rate on par with the top universities and research centres around Australia. This year we published 219 journal papers, book chapters and reports, We made 258 conference presentations nationally and internationally and gave 200 external lectures, workshops and seminars.

More than a third of individuals with a drug and alcohol use disorder have at least one other co-occurring affective or anxiety disorder, double that on some treatment programs, and the Centre has continued to produce world leading research in the field of comorbidity. Several projects were completed this year with the results presented at national and international conferences and published (or are in press) in peer reviewed journals.

Our Indigenous research program has been consolidated and has grown significantly over the year in partnership with a number of Aboriginal community controlled health services and specialist drug and alcohol agencies.

Our international work continued to grow and strengthen through collaborations with the UN, WHO, the Global Burden of Disease project, as well as projects in Vietnam, Iran, Laos, Singapore, Burma and the Western Pacific region.

Epidemiological research is a major strength of the Centre and we produced a large number of publications again this year. The first ever lifetime estimates of alcohol problems in Australia, analysing data from the 2007 National Survey of Mental Health and Wellbeing, were published this year and received extensive media coverage.

NDARC's health economics team provided the economic modelling for the groundbreaking study of Alcohol's Harms to Others produced by Turning Point Alcohol and Drug Centre in Melbourne for the Alcohol Education Research Foundation. The study is the most extensive effort anywhere in the world to measure the impact of drinking on people other than the drinker.

Our Centres within the Centre went from strength to strength. The National Cannabis Prevention & information Centre (NCPIC) received a further four years funding following a rigorous external review by the Australian Government Department of Health and Ageing.

The Drug Policy Modelling Program continued its significant output of publications and reports as well as working closely with governments around Australia to improve the evidence base for drug policy.

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. We received a record five Faculty of Medicine Dean's Rising Star awards for postdoctoral and early career researchers recognising outstanding contributions to research, and three Dean's List awards acknowledging young researchers with the potential to become career scientists. Dr Frances Kay-Lambkin won a NSW Tall Poppy Award and Associate Professor Kate Dolan has been promoted to full Professor effective January 1.

As Acting Directors during 2010, Maree Teesson and Alison Ritter have both been supported by strong administration and a highly talented and diverse group of researchers. We look forward to the commencement of Professor Michael Farrell in 2011 as the new Director for the Centre. The year ahead will see new strategic planning, and reviews of our research areas, governance structures and quality assurance mechanisms. Most importantly, we are looking forward to the exciting new research being undertaken by our academic staff, research staff and many post graduate students to provide new responses to the problems associated with drug and alcohol use.

**Alison Ritter and Maree Teesson**  
Acting Directors, 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 held fortnightly.

In 2010 the Members were:

**Acting Director** (from 9 June 2009 to 25 February 2010, then from 1 September 2010)  
Associate Professor Alison Ritter

**Acting Director** (from 26 February 2010 to 31 August 2010)  
Professor Maree Teesson

**Assistant Directors:**  
Professor Jan Copeland  
Professor Louisa Degenhardt (until 1 September 2010)  
Associate Professor Christopher Doran

**NDARC Executive Officer**  
Dr Shale Preston

## NDARC ADVISORY BOARD

The NDARC Advisory Board meetings are normally scheduled quarterly. In 2010 there were three meetings including an e-meeting.

During 2010, Professor Maree Teesson and Associate Professor Alison Ritter had the opportunity to participate in Advisory Board meetings while in the role of Acting Director. Keith Evans resigned from the Advisory Board in June 2010. The Chair met and had discussions with Professor Farrell when he visited from England in November 2010.

**In 2010 the Members of the NDARC Advisory Board were:**

**The Honourable Kevin Rozzoli, AM, Dip Law**  
Chair

**Professor Denis Wakefield, MBBS, MD, DSc, FRACP, FRCPA**  
Associate Dean (Research), Faculty of Medicine, University of New South Wales

**Professor Les Field, BSc, PhD, DSc, CChem, FRACI, FAA**  
Deputy Vice Chancellor (Research) & Professor of Chemistry, University of New South Wales

**Mr Keith Evans (until June 2010), BA, SRN, RMN, ANZIM**  
Executive Director, Drug and Alcohol Services Australia

**Mr Simon Cotterell**

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

**The Hon Pru Goward, MP, BA (Psych)**

Shadow Minister for Community Services, Shadow Minister for Women

**Dr Don Weatherburn, BA (Hons), PhD, PSM, FASSA**

Director, NSW Bureau of Crime Statistics and Research

## FINANCE COMMITTEE

This Committee manages the financial and administrative areas of NDARC, and is responsible for preparing and monitoring annual budget models and forecasts. It is also responsible for keeping up to date with the current Finance policies and guidelines, including GST, Procurement and Travel, and keeps an active liaison with various areas within UNSW, including Corporate Finance, Treasury and the Grants Management Office.

The group meets once a month and in 2010 comprised Professor Maree Teesson, A/Prof. Alison Ritter, Dr Shale Preston, Crisanta Corpus and Jackie Du.

## OTHER COMMITTEES

Key committees that continued as in previous years were:

- The OHS Committee comprising Dr Shale Preston (Chairperson), Julie Hodge (Deputy), Professor Maree Teesson (until 31 August 2010), A/Prof. Alison Ritter, Dr Suzanne Czech (until 30 June 2010), Marian Shanahan, Elizabeth Conroy and Dr Wendy Swift
- The Library Committee comprising Professor Shane Darke (Chairperson), Dr Sharlene Kaye, Dr Wendy Swift and Mary Kumvaj
- The NDARC Employee Assistance Team (NEAT) Committee comprising Dr Sharlene Kaye (Chairperson), Dr Matthew Dunn, Dr Katherine Mills, A/Prof. Alison Ritter and Sarah Larney (until 5 November 2010)
- The Green Team comprising Karina Hickey (Chairperson), Emma Black, Dr Jenny Chalmers, Jackie Du, Hector Navarro, Dr Shale Preston, Natasha Sindicich and Barbara Toson. In December 2010, the Green Team was awarded the inaugural UNSW Staff Excellence Award for Excellence in Sustainability.

Various Steering Committees for individual projects also continued throughout 2010.

## 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.

As at 31 December 2010, NDARC employed 133 staff. This represents a 9% increase in staff from the previous year. The above figure includes full-time and part-time academic staff, research staff and support staff. In addition, NDARC had 13 conjoint appointments. The conjoint staff numbers have increased by 8% from the previous year. Casual staff and visiting academics have not been included in the count. A full list of the staff that NDARC employed over 2010 is given in Appendix A.

We have farewelled a number of staff who have made a substantial contribution to NDARC. Two farewells, in particular, should be noted. On 15 March 2010 we farewelled our longstanding Librarian, Eva Congreve upon her retirement. Eva was one of NDARC's inaugural staff members having started work at NDARC in May 1987. Aside from providing excellent support to research staff over the years, Eva possessed a vivacious and enthusiastic personality and was well liked by all. Eva has relocated to Tasmania and we wish her all the very best for the future. In relation to academic staff, on 10 September 2010 we farewelled Professor Louisa Degenhardt (one of NDARC's Assistant Directors) following her decision to take up an appointment as the Principal for Adolescent Health at the Burnet Institute in Melbourne.

The above losses, however, have been offset by a number of gains. In October 2010, Dr Catherine Chapman joined NDARC as a part-time Senior Research Fellow and one of our Senior Research Officers, Fiona Shand, took up an Associate Lecturer appointment. In addition, another of our Senior Research Officers, Dr Elizabeth Conroy will take up a Research Fellow appointment with NDARC in January 2011. It is very encouraging to see our doctoral candidates moving on to commence their academic career trajectories and these appointments will no doubt serve to enhance NDARC's research capacity in the years to come.

# FROM THE EXECUTIVE



Prof. Maree Teesson

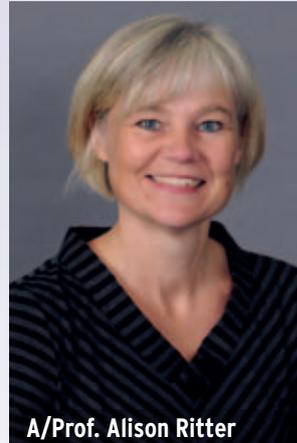
“Our research group aims to increase our understanding of drug and alcohol problems, prevent these where possible and improve treatment responses.”

**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 28 includes two Professors (Teesson, Darke), one A/Prof. (Dolan), five Senior Lecturers (Slade, Mills, McKetin, Ross, Kay-Lambkin), five Research Fellows (Newton, Proudfoot, Taplin, Carragher, Sannibale), four PhD students (Mewton, Johnston, Barrett, Larney), and 11 researchers. Successes in 2010 included:

- Extension of our successful program of research in prevention of alcohol and drug harms through our innovative Climate Schools internet program to pilot trials in the UK (Teesson, Newton). A new NHMRC funded trial will commence in 2011.
- Examining the high rates of alcohol problems among Australians (Slade, Teesson, Mills, Mewton).
- Leading international research in the area of comorbid mental disorders and substance use disorders (Darke, Teesson) including PTSD (Mills, Teesson), psychosis (McKetin), depression (Kay-Lambkin).

- 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); unhealthy lifestyles amongst people with depression (Kay-Lambkin); and for young people using psychostimulants (McKetin, Kay-Lambkin).
- Conducting a successful program of research in PTSD (Mills, Teesson, Sannibale and collaborators at Medical University of South Carolina).
- Establishing three-year treatment outcomes for methamphetamine dependence (McKetin, Ross).
- 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).
- 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).



A/Prof. Alison Ritter

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

**The Drug Policy Modelling Program (DPMP) and the Drugs Trends Program have both had a highly successful year in 2010.**

DPMP has continued to engage with Australian policy processes; for example, convening a Roundtable as part of the development of Australia's new National Drug Strategy (2010-2015). Twenty-three leaders in the fields of alcohol and illicit drugs attended. DPMP also distributed a briefing note to NSW politicians (October 2010), highlighting four priority areas for drug policy. Work continues with governments around Australia to improve the evidence-base for drug policy.

DPMP completed a number of research projects during 2010, with associated academic publications, reports and press releases. Notable work includes research on the Portuguese decriminalisation of illicit drugs (Dr Caitlin Hughes and Professor Alex Stevens), published in the *British Journal of Criminology*. Better understanding of how drug users evaluate price, and choose between substances, led by Dr Jenny Chalmers in collaboration with BOCSAR, was also completed this year. A novel analysis of the impact that newspaper reporting has on young peoples' attitudes to drugs was also completed (Dr Caitlin Hughes, Kari Lancaster and others). Our staff gave

a total of 56 presentations at international and national conferences and meetings. A/ Prof. Ritter presented work at a special meeting of the World Health Organization on treatment systems for substance use disorders.

The Drug Trends Program (including the IDRS, EDRS and NIDIP) led by Dr Lucy Burns forms an essential part of Australia's ongoing monitoring of trends in drug use and associated harms. Extensive dissemination of the 2010 findings included the National Drug Trends Conference for 2010, other national and international conference presentations and media. This has focused on improving public knowledge of trends in illicit drug use, energy drinks and alcohol; alcohol, pregnancy and parenting; and the emergence of new drugs including mephedrone.

We have continued to build expertise in the association between homelessness, substance use and service provision with multiple projects in this area. Our work in the area of women's and infant health has also continued. We have been funded to develop a model of sexual health contraception intervention for drug dependent women and research into the prevalence of Pap testing for cervical cancer in this group.



Prof. Jan Copeland



Following a rigorous Government review, NCPIC has been awarded a further four years funding until mid-2014.



A/Prof. Chris Doran



We continued our work on an NHMRC funded capacity grant in the field of health economics.



**This year has seen the Centre's achievements acknowledged in a rigorous external review commissioned by the Australian Government Department of Health and Ageing. As a result of the review, the Centre has been awarded a further four years funding until to mid-2014.**

The National Cannabis Prevention and Information Centre is a consortium of high quality organisations from around the country, led by NDARC. This year we welcomed a new partner, Turning Point Alcohol and Drug Centre, under the Directorship of Professor Dan Lubman, building on his contribution to NCPIC when working with ORYGEN Youth Health.

The new funding cycle saw the consultative development of our 2010-2014 NCPIC Strategic Plan: [ncpic.org.au/ncpic/news/ncpic-news/article/strategic-plan](http://ncpic.org.au/ncpic/news/ncpic-news/article/strategic-plan). The strategic review identified two key areas of focus for the Centre - prevention and treatment. Outcomes in these areas will be achieved by providing the community, in particular young people, with high quality, evidence-based information on cannabis use, and by building the capacity of service providers to respond to cannabis users and their families. The free national Cannabis Information and Helpline (CIH) continued to take calls from cannabis users and their friends and families and from clinicians.

This year, staff gave 51 conference papers/posters and had 18 papers published in the international peer reviewed literature and a further nine accepted for future publication.

The Community and Clinical Training team has worked extraordinarily hard this year providing 167 workshops in 2010. Unfortunately, as a result of the external review recommendations, the Centre will no longer be providing face-to face information-only sessions. Annie Bleeker is to be congratulated for her excellent contribution as Community Training Manager and she will be working with the communications team in 2011 to deliver alternative models of cannabis education delivery.

The Clinical Services and Evaluation team's work develops under the guidance of Dr Melissa Norberg. A number of projects are being finalised and will be made available in 2011. These include the Cannabis Withdrawal Scale; interventions delivered by mail, telephone and web; and improved quantification of cannabis use.

NCPIC is also a partner of the newly funded Co-operative Research Centre for Young People, Technology and Wellbeing, led by the Inspire Foundation, which will support further development of our communication and intervention activities.

**Our directorate had major successes in external grant rounds, publications in international journals, presentations at key conferences, and in contributions to local and international understanding of and response to drug and alcohol problems. Several staff deserve particular attention for their outstanding achievements in 2010:**

- Dr Delyse Hutchinson is managing the \$1.9 million NHMRC-funded Triple B Study, a new longitudinal birth cohort of 1800-2000 families that aims to improve our current understanding of the effects of alcohol, tobacco and other substance use on both early infant development and family functioning.
- Ed Silins is a co-investigator on an NHMRC Project Grant investigating the relationships between cannabis and other drug use, mental health, early life factors and life course outcomes using integrated analyses of data from four Australasian cohort studies.
- Dr Wendy Gong and Ansari Jainullabudeen continued their work as part of an NHMRC-funded capacity building grant in the field of health economics. Ansari worked with me to produce

the economic modelling for the AERF-funded project: *The Range and Magnitude of Alcohol's Harm to Others*.

- I was successful in obtaining a \$5.5 million NHMRC grant to establish a Centre for Clinical Research Excellence along with colleagues from the University of Sydney's Brain and Mind Research Institute.
- Professor Mattick had an exceptional year and would surely win the Oscar for drug and alcohol research (if it were awarded) for his outstanding grant success and contribution to knowledge. NDARC is indeed privileged to have such a unique and gifted person working within its ranks.
- Finally, we welcomed back A/Prof. Anthony Shakeshaft to the senior academic team at NDARC. After a sojourn at the Sax Institute, he re-joined NDARC to continue his groundbreaking community action alcohol research, notably the Alcohol Action in Rural Communities (AARC) project.

# FROM THE EXECUTIVE



Prof. Louisa Degenhardt



A range of projects examined use and diversion of pharmaceutical opioids including trials of new formulations



Dr Shale Preston



We have made significant improvements to our internal and external communications throughout the year



**Our directorate continued to focus upon local and international activities (with UN agency collaborations and a large range of research institutions domestically and overseas) with an emphasis upon producing high quality publications relevant to policy makers, researchers and service providers.**

Significant international projects included the Secretariat of the Reference Group to the United Nations on HIV and Injecting Drug Use and the Global Burden of Disease (GBD): Mental Disorders and Illicit Drug Use Expert Group.

In 2010, the first systematic global and regional review of the provision of HIV prevention, treatment and care services for injectors was published in *The Lancet* on behalf of the Reference Group. As well, a Consensus Statement was issued in November 2010 (see [www.idurefgroup.com](http://www.idurefgroup.com)) (Mathers, Degenhardt, Mattick).

My role as the co-chair of the GBD expert group continued (along with Professor Harvey Whiteford, University of Queensland), with continued involvement of dozens of researchers internationally (see [www.gbd.unsw.edu.au](http://www.gbd.unsw.edu.au)). In 2010, all systematic reviews were completed and published (<http://www.gbd.unsw.edu.au/gbdweb.nsf/page/Publications>). Modelling work began, and in 2011 it is expected to produce the

first estimates of the prevalence and burden related to cannabis, cocaine, amphetamine and opioid dependence regionally and globally (Degenhardt, Nelson, Bucello).

Other research included studies of drug use among adults with ADHD (Kaye, Degenhardt), including Dr Sharlene Kaye's involvement as Secretary for the ICASA foundation ([www.adhdandsubstanceabuse.org](http://www.adhdandsubstanceabuse.org)). Dr Matthew Dunn and his team produced a number of publications focusing upon drug use by elite athletes in Australia.

A range of projects examined the use and diversion of pharmaceutical opioids, including trials of new formulations (Larance, Mattick, Degenhardt), studies of diversion and policy responses to this issue (Larance, Shand, Mattick, Degenhardt), and mortality related to opioid substitution treatment (Degenhardt, Burns).

New work also examined parental supply of alcohol to adolescents (Vogl, Mattick). Dr Wendy Swift continued work examining cannabis use among Australian young people, including collaborative work with Professor George Patton and the Centre for Adolescent Health in Melbourne (Swift, Degenhardt). Work focusing on young people in contact with the criminal justice system was led by Paul Nelson.

**Smooth administration of NDARC throughout 2010 has included attention to physical facilities; communications with external stakeholders (such as our website); effective human resource management; IT services; finance management and administrative support.**

NDARC was successful in the UNSW Capital Expenditure 2011 Round and was allocated \$230,000 under the 'public spaces' upgrade program. NDARC was the only organisation within the Faculty of Medicine to receive these funds. Work on the upgrade to one of our two buildings will commence next year. NDARC also successfully negotiated with UNSW Facilities Management to replace substandard air-conditioning systems. As a result, both buildings received new air-conditioning systems and vastly improved thermal comfort levels. This combined infrastructure (worth around half a million dollars) was paid for by central UNSW funds.

NDARC was chosen as the pilot site for the Faculty of Medicine's website redevelopment and to this end worked closely with Faculty IT staff and Infinity Technology. The upgraded website is expected to be launched in April 2011. NDARC's website redevelopment

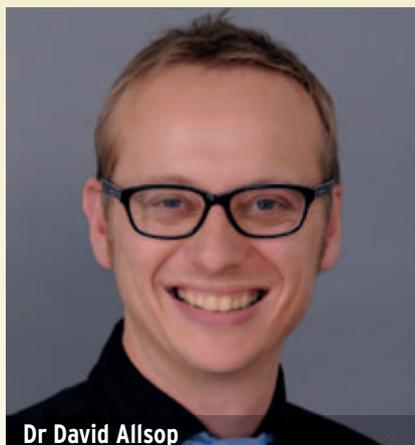
contributes towards the significant improvements we have made to our internal and external communications throughout the year following the appointment of a full-time Communications and Media Manager - a position which had been vacant for some time. NDARC has received excellent media coverage over the year and vast improvements have been made to key components of our communications strategy, including the Annual Report and Annual Symposium.

The UNSW Performance Development Scheme for professional and technical staff was successfully implemented in 2010. This Scheme provides a formal mechanism for supervisors to develop performance development targets and measures. It also gives professional and technical staff the means to realise their full potential and be recognised for their achievements.

During the year, NDARC forged good relations with the central UNSW Finance team, working with the new UNSW Finance Communications Manager. I have been invited to join UNSW Finance's Working Group in 2011 to contribute to service improvements. Our own finance team here at NDARC continues to provide outstanding support.

Finally, NDARC's administrative staff members all performed at their customary high levels.

# YEAR IN REVIEW



Dr David Allsop

In 2010 Dr David Allsop finished recruitment to a project developing a cannabis withdrawal measurement scale, in collaboration with NCPIC staff Professor Jan Copeland, Dr Melissa Norberg, and Jennifer Mackenzie and externally with Dr Shanlin Fu at the University of Technology, Sydney, and Professor Alan Budney at the University for Medical Sciences, Arkansas, US. Dr Allsop presented the findings of this work at several Australian meetings in 2010. He is currently preparing the data analysis for publication in 2011.

Dr Allsop was a chief investigator on a successful NHMRC project grant in 2010 to test the safety and efficacy of a novel pharmacotherapy - cannabis-based Sativex - for alleviating symptoms of cannabis withdrawal (with Professor Copeland, Dr Norberg and Associate Professor Nick Lintzeris of the South East Sydney & Illawarra Area Health Service, Professor Iain McGregor of Sydney University, and Associate Professor Adrian Dunlop at the Hunter New England Area Health Service).

Dr Allsop expanded his research scope in 2010 to support A/Prof. Kate Dolan in her analysis of the data arising from her work developing a treatment clinic for female drug users in Iran. The results of this work have been presented at the 22nd Annual Conference for the Australasian Society for HIV Medicine, and abstracts have been accepted for presentation of the work at the International Harm Reduction Association Conference in Beirut in 2011. A manuscript from this work is being prepared for publication in 2011.



Dr David Bright

In 2010, Dr David Bright collaborated with Associate Professor Alison Ritter and Dr Wendy Gong on a project which examined the relative cost effectiveness of different types of law enforcement interventions directed towards methamphetamine.

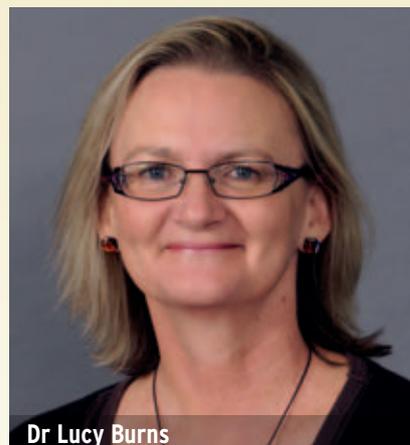
Dr Bright published papers on: Australian trends in drug dealer and user arrests (with A/Prof. Alison Ritter); the relationship between retail price and drug law enforcement (with A/Prof. Alison Ritter); a social network analysis of an Australian drug trafficking syndicate (with Dr Jenny Chalmers and Dr Caitlin Hughes); and a study of jury decision making (with Professor Jane Goodman-Delahunty).

Dr Bright also collaborated with Dr Catherine Greenhill (School of Mathematics and Statistics, UNSW) on a project which examined the structural properties of criminal networks involved in methamphetamine and cocaine trafficking in Australia. The results were presented at the 2nd Australian Illicit Networks Conference held in December 2010.

With Dr Jenny Chalmers and Dr Rebecca McKetin, David received an ARC linkage grant partnered with BOCSAR, to investigate the impact on young people of hypothetical changes in the prices of alcohol, cannabis and ecstasy.

He was awarded a UNSW Faculty of Medicine grant to study criminal networks involved in drug trafficking and identify areas of resilience and vulnerability to law enforcement interventions.

Dr Bright received an award from the College of Forensic Psychologists (Australian Psychological Society) for Research and Academic Work in Forensic Psychology and a Faculty of Medicine Dean's Rising Star Award.



Dr Lucy Burns

Dr Lucy Burns continued to lead the national surveillance projects: the Illicit Drug Reporting System (IDRS), Ecstasy and Related Drugs Reporting System (EDRS) and National Illicit Drug Indicators Project (NIDP).

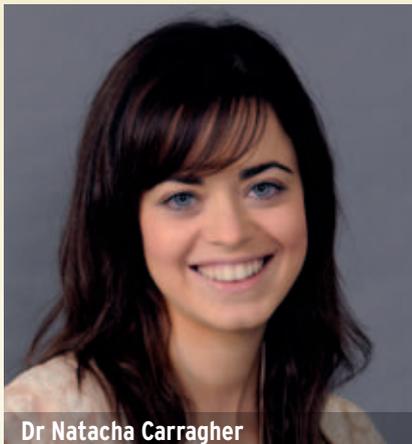
Dr Burns also continued to work in the area of treatment for marginalised subgroups. Together with Elizabeth Conroy, Bridget Spicer and external colleagues, data collection was completed for a 12-month follow-up of 250 homeless men in Sydney (the Michael Project, funded by Mission Australia), examining the effect of a model of more responsive services.

A major focus of contemporary homelessness research is evaluation of the impact of a Housing First model (where housing is provided to homeless people and then services provided in this context) on improvement in the health and circumstances of chronically homeless people. In a NSW Health funded project, Dr Burns and colleagues are evaluating whether this model is also effective in managing substance use problems.

She has also completed an AERF funded project examining a best practice model for the reduction of alcohol-related harm in older Australians who are homeless and alcohol dependent.

Dr Burns has continued her work in substance use and pregnancy and has been involved in a number of initiatives examining aspects of foetal alcohol spectrum disorder and alcohol use in pregnancy. She has worked on guidelines for the management of substance use in pregnancy for NSW Health and the Australian General Practice Network.

# YEAR IN REVIEW



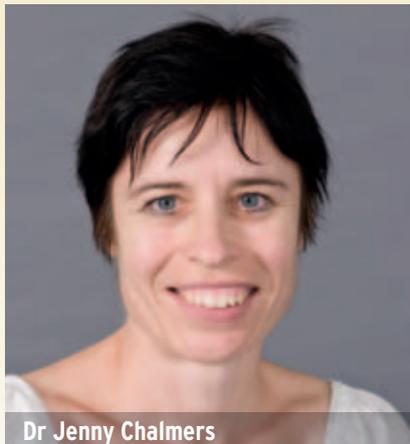
Dr Natacha Carragher

In 2010, Dr Natacha Carragher continued to work on an NHMRC project grant exploring the contributions of epidemiological data to the revision of the extant psychiatric classification system.

Published papers from this grant, included a paper examining the latent structure of post-traumatic stress disorder (with Dr Katherine Mills, Dr Tim Slade, Professor Maree Teesson, and Professor Derrick Silove) and a paper exploring the psychometric properties and presence of gender bias in the major depression criteria (with Louise Mewton, Dr Tim Slade, and Professor Maree Teesson). These papers represent investigation of these important issues for the first time in the Australian general population.

During the year, she presented key findings from these papers at the International Congress of Applied Psychology in Melbourne and at the Annual Convention of the Association of Behavioural and Cognitive Therapies in San Francisco. In collaboration with Dr Lachlan McWilliams at Acadia University in Canada, a paper was accepted on empirically classifying gambling behaviours in the US general population, to be published in *Psychiatry Research*.

In December she was awarded a Faculty of Medicine Early Career Researcher Grant to explore the course of substance-induced versus independent depression. This project will prospectively examine the depressive episodes of alcohol dependent patients and identify predictors of diagnostic change. The project will begin in early 2011 and the findings will have important implications from a classification and clinical perspective, including informing revisions to the extant psychiatric classification systems.



Dr Jenny Chalmers

In 2010 Dr Jenny Chalmers worked with Associate Professor Alison Ritter on a project to determine the likely ramifications of the global financial crisis for drug use in Australia.

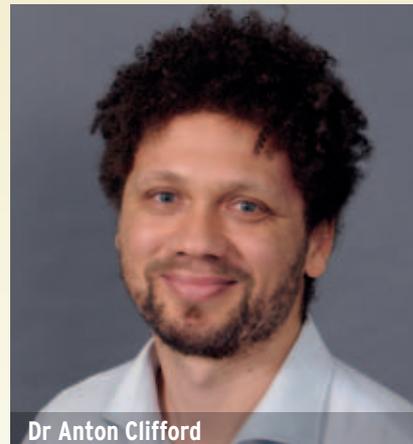
Dr Chalmers collaborated with the NSW Bureau of Crime Statistics and Research (BOCSAR) on a study to assess how drug market adjustments impact on users' choices and the influence of trust and social relations in this context.

She published research using social network analysis to characterise the operation of illicit drug markets (Chalmers, Bright and Hughes) and completed a project on ecstasy use trends in Australia (Chalmers, McKetin, Burns and Vogl).

Dr Chalmers was awarded, with Dr Rebecca McKetin and Dr David Bright, an ARC linkage grant in partnership with BOCSAR. This project will use an experimental behavioural economics approach to ask young Australians how they would adjust their alcohol and illicit drug use over the course of a 'night out' in response to hypothetical changes in the prices of alcohol, cannabis and ecstasy.

She is co-author of a book to be published in 2011 by Allen and Unwin based on in-depth interviews with 150 Australians who receive income support payments.

She also presented findings from an ARC Discovery project looking at ways to make it easier for parents to find time for raising children, without damaging their earnings over the life course, at the International Association for Feminist Economics Conference.



Dr Anton Clifford

Dr Anton Clifford continued to lead NDARC's research projects in indigenous communities throughout 2010.

He completed a project with Associate Professor Anthony Shakeshaft and Catherine Deans on implementing an intervention combining training and outreach support to enhance the delivery of alcohol screening and brief intervention (SBI) in four Aboriginal Community Controlled Health Services (ACCHSs) in NSW. The intervention increased the proportion of eligible clients screened for alcohol and improved the quality of alcohol assessments in each ACCHS. One paper examining key issues to consider when implementing alcohol SBI in ACCHSs was published and another was accepted for publication.

Dr Clifford commenced two new projects in 2010. In collaboration with A/Prof. Shakeshaft, Bianca Calabria and Miranda Rose, he is evaluating the feasibility and effectiveness of a family-based intervention for reducing alcohol-related harms among Indigenous Australians with alcohol problems. In 2011, the intervention will be delivered to Indigenous clients in routine healthcare through Yoorana Gunya Family Violence Healing Centre Aboriginal Corporation, Forbes and Lyndon Community (a specialist drug and alcohol agency in Orange).

The second project is an evaluation of feedback and support for improving Indigenous healthcare practitioners' systematic use of Patient Information Systems for alcohol screening and intervention. The project builds on recent work to improve the delivery of alcohol SBI in ACCHSs.

Dr Clifford also had three papers published from his PhD thesis and presented at the inaugural National Indigenous Drug and Alcohol Conference in Adelaide.



In 2010 Professor Darke completed his book *The life of the heroin user. Typical beginnings, trajectories and outcomes* (Cambridge University Press). The book will provide the first natural history of the life of the heroin user, from birth to death, and will be published in 2011.

Professor Darke also continued his collaborative work with the NSW Department of Forensic Medicine, including a new project on zolpidem-related death. Major studies of cognitive impairment and heroin use, and ADHD amongst psychostimulant users, continued. Collaborative work with We Help Ourselves resulted in a number of publications on predictors of retention in therapeutic communities.

Professor Darke had 10 refereed articles published in major journals, and a further eight accepted for publication, as well as chapters appearing in two edited international books. Major works included a comparison of the toxicology and major organ pathology of heroin and methadone overdose, and a comprehensive review of the toxicology of homicide offenders and victims.

He attended the College for Problems of Drug Dependence conference in Arizona, where he attended the board meeting of *Drug and Alcohol Dependence*, of which he is an Editor. He also attended the *Addiction* Regional Editors' meeting in the UK.

Professor Darke continued his role in staff training and mentoring, organising the NDARC seminar and training series. He also continued as the PhD Co-ordinator for NDARC, and as Chair of the Library Committee.



A large proportion of injecting drug users (IDU) have hepatitis C but they experience many barriers to undertaking hepatitis C antiviral therapy.

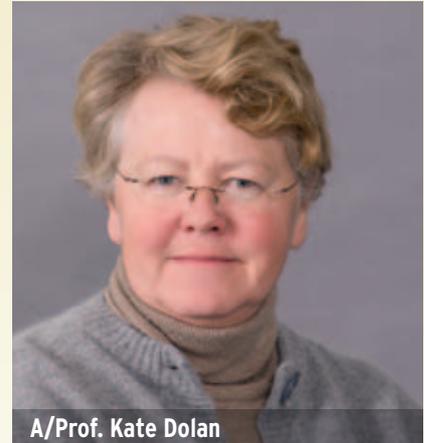
In 2008 Dr Erol Digiusto started work at NDARC on developing and evaluating a shared-care health service intervention designed to address this problem among IDUs who are engaged in opioid maintenance treatment. Recruitment of client participants occurred in 2009, follow-up data collection occurred 12 months later in 2010, and a report on this project should be completed by mid-2011.

This project has involved Professor Richard Mattick, Professor Robert Batey, Julia Purchas, Rowena Friend, and collaborating clinical investigators at nine methadone/buprenorphine treatment clinics and six nearby hepatitis C clinics around NSW. The intervention involved providing a range of clinical reference materials and assessment tools and conducting two workshops for the staff at the intervention locations.

The intervention was designed to educate clients about hepatitis C and motivate them to address it, and to modify relevant staff behaviour, and thereby to increase the number of IDUs who undertake diagnostic assessment, who are referred to antiviral therapy services, and who actually initiate antiviral therapy.

The project compared the effectiveness of the Shared Care intervention (at a subgroup of locations) with Usual Care (at another subgroup of locations).

Early indications are that the intervention significantly affected staff behaviour, but it had only a limited impact on the number of clients who initiated antiviral therapy.



In 2010, Associate Professor Kate Dolan, who was promoted to Professor in November 2010, effective 1 January 2011, continued her international projects.

Her main project was overseeing the Centre's clinic for female drug users in Tehran, which opened in August 2007. Follow-up data on the women have indicated significant improvements in many areas.

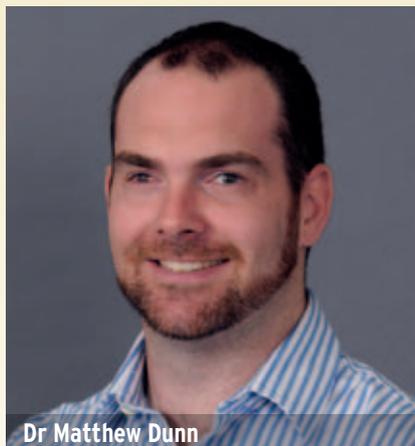
A/Prof. Dolan began a new project for the United Nations Office on Drugs and Crime (UNODC) aimed at building capacity among drug researchers in Burma, making a number of on-site visits.

Other international activity included: keynote presenter at Taiwan's Tenth International AIDS Conference; a new project in Pakistan assisting the Amitiel Welfare Society with their HIV prevention programs; hosting a study tour from Vietnam to inspect prison services in NSW; and developing a HIV peer educational program for prisoners in Vietnam.

A/Prof. Dolan was awarded an Australian National Council on Drugs (ANCD) grant to update its 2004 review of supply, demand and harm reduction in Australian prisons and work on this has commenced with Ana Rodas. She continued working locally on studies looking at hepatitis transmission in prisons and on a project examining the possibility of developing a vaccine for hepatitis C infection.

A/Prof. Dolan's PhD student, Sarah Larney, explored the long-term impact of methadone treatment on a range of outcomes for injecting drug users (IDU) released from NSW prisons. Ms Larney submitted at the end of 2010.

# YEAR IN REVIEW



Dr Matthew Dunn

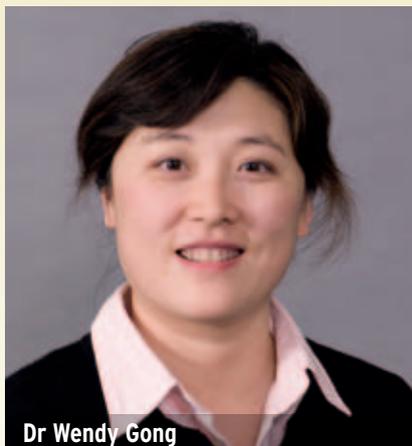
Dr Matthew Dunn continued his work on a range of projects investigating substance use issues related to sport and exercise. As chief investigator he collaborated with Johanna Thomas and Drs Wendy Swift and Lucy Burns on a world-first project exploring illicit substance use among elite athletes and he was also chief investigator of a pilot study investigating substance use among university student-athletes.

He obtained funding from the Australian Government to conduct a systematic literature review documenting the effects of substance use on physical performance and co-ordinated the delivery of the Club Champions alcohol education initiative to elite Australian swimmers.

Dr Dunn had 10 peer-reviewed manuscripts published or accepted for publication in 2010, including drug use among elite athletes, steroid use among the general population, and steroid use among secondary school students. He presented work at a range of conferences and symposia and was invited to give a keynote address at the National Drug Trends conference.

Dr Dunn continued as a member of the Scientific Committee for the Australasian Professional Society on Alcohol and Other Drugs conference and was invited to be a member of UNSW's Faculty of Medicine postdoctoral Advisory Committee. He was awarded the Faculty of Medicine Dean's Rising Star Award.

Dr Dunn was interviewed by print and radio media throughout the year on a range of sport and non-sport related drug topics, including the international publication *Men's Health* for a feature on doping.



Dr Wendy Gong

Dr Wendy Gong joined the Drug Policy Modelling Program as a Research Fellow at NDARC in mid-2009. She 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.

The final report has been submitted to NDLERF for review before publication.

This year she continued to work with colleagues Associate Professor Alison Ritter, Associate Professor Chris Doran and Dr David Bright on the issue of illicit drug markets. A paper has been prepared on the profitability of dealing methamphetamine, which is the first attempt to analyse this issue comprehensively in Australia. The findings of this study will help to improve understanding of the motivations and decisions of drug dealers, and potentially assist drug law enforcement agencies to design better strategies to dismantle supply chain linkages which generate excessive profits.

Dr Gong has also worked on estimates of the size of the illicit drug market (consumption). The first work was to estimate the size of the ecstasy market (as measured by the pattern of consumption and the turnover at the retail level) using the 2007 National Drug Strategy Household Survey (NDSHS) data. A paper on the findings is currently under review.

An estimate of consumption size and retail value of cannabis has been completed and the results will be presented in the Netherlands in 2011.



Dr John Howard

Dr John Howard continued his work with NCPIC and provided face-to-face full day training sessions on Cannabis and Young People for those who work with youth in a variety of roles across metropolitan, regional, rural and remote Australia.

He also produced, with workers and young people from 'Youth Off The Streets', a quitting guide for young people with multiple and complex needs.

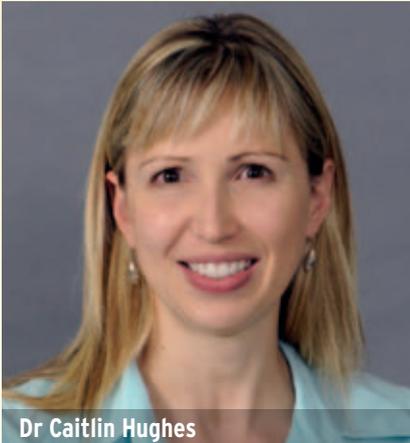
Dr Howard led the production of three NCPIC Bulletins and co-authored publications with ACON, the Drug and Alcohol Multicultural Education Centre (DAMEC), and WAYS Youth Services.

His Faculty of Medicine Independent Learning Project student is exploring comorbidity among young same-sex attracted males, which is the subject of a co-authored chapter for a forthcoming book. He continues PhD supervision of two students.

The Aids Fonds project, on increasing access to and participation in youth-friendly harm reduction services, in conjunction with Access Quality International, continues with field visits to Nepal, China and Thailand.

Dr Howard also produced a toolkit to facilitate training and program redesign to build capacity for youth-friendly harm reduction. He facilitated an expert meeting for WHO's Western Pacific Regional Office (WPRO) to develop responses to the findings of the 2009 project which looked at substance use among young people in the region.

He remains a member of NSW Health Drug and Alcohol Office Quality in Treatment Advisory Group, the NSW Ministerial Advisory Committee on Hepatitis, and the NSW Child Death Review Team.



**Dr Caitlin Hughes**

Dr Caitlin Hughes continued to work for the Drug Policy Modelling Program (DPMP) on a diverse range of projects.

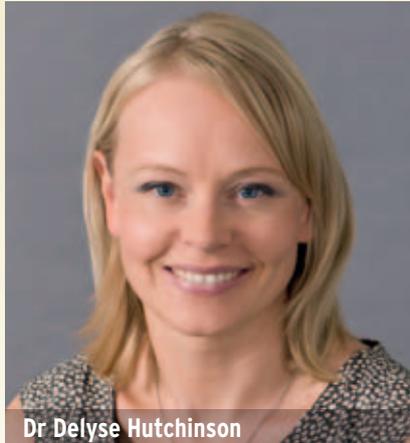
In collaboration with Professor Alex Stevens from the University of Kent she completed the first independent, academic study of the effects of the Portuguese decriminalisation of illicit drug use. The study, which was published in the *British Journal of Criminology*, received international and domestic media attention and a subsequent invitation to an expert meeting of the European Monitoring Centre for Drugs and Drug Addiction.

Dr Hughes completed work with A/Prof. Alison Ritter (DPMP) for the Queensland Government on the diversion of cannabis offenders and commenced a project with the ACT Department of Justice and Community Safety reviewing threshold quantities for drug trafficking laws.

Dr Hughes also concluded work with DPMP colleagues Kari Lancaster, Bridget Spicer, Francis Matthew-Simmons and Paul Dillon (Drug and Alcohol Research Training Australia) on an Australian Government Department of Health and Ageing (DoHA) funded study of news media reporting on illicit drugs in Australia.

The project, which examined trends in media reporting from 2003 to 2008 and impacts of news media on youth attitudes to illicit drugs, coded 4,397 newspaper articles and conducted an online survey with 2,296 youth aged 16-24.

Findings and recommendations have been disseminated widely via the media, DPMP publications, peer-reviewed papers and presentations. Three papers are under review.



**Dr Delyse Hutchinson**

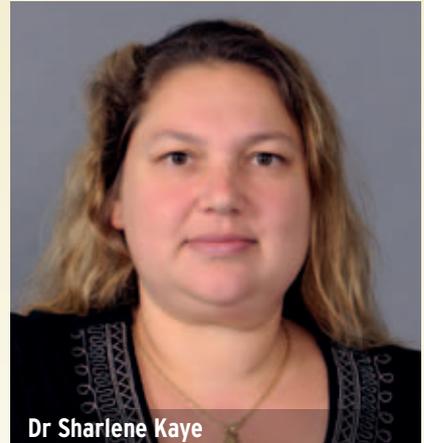
Dr Delyse Hutchinson is a Postdoctoral Research Fellow at the Centre. In 2010 she managed the set-up and commencement of a \$1.9 million NHMRC funded longitudinal birth cohort study of 1,800-2,000 Australian families entitled 'The Triple B Study'.

The study will run over four years and aims to improve understanding of the effects of alcohol, tobacco and other substance use on early infant development and family functioning. The project is being conducted in NSW, and with the National Drug Research Institute in WA. Over 300 families have joined the Triple B study in NSW.

Dr Hutchinson is also a Coordinating Investigator 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 2010, the results of a pilot study were published demonstrating 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.

NHMRC Project Grant funding was subsequently awarded for 2011 to extend this pilot work by integrating data from four large and long-running Australasian cohort studies to better understand the link between cannabis use and a range of later-life outcomes.



**Dr Sharlene Kaye**

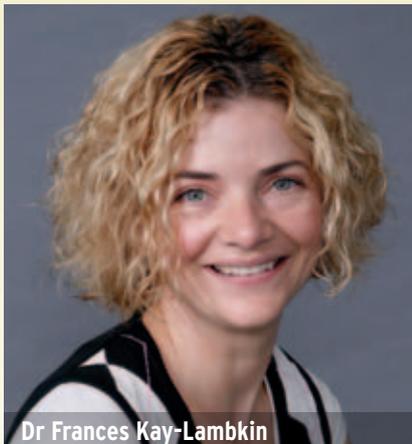
In 2010, Dr Sharlene Kaye commenced the coordination of a study, funded by Curtin University, investigating adult ADHD and risk-taking behaviour among people entering treatment for drug or alcohol dependence. This study is a collaboration between NDARC (Dr Sharlene Kaye, Joanne Cassar), the Faculty of Health Sciences at Curtin University (Professor Steve Allsop, Dr Susan Carruthers, Professor David Hay, Dr Neilson Martin, Associate Professor David Groth), and the Burnet Institute (Professor Louisa Degenhardt).

This research is part of an international multi-site study, the International ADHD in Substance use disorders Prevalence (IASP) study, coordinated by the International Collaboration on ADHD and Substance Abuse (ICASA). The IASP study is currently being conducted in Australia, Belgium, Finland, France, Hungary, Norway, Spain, Sweden, Switzerland, The Netherlands and the US.

Dr 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 and worked with NDARC colleagues, Michelle Torok and Gabrielle Campbell to complete data collection for a study of organic brain damage after non-fatal overdose, led by Professor Darke and Professor Skye McDonald (School of Psychology, UNSW).

She is also currently a chief investigator on a Justice Health funded study of adult ADHD among prison inmates, along with Dr Devon Indig and Dr Sandra Sunjic (Justice Health) and has continued in her role as Assistant Editor for *Addiction* and as Secretary on the board of ICASA.

# YEAR IN REVIEW



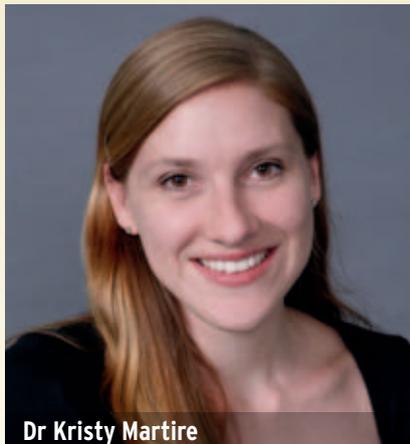
Dr Frances Kay-Lambkin

During 2010, Dr Frances Kay-Lambkin completed work on new internet-delivered treatment modules on healthy eating, exercise and smoking cessation for people with depression that will be integrated with her existing online psychological treatment for depression and alcohol/other drug use (the SHADE treatment package). This represents the first evidence-based treatment for these comorbidities available via the internet.

Dissemination work using SHADE progressed well in 2010, with the Central Coast Drug and Alcohol Service and the Early Psychosis Bondi Clinic using the resource with over 100 clients.

In June, Dr Kay-Lambkin was an invited presenter at the World Congress of Behaviour and Cognitive Therapies in Boston, US. She commenced a new collaboration with Dr Rebecca McKetin and researchers at the Centre for Mental Health, Australian National University, to develop and test a brief online treatment for psychostimulant use for young people, funded by the Australian Government Department of Health and Ageing.

In 2010, Dr Kay-Lambkin was honoured with a NSW Young Tall Poppy Award by the Australian Institute of Policy and Science in recognition of her contribution to research and development in NSW. Her work on SHADE was also recognised by a Mental Health Matters Award for Research and Evaluation, sponsored by the Mental Health Association of New South Wales. She was successful in securing an NHMRC-funded Career Development Award to commence in 2011 to continue her work on technology and innovation in the delivery of efficient, effective treatments for comorbid conditions.



Dr Kristy Martire

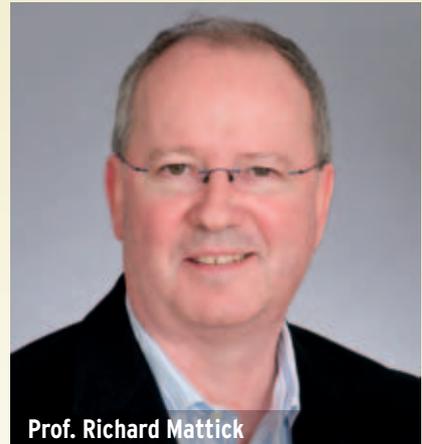
In 2010 Dr Kristy Martire continued her work on drugs and crime with a particular emphasis on the prevalence and contribution of problematic alcohol and other drug use to sexual recidivism risk. Her work relating to fine debts among incarcerated substance users was accepted for publication in the *Australian and New Zealand Journal of Criminology*.

Dr Martire continued her research relating to offender reintegration issues through collaboration with investigators at the University of Toronto, Canada, and through the supervision of Forensic Psychology Masters student Rebecca Medlock, whose dissertation evaluated the impact of the Justice Health Connections Project on recidivism.

Dr Martire also commenced work focusing on smoking cessation interventions and success in lower socioeconomic status groups. Analyses modelling the likely impact of financial strain on the efficacy of price-based interventions to reduce smoking prevalence in Australia and the United States appeared in *Addiction* in 2010. She has presented this analysis at the annual conference of the Financial Counsellors Association of NSW and is now collaborating with national and international researchers to secure funding to trial cessation interventions targeting disadvantaged groups.

Dr Martire was awarded a Faculty of Medicine Deans Rising Star Award in 2010. She is a member of the Australian Psychological Society and a full member of the APS College of Forensic Psychologists.

Dr Martire will be taking up a position as Lecturer in the School of Psychology at the University of New South Wales in 2011.



Prof. Richard Mattick

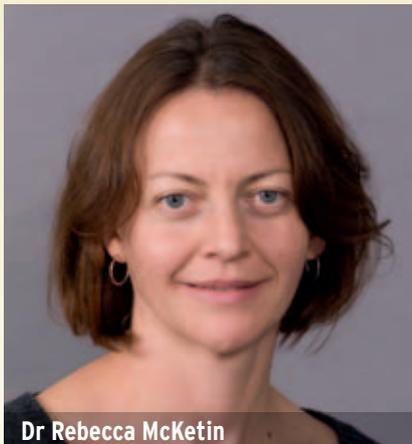
Professor Richard Mattick has worked as chief investigator (CI) on a large ARC grant (\$760,000) commencing in 2010 for five years, studying nearly 15,000 high school children and their families to investigate the role of parents in adolescents' drinking habits. He will lead a team from NDARC working with researchers from the Universities of Queensland, Tasmania and Newcastle. NDARC PhD student Ms Monika Wadolowski won a Rotary Health Scholarship and a Commonwealth APA Scholarship to work on the project.

Professor Mattick authored an update of the highly-cited Cochrane Collaboration review of research evidence on the effects of buprenorphine maintenance treatment compared with methadone maintenance treatment (MMT) (Mattick, Breen, Kimber and Davoli).

Professor Mattick is a coordinating investigator with Dr Delyse Hutchinson, on a 2011 NHMRC-funded Cannabis Cohort Research Consortium project. He is also leading a review of opioid prescribing in Tasmania to improve policy and practices with regard to these S8 medications.

Professor Mattick is working on a large project with Briony Lrance and Professor Louisa Degenhardt addressing the assessment of aberrant opioid use behaviours, and is involved with a number of projects on new formulations of opioids available in Australia.

He continues as CI on the \$1.9 million NHMRC grant to study the impact of parental drug use on infant development from the prenatal period through to the early years of life (Mattick, Hutchinson, Burns, Swift et al.).



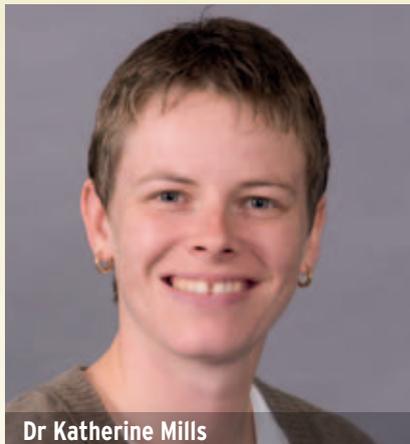
Dr Rebecca McKetin continued her psychostimulant research in 2010, completing a series of projects funded by the Australian Government Department of Health and Ageing, including:

- A three-year follow-up of the Methamphetamine Treatment Evaluation Study (MATES) cohort, which found that many methamphetamine users, despite showing an initial recovery following treatment, had relapsed and sought further help for their drug use;
- A pseudo-cohort analysis of the National Drug Strategy Household Survey, which found an ageing cohort of ecstasy users in Australia and a recent resurgence in the popularity of ecstasy among young women; and
- The development of a brief online intervention for psychostimulant use, in collaboration with Dr Frances Kay-Lambkin and researchers from the Australian National University.

Other activities included a global review of amphetamine-type stimulant use, a contribution on methamphetamine addiction to an Elsevier *Encyclopaedia of Addictive Behaviours*, and a systematic review on the effectiveness of precursor controls in reducing methamphetamine use.

Dr McKetin co-supervised two PhD students who completed this year: Andreas Pluddeman on methamphetamine use among youth in South Africa and David Bosanquet on the impact of illicit methamphetamine use on driving.

Her professional contributions to the field include editorial roles on *Drug and Alcohol Review* and *Contemporary Drug Problems*, participating on the steering committee for the NSW Stimulant Treatment Programs and being on the Scientific Advisory Committee for the annual APSAD conference.

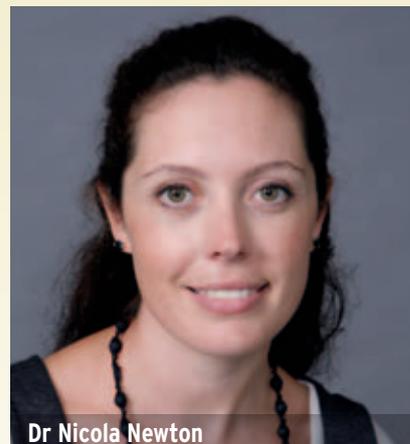


Dr Katherine Mills commenced her NHMRC Career Development Award which examines the epidemiology, classification and treatment of comorbid substance use and PTSD. She and her team completed work on a landmark NHMRC-funded randomised controlled trial which examined an integrated intervention for PTSD and substance use disorders. Dr Mills presented the findings from this study at a number of conferences throughout the year.

In May, Associate Professor Sudie Back, one of the co-investigators on this grant, visited NDARC as a Fulbright Scholar to plan future research in this area. With other researchers from NDARC, the University of Newcastle, and NSW Justice Health, Dr Mills successfully obtained funding from NSW Health to conduct two studies to further examine treatment options for this comorbidity.

Dr Mills completed the national dissemination of the Australian Government Department of Health and Ageing (DoHA) funded *Guidelines on the management of co-occurring alcohol and other drug and mental health conditions in alcohol and other drug treatment settings*. In recognition of the impact this work has had on the field, Dr Mills received the 2010 NDARC Community Impact Award. Dr Mills also received a Faculty of Medicine Dean's Rising Star Award.

Dr Mills supervised two PhD students: Emma Barrett (primary supervisor) and Francis Matthew-Simmons (co-supervisor). Barrett received third prize in the Australasian Society for Traumatic Stress Studies Annual Academic Awards for her work examining the relationship between substance use, PTSD and violence.



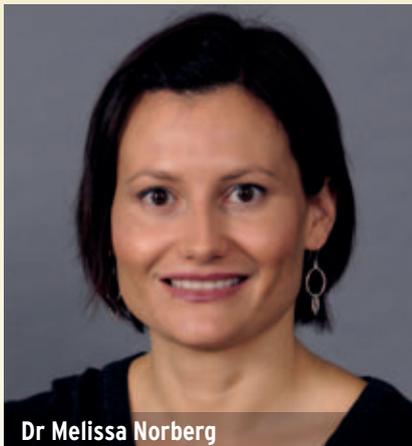
In 2010 Dr Nicola Newton commenced her three year UNSW Vice-Chancellor's postdoctoral Fellowship at NDARC. Her postdoctoral research involves developing and evaluating a comprehensive model for substance use prevention in schools with the aim of maximising prevention outcomes for both low and high-risk students.

To fund this research, Dr Newton was successful, alongside Professor Maree Teesson, Dr Patricia Conrod and Dr Tim Slade, in obtaining a large NHMRC project grant to run over five years. The research project will be known as the CAP study and will test the efficacy of combining the effective universal Climate Schools and the UK-based Preventure programs, which targets personality risk factors. This work is to 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.

In addition, 2010 also saw the conclusion of the development of the Climate Schools Ecstasy project, funded by DoHA. This program is an internet-based program for the prevention of ecstasy use in Year 10 students that is now ready to be trialled.

During the year Dr Newton published papers in a number of prestigious journals and presented her research at various national and international conferences. These included the 6th World Conference for the Prevention of Mental Disorders in Washington DC, US, and the Australasian Society for Psychiatric Research in Bondi, Australia. She was also invited as a plenary speaker to the VAD conference in Brussels, Belgium.

# YEAR IN REVIEW



Dr Melissa Norberg

Dr Melissa Norberg is the National Clinical Services and Evaluation Manager at the National Cannabis Prevention and Information Centre (NCPIC).

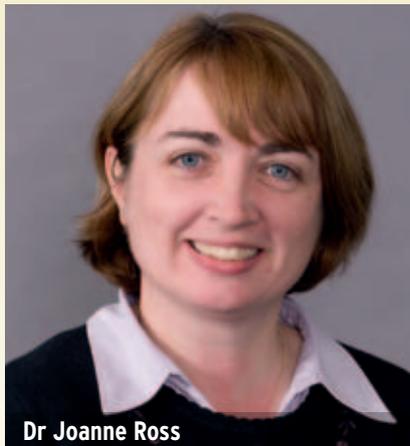
She and her team are developing and testing alternative methods for delivering treatment for cannabis use disorders. Her team examined the feasibility and acceptability of delivering treatment through the post, telephone, and internet.

In addition, Dr Norberg tested the efficacy of a brief cannabis intervention for young people with co-occurring mental health issues. The brief intervention was adjunctive to treatment for concurrent mental health problems, such as anxiety, depression, and psychotic disorders.

This year also marked the beginning of evaluation of a brief intervention for reducing ecstasy use. Together with fellow NDARC colleagues, Professor Jan Copeland and Dr Rebecca McKetin, Dr Norberg recruited regular ecstasy users to examine if adherence to motivational interviewing principles is responsible for producing reductions in ecstasy use.

Outside of treatment research, Dr Norberg was involved in the evaluation of two cannabis assessment measures: a cannabis withdrawal scale and a cannabis use interview. And outside of addiction research, she was involved with examining whether individuals with compulsive hoarding exhibit impairment on executive functioning and categorisation tasks.

In recognition of her work with social anxiety and alcohol use in university students, Dr Norberg was awarded a New Investigator Award from the Women's Issues in Behavior Therapy Special Interest Group of the Association for Behavioral and Cognitive Therapies, in the US.



Dr Joanne Ross

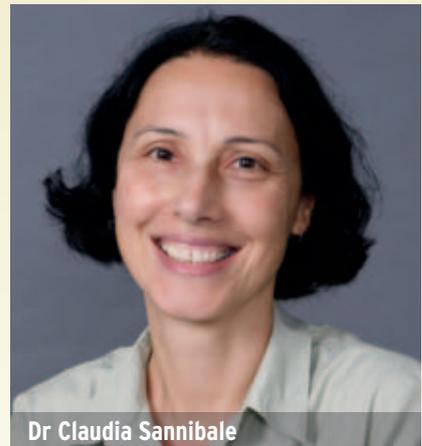
In 2010, Dr Joanne Ross and colleagues (Professor Shane Darke and Mark Deady) commenced work on Stage 2 of the suicide risk assessment and intervention strategies study, funded by the Australian Government Department of Health and Ageing (DoHA). Stage 2 of the project is being conducted in partnership with an Advisory Panel from the Network of Alcohol and other Drugs Agencies (NADA).

The aim of the study is to develop resources to assist drug and alcohol workers in the identification and management of suicide risk among clients of residential rehabilitation services.

These resources include a suicide policies and procedures pro-forma for managers, to help guide the process of creating supportive links with mental health services, and upon which suicide risk assessment guidelines can be established; an acute suicide risk screener to help guide and document acute risk assessments; and a suicide risk formulation template.

Findings from Stage 1 of the project were published in an NDARC technical report earlier this year, and were presented at the 13th European Symposium on Suicide and Suicidal Behaviour in September.

Dr Ross was an investigator on the three year follow-up of the Methamphetamine Treatment Evaluation Study (MATES) cohort led by Dr Rebecca McKetin, completed earlier this year. She graduated with a Masters of Clinical Psychology in April, and is now complementing her research by gaining experience in clinical practice. She is an Assistant Editor for *Addiction*.



Dr Claudia Sannibale

In 2010, Dr Claudia Sannibale completed several externally funded treatment trials. The NHMRC funded multi-site study *Integrating treatment for alcohol use problems and comorbid PTSD* (Sannibale, Teesson, Mills, Creamer, Sitharthan) was completed and early data analyses of the main outcomes were presented at national and international meetings.

Results reveal large reductions and effect sizes in alcohol consumption and symptoms of PTSD and other areas of functioning among participants in both arms of the treatment trial. These results suggest that delivering effective treatment for alcohol dependence alone is sufficient to generate large improvements across a wide range of domains among individuals with complex presentations. Several articles are currently in preparation for journal submission.

Other studies that have now ended include the NHMRC funded *The efficacy of an intervention for PTSD among illicit drug users* (Mills, Teesson, Baker, Hopwood, Sannibale, Back, Brady) and the Alcohol Education Research Foundation (AERF) funded *A randomised controlled trial of structured stepped-care intervention for psychiatric comorbidity*. The results of these trials have been analysed and are being prepared for publication and wide dissemination.

The *Randomised controlled trial of treatment for alcohol use disorders and social phobia* (Baillie, Sannibale, Teesson, Rapee, Haber) is still in its recruitment phase and is progressing well.

In 2010 Dr Sannibale received an AERF innovative project grant to conduct a small pilot Teen Triple-P intervention for the treatment of adolescent alcohol abuse.



A/Prof. Anthony Shakeshaft

Associate Professor Anthony Shakeshaft reduced his hours at NDARC in late 2009 in order to take up an appointment as Head of the Research Division at the Sax Institute. He returned to NDARC full-time in October 2010.

With funding from the Alcohol Education Research Foundation (AERF), and in collaboration with the University of Newcastle, he continued to lead the randomised community trial aimed at reducing alcohol harms: the Alcohol Action in Rural Communities (AARC) project – the largest of its type in the world. Having completed the baseline data collection and intervention phases of the project, 2010 work focused on obtaining and analysing the post-intervention data, writing papers for publication and examining ways to sustain the project beyond its active research phase.

AARC has also made a significant contribution to building community-based research capacity. Dr Dennis Petrie was awarded his PhD in 2009, accepting a prestigious lecturing position at the University of Dundee, UK. In 2010, a further two PhD candidates submitted their theses and both have obtained academic positions for 2011: Courtney Breen has an appointment at NDARC and Alys Havard has received a highly competitive NHMRC Post-Doctoral Training Fellowship. Josh Byrnes and Hector Navarro are expected to submit in 2011.



Dr Tim Slade

In 2010, Dr Tim Slade continued his role as a Senior Research Fellow providing biostatistical advice to staff and students at NDARC.

He continued to work closely on a number of projects, most notably the Alcohol Action in Rural Communities (AARC) project with Courtney Breen and Associate Professor Anthony Shakeshaft. This work aimed to identify useful measures of alcohol-related crime through the application of linear mixed models to routinely collected police record data.

He was involved in a number of collaborative projects using data from the 2007 National Survey of Mental Health and Wellbeing. These included investigations of the determinants of service use for mental health problems in the Australian general population and examinations of changes over time in the prevalence of alcohol use and alcohol use disorders.

He 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. Output from this project included empirical evaluations of the proposed DSM-5 alcohol use disorder diagnostic criteria.

In 2010 Dr Slade commenced an NHMRC funded project examining young adults' interpretations of the diagnostic criteria for alcohol use disorders. This project seeks to determine whether the high prevalence of alcohol use disorders in young people is a true 'youthful epidemic' or the result of biases introduced by the way alcohol use disorders are assessed.



Dr Wendy Swift

Dr Wendy Swift continued her focus on cannabis. As a member of the Cannabis Cohort Research Consortium (CCRC), she was a chief investigator on successful NHMRC and Rotary grants enabling this group to continue its work conducting longitudinal analyses of cannabis use in major Australasian cohorts.

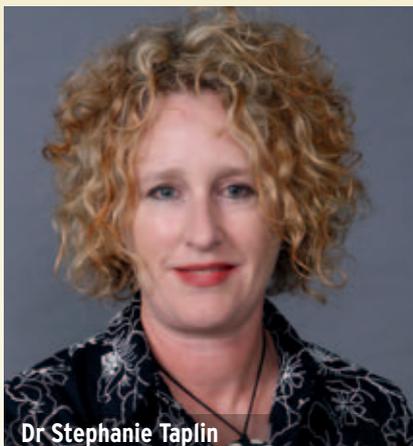
In 2010 she finalised papers from a recently completed collaborative project with the Centre for Adolescent Health, involving secondary analyses of cannabis use in the Victorian Adolescent Health Cohort Study, and is involved in ongoing collaborations examining alcohol use in this cohort.

Dr Swift has continued to work on her NCPIC-funded demonstration project to determine cannabis potency (strength) in Australian cannabis seizures. Due to state drug laws regulating access to cannabis seizures for research purposes, this project has been complicated to realise. However, NSW Police have kindly permitted access to cautioning seizures so these important data should be available in 2011.

She continued her collaboration on several studies, including an ARC Discovery Grant estimating the economic costs and benefits of alternate cannabis policy options and research on illicit drug use among professional athletes. She was an Associate Investigator on a Faculty ECR grant awarded to Sally Rooke to examine the physical effects of long-term cannabis use.

Dr Swift is currently supervising Paul Nelson's doctoral thesis examining outcomes among young offenders and is co-supervising Ed Silins' thesis on cannabis use moderation in a longitudinal cohort study.

## YEAR IN REVIEW



Dr Stephanie Taplin is completing the final year of her three year postdoctoral research fellowship,

She has been working with Professor Richard Mattick on a study of *Child protection and mothers in substance abuse treatment* funded by the NSW Department of Community Services (DOCS) and the University of NSW.

The first half of 2010 was predominantly spent recruiting and interviewing women for the study. In total, 175 women have been interviewed, all of whom were on the NSW Opioid Treatment Program (OTP) and had children under 16 years of age.

A great deal of qualitative and quantitative data were collected from these women about their substance use and treatment histories, their demographic characteristics, children and parenting, and any parenting-related interventions, particularly those from child protection services.

Administrative records for those women who have consented have also been accessed. Data has now been entered and the first results have been presented at a number of conferences in the latter half of 2010, including APSAD's Annual Conference, *Building on the Capital*, in Canberra. A report and journal articles will follow in 2011.

Throughout 2010, Dr Taplin 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, providing expert advice to reviews and committees, reviewing research, and participating in a number of forums and discussion groups.

## POSTGRADUATE PROGRAM

NDARC had 24 postgraduate students enrolled during 2010. Congratulations to Dr Elizabeth Conroy who was awarded her doctorate in December 2010. Elizabeth will commence work as Research Fellow at NDARC in January 2011. During the year, four other PhD candidates (Courtney Breen, Alys Havard, Sarah Larney and Fiona Shand) submitted and it is expected that they will graduate in early 2011.

As in previous years, our students' achievements received much recognition. On 10 November 2010 the following three PhD candidates were presented with Dean's List Awards at the Faculty of Medicine Annual Awards Ceremony:

- Emma Barrett
- Briony Larance
- Fiona Shand

Acknowledgement on the Dean's List is the highest award made by the UNSW Faculty of Medicine to any student. The Dean's List acknowledges the achievements of young researchers with the potential to become career scientists and to be appointed to the Faculty or a research centre at UNSW.

In August 2010 the NDARC Annual Symposium was held and two of our PhD students received top honours in the poster awards: Emma Barrett received the award for Best Clinical Research Poster and Courtney Breen received the award for Best Policy Research Poster.

On 22 October 2010, the School of Public Health and Community Medicine Post-Graduate Research Student Conference 2010 was held. The Post-Graduate Research Student Conference gives students and staff inspiring insights into the research being undertaken by research students within the SPHCM and associated Research Centres. It is a valuable opportunity for students to learn

and practice their conference presentation and "Question & Answer" skills as well as receive feedback about their research. The conference also provides the opportunity to network with others working in similar fields. Six of our postgraduate students gave oral presentations at the Conference:

- Amy Johnston
- Francis Matthew-Simmons
- Louise Mewton
- Hector Navarro
- Paul Nelson
- Marian Shanahan

Paul Nelson was one of the five finalists in the oral presentation category. In addition, two of our postgraduate students gave poster presentations:

- Bianca Calabria
- Edmund Silins

At the December 2010 Staff Meeting, Elizabeth Conroy received the NDARC Jennifer McLaren Award for Outstanding Research Achievement. This annual award is open to non-academic research staff and PhD students.

NDARC's postgraduate students were actively involved in national and international conferences in 2010 (see Appendix G). Hector Navarro (first round recipient of the 2009 NDARC International Travel Assistance Scheme Award) attended the 8th European Conference on Health Economics in Helsinki, Finland. Paul Nelson (second round recipient of the 2009 NDARC International Travel Assistance Scheme Award) attended the World Psychiatric Association Section on Epidemiology and Public Health meeting in Lisbon, Portugal.



# FUNDING AND COMMUNICATION

## FUNDING

The current funding from the Australian Government Department of Health and Ageing is now based on calendar years, rather than financial years. This change, which came into effect on the 1st of January, 2009, will run until the end of December 2011, until a new contract is executed. For research grants and funding please refer to Appendix D.

The costs associated with each new schedule are kept separate from the core-funding schedule, which simplifies budget analysis and sign-off procedure from the Department. This change enables NDARC to more effectively separate each project from core funding.

NDARC also received funds from Federal Government granting agencies, including the NHMRC, ARC and NDLRF; NSW state government departments including NSW Health, DoCS, Bureau of Crime Statistics, RTA and Juvenile Justice; charities, foundations and professional organisations; and international bodies, such as the United Nations, World Health Organization and the US National Institutes of Health.

Expenditure of \$14.559 million was incurred during the 2010 calendar year, from core funding, research grants, infrastructure and fellowships awarded to NDARC.

## DISSEMINATION

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

In 2010, our staff gave 258 presentations at national and international conferences; published more than 150 articles in peer reviewed journals; 10 technical reports and monographs; nearly 50 other reports; and nine book chapters. As well, staff conducted more than 200 external training sessions and workshops - 167 of which were as part of the National Cannabis Prevention and Information Centre's (NCPIC) professional and community training program.

The extensive dissemination activities of our academic staff are supported and complemented by a robust communications strategy which has four major components:

media relations; publications such as *CentreLines*, the Annual Report and fact sheets; the website and the NDARC Annual Symposium.

The Centre issued 17 media releases on topics including cannabis use in teenagers; the impact of decriminalisation policy in Portugal; the Medically Supervised Injecting Centre; price signals and drug and alcohol use; decline in purity and availability of ecstasy; media reporting on drugs; rates of acquisition of hepatitis C in Australian prisons; and new figures for rates of alcohol abuse in Australia. These were all widely followed up by print, radio, television and online media.

A media release entitled 'Australia's Poor Alcohol Report card' - issued to publicise the findings of Professor Maree Teesson and Dr Tim Slade's report, *Prevalence and Correlates of DSM-IV Alcohol Abuse and Dependence in Australia: findings of the 2007 National Survey of Mental Health and Wellbeing* - attracted more than 70 media mentions, including interviews on TV and radio and 15 print articles.

Our senior academics provided expert comment to a broad range of media, including the ABC, The Australian, *The Sydney Morning Herald*, Channel 10, Channel 7 and local and national radio, on topics as varied as ecstasy deaths; smoking in pregnancy; the minimum legal drinking age; drug decriminalisation; energy drinks; cocaine trends; illicit drugs in sport; opioid substitution therapy; and rates of alcohol harm in Indigenous communities.

Our Annual Symposium in 2010 was a great success and focused on the translational impact of our research: what the findings mean for clinicians and policy makers. We held the Symposium for the first time in the impressive surrounds of the John Niland Scientia Centre at the UNSW.

A major focus of the communications strategy has been the overhaul of the NDARC website, with the UNSW Faculty of Medicine. NDARC staff participated in a half-day workshop to define the direction and key audiences for the new website which will go live in 2011.

CORE FUNDING COMPONENT	2010
Baseline Administration	\$912,500
Baseline Materials	\$245,000
Baseline Research Capacity	\$1,271,684
PhD Scholarships	\$54,000
Illicit Drug Reporting System	\$455,000
<b>TOTAL CORE FUNDING</b>	<b>\$2,938,184</b>

SCHEDULE	DESCRIPTION	2010
5	CLIMATE Schools Ecstasy Module	\$45,454
6	Injecting Drug Users Interview Component-IDRS	\$430,629
7	Ecstasy and related Drugs Reporting System (EDRS)	\$54,402
8	Brief Intervention - The Ecstasy Check-Up	\$9,091
9	Redevelopment of On Thin Ice: A User's Guide	\$4,545
10	Evaluation Outcomes for Methamphetamines (MATES)	\$6,909
11	Illicit Drugs and the Media	\$15,700
12	Ecstasy Use Among Young Women in Australia	\$5,988
13	National Comorbidity Guidelines Reprint and Distribution	\$60,071
14	Information Booklets for Substance Users	\$115,000
15	Suicide Risk Assessment (Stage 2)	\$75,125
16	Ecstasy and related Drugs Reporting System (EDRS)	\$289,441
<b>TOTAL CORE FUNDING FOR SCHEDULES 5 TO 16</b>		<b>\$1,112,355</b>

# CURRENT PROJECTS

## EPIDEMIOLOGY

### National Illicit Drug Indicators Project

**NDARC Staff:** Dr Lucy Burns and Amanda Roxburgh

**Rationale:** NIDIP was established in 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, then, include the enhanced dissemination of information on trends in harms related to opioid and psychostimulant use and use of prescription drugs, 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.

**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 separations 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.

**Progress:** NIDIP has successfully negotiated access to several national routine data collections including the National Hospital Morbidity Database (NHMD), the Alcohol and Other Drug Treatment Services National Minimum Data Set (AODTS-NMDS), the Australian Bureau of Statistics Causes of Death Collection, and the National Coroner's Information System (NCIS). Jurisdictional data from NSW is also accessed for reporting in the IDRS and EDRS reports including ambulance overdose callouts, calls to the Alcohol and Drug Information Service and the Family Drug Support Service, drug-related emergency department presentations and numbers of needles distributed.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** 2002

**Expected Date of Completion:** Ongoing

### Global Burden of Disease: Mental Disorders and Illicit Drug Use Expert Group

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

**Other Investigators:** Professor Harvey Whiteford, Amanda Baxter, Adele Somerville, Fiona Charlson, Alize Ferrari, Roman Scheurer, Bianca Garcia and Allison Ventura (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 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 over 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 and cannabis.

**Progress:** Systematic reviews of heroin and other opioids, amphetamine type stimulants, cocaine and cannabis have been conducted, and data extracted. The data analysis of mortality, prevalence, incidence and remission/duration of dependence on the illicit drugs is underway for the 1990 and 2005 time periods. The comparative risk assessment for illicit drugs is in progress with some early data analysis of injecting drug use and regular cannabis use.

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

**Date Commenced:** July 2007

**Expected Date of Completion:** 2011

### Study on HIV incidence among injecting drug users in Northern Shan States, Burma

**NDARC Staff:** A/Prof. Kate Dolan and Professor Richard Mattick

**Rationale:** HIV prevalence among IDUs in Burma had reached over 80% in some areas. HIV prevention has been introduced and is being expanded.

**Aims:** The aim of this project is to study the seroincidence of HIV transmission among IDUs and other drug users living in Lashio Township in the Northern Shan States of Burma, as part of the monitoring mechanism to detect the impact of harm-reduction initiatives in this area. Changes in HIV risk behaviours among IDUs, and awareness of HIV/AIDS and STI among them and their families, will also be studied. In addition, community perceptions of the environmental security related to drug use will be studied.

**Design and Method:** Sample size calculations indicated the 162 drug injectors were required in each group; one group accessing HIV prevention programs and one group with little or no access to HIV prevention programs.

**Progress:** Professor Dolan visited the Substance Abuse Research Association (SARA) in May and spent one week carrying out a needs assessment. She also visited a research site in the Golden Triangle to observe the study intake procedures. Over 100 IDUs have been recruited in the study.

**Output:** A needs assessment of SARA has been completed. The study of community perceptions has started.

**Funding:** UNODC Myanmar

**Date Commenced:** January 2010

**Expected Date of Completion:** December 2011

### Alcohol-related crime in the Sydney Local Government Area

**NDARC Staff:** Stephanie Love and A/Prof. Anthony Shakeshaft

**Rationale:** There has been considerable recent concern about escalating rates of alcohol-related harm in inner Sydney from both the City of Sydney Council and residents. NDARC was approached to provide an empirical description of whether rates of alcohol-related crime in the inner city areas of Kings Cross and Darlinghurst have been increasing over time.

**Aims:** The aim of this project is to apply a surrogate measure of alcohol-related crime to Sydney Local Government Area (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:** The initial analyses have been completed and the report is currently available on the City of Sydney Council website. The data showed an increase in alcohol-related crime in Kings Cross between 2000 and 2007 and in Darlinghurst for the same time period. The most likely explanation for the increase in Kings Cross is the density of alcohol outlets and the high proportion of them that are open late at night, while the most likely explanation for Darlinghurst is the substantial increase in the number of alcohol outlets over that time period. Annual updates of the analysis are to be conducted. The update to the end of 2009 shows that the upward trends in rates of alcohol-related crime have continued for both Kings Cross and Darlinghurst.

**Output:** To date, a report has been written and is available on the City of Sydney website.

**Funding:** City of Sydney Council

**Date Commenced:** April 2008

**Expected Date of Completion:** December 2012

### Alcohol use disorders in young adults: 'Youthful epidemic' or diagnostic bias?

**NDARC Staff:** Dr Tim Slade, Professor Maree Teesson and Louise Newton

**Other Investigators:** Professor Robert F Krueger (University of Minnesota)

**Rationale:** Estimates of the prevalence of alcohol use disorders (i.e. abuse and dependence) are consistently higher for younger adults compared to their older counterparts. Nationally representative surveys have indicated that one in five young Australians aged 18-24 years are diagnosed as having an alcohol use disorder, with evidence suggesting that after the age of 24 the prevalence declines rapidly. In response to this finding, the Australian Government recently announced a \$55 million initiative aimed at reducing alcohol misuse amongst young Australians. Whilst rates of alcohol use amongst young adults are clearly high, questions remain as to whether this 'youthful epidemic' of alcohol use disorders is real or a methodological artefact of the prevailing classification criteria. The current project aims to resolve these questions.

# CURRENT PROJECTS

**Aims:** The aims of the project are to:

Determine potential sources of bias in young adults' interpretations of the diagnostic criteria for alcohol use disorders

Propose practical recommendations for revision of these criteria for inclusion in upcoming editions of the major psychiatric classification systems.

**Design and Method:** The current project seeks to build on our previous program of research by using the novel investigative techniques of cognitive interviewing derived from the converging fields of cognitive science and survey methodology to explore the reasons behind the apparent shortcomings in the alcohol use disorder criteria. These novel techniques quantify an individual's understanding of the diagnostic criteria and signal potentially ambiguous or misunderstood criteria. The results of the current project will provide practical recommendations for modifications to the alcohol use disorders diagnostic criteria in the upcoming revised classification systems.

**Progress:** As of the end of 2010 we have recruited and interviewed a total of 102 young adults. Data are currently being analysed.

**Funding:** National Health and Medical Research Council

**Date Commenced:** January 2010

**Expected Date of Completion:** December 2011

## Pap test screening for cervical cancer among women with a substance use hospital admission

**NDARC Staff:** Dr Lucy Burns and Dr Elizabeth Conroy

**Other Investigators:** Dr Anne Krickler (Sydney University)

**Aims:** This research builds on a data linkage study that is currently underway to investigate the rates of high grade cervical abnormalities and cervical cancer among women with a substance use hospital admission in NSW. Previously, records from women aged 20-54 with a substance use hospital admission in the NSW Admitted Patient Data Collection (APDC) were linked to records held by the NSW Cancer Registry (CCR), the NSW Register of Births, Deaths and Marriages (RPDM), Australian Bureau of Statistics (ABS) mortality data and the NSW Pap Test Register (PTR) from July 1996 to June 2006 by the Centre for Health Record Linkage (CHeReL). We will calculate rates of deaths, cervical cancer, high-grade abnormalities and Pap tests in women with a substance use hospital admission code (cases) and compare them with rates in a matched sample of women of the same age who do not have a substance use code in their hospital admission (controls).

We aim to:

- Examine the rates of cervical Pap screening in women with substance use hospital admissions and compare these to women with a non-substance use hospital admission
- Examine the predictors of cervical Pap screening in women with substance use hospital admissions
- Examine the rates, predictors, grade and outcome of cervical cancer, controlling for cervical Pap screening status
- Make recommendations on how best to increase the rate of Pap screening and lower cervical cancer rates and mortality in these vulnerable women.

**Design and Method:** An analysis of linked data from: Admitted Patients Data Collection, Pap Test Register, NSW Cancer Register.

**Progress:** Data has been analysed and is currently being analysed.

**Funding:** NSW Health Mental Health and Drug and Alcohol Grants Program 2009/10

**Date Commenced:** February 2008

**Expected Date of Completion:** June 2011

## Evaluation of NSW Health drug and alcohol clinical liaison services

**NDARC Staff:** Dr Lucy Burns, Dr Elizabeth Conroy and Dr Tim Slade

**Other Investigators:** Cate Wallace (NSW Health) and Dr Rosalie Viney, Dr Rebecca Reeve and Kees van Gool (Centre for Health Economics Research and Evaluation)

**Aims:** To determine whether the implementation of clinical liaison services for drug and alcohol increases the identification of patients with drug and alcohol problems and improves the health outcomes and treatment pathways for patients with drug and alcohol problems.

**Design and Method:** The objectives of the evaluation are to:

- Undertake a snapshot survey, aimed at determining the prevalence of drug and alcohol presentations to emergency departments and admissions to selected inpatient wards in six NSW hospitals
- Design and undertake three-month interviews for a longitudinal cohort study aimed at measuring the impact of enhanced clinical liaison services on emergency departments and inpatient wards and examining clinical pathways.

**Progress:** Data is being collected.

**Funding:** NSW Health

**Date Commenced:** November 2010

**Expected Date of Completion:** December 2012

## IDENTIFICATION OF POTENTIAL HARMS

### Cannabis Cohort Research Consortium (CCRC)

**NDARC Staff:** Dr Delyse Hutchinson, Professor Richard Mattick, Edmund Silins, Professor Jan Copeland, Professor Louisa Degenhardt, Marian Shanahan, Dr Tim Slade, Dr Wendy Swift, Professor Maree Teesson and Dr Laura Vogl

**Other Investigators:** Professor Steve Allsop (National Drug Research Institute, Curtin University), Professor David Fergusson and A/Prof. John Horwood (Christchurch School of Medicine and Health Sciences, University of Otago), Professor Wayne Hall (School of Population Health, University of Queensland), Professor Jake Najman and Mohammad Hayatbakhsh (Queensland Alcohol and Drug Research and Education Centre, University of Queensland), Professor Richie Poulton (Dunedin Multidisciplinary Health and Development Research Unit, University of Otago), Professor Bryan Rodgers (Australian Demographic and Social Research Institute, Australian National University), Diana Smart (Australian Institute of Family Studies), Professor John Toumbourou (School of Psychology, Deakin

University), Dr Craig Olsson, Professor George Patton and Carolyn Coffey (Centre for Adolescent Health, Royal Children's Hospital, Melbourne), Dr Rachel Skinner (Telethon Institute for Child Health, University of Western Australia) and Dr Robert Tait (Centre for Mental Health Research, Australian National University)

**Affiliates:** Dr David Allsop and Dr John Howard (NCPIC), Emma Black, Paul Nelson and Dr Anton Clifford (NDARC), Dr Caitlin Hughes (DPMP), Trish Jacomb (Centre for Mental Health Research, Australian National University), Kylie Lee (University of Sydney), Dr Primrose Letcher (School of Paediatrics, Royal Children's Hospital, Melbourne), Dr Alan Clough (School of Indigenous Australian Studies, James Cook University, Cairns), Dr Eugen Mattes (Telethon Institute for Child Health, University of Western Australia), Dr Andrew Percy (Queens University, Belfast), Ann Sanson (University of Melbourne), Dr Tim Windsor (Australian National University) and A/Prof. Jenny Williams (Department of Economics, University of Melbourne)

**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 developing collaboration which stemmed from the need to better address pressing questions about the relationship between cannabis, other drug use, life-course outcomes 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 (2,000 Stories), to potentially strengthen associations between early cannabis use and educational outcomes.

A paper is also in preparation which uses Structural Equation Modelling to examine potential reciprocal relationships between cannabis use and depression across several cohorts.

An NHMRC grant application was successful which will extend the work of the pilot study, due to commence in 2011. The CCRC was also involved in an unsuccessful but highly competitive bid for a Cooperative Research Centre for Young Australians (led by Professor Ann Sanson, with Professor George Patton co-leader of one of three research programs).

Additionally, based on how well the CCRC presents the theory and best practice of collaboration, the Consortium has been selected by the Australian Research Alliance for Children & Youth (ARACY) as a case study of a 'network in action' and promoted to ARACY members and others interested in collaboration management.

**Funding:** NDARC

**Date Commenced:** 2006

**Expected Date of Completion:** Ongoing

## Child protection and mothers in substance abuse treatment

**NDARC Staff:** Dr Stephanie Taplin and Professor Richard Mattick

**Aims and Rationale:** Overseas research has found that families where alcohol or other drug use is present are more likely to come to the attention of child protection services, more likely to be re-reported, more likely to have their children removed from their parents' care, and more likely to have them remain in out-of-home care for long periods of time. Little research has focused on the reasons for this, however, and the appropriateness of the interventions provided to this population.

The Child Protection and Mothers in Substance Abuse Treatment Study is the first study to interview a relatively large sample of women in opioid pharmacological treatment in NSW about their children, parenting and child protection involvement, and aims to increase our knowledge and understanding of these complex issues.

**Design and Method:** 175 women on the NSW Opioid Treatment Program (OTP) at nine sites throughout Sydney were recruited into the study between May 2009 and May 2010. The major selection criterion was that they had a birth child under the age of 16 years. Women were asked to complete a one-off face-to-face interview covering their substance use, abuse and treatment histories, their demographic characteristics, children and parenting, and any parenting-related interventions, particularly those from child protection services. Administrative records for those women who consented were also accessed.

**Progress:** Data collection for the study has now been completed. First results have been presented at a number of conferences in the latter half of 2010 and a final report is due in February 2011. Journal publications will follow in 2011.

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

**Date Commenced:** February 2008

**Expected Date of Completion:** March 2011

## The characteristics of cannabis in Australia

**NDARC Staff:** Dr Wendy Swift and Paul Dillon

**Other Investigators:** Professor Iain McGregor and Dr Jonathon Arnold (University of Sydney) and Professor Steve Allsop (Curtin University)

**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. This study builds on previous pilot work to address this issue.

**Aims:** This study aims to establish a methodology to assess the characteristics of the locally available cannabis product, and to

# CURRENT PROJECTS

use this methodology to collect this information using cannabis cautioning seizures in NSW. The project has several potential public health and law enforcement benefits, including: (i) 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; (ii) the protocol may serve as a model to be expanded to other jurisdictions to provide routine monitoring and to measure longitudinal changes in, for example, potency, that may result from policy, law enforcement and public health strategies; (iii) 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; and (iv) intersectoral collaboration between NDARC, NCPIC, the University of Sydney and NSW Police.

**Design and Method:** We will conduct laboratory analysis of 200 cannabis cautioning seizures from urban and rural Local Area Commands in NSW. Analysis of cannabinoid content (potency) in the seized cannabis samples will follow the HPLC method. Following extraction of the plant material, HPLC with UV detection will be used to quantify the following cannabinoids: THCA, THC, CBD, CBDA, CBG, CBGA, CBN. We intend to also quantify THCV and CBC in these plants given contemporary interest in their pharmacology and possible modulatory effect on THC actions. Cannabinoid levels derived from HPLC analysis will be cross-checked with those obtained from a GC-MS approach. An additional arm of our project is to use PCR-based genotyping approaches and GC radioisotope analysis to explore similarities and differences across the 200 seized samples in terms of key gene expression (SNP analysis) and radioisotope (C14, N15) content. This information can point to the diversity or otherwise of current Australian cannabis supplies, perhaps indicating whether the cannabis has been grown in Australia or imported from elsewhere, and whether it has been grown in outdoor plantations or hydroponically.

**Progress:** We have received approval from NSW Police to access 200 cannabis cautioning seizures from urban and rural regions of the state. We are finalising contractual agreements with NSW and expect to start analyses in early 2011.

**Funding:** National Cannabis Prevention and Information Centre

**Date Commenced:** September 2008

**Expected Date of Completion:** June, 2011

## Impact of parental substance use on infant development and family functioning – pilot study

**NDARC Staff:** Dr Delyse Hutchinson, Professor Richard Mattick, Dr Lucy Burns, Marian Shanahan, Dr Tim Slade, Dr Wendy Swift, Emma Black, Gabrielle Campbell, Joanne Cassar, Laura Dewberry, Maria Gomez, Thea Gumbert, Erin Kelly and Megan Sety

**Other Investigators:** Professor Steve Allsop (National Drug and Alcohol Research Institute, Curtin University), Professor Jake Najman (Queensland Alcohol and Drug Research and Education Centre, University of Queensland), Professor Elizabeth Elliot (The Children's Hospital at Westmead, University of Sydney Clinical School), Dr Sue Jacobs (Royal Prince Alfred Hospital), Dr Craig Olsson (Murdoch Children's Research Institute), Anne Bartu (Curtin University), Dr Elizabeth Maloney (University of New South Wales) and Lee Taylor (Macquarie University)

**Rationale:** This project is a pilot study to establish the feasibility and methods for a new Australian birth cohort of 1,800-2,000 Australian families (also known as the Triple B Study: Bumps, Babies and Beyond project). The research will examine a wide range of biopsychosocial factors that relate to the health and development of Australian children and families. The project has a key focus on examining the impacts of substance use in pregnant women and their partners during the prenatal period on infant development and family functioning. The results of this study will inform public health and treatment initiatives that improve the health and wellbeing of Australian children and families.

**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
- Monitor substance use patterns and mental health in pregnant women and their partners
- Examine the relationship of maternal and paternal substance use and mental health with obstetric and neonatal outcomes for mothers and infants
- Determine how prenatal substance 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:** Seventy pregnant women and their partners will be recruited during the prenatal period. 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 is 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:** Seventy-two families were recruited from Royal Prince Alfred Hospital (RPAH) in NSW. Of these, 64 completed their final 12 month follow-up, five withdrew from the study and three are due for follow-up in 2011. Over 90% of partners have agreed to participate. Three women were recruited through drugs in pregnancy services at RPAH.

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

**Date Commenced:** March 2008

**Expected Date of Completion:** Ongoing

## Impact of parental substance use on infant development and family functioning

**NDARC Staff:** Dr Delyse Hutchinson, Professor Richard Mattick, Dr Lucy Burns, Marian Shanahan, Dr Tim Slade, Dr Wendy Swift, Emma Black, Gabrielle Campbell, Joanne Cassar, Laura Dewberry, Maria Gomez, Thea Gumbert, Erin Kelly and Megan Sety

**Other Investigators:** Professor Steve Allsop (National Drug Research Institute, Curtin University of Technology), Professor Jake Najman (Queensland Alcohol and Drug Research and Education Centre, University of Queensland), Professor Elizabeth Elliot (The Children's Hospital at Westmead, University of Sydney Clinical School), Dr Sue Jacobs (Royal Prince Alfred Hospital), Dr Craig Olsson (Murdoch Children's Research Institute), Anne Bartu (Curtin University), Dr Elizabeth Maloney (University of New South Wales) and Lee Taylor (Macquarie University)

**Rationale:** Also known as the Triple B Study: Bumps, Babies and Beyond, this project is an innovative new Australian study of 1,800-2,000 families. The project is a longitudinal birth cohort which examines a wide range of biopsychosocial factors that relate to the health and development of Australian children and families. Importantly, the project has a key focus on examining the impacts of substance use in pregnant women and their partners during the prenatal period on infant development and family functioning. The results of this study will inform public health and treatment initiatives that improve the health and wellbeing of Australian children and families.

**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 wellbeing, exercise, nutrition and temperament will also be examined. The research design involves a longitudinal birth cohort study, in which 1800-2000 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 (Bayleys Infant Development Scales), which includes feedback and recommendations.

**Progress:** 300 families have been recruited through antenatal clinics at the Royal Prince Alfred Hospital (RPAH) and the Royal Hospital for Women in NSW. Of these, 12 were recruited through drugs in pregnancy services. Recruitment is ongoing and will soon commence at Liverpool Hospital in NSW and King Edward Memorial Hospital in Perth. Sixty-four families have completed the final 12 month follow-up.

**Output:** Numerous presentations have been made to staff at participating hospitals, research centres and at professional conferences.

**Funding:** National Health and Medical Research Council

**Date Commenced:** January 2010

**Expected Date of Completion:** December 2014

## 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 and Michelle Torok

**Rationale:** The main pharmacotherapy for ADHD is stimulant medication. The primary concerns about the prescription of these medications are the risks of diversion and inappropriate use. Previous research has demonstrated diversion and/or misuse of prescribed stimulant medication among adolescents and university students. No major studies of the diversion or misuse of ADHD medication have been conducted among illicit psychostimulant users, among whom high rates of misuse and diversion would be expected. The proposed study aims to examine the nature of diversion and/or misuse of ADHD medications, as well as the patterns and correlates of such use. It will provide the first data on the nature of diversion and misuse of pharmaceutical stimulants among illicit psychostimulant users and will be the first to provide information as to the potential consequences and risks of such behaviour.

**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:** 269 participants have been recruited for the study. It is anticipated that data collection will be completed by January 2011.

**Funding:** National Health and Medical Research Council

**Date Commenced:** July 2009

**Expected Date of Completion:** June 2011

# CURRENT PROJECTS

## Exploring the relationship between cannabis use and crime among adolescents

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

**Aims:** This study aims to further understand the complex relationship between substance use and criminal offending, focusing specifically on cannabis use and crime among adolescents. A primary aim of the study is to examine the social factors and situations that contribute to first cannabis use and first involvement in crime and how the two relate.

**Design and Method:** The project is comprised of three smaller studies:

- Secondary analysis of Drug Use Monitoring in Australia (DUMA) data to compare differences in the prevalence, trends and patterns of substance use and criminal offending among cannabis-using adult and adolescent police detainees
- Prospective follow-up study of 300 young people who report varying levels of involvement with the criminal justice system in NSW
- In-depth qualitative study of 20-30 young people who report a history of contact with the criminal justice system and cannabis use.

**Progress:** Baseline recruitment for the follow-up study is complete. Six month follow-up interviews with the community sample have been finalised, while follow-up interviews with the custody sample are currently underway. Approximately 50% of the interviews for the qualitative study have been completed.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** July 2008

**Expected Date of Completion:** December 2011

## Tasmanian review of opioid prescribing

**NDARC Staff:** Professor Richard Mattick and Fiona Shand

**Other Investigators:** Professor Wayne Hall (University of Queensland), Professor Louisa Degenhardt (Burnet Institute), A/Prof. Milton Cohen (UNSW and St Vincent's Hospital) and A/Prof. Nick Lintzeris (South Eastern Sydney Illawarra Area Health Service)

**Rationale:** Prescription opioids have an important role to play in providing relief of acute pain and in treating opioid dependence. Their role in chronic pain is more limited and controversial. Nevertheless, prescriptions for opioid analgesics have been rising in Australia and other developed nations for more than a decade. At the same time, many jurisdictions have experienced a rise in harms such as opioid poisonings and overdose deaths.

**Aims:** The aims of this project are to:

- Identify recent changes in opioid prescribing and any associated harms in Tasmania
- Review prescribing practices for opioids and other drugs of dependence in Tasmania and make recommendations regarding good clinical practice for chronic non-malignant pain

- Identify the educational requirements to ensure good clinical practice in the area of chronic non-malignant pain
- Review the regulatory frameworks for Schedule 8 medications.

**Design and Method:** The project will involve analysis of relevant datasets to identify changes in prescribing patterns and associated harms; interviews with prescribers in Tasmania; reviews of the published and grey literature for chronic non-malignant pain, opioid prescribing, and evidence-based regulatory systems; and the use of expert reference groups to advise on clinical practice and regulatory models.

**Progress:** The literature reviews and data analysis are currently underway and the regulatory reference group has been formed.

**Benefits:** This project will inform the policy and practices regarding opioid analgesic prescribing in Tasmania. In doing so, it will contribute to improved management of chronic non-malignant pain and potentially reduce the risk of harms associated with prescription opioids.

**Output:** Three reports to the Tasmanian Department of Health and Human Services; peer reviewed manuscripts.

**Funding:** Tasmanian Dept of Health and Human Services

**Date Commenced:** August 2010

**Expected Date of Completion:** August 2011

## Attention deficit hyperactivity disorder (ADHD) among dependent drug and alcohol users: prevalence, correlates, and implications for diagnosis and treatment

**NDARC Staff:** Dr Sharlene Kaye and Joanne Cassar

**Other Investigators:** Professor Steve Allsop and Dr Susan Carruthers (National Drug Research Institute, Curtin University of Technology), Professor David Hay and Dr Neilson Martin (School of Psychology and Speech Pathology, Curtin University of Technology), A/Prof. David Groth (School of Biomedical Sciences, Curtin University of Technology) and Professor Louisa Degenhardt (Burnet Institute)

**Collaborators:** Geurt van de Glind (Trimbos Institute, Utrecht), Wim van den Brink (Amsterdam Institute for Addiction Research), Arvid Skutle, Eva Karin Lovaas and Kari Lossius (Bergen Clinics Foundation), Johan Franck and Maija Konstenius (Karolinska University Hospital, Stockholm), Csaba Barta (Semmelweis University, Budapest) and Antoni Ramos Quiroga (Vall d'Hebron University Hospital, Barcelona)

**Rationale:** Limited research suggests a strong association between adult attention deficit hyperactivity disorder (ADHD) and substance use disorders (SUD), with adult ADHD over-represented among people with substance use problems (20-40% prevalence). ADHD complicates the course of SUD, such that substance dependence is likely to have an earlier onset and greater severity among those with ADHD, and be more difficult to treat, with higher rates of relapse. The harms associated with alcohol and other drug use may be increased when ADHD is present, due to the inattention, carelessness, and impulsive risk-taking that are associated with ADHD. The increased risk of alcohol and other drug-related harm is of particular concern among younger people with ADHD, who already engage in more high-risk behaviour than their non-ADHD and older counterparts.

Risk behaviours that are likely to compound the harms already inherent in drug and alcohol use per se include engaging in high-frequency substance use, harmful routes of drug administration, blood-borne virus risk behaviours, and high-risk driving behaviours. This study is part of an international multi-site study, known as the International ADHD in Substance use disorders Prevalence (IASP) study, coordinated by the International Collaboration on ADHD and Substance Abuse (ICASA). The IASP study is currently being conducted in Australia, Belgium, Finland, France, Hungary, Norway, Spain, Sweden, Switzerland, The Netherlands and the US.

**Aims:** The aims of this project are to:

- Assess current ADHD symptomatology among adults entering treatment for drug or alcohol dependence
- Test the performance of internationally used screening instruments for adult ADHD among this specific clinical population
- Investigate the relationship between ADHD symptoms and the onset and course of SUD, by comparing psychiatric comorbidity, onset of SUD, and health and social functioning of patients with and without symptoms of ADHD
- Assess the nature and level of risk-taking behaviour associated with ADHD symptomatology.

**Design and Method:** This study employs a cross-sectional survey design. 600 adult alcohol and/or illicit drug users (Perth: n=300; Sydney: n=300), entering a new episode of treatment for drug and/or alcohol dependence, will be administered a structured interview designed to screen for adult ADHD and examine SUD, psychiatric history, and drug-related, sexual and driving risk behaviours.

**Benefits:** This will be the first Australian study to contribute to internationally comparable estimates of adult ADHD among people with SUD and the largest study of adult ADHD among substance-dependent populations in Australia to date. It will also be the first Australian study to examine risk behaviours associated with ADHD among SUD populations. Improved identification of adult ADHD among people with SUD will assist in the tailoring of substance dependence treatment to the specific needs of those with ADHD and in the management of ADHD treatment, where indicated, leading to a better treatment outcome for the patient. This research also has important implications for children and adolescents with ADHD, who are at greater risk of developing problematic substance use and comorbid psychiatric disorders and engaging in harmful risk-taking behaviours. Alcohol and other drug use prevention and intervention strategies specifically targeted toward young people with ADHD will be of critical importance in reducing the harm and public health burden associated with SUD complicated by ADHD. Moreover, the findings will inform the development of future trials of ADHD treatment among substance-dependent populations. The proposed study will, therefore, guide the development of programs to detect, diagnose and manage ADHD in people with SUD, contribute to improved and effective treatment of SUD in patients with comorbid ADHD, and inform strategies for prevention and monitoring of SUD in children and adolescents with ADHD.

**Funding:** Faculty of Health Sciences, Curtin University of Technology

**Date Commenced:** September 2010

**Expected Date of Completion:** September 2011

## Can parents teach their children to drink responsibly? Or is one drop a drop too many?

**NDARC Staff:** Professor Richard Mattick, Dr Laura Vogl, Dr Tim Slade, Dr Delyse Hutchinson, Delphine Bostock Matusko, Megan Sety and Monika Wadolowski

**Other Investigators:** Professor Jake Najman (Queensland Alcohol & Drug Research and Education Centre, University of Queensland), Dr Kypros Kypri (School of Medicine & Public Health, University of Newcastle), Dr Raimondo Bruno (School of Psychology, University of Tasmania) and Dr Nyanda McBride (National Drug Research Institute, Curtin University of Technology)

**Rationale:** Binge drinking among adolescents is currently being touted as a recent epidemic, but it is a long-standing problem which needs to be addressed. Australian parents are prepared to make a significant contribution; they believe that it is their role to teach their children when, where and how to drink. The impact of parental supply is not well understood. This study will research the consequences of parental supply within the broader context of parent, child and peer relationships. It will help to determine how parental supply influences the different patterns of adolescent alcohol consumption over time, providing essential information to help parents prevent alcohol misuse in their children. Parents can play a pivotal role in prevention of alcohol misuse, but at present we don't know exactly how.

**Aims:** This study aims to determine if parental supply of alcohol in the Australian context affects the progression to harmful levels of drinking in adolescence.

**Design and Method:** Using a longitudinal design, up to 2,000 parent-child dyads will be recruited from schools in NSW, Tas and WA, and followed for five years. Families are eligible to participate in the study if their child is aged 11-12 years. Dyads will be asked to complete surveys online, mail or phone at baseline and nine-month follow-ups over a period of five years. Latent growth curve modelling within the framework of structural equations modelling will be used to examine if:

- Parental supply is associated with the progression (acceleration/ deceleration) of adolescent drinking over time
- If the immediate (e.g. quantity supplied, context, supervision) and broader contextual factors (e.g. parent modelling of alcohol use, family history alcohol-related problems, childhood behaviour) mediate or moderate the relationship between parental supply and progression in adolescent drinking over time.

**Funding:** Australian Research Council and Australian Rotary Health

**Date Commenced:** September 2010

**Expected Date of Completion:** May 2015

## Aberrant medication-related behaviours associated with opioid treatment: developing a scale for use in multiple healthcare settings

**NDARC Staff:** Briony Larance, Professor Richard Mattick and Emma Black

**Other Investigators:** A/Prof. Nick Lintzeris (The Langton Centre), Professor Louisa Degenhardt (Burnet Institute), Dr Raimondo Bruno

# CURRENT PROJECTS

(School of Psychology, University of Tasmania), A/Prof. Robert Ali (WHO Collaborating Centre for the Treatment of Drug and Alcohol Problems, University of Adelaide), Dr Suzi Nielsen (Turning Point Alcohol and Other Drug Centre), A/Prof. Milton Cohen (St Vincent's Clinic), Dr Bridin Murnion (Drug Health Services, Concord Hospital) and A/Prof. Adrian Dunlop (Drug and Alcohol Clinical Services, Hunter New England Health Service) and Rohan Holland (Drug and Alcohol Clinical Services, Hunter New England Health Service) and A/Prof. Adrian Dunlop (Drug and Alcohol Clinical Services, Hunter New England Health Service)

**Aims:** An emerging body of literature from the United States (US) describes aberrant (i.e. divergent) medication-related behaviours among pain patients, and the extent to which they are associated with opioid misuse, dependence and/or drug diversion. To date, these clinical tools have not been tested and validated among Australian patients receiving opioid treatment. This study seeks to (i) review the aberrant drug behaviour literature and (ii) describe the development of an aberrant drug behaviour scale for use in multiple healthcare settings in Australia. These studies will inform the development and validation of brief assessment tools that help clinicians stratify risks (in terms of severity and likelihood of harm). The behavioural indicators that will be examined will include those associated with medication (non)adherence (taking prescribed doses at specified dosing intervals, via intended route of administration, under specified levels of supervision) and programmatic (non)adherence (attendance at dosing/review appointments, doctor shopping, diversion, etc.).

**Design and Method:** In the first stage of the study, 30 key experts (KE) from pharmacies, hospitals, mental health services, general practice, palliative care, opioid substitution treatment (OST) services and pain clinics will rate aberrant behaviours and resultant harms in terms of clinical relevance, the nature and severity of harm associated with the behaviours, and the likelihood of harm occurring.

These surveys will inform the development of a brief scale (10-20 items). In the second stage of the study, the latent structure of the proposed scale, its construct validity and (inter-rater, test-retest) reliability will be examined using interview data from 400 chronic opioid treatment patients from OST clinics, pain clinics, general practice and pharmacy settings. A variety of recruitment methods will be used, including advertisements/flyers provided in relevant clinical settings such as pharmacies, OST and pain clinics, and direct approach by healthcare providers such as pharmacists.

A sub-sample (n=30) will be interviewed within a week of baseline interviews to establish test-retest and inter-rater reliability.

**Benefits:** The purpose of the scale is to assist in the identification of aberrant behaviours relating to pharmaceutical opioids that may indicate emerging problems in treatment and to assist clinicians and patients/clients minimise unintended consequences and harms.

**Funding:** Reckitt Benckiser

**Date Commenced:** November 2010

**Expected Date of Completion:** November 2011

## Binge drinking and the adolescent frontal lobe development

**NDARC Staff:** Professor Maree Teesson and Louise Mewton

**Other Investigators:** Professor Caroline Rae (Neuroscience Research Australia) and Professor Roland Henry (Berkley, US)

**Rationale:** Adolescence is a critical period for brain development, with active rewiring of circuitry that is necessary in successful development of 'adult' adaptive patterns of behaviour, with particular focus on the frontal lobe and its connections. Binge drinking practices amongst adolescents are of deep concern considering the capacity for interference with the development of these important circuits. The available evidence in animals supports the hypothesis that heavy adolescent alcohol consumption disrupts cortical development in a manner that promotes continued impulsive behaviour, alcohol abuse and risk of alcohol dependence. However, there are few studies of the brain particularly targeted to binge drinking effects in adolescent humans and none examining the crucial development of connectivity in relation to cognition.

**Aims:** The aims of the project are to:

- Study brain connectivity patterns in adolescent binge drinkers and abstinent controls by structural magnetic resonance imaging and diffusion tensor imaging
- To measure selected behavioural and cognitive functional outcomes and correlate these with brain structure.

**Design and Method:** 160 participants, comprising 40 female binge drinkers, 40 male binge drinkers, 40 abstinent females and 40 abstinent males will be recruited.

**Progress:** Preliminary data has been collected on 22 subjects.

**Benefits:** New knowledge on the impact of binge drinking on brain development.

**Funding:** NDARC seeking NHMRC funding

**Date Commenced:** 2009

**Expected Date of Completion:** 2014

## HEALTH ECONOMICS

### Assessing the economic consequences of cannabis policy options

**NDARC Staff:** Marian Shanahan, A/Prof. Alison Ritter, Dr Wendy Swift and Professor Maree Teesson

**Other Investigators:** Dr Rosalie Pacula (RAND Corporation)

**Aims:** The aims of this project are to estimate the costs and benefits of two alternate cannabis policies relative to the existing cannabis policy in NSW, Australia. Changes to the status of cannabis, ranging from legalisation through to tougher enforcement of prohibition, are frequently posed. To date, the debate has primarily centred on arguments associated with liberty and harms, but not the economic implications. This research takes an economics perspective and examines the question of the relative costs and benefits of different cannabis policy options.

In the NSW context and environment, and in the context of other cannabis policies such as treatment, prevention and so on, the two policies being compared are:

- Cannabis Cautioning Scheme as represented by the current (as of 2007) NSW policies
- A regulated and legalised framework.

**Design and Method:** Using a static economic model, the costs and benefits will be estimated from a societal perspective and will include the health sector, the criminal justice sector, and impacts on education and productivity as well as on the individual. Various tools such as willingness to pay, and discrete choice experiments, will be used to assess the intangible outcomes from policy changes.

The data for this project will come from a wide variety of sources: crime statistics, survey of police activities, household survey data, drug treatment data and the literature.

**Progress:** This project forms the basis of Ms Shanahan's PhD thesis. Work is ongoing with submission expected in March 2011.

**Funding:** Australian Research Council and Colonial Foundation Trust

**Date Commenced:** January 2007

**Expected Date of Completion:** March 2011

## Building capacity in health economics

**NDARC Staff:** A/Prof. Chris Doran

**Other Investigators:** Professor Rob Carter (Deakin University), Professor Jeff Richardson (Monash University), A/Prof. Jan Barendregt, Professor Theo Vos, Professor Wayne Hall and Professor Tim Coelli (University of Queensland) and Dr 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

- Establishing 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.

**Design and Method:** The project involves a number of early to mid-career researchers developing their own research agenda under the supervision and mentoring of investigators. To this extent a range of methodologies and topics are investigated.

**Progress:** A/Prof. Doran moved to UNSW in 2008 with NHMRC approving transfer of administrative rights. Lead applicant Professor Carter relocated from the University of Melbourne to Deakin University during the first half of 2007. Doran enrolled two PhD students (Joshua Byrnes and Hector Navarro) at UNSW. These team members are new additions to the capacity building team. Dr Wendy Gong joined UNSW as postdoctoral researcher in 2008 and Dam Anh Tran joined UNSW team as a PhD student. Dam Anh was awarded an AusAID leadership scholarship.

**Output:** Year 3 milestones include: training programs on higher research degree supervision and grant writing; three-day workshop; research and policy exchange; peer reviewed publications; continued supervision of RHD students; grant applications; fellows present at one national or international conference; and one to two PhD students incorporated into group. Progress has been good in meeting these objectives. Staff have attended training programs (both internal and external) to broaden their skill base and improve their capacity to become independent researchers. Such expertise has been translated into successful paper writing and submission of grant proposals with the team having published over 50 articles in peer-reviewed journals and attracting millions of dollars in additional research funds. Further, the team met officially on one occasion during the reporting period to: discuss and refine capacity building plans; consolidate the priority areas of the grant; and discuss mentor arrangements. The team was also in regular contact through phone, email and Skype.

**Funding:** National Health and Medical Research Council

**Date Commenced:** April 2007

**Expected Date of Completion:** April 2012

## The cost of homelessness and the net benefit of homelessness programs

**NDARC Staff:** Dr Lucy Burns, Dr Elizabeth Conroy and Bridget Spicer

**Other Investigators:** Dr Kaylene Zaretsky (Murdoch University) and Professor Paul Flatau (Centre for Social Impact, University of Western Australia)

**Aims:** The overarching aim of the study is to estimate the cost effectiveness to government of providing services to prevent a period of homelessness. The whole of government cost includes

# CURRENT PROJECTS

both 1) the cost of preventing a period of homelessness and 2) the potentially offsetting change in government expenditure in non-homelessness services, such as health and justice, as a result of preventing a period of homelessness.

This will be achieved by:

- Assessment of the cost to government of providing services to assist people at risk of homelessness
- Estimating the impact of homelessness on use of health, justice, income support and welfare services
- Assessing the potential cost to government in the areas of health, justice, income support and welfare services of not undertaking homelessness prevention programs
- Investigating the potential to use linked administrative homelessness, health, justice, income and welfare support data to quantify the costs of homelessness and the costs and benefits of homelessness program assistance.

Design and Method:

- Literature and policy review
- Qualitative and quantitative survey administered with clients of homelessness prevention services
- Quantitative survey administered with managers of agencies which operate homelessness prevention services
- Analysis of survey data using descriptive statistics and multivariate statistical methods
- Examination and analysis of the properties of homelessness and non-homelessness administrative data collections
- Interviews with administrative data collection managers.

**Progress:** Data is being reviewed.

**Funding:** NSW Health

**Date Commenced:** May 2010

**Expected Date of Completion:** June 2012

## DRUG MARKET ANALYSIS AND SUPPLY REDUCTION

### The Illicit Drug Reporting System (IDRS)

**NDARC Staff:** Dr Lucy Burns, Jennifer Stafford, Natasha Sindicich, Laura Scott, Benjamin Phillips, Bridget Spicer, Sheena Arora and Karla Heese

**Other Investigators:** A/Prof. Paul Dietze and Siobhan Reddel (Macfarlane Burnet Institute for Medical Research Chris Moon and Paul Rysavy (Department of Health and Community Services), A/Prof. Rosa Alati, Dr Fairlie McIlwraith and Sophie Hickey (Queensland Alcohol and Drug Research and Education Centre), Dr Raimondo Bruno and Barbara de Graaff (University of Tasmania) and Professor Simon Lenton and Candice Rainsford (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
- 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 strengths of the IDRS are 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 2010, 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.

**Output:** In October 2010, the annual National Drug Trends Conference was held in Sydney - a reflection on the last ten years of data collection as well as a summary of jurisdictional drug trends findings, in addition to a national overview and presentation on specific areas of interest arising from the data, to relevant health, law enforcement, and policy-making professionals. To see a copy of these presentations please see the 'What's New' page. Throughout the year, quarterly bulletins outlining current drug trends or issues of interest were also disseminated. These bulletins are available on the National Drug and Alcohol Research Centre (NDARC) website to ensure broader dissemination. Publications arising from the project during 2010 can be found on the IDRS website.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** January 1997

**Expected Date of Completion:** April 2011

### The Ecstasy and Related Drugs Reporting System (EDRS)

**NDARC Staff:** Dr Lucy Burns, Natasha Sindicich, Jennifer Stafford, Laura Scott, Benjamin Phillips Sheena Arora and Karla Heese

**Other Investigators:** A/Prof. Paul Dietze and Anita Feigin (Macfarlane Burnet Institute for Medical Research and Public Health), Dr Raimondo Bruno and Dr Allison Matthews (University of Tasmania), A/ Prof. Rosa Alati and Dr Fairlie McIlwraith and Sophie Hickey (Queensland Alcohol and Drug Research and Education Centre) and Professor Simon Lenton and Jessica Miller (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
- Examine the patterns of ecstasy and other drug use of these samples

- Document the current price, purity and availability of ecstasy and other party drugs across Australia
- Examine the incidence and nature of harms related to the use of ecstasy and related drugs (ERD)
- 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 ERD use, current availability, price and purity of ERD and perceived drug-related health issues associated with ERD 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 ERD use and markets.

**Progress:** The EDRS was conducted successfully in every state and territory in 2010. Six hundred and ninety-three regular ecstasy users were interviewed, providing information on their drug use patterns, ecstasy and related 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 and treatment data were examined.

**Output:** In October 2010, the Annual National Drug Trends Conference was held in Sydney – a reflection on the last ten years of data collection as well as a summary of jurisdictional drug trends findings, in addition to a national overview and presentation on specific areas of interest arising from the data, to relevant health, law enforcement, and policy-making professionals. To see a copy of these presentations please see the 'What's New' page. Throughout the year, quarterly bulletins outlining current drug trends or issues of interest were also disseminated. These bulletins are available on the National Drug and Alcohol Research Centre (NDARC) website to ensure broader dissemination. Publications arising from the project during 2010 can be found on the EDRS website.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** January 2003

**Expected Date of Completion:** April 2011

## PREVENTION AND EARLY INTERVENTIONS

### Alcohol Action in Rural Communities (AARC)

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

**Other Investigators:** Professor Rob Sanson-Fisher and Professor Catherine D'Este (University of Newcastle)

**Rationale:** Despite increasing rates of alcohol-related harm, there is little evidence about which types of interventions are most effective in reducing alcohol harm across whole communities. Consistent with the approach of the National Drug Strategy, it is likely that optimal interventions will comprise a mix of harm reduction, demand reduction and supply reduction strategies, but there is currently little evidence to help inform policy decisions about the optimal proportion of resources and effort that ought to be allocated to each of these three areas.

**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 and access to resources for reducing alcohol-related harm in your community, please go to the AARC webpage.

**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 (10 intervention and 10 control communities). Outcomes include community-level harms (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 have been collected, analysed and continue to be written-up for publication. The suite of interventions were developed, implemented and were stopped as of December 2009. Post-test data have been collected, and are in the process of being analysed and written-up for the final report and for publication.

**Funding:** Alcohol Education and Rehabilitation Foundation (AERF)

**Date Commenced:** July 2005

**Expected Date of Completion:** July 2011

### Preventing adolescent cannabis use through web-based graphic warning images

**NDARC Staff:** Dr Sally Rooke, Dr Tracey Wright and Professor Jan Copeland

**Other Investigators:** A/Prof. Don Hine (University of New England, Australia)

**Rationale:** Cannabis use is a significant problem among Australian adolescents. There is evidence suggesting that substance use interventions for adolescents must target immediate affective responses to thoughts of using the substance. Therefore, graphic or otherwise emotion provoking warning images may be effective in deterring adolescent substance use.

# CURRENT PROJECTS

**Aims:** The objective of the research is to develop and pilot test a web intervention for adolescent cannabis use that employs warning images aimed at eliciting negative affective responses. The study will determine whether graphic warning images can effectively discourage adolescent cannabis use.

**Design and Method:** 200 adolescents aged 15-18 will be randomly assigned to receive the intervention program, or to a control condition. Cannabis use will be assessed before the intervention and at a six-month follow-up. Adolescents assigned to the intervention condition will also rate the images in terms of their perceived effectiveness.

**Progress:** 80 participants have been recruited to date.

**Benefits:** Should the pilot intervention prove successful, we will seek funding to develop and test an extended version of the program that incorporates activities that appeal to adolescents.

**Funding:** Australian Rotary Health

**Date Commenced:** March 2010

**Expected Date of Completion:** August 2011

## Integrating and sustaining use of health information technology (IT) systems for alcohol screening and intervention by Indigenous health practitioners

**NDARC Staff:** Dr Anton Clifford

**Other Investigators:** Stacey Merdith (Griffith Aboriginal Medical Service)

**Collaborators:** Griffith Aboriginal Medical Service, Griffith, NSW and South Coast Aboriginal Medical Service, Nowra, NSW

**Rationale:** Alcohol misuse causes a disproportionately high burden of harm in Indigenous communities in Australia, at the individual and community levels, in terms of its contribution to premature mortality, chronic illness, social disruption and economic costs. Indigenous health practitioners fulfil critical and respected front line roles in secondary prevention, making them well positioned to contribute to reductions in alcohol-related harms among Indigenous Australians through the provision of routine alcohol screening and intervention.

However, recent research shows that practitioners make less than optimal use of locally available health IT systems to deliver alcohol screening and intervention in Aboriginal Community Controlled Health Service (ACCHS) settings. Specifically, findings suggest that practitioners do not routinely or uniformly document alcohol screening and intervention delivered to clients, while many are relatively unaware of how to optimally utilise existing health IT systems to reinforce alcohol screening and intervention.

**Aims:** Evaluate two evidence-based approaches (feedback and support) for improving Indigenous front line health practitioners' utilisation of health IT systems for alcohol screening and intervention in Aboriginal primary health care.

**Design and Method:** Audit of alcohol screening and intervention in health information systems at three monthly intervals, with feedback of audit findings to healthcare practitioners and support to increase their utilisation of health IT systems for alcohol screening and intervention.

**Progress:** An initial audit and feedback of alcohol screening and intervention has been conducted in each participating ACCHS, and a clinical audit tool to conduct ongoing cycles of audit and feedback has been identified for implementation in each ACCHS.

**Benefits:** Firstly, this research complements a recently implemented related stream of work in participating ACCHSs: a range of collaborative evidence-based strategies for integrating an evidence-based framework for alcohol screening and intervention in routine health care.

Secondly, this research will potentially improve local health service knowledge and understanding of how to facilitate health practitioners' optimal use of health IT systems for primary health care delivery. Thirdly, there is the potential for this research to contribute to improvements in information on the types and extent of alcohol problems managed by local ACCHSs.

**Funding:** Australian Institute of Aboriginal & Torres Strait Islander Studies

**Date Commenced:** December 2010

**Expected Date of Completion:** December 2011

## TREATMENT AND OTHER INTERVENTIONS

### Public opinion, the media, and illicit drug policy in Australia

**NDARC Staff:** Francis Matthew-Simmons

**Rationale:** Whilst many believe that policy decisions should be based, where possible, on scientific evidence, the realities of democratic politics dictate that many policy decisions also need to be acceptable to a majority of the voting population. This project seeks to understand the dynamics of public opinion regarding illicit drug policy in Australia.

**Aims:** By examining two case studies (the legal status of cannabis, and treatment for heroin dependence), this project aims to understand the factors that can influence public opinion. The first case study considers the possibility that policy decisions on cannabis use (decriminalisation) can 'send a message' about drug use. The second examines the role of the news media in influencing public opinion, regarding treatment for heroin dependence.

**Design and Method:** The project involves secondary analysis of attitudinal data from the National Drug Strategy Household Survey. In addition, a content analysis of news print media has been conducted. Analyses seek to determine relationships between attitudes and a number of explanatory factors, including media content, policy environment, and demographic factors.

**Progress:** This project forms the basis of Matthew Simmons's PhD thesis, due for submission in March 2011.

**Funding:** Colonial Foundation Trust

**Date Commenced:** August 2007

**Expected Date of Completion:** March 2011

## Promoting compliance, 'recovery' and 'desistance': comparative case studies of pre-sentence diversion schemes for drug misusing arrestees in Australia and England

**NDARC Staff:** Tim McSweeney

**Other Investigators:** Dr Caitlin Hughes and A/Prof. Alison Ritter (DPMP, NDARC) and Paul Turnbull (Institute for Criminal Policy Research, University of London) (Supervisors)

**Rationale:** There is a growing body of research evidence demonstrating the impact of a range of pre-sentence diversion options at engaging substance misusing defendants in treatment, and reducing illicit drug use and 'related' offending in both Australian and British contexts.

However, given their main focus on measuring and quantifying impacts, this work necessarily tends to be largely a-theoretical and virtually silent when it comes to explaining the dynamic and interactive processes which might facilitate or hinder these positive outcomes. The broader justifications for and potential value of the research is its uniquely comparative and multi-disciplinary nature. It brings together public health, criminological and socio-legal perspectives on both the processes and outcomes of attempts to facilitate both engagement and behaviour change amongst drug misusers coming into contact with the criminal justice system in different jurisdictions and settings.

**Aims:** Using two models of pre-sentence diversion as case studies - one 'voluntary' scheme in Australia, the other a 'compulsory' model in England known as 'Tough Choices' - this research seeks to better understand (in broad terms):

- How different participants in these settings define and measure 'success'
- To what extent the schemes deliver on these outputs and outcomes
- How aspects of policy, program design and delivery impact (either positively or negatively) on outcomes
- How processes might be refined and adapted in order to further improve outcomes.

More specifically, the first aim of the proposed research is to assess, using various administrative datasets, the extent to which these two pre-sentence diversion schemes:

- Secure 'formal' compliance (as measured by program engagement and completion rates)
- Promote 'recovery' from dependent drug use (defined as the absence of, or a progressive reduction in, the number and intensity of substance use related problems)
- Encourage 'desistance' from crime (defined as a cessation in offending, or a significant reduction in the frequency and seriousness of offending).

The next phase of the research will involve in-depth interviews with various purposively sampled participants to identify and understand the mechanisms through which these outputs and outcomes are achieved. For example, what strategies do these schemes employ to engage and retain different types of participant, such as narcotic and stimulant users, in treatment long enough for them to derive

any benefit? How do these interventions affect behavioural change with an intractable group, often within a short period of time?

**Design and Method:** The research will utilise both quantitative and qualitative methods and make use of a range of primary and secondary data sources. The main methodological approaches to be adopted in each site in order to answer the key research questions posed by this thesis include:

- Content analysis of existing documentation (e.g. in order to explore the extent of adherence to established best practice principles, and consistency between stated policy and actual practice between sites)
- Linkage of existing administrative datasets to assess the extent of formal compliance, recovery and desistance (e.g. in NSW this will involve utilising data from the MERIT Information Management System (MIMS), the Bureau of Crime Statistics and Research Re-Offending Database (ROD) and, for the purposes of assembling a comparison group, NSW Correctional Services' Offender Information Management System (OIMS) data)
- In-depth qualitative interviews with defendants (N=30) and professional stakeholders (N=30) to illuminate and better understand related processes and mechanisms in each setting.

**Progress:** By the end of December 2010 all English administrative datasets had been sourced and acquired, and qualitative interviews with drug-misusing arrestees and professional stakeholders completed. Analyses of these data are ongoing. Ethical processes and fieldwork in NSW are also ongoing, with a view to completion by the end of 2011.

**Funding:** Colonial Foundation Trust

**Date Commenced:** August 2009

**Expected Date of Completion:** August 2012

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

**NDARC staff:** A/Prof. Kate Dolan

**Other Investigators:** Dr Bijan Nassirimanesh (Persepolis NGO) and Dr 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 coordinated 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 and syringe program, contraception and family planning, primary

# CURRENT PROJECTS

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:** Approximately 100 women have been enrolled in treatment and 78 were enrolled in the research and 45 were followed up. There are plans to follow up the women one more time.

**Output:** Peer reviewed papers are under review and presentations have been made at conferences in Sydney, Washington and Arizona.

**Funding:** Drosos, Switzerland

**Date Commenced:** 2007

**Expected Date of Completion:** May 2011

## Improving shared healthcare for methadone patients with hepatitis C

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

**Other Investigators:** Professor Robert Batey (Royal Prince Alfred Hospital, University of Sydney), Rowena Friend (School of Psychology, UNSW), Dr Pooba Govender (Denison Street Clinic, Wollongong), Dr Robert Anderson (Bungora Centre, South East Sydney Illawarra Area Health Service, Wollongong), Dr Paul Webster (Drug and Alcohol Service, Port Macquarie Community Health Centre), Dr Sally McKenna (Wallama Clinic, Wyong Hospital), Dr Paul McGeown (Riverlands Drug and Alcohol Clinic, Lismore), Dr Jack Kehoe (Praxis Centre Drug and Alcohol Service, Coffs Harbour), Francis Haldar (Scott Street Clinic, Liverpool), Dr Martin Veysey (Holden Street Clinic, Gosford), Dr Andrew Eakin (Hepatitis Clinic, Port Macquarie Hospital), Dr John Wenman (Hepatitis Treatment Unit, Coffs Harbour Base Hospital), Dr Mark Cornwell (Liver Clinic, North Coast Area Health Service, Lismore), Dr Jenny McDonald (Gastroenterology and Hepatology Unit, Wollongong Hospital) and Dr John Quin (Bigge Park Centre Interferon Treatment Unit, Liverpool)

**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:** This study has been conducted 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 Care (at Intervention locations). The Intervention involves identifying and implementing 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 to provide and discuss relevant clinical guidelines; and regularly communicating with intervention-site clinicians to monitor and support implementation of the agreed service development processes.

**Progress:** Nine methadone clinics linked to six hepatitis C therapy services have participated in the study. Two workshops were conducted at each of the intervention sites; patient recruitment and follow-up data collection have been completed. It is anticipated that the project will be completed by June 2011.

**Funding:** NSW Health and an anonymous charitable foundation

**Date Commenced:** April 2008

**Expected Date of Completion:** June 2011

## The Ecstasy Check-Up: A multi-site trial of a brief intervention for ecstasy use among regular ecstasy users

**NDARC Staff:** Professor Jan Copeland, Dr Melissa Norberg, Dr Rebecca McKetin and Dr Laila Khawar

**Other Investigators:** Dr Leanne Hides (Institute of Health and Biomedical Innovation (IHBI) School of Psychology and Counselling, Queensland University of Technology) and Dr Jake Olivier (Cancer Medical Statistics Unit, Lowy Cancer Research Centre, UNSW)

**Rationale:** Ecstasy is one of the few drugs that has become more prominent within the Australian community, particularly among young people. A recent Australian study indicated that one-fifth of ecstasy users reported using weekly or more often, and that almost half used more than one tablet per average use episode. This is of concern, as several studies indicate that ecstasy is associated with a range of short- and long-term harms, such as depression, insomnia, and neurological changes. Despite widespread use and acknowledgment of harm, few ecstasy users seek treatment. Data from the National Minimum Dataset for 2003-2004 revealed that only 0.4% of drug treatment episodes were ecstasy related. This suggests that interventions should be developed that facilitate treatment-seeking. The objective of the current study is to evaluate a brief motivational intervention (Ecstasy Check-Up) for regular ecstasy users compared to an educational control intervention. The Ecstasy Check-Up consists of 50 minutes of personalised feedback delivered within a motivational interviewing framework. The feedback is based on a comprehensive assessment of an individual's ecstasy use, associated problems, motivation, and self-efficacy for change. The education intervention consists of a few pages factsheet on ecstasy harms and usage norms.

**Aims:** The three aims of this project are to:

- Evaluate the effect of the Ecstasy Check-Up intervention results in more days of continuous abstinence, fewer days of total use, and lower quantity of use at one-, four- and six-month follow-ups than individuals who receive education only. To evaluate whether individuals who receive the Ecstasy Check-Up will meet fewer DSM-IV dependence criteria at one-month, four-month and six-month follow-up than individuals who receive education only
- Evaluate if individuals who receive the Ecstasy Check-Up intervention will be more motivated to change their ecstasy use at one-month, four-month, and six-month follow-ups than individuals who receive education only. To evaluate if the difference between conditions will be more pronounced for heavy ecstasy users than for mild and moderate users

- Examine if sessions in which therapist adhered more so to motivational interviewing principles will be related to greater improvements in motivation, self-efficacy for reducing ecstasy use, and greater reductions in ecstasy use than sessions in which therapist adhered to motivational interviewing principles less so.

**Design and Method:** The Ecstasy Check-Up is a two-group randomised controlled trial. Participants are followed up at one-, four- and six-months post baseline session. The study is conducted at two sites: the NDARC therapy offices and the Institute of Health and Behavioural Innovation, Queensland University of Technology.

**Progress:** Recruitment began in January 2010. Advertisements have been placed in local newspapers, street magazines, websites, and on universities' campuses. Recruitment and follow-up sessions are being carried out.

**Funding:** National Health and Medical Research Council

**Date Commenced:** January 2010

**Expected Date of Completion:** December 2011

## Refining the Timeline Followback to assess cannabis use

**NDARC Staff:** Dr Melissa Norberg, Professor Jan Copeland, Jennifer Mackenzie, Nicholas Lim-Howe and Karina Hickey

**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 inter-rater 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 participants' cannabis use.

**Progress:** Recruitment ended December 2010. Preliminary results have been presented at both national and international conferences. Final analyses and manuscript write-up will occur in 2011.

**Funding:** Department of Health and Ageing

**Date Commenced:** November 2009

**Expected Date of Completion:** June 2011

## Web-based intervention for cannabis use

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

**Other Investigators:** Dr Jim McCambridge (University of London)

**Rationale:** Most individuals with cannabis use disorder do not seek treatment, and this is often due to problems with accessibility and concerns about privacy. Web-based therapy addresses these two major barriers to treatment uptake.

**Aims:** 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 200 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:** 161 individuals have enrolled in the study so far. The remaining 39 will likely be recruited before the end of January 2011.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** October 2008

**Expected Date of Completion:** April 2011

## Process evaluation of the Cannabis Information and Helpline (CIH)

**NDARC Staff:** Peter Gates, Professor Jan Copeland, Dr Melissa Norberg and Dr Erol Digiusto

**Rationale:** Despite its widespread use, relatively few cannabis users present to treatment, with only 31,980 episodes of care provided for primary cannabis use problems in 2006-07 (AIHW, 2008). Study on the barriers to cannabis treatment has highlighted the importance of providing additional outpatient treatments that are specific to cannabis (Treloar et al., 2007).

Partly based on the success that telephone counselling has shown for people with tobacco-related problems (see Stead et al., 2008, Cochrane Review) and this desire for alternative treatments, the Cannabis Information and Helpline (CIH) was launched by Lifeline Australia in collaboration with the National Cannabis Prevention

# CURRENT PROJECTS

and Information Centre. However, to date, no Australian data exists on the satisfaction of callers to this service or any other telephone service with a specific focus on a particular illicit drug.

**Aims:** This study is designed to evaluate the 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, and 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:** To date, the full sample has been interviewed and the associated dataset has been analysed. One article has been published in the *Journal of Telemedicine and Telecare*. A second article will be submitted as a chapter to the first author's PhD in August 2011.

**Output:** One peer reviewed paper and one chapter to a PhD submission

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** 2009

**Expected Date of Completion:** 2011

## Telephone counselling via the Cannabis Information and Helpline

**NDARC Staff:** Peter Gates, Professor Jan Copeland, Dr Melissa Norberg and Dr Erol Digiusto

**Rationale:** Despite its widespread use, relatively few cannabis users present to treatment, with only 31,980 episodes of care provided for primary cannabis use problems in 2006-07 (AIHW, 2008). Study on the barriers to cannabis treatment has highlighted the importance of providing additional outpatient treatments that are specific to cannabis (Treloar et al., 2007).

Partly based on the success that telephone counselling has shown for people with tobacco-related problems (see Stead et al., 2008, Cochrane Review) and this desire for alternative treatments, the Cannabis Information and Helpline (CIH) was launched by Lifeline Australia in collaboration with the National Cannabis Prevention and Information Centre.

However, to date, no Australian data exists on the effectiveness of a brief intervention based on the telephone in assisting individuals to reduce their cannabis use. The Helpline offers the opportunity to research the efficacy of different brief interventions that may address several barriers to conventional cannabis treatments.

**Aims:** This study will recruit 120 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. 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 to be delivered by Cannabis Information and Helpline counsellors. All counsellors will receive two full-days of training. Counselling calls will be monitored randomly to assess treatment fidelity.

**Design and Method:** The brief intervention is a four session intervention utilising a directive model that assists participants in recognising the benefits of change and developing coping skills that work towards a reduction of cannabis use and prevention of relapse. Participants are first assessed at baseline and provide information to the researcher that is forwarded to the counsellors at the Helpline. As is typical with interventions based on motivational interviewing, participants will receive feedback from their initial baseline assessment in the form of a Participant Case File (PCF). The PCF is also used as a case management tool to help counsellors maintain continuity between treatment sessions. Immediately following the baseline assessment, the participants are randomly placed into one of two groups: those who will begin the intervention immediately and those who are asked to wait three months before beginning the intervention (the 'Control' group).

Following the completion of the four sessions (or after four weeks from baseline assessment for those in the Control group), each participant is asked to provide the researcher with information on their cannabis use, as well as their physical and mental health via phone interview. Finally, participants complete a second phone interview three months from the original baseline assessment date.

**Progress:** To date, the counsellors from the CIH have each participated in two full day training sessions to assist them in conducting the brief intervention. The administration side of the project has been established between the CIH and the researcher from the National Cannabis Prevention and Information Centre.

Current at the end of September, 217 individuals left their contact information with the Helpline. From this sample: 131 participants (60%) completed the baseline interview and were randomised into Control (n=68) and Intervention groups (n=63); 25 individuals (12%) were excluded as they did not meet eligibility criteria; and 61 individuals (28%) could not be contacted. From the 131 participants who had completed the baseline interview: 66 have completed both follow-up interviews (50%); 38 participants are proceeding as scheduled (29%: 18 in the Intervention group [6 pre one-month follow-up and 12 pre three-month follow-up] and 20 in the Control group [8 pre one-month follow-up and 12 pre three-month follow-up]); 22 could not be contacted at the time of their follow-up interview although are still active (17%: 12 had completed baseline only, 10 had completed one-month follow-up only); and 5 withdrew their consent to participate (4%).

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** 2009

**Expected Date of Completion:** 2011

## 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, Emma Barrett, Philippa Farrugia, Dr Sabine Merz and Julia Rosenfeld

**Other Investigators:** Professor Amanda Baker (University of Newcastle), Sally Hopwood (Traumatic Stress Clinic, Westmead Hospital), A/Prof. Sudie Back and Professor Kathleen Brady (Medical University of South Carolina, US)

**Rationale:** Trauma and post-traumatic stress disorder are highly prevalent among people with substance use disorders. There is, however, a dearth of literature as to how best to treat this comorbidity. 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.

**Aims:** The aims of this project 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
- 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 US. The intervention consists of thirteen, 90 minute sessions involving cognitive behavioural therapy with exposure techniques. Attempts are made to follow-up all participants at six weeks, three months and nine 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 interviews were completed April 2010. Analysis of the data is continuing.

**Funding:** National Health and Medical Research Council and NSW Health

**Date Commenced:** January 2007

**Expected Date of Completion:** December 2011

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

**NDARC Staff:** Dr John Howard

**Collaborators:** Access Quality International/Asian Harm Reduction Network, Chiang Mai, Thailand; Yunnan Institute for Drug Abuse, Kunming, China; Youth Vision, Kathmandu, Nepal; and 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 programs, 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 Tool Kit for providing comprehensive harm-reduction interventions for young, marginalised drug users.

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

- What are the attributes of harm-reduction interventions/ programs 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, and ongoing consultation will lead to facility and service (re) design and the development of training materials and a Tool Kit. Data collection systems will be enhanced to allow for synthesis of monitoring and evaluation activities.

**Progress:** Four field visits were undertaken in 2010 to help shape the local projects at the three sites (Kathmandu, Kunming and Bangkok), and to assist in the synthesis of key learnings. Focus groups have been conducted at each site to identify the needs and wants of young IDU and those at risk of becoming IDU, and have led to more depth of understanding of their substance use and the contexts within which it emerges and is maintained. The Tool Kit

# CURRENT PROJECTS

has been developed from the focus groups, site visits and literature and the draft is being used in trainings to better understand the rationale for and practice of 'youth-friendly' approaches to harm reduction. Data collection tools and monitoring and evaluation processes have been enhanced.

**Outputs:** The anticipated outcomes are:

- 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 wellbeing 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
- A Tool Kit to assist in 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 drugs 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 (e.g. compulsory drug treatment centres, work camps, prisons and other places of detention) and return to such closed settings following release.

**Funding:** Aids Fonds (Netherlands)

**Date Commenced:** September 2009

**Expected Date of Completion:** September 2011

## Homelessness and services and systems integration

**NDARC Staff:** Dr Lucy Burns and Dr Elizabeth Conroy

**Other Investigators:** Professor Paul Flatau (University of Western Australia) and Anne Clear (Murdoch Business School, Murdoch University)

**Rationale:** Prevalence rates of mental disorders among homeless persons typically exceed general population estimates. Despite the high level of need in the homeless population, access to appropriate services is limited, particularly among those with co-occurring substance use and other mental disorders. There is a strong need to address the gap between the homelessness and health service sectors. The Australian Government's White Paper on homelessness, 'The Road Home', highlighted the necessity of service and system level integration to prevent homelessness. Such an approach requires that funding streams, government programs and service delivery across diverse sectors are 'joined up' to deliver holistic and tailored interventions for homeless individuals. 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 is being conducted in Sydney, Melbourne and Perth, and comprises three components:

- Case studies of different models of integrated services or programs from both the homelessness and health sectors
- In-depth interviews with key stakeholders from the homelessness and health sectors, including policy and operational levels, as well as members of intergovernmental programs in the human services
- Agency survey to identify the type and extent of interactions between agencies within a given geographical area (including both health and homelessness agencies, and government and non-government agencies).

**Progress:** This study is ongoing. Three case studies from the homelessness sector have been completed; a further three case studies in the health sector will be conducted during late 2010. In-depth interviews with five key stakeholders have been completed; an additional seven interviews are planned for the near future. A final draft of the agency survey has been developed with data collection to commence late 2010.

**Funding:** Australian Housing and Urban Research Institute

**Date Commenced:** May 2009

**Expected Date of Completion:** February 2011

## A brief internet-based motivational intervention for psychostimulant use

**NDARC Staff:** Dr Frances Kay-Lambkin, Dr Rebecca McKetin and Jenny Geddes

**Other Investigators:** Dr Robert Tait, Professor Helen Christensen and Professor Kathy Griffiths (Centre for Mental Health Research, Australian National University)

**Rationale:** Many psychostimulant users do not receive help for problems with their drug use because of fears around confidentiality and stigma, physical barriers to accessing services (e.g. hours of opening, location), and because existing treatment services are not tailored toward their needs. Web-based services can overcome many of these barriers, providing a tailored service that is anonymous and accessible.

**Aims:** To develop and trial an internet-based intervention for psychostimulant use that is appropriate for young adults. The aim of the intervention is to increase motivation to reduce drug use, to increase help-seeking around drug use and related issues, and to reduce concurrent risk factors for dependence and other harms from drug use.

**Design and Method:** Brief motivational intervention techniques will be adapted to an online setting and tailored to psychostimulant use. Focus groups with psychostimulant users will be used to refine the content and appearance of the website. Clients will be randomised to

different conditions to evaluate the effectiveness of the intervention. Once the website has been developed, online recruitment will commence for a feasibility project (N=160) comparing assessment and brief intervention via the website versus assessment plus generic illicit drug information. The outcomes will be evaluated at six months in terms of frequency of self-reported use of psychostimulants and assessment of psychological functioning.

**Progress:** Website content under development.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** July 2010

**Expected Date of Completion:** June 2012

## Substance use and comorbidities in same-sex-attracted young males

**NDARC Staff:** Dr John Howard

**Other Investigators:** Simon Beck (Medical Student, UNSW)

**Collaborators:** ACON, Inspire Foundation

**Rationale:** The young male same-sex-attracted (SSA) population has been reported to have a suicide attempt rate 3-6 times higher than that found in the same age range in the non SSA population, and higher levels of mental health concerns. The reasons behind this are still poorly understood but it is thought that many complex factors are involved, including substance use, non-availability of adequate support services, social stigma including family and friends' reaction or fear of what this reaction might be, mental illness, abuse (including emotional, physical and sexual) and many others. A better understanding of these factors may lead to the availability of better support services for young SSA people, with the goal of reducing the high suicide attempt rate and other comorbidity.

**Aims:** This project aims to:

- Increase understanding of the relationships between sexuality, mental health and substance use among this marginalised group of young people, where there is evidence of elevated risk for substance use and suicidality
- Increase understanding of coping strategies employed by SSA young males
- Increase knowledge about how the 'coming out' process, substance use, suicidality and other mental health concerns intersect and interact
- Develop research-informed strategies and interventions to assist ACON and others providing services to SSA young people to refine and shape more effective interventions for mental health, substance use and co-occurring disorders.

**Design and Method:** The study will use two approaches: (1) a quantitative study using a self-administered questionnaire with SSA and non-SSA young males aged 18-24; (2) a qualitative study with a group of SSA young males. This group will explore via a semi structured interview the intersections and relationships between the 'coming out' process, sexual identity formation, substance use, mental health issues and coping strategies.

**Progress:** Ethics approvals obtained from UNSW and ACON, interviewing begun.

**Benefits:** Better understanding of comorbidity in young SSA males, improved assessment and interventions, and reduced suicidality.

**Funding:** None

**Date Commenced:** March 2010

**Expected Date of Completion:** March 2011

## The cost-effectiveness of a family-based intervention for reducing alcohol-related harms among Indigenous Australians with high-risk alcohol use

**NDARC Staff:** Dr Anton Clifford, A/Prof. Anthony Shakeshaft, A/Prof. Chris Doran, Bianca Calabria and Miranda Rose

**Other Investigators:** Professor Komla Tsey (James Cook University), Dr Julaine Allan and Rod MacQueen (Lyndon Community) and Donna Bliss (Yoorana Gunya Family Violence Healing Centre Aboriginal Corporation, Forbes)

**Collaborators:** Lyndon Community, Orange; Yoorana Gunya Family Violence Healing Centre Aboriginal Corporation, Forbes and Condobolin Aboriginal Health Service, Condobolin

**Rationale:** Indigenous Australians experience a disproportionately high burden of alcohol-related harm relative to non-Indigenous Australians. These alcohol-related harms are typically cumulative, extending beyond the individual to the family and community. The number of Indigenous-specific intervention programs to address these harms appears less than optimal, and there have been few rigorous evaluations of Indigenous-specific alcohol interventions that have been implemented. There is evidence from empirical studies that family-based approaches can be effective for reducing alcohol-related harms among high-risk drinkers and the negative effects of alcohol misuse on other family members. Family relationships have always been vital to the cohesion and wellbeing of Indigenous communities. What happens at the family level shapes the social functioning of Indigenous Australian communities and the wellbeing of individuals. The potential strength of relationships between Indigenous individuals, their families and communities suggests that family-based approaches are likely to be appropriate and effective for reducing alcohol-related harm among Indigenous Australians.

**Aims:** This study aims to assess the acceptability, feasibility and likely cost-effectiveness of an individually-focused Community Reinforcement intervention (CR), and a family-focused Community Reinforcement and Family Training intervention (CRAFT), for Indigenous individuals with alcohol dependence, delivered in the context of routine Indigenous-specific, health-care services. The hypothesis is that the addition of family training (CRAFT) to individually focused intervention (CR only) will be more acceptable and cost-effective, and equally feasible, for Indigenous clients with high levels of alcohol dependence.

**Design and Method:** A demonstration project, using a pre/post-intervention study design, to evaluate the feasibility, acceptability and likely cost-effectiveness of CR and CRAFT for alcohol-dependent individuals, delivered by a rural Indigenous community-based health service in partnership with a regional drug and alcohol clinical service.

# CURRENT PROJECTS

**Progress:** An acceptability survey to assess the relative acceptability of CR and CRAFT has been administered to 80 new and existing Aboriginal clients of Yoorana Gunya and Lyndon Community. 180 clients is the target sample size for the acceptability survey. Survey findings will assist to identify specific components of CR and CRAFT that will require modification to optimise their uptake during the intervention phase of the project.

A training package (combining a clinical manual and program of training and outreach support), to support healthcare practitioners to deliver the CR and CRAFT programs to their clients in routine health care, is being developed by researchers in collaboration with healthcare practitioners from Yoorana Gunya and Lyndon Community.

**Benefits:** At the service level the primary benefit of the CRAFT intervention is its potential to strengthen the overall role of Yoorana Gunya to support Aboriginal families and individuals who are dealing with alcohol problems. This will be achieved, firstly, through training Yoorana Gunya Aboriginal and other health practitioners to employ a range of evidence-based approaches to treat clients with alcohol problems, and secondly, through the utilisation of existing structured frameworks to improve processes and support the integration of CRAFT into Yoorana Gunya's routine service provision. At the community level the benefit of CRAFT will be to individuals with alcohol problems and families who participate in training and acquire skills and knowledge to reduce alcohol-related harm. Benefits to these groups are also likely to result from the strengthened role of Yoorana Gunya in health service delivery and the increased capacity of health staff to employ evidence-based approaches to treat and manage clients with alcohol problems.

**Funding:** National Health & Medical Research Council and Australian Research Council

**Date Commenced:** March 2010

**Expected Date of Completion:** June 2012

## Suicide risk assessment and intervention strategies - Stage 2

**NDARC Staff:** Dr Joanne Ross, Professor Shane Darke and Mark Deady

**Rationale:** Stage 1 of this project identified the need for the development of three resources to improve the management of suicide risk in residential drug and alcohol treatment settings: a Policies and Procedures Pro-forma (Suicide-PPP) to assist managers in drafting guidelines for managing suicide risk, an Acute suicide risk Screener (Suicide-AS), and a standardised suicide Risk Formulation Template (Suicide-RFT).

**Aims:** The aims of this project are to:

- Design a template that managers of drug and alcohol treatment agencies can use to guide the process of creating supportive links with mental health services, and upon which suicide guidelines can be established
- Develop an acute suicide risk assessment screener
- Design a standardised suicide risk formulation template for identifying what is known about a client's background suicide risk factors (e.g. personality disorders, other psychopathology), and highlighting any unknown factors in the client's suicide risk profile

- Develop a brief resource to accompany these tools, explaining why suicide risk assessment is important, and raising awareness about these assessment tools
- Promote the sustainability of the tools by producing an instruction manual to accompany them.

**Design and Method:** The development of resources is being informed by the literature on suicide risk assessment and an Advisory Panel consisting of members of the Network of Alcohol and Other Drugs (NADA).

**Progress:** To date, a suicide risk assessment screener has been drafted, and feedback sought from the NADA advisory panel.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** June 2010

**Expected Date of Completion:** June 2011

## Supply, demand and harm-reduction strategies in Australian prisons: An update

**NDARC Staff:** A/Prof. Kate Dolan, Sarah Larney and Ana Rodas

**Other Investigators:** Dr AlexWodak (Alcohol and Drug Service, St Vincent's Hospital, Sydney)

**Rationale:** The Australian National Council on Drugs (ANCD) has requested a review of the prevalence of alcohol and/or drug use problems among prisoners and the range and availability of supply, demand and harm-reduction programs and services in prisons. The focus of the review is adult prisoners and remand inmates.

**Aims:** The project has two broad aims:

- Collate current data on the number and proportion of prisoners reporting problematic alcohol, tobacco and/or illicit drug use, and place these data in context by comparing to previous years
- Assess the availability, access and extent of use of the range of demand, harm and supply reduction programs and services in prisons. Attention will be given to the extent to which these programs and services adhere to the principles of the National Correctional Drug Strategy.

**Design and Method:** A literature review of publicly available data through medical and criminal justice databases, as well as reports produced by the respective Departments of Corrective Services/Justice, will be reviewed for data, focusing on alcohol and drug use and information about demand, supply and harm-reduction programs.

A questionnaire will also extract routinely collected data by health and prison departments on supply, demand and harm-reduction strategies.

**Progress:** Currently in the data extraction and analysis phase.

**Output:** At the completion of the project a report will be made available through the Australian National Council on Drugs (ANCD) website.

**Funding:** Australian National Council on Drugs (ANCD)

**Date Commenced:** March 2010

**Expected Date of Completion:** May 2011

## Evaluation of NSW health initiatives funded through the NSW homelessness action plan including: Inner City Assertive Outreach Model and Inner City Youth at Risk Project

**NDARC Staff:** Dr Lucy Burns, Dr Elizabeth Conroy and Bridget Spicer

**Other Investigators:** Professor Paul Flatau (Centre for Social Impact, University of Western Australia)

**Aims:** This proposal involves the evaluation of the effectiveness of two projects funded under the NSW Implementation Plan of the National Partnership Agreement (NPA) on Homelessness, the Inner City Assertive Outreach Model and the Inner City Youth at Risk Project.

In respect of the Inner City Assertive Outreach Model, the aims of the evaluation study are to:

- Examine whether the Model has successfully implemented a best practice model of Assertive Outreach and of Housing First Principles
- Determine whether effective integrated support has been provided to clients across a range of housing and health needs
- Assess the extent to which the Model has achieved positive health and housing outcomes for clients and is more effective than existing programs in achieving positive client outcomes
- Assess the key factors leading to identified successes or barriers for the Model with specific reference to the role of the Housing First model, partnerships, the Assertive Outreach approach and the access to services and housing
- Evaluate the extent to which the Model led to positive NPA performance benchmark indicator outcomes
- Determine the overall effectiveness and cost-effectiveness of the Model
- Detail any relevant implications for future NSW Government policy in addressing homelessness.

In respect of the Inner City Youth at Risk Project, the evaluation study seeks to:

- Assess the extent to which the Project meets the needs of both young people with high needs who were rough sleepers or chronically homeless as well as homeless young people who are homeless or at risk of homelessness with low to moderate needs
- Determine the extent to which the Project improves the sustainability of tenancies for those clients who received a tenancy and support package
- Evaluate the extent to which the Project improved access to mainstream health supports and identification of those young adults and youth at risk through the development of interagency partnerships with mainstream services and specialist homelessness services
- Assess the extent to which the Project achieves positive health, housing and social and economic outcomes for young people
- Assess the key factors leading to identified successes or barriers for the Project with specific reference to interagency collaboration, partnerships, referral pathways and resource availability (services and housing)

- Evaluate the extent to which the Model led to positive NPA performance benchmark indicator outcomes
- Determine the overall effectiveness and cost-effectiveness of the Model
- Detail any relevant implications for future NSW Government policy in addressing homelessness.

**Design and Method:** The study will be based on a mixed methods design involving quantitative and qualitative components. This includes baseline and follow up of client outcomes; use of health and other administrative data; level of integration between services; and analysis of administrative data sets. Quantitative data will be used to assess the needs and background of clients and the effectiveness and cost-effectiveness of services.

**Progress:** Data is being collected.

**Funding:** NSW Health

**Date Commenced:** November 2010

**Expected Date of Completion:** December 2013

## Development of a brief intervention for ecstasy-related problems: The Ecstasy Check-Up randomised controlled trial

**NDARC Staff:** Professor Jan Copeland, Dr Melissa Norberg and Dr Laila Khawar

**Other Investigators:** Dr Jake Olivier (Cancer Medical Statistics Unit, Lowy Cancer Research Centre, UNSW)

**Rationale:** Ecstasy is one of the few drugs that has become more prominent within the Australian community, particularly among young people. A recent Australian study indicated that one-fifth of ecstasy users reported using weekly or more often, and that almost half used more than one tablet per average use episode. This is of concern, as several studies indicate that ecstasy is associated with a range of short- and long-term harms, such as depression, insomnia, and neurological changes. Despite widespread use and acknowledgment of harm, few ecstasy users seek treatment. Data from the National Minimum Dataset for 2003-2004 revealed that only 0.4% of drug treatment episodes were ecstasy related. This suggests that interventions should be developed that facilitate treatment seeking. The objective of the current study is to expand the one-session Ecstasy Check-Up to a three-session intervention that includes one session of motivational enhancement and two sessions of cognitive-behavioural skills training.

**Aims:** The two aims of this project are to:

- Evaluate if ecstasy users will participate in cognitive-behavioural therapy
- Compare the relative efficacy of a one-session motivational enhancement session to a three session motivational and cognitive-behavioural intervention.

**Design and Method:** The Ecstasy Check-Up is a two-group randomised controlled trial. Participants are followed up at one, four and six months post baseline session.

**Progress:** Recruitment began in January 2010. Advertisements have been placed in local newspapers and street magazines, different websites, and as well as on different universities' campuses. Recruitment and follow-up sessions are being carried out.

# CURRENT PROJECTS

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** September 2009

**Expected Date of Completion:** December 2011

## INFORMATION AND TRAINING

### Program of International Research and Training (PIRT)

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

**Other Investigators:** Dr Alex Wodak (Alcohol and Drug Services St Vincent's Hospital)

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

**Design and Method:**

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

**Progress:** PIRT hosted a study tour to NSW prisons for 15 Vietnamese police and drug treatment officers. PIRT assisted researchers from Pakistan and Iran to submit abstracts to the IHRA conference and to write up their results. PIRT has applied for two scholarships for researchers in Iran and Myanmar to visit NDARC in 2011. PIRT staff will supervise a PhD student from Indonesia. PIRT staff met with Michel Sidibe, Executive Director, UNAIDS, and Gary Lewis, UNODC's regional representative. PIRT assisted a researcher from Pakistan to apply for a grant from MENAHR.

**Output:** Peer reviewed papers and presentations at conferences in Sydney, Washington, Taiwan and Arizona. PIRT staff authored a policy document entitled 'Advancing the sexual and reproductive health and human rights of prisoners living with HIV'.

**Funding:** UNODC Vietnam, UNODC Myanmar

**Date Commenced:** 2003

**Expected Date of Completion:** Ongoing

### Secondary traumatic stress among alcohol and other drug workers

**NDARC Staff:** Dr Katherine Mills, Professor Maree Teesson, Dr Claudia Sannibale and Philippa Farrugia

**Other Investigators:** Professor Ann Roche (Flinders University)

**Rationale:** There is a growing literature documenting the high prevalence of trauma exposure and post-traumatic stress disorder (PTSD) among people with AOD use disorders. Indeed, in this population trauma exposure is almost universal and up to one-third have current PTSD. Studies have shown that individuals who are involved in the assessment and treatment of traumatised clients may be at risk of secondary traumatic stress (STS). STS has been

described as particular behaviours, emotions and stress that result from helping or wanting to help traumatised individuals. STS has been referred to as an occupational hazard for those working with trauma survivors; however, limited research has been conducted in the area. To our knowledge only one US study has examined STS among the AOD workforce. They found that 19% of the AOD workers they assessed met criteria for current STS. While STS has been explored among the AOD workforce in the US, the degree to which it is suffered by AOD workers in Australia is unknown.

**Aims:** The aims of the study are to address two research questions:  
1) What is the prevalence of STS among AOD workers in Australia?  
2) What factors are associated with the presence of STS and its severity (e.g. professional experience and training; a personal history of trauma exposure and PTSD)?

**Design and Method:** A cross-sectional survey is being conducted of AOD workers from across Australia. Those interested in participating are invited to complete an anonymous online survey to assess their current level of trauma education and training, trauma screening practices, along with both their exposure risk and levels of STS. Levels of past trauma exposure and PTSD among AOD workers are also assessed.

**Progress:** The online survey is currently available to complete. Data collection will conclude at the end of December 2010.

**Date Commenced:** June 2010

**Expected Date of Completion:** June 2011

### Dissemination strategy for the National Clinical Guidelines for the management of drug use during pregnancy, birth and the early development years

**NDARC Staff:** Dr Lucy Burns and Dr Elizabeth Conroy

**Other Investigators:** Cate Wallace (NSW Health)

**Aims:** The National Clinical Guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn (the Guidelines) were commissioned by the Ministerial Council on Drug Strategy and were published in March 2006. The aim of the Guidelines was to develop a comprehensive, coherent and consistent approach to the clinical care of women with problematic drug or alcohol use during pregnancy and to the care of mother and child in the early developmental stages of the child's life. The Guidelines are intended for use by all health care practitioners working with pregnant women experiencing a drug or alcohol problem.

The purpose of this project is to:

- Review and update the Guidelines for use in the NSW context
- Develop a dissemination strategy for the revised Guidelines.

**Design and Method:** The process will use a similar method (a consensus model) adopted in the development of the Guidelines to revise and update the Guidelines. A rigorous process will be used in which international and Australian research literature is reviewed by experts and consensus achieved. A collaborative group of colleagues working within the drug and alcohol program of their respective Area Health Services along with key experts in the area

will be bought together in a face-to-face consensus meeting to comment on and endorse the revised Guidelines.

**Progress:** Data is being reviewed.

**Funding:** NSW Health

**Date Commenced:** June 2010

**Expected Date of Completion:** March 2011

## POLICY RESEARCH

### Australian drug policy 1985-2010: An overview report on drug use and harms and their relationship to policy

**NDARC Staff:** A/Prof. Alison Ritter, Kari Lancaster and Dr Katrina Grech

**Other Investigators:** Professor Peter Reuter (University of Maryland)

**Rationale:** Driving this report are questions regarding factors that influence patterns of drug use and harms in Australia. We explore whether any reductions in drug use can be ascribed to successful government action or have been generated through shifts in drug fashions; whether social policy such as welfare policies, macroeconomic factors and socio-economic conditions account for changes in patterns of use and harms irrespective of or over and above what governments do; and the extent to which Australia's approach is grounded in scientific evidence.

**Aims:** The goal of the report is to produce an objective analysis of Australian drug policy that provides an accessible account of the Australian situation to date. It is hoped this report will become the 'source' document for those wanting an overview of the Australian situation.

**Design and Method:** The report will cover:

- The Australian context (socio-economic climate - employment, poverty, social cohesion)
- Description of drug policy in Australia and international comparisons (policies, approaches, distinguishing features)
- Analysis of trends in drug use and harms (comparisons across and between drugs, and comparisons with global trends)
- Government action on drugs (government spending across the four 'pillars' of prevention, law enforcement, harm reduction and treatment)
- Analysis of the Australian policy landscape (key roles played by actors in the policy subsystem).

**Progress:** The full report will be released in January 2011

**Funding:** Colonial Foundation Trust

**Date Commenced:** 2007

**Expected Date of Completion:** January 2011

### Consultation and modelling in relation to the ACT AOD treatment service system

**NDARC Staff:** A/Prof. Alison Ritter

**Other Investigators:** Professor Pascal Perez (ANU), Dr Jen Badham (Critical Connections) and Helene Delany (ACT Health)

**Rationale:** The ACT is currently in an environment of change. A review of treatment services for alcohol and drug dependency has provided some guidance about treatment structures and functions for the ACT. In addition, a new prison opened in 2009 that will provide drug treatment interventions and there is significant attention to 'throughcare' - which will mean ensuring effective links and pathways between the prison and community-based drug treatment services.

**Aims:** DPMP is working with the ACT to develop an ACT-specific drug services system model. With a finite set of treatment services, locations and a closed population, it is possible to model the movement of drug users/offenders/clients through the system over time. The model represents drug users/offenders/clients moving around the system according to simple rules driven by existing data. The costs of service provision can also be built into the model. Likewise, measures of harm such as overdose or infection rates can be built in if data exist that can be used as reasonable proxies.

**Design and Method:** Extensive participatory consultation processes will be conducted prior to building the model. These participatory processes will map the current treatment system and explore the most important aspects for modelling. Stakeholders from across the ACT system participate in the workshops, including service providers (both government and non-government), consumers, police and corrections staff.

Arising out of the participatory workshops, a system dynamics model will be built from data provided by ACT Health and ACT Policing. The model will be validated against external parameters. Sample scenarios will be run examining the impact of changes in client flows or changes in service delivery.

The model itself along with a final report that describes the model, and a user manual, will be delivered to ACT Health for its future use.

**Progress:** The model and manual are completed. The report is in final draft stages.

**Funding:** Colonial Foundation Trust

**Date Commenced:** 2010

**Expected Date of Completion:** 2011

### Australian Government spending in response to illicit drugs

**NDARC Staff:** A/Prof. Alison Ritter, Karen Schneider, Marian Shanahan, Rachel Ngui and Dr Katrina Grech

**Rationale:** The aim of this project is to update and further develop the Moore (2005) Australian drug budget. As in the earlier Moore budget, our study examines both federal and state and territory government spending in response to illicit drugs. Proactive spending is the amount directly spent by government on illicit drug policy and is broken down into the areas of prevention, treatment, harm reduction, law enforcement and interdiction. The costs attributable to the policy/intervention are grouped into one of the above categories by the outcome of the intervention rather than its aim.

# CURRENT PROJECTS

Developing an up to date Australian drug budget is useful in that it allows us to: 1) examine what policies the government is currently employing in relation to illicit drug use; 2) examine the mix of these policies; and 3) compare our drug budget and spending mix with other countries. Using an approach similar to the one outlined above, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has committed to producing estimates of government expenditure on 'drug-related issues' and to developing comparable estimates for all the EU countries (Ballotta & Bergeron, 2006; Ramstedt, 2006; Rigter, 2006; EMCDDA, 2008). Both the US and the UK also produce government spending estimates.

**Aims:** The aims of this project are to:

- Estimate spending by the Australian federal, state and territory governments between 2007-08 using publicly available documentation and expert opinion
- Classify spending into the areas of prevention, treatment, harm reduction, law enforcement and interdiction to increase our understanding of the current policy mix
- Identify all types of interventions and areas of spending (i.e. decide whether to include costs associated with all consumer and provider drug arrests as well as arrests that may be related to drug use such as household crime)
- Categorise interventions into Prevention, Treatment, Enforcement, Harm Reduction
- Using top-down accounting methods, calculate spending
- Use expert opinion to ensure results are concordant with expert views.

**Design and Method:** It is important that each spending estimate is calculated using the same method. To this end, we use a top-down, rather than bottom-up, accounting method to estimate total spending within each category. The actual amounts calculated are less important than the distribution among policy pillars.

**Progress:** The estimates are currently underway.

**Funding:** Colonial Foundation Trust

**Date Commenced:** 2010

**Expected Date of Completion:** 2011

## Identifying current and alternate police options for intervening with MDMA

**NDARC Staff:** Dr Caitlin Hughes and A/Prof. Alison Ritter

**Other Investigators:** Fiona Christian and Patricia Ward (NSW Police)

**Rationale:** There is a lack of knowledge about the offending profiles of MDMA offenders. Data from the Ecstasy and related Drugs Reporting System (EDRS) suggests MDMA users are not a criminally active population, but at the same time rates of reported police incidents involving MDMA in NSW are increasing.

**Aims:** This project seeks to identify current and alternate police options for intervening with MDMA use/possess offenders in NSW.

**Design and Method:** The NSW Police database will be used to examine the nature of MDMA offending in NSW (and a comparative group of cannabis offenders). This will involve two analyses:

- Descriptive analyses of MDMA offenders and a comparative group of cannabis offenders detected in the reference year 2006 in terms of age, sex, offence type, offence circumstances and legal action taken
- Recidivist and subsequent offending analyses of the subset of MDMA and cannabis offenders detected in 2006 who have past or future offences (1998-2007) in terms of the proportion with prior/subsequent offences and number and type of prior/subsequent offences.

A literature review and interviews with NSW Police officers will then be used to identify and explore the feasibility and desirability of adopting alternate evidence-based policing options for intervening with MDMA use/possess offenders in NSW.

**Progress:** The profiles of MDMA and cannabis offenders have been determined. This confirmed the presence of substantial differences between the two groups. Interviews will be conducted in early 2011 with NSW Police officers about the desirability of alternate policing options.

**Funding:** Colonial Foundation Trust

**Date Commenced:** August 2007

**Expected Date of Completion:** 2011

## ACT schedule for serious drug offences: Determining amounts of trafficable, commercial and large commercial drug offences

**NDARC Staff:** Dr Caitlin Hughes and A/Prof. Alison Ritter

**Other Investigators:** Victor Martin and Nikki Besch (ACT Department of Justice and Community Safety) and Helene Delany (ACT Health)

**Rationale:** One of the key measures for determining the seriousness of drug trafficking offences (i.e. for distinguishing between low and high level trafficking) is the quantity of drug involved. But, to date, there has been surprisingly little use of research to inform decisions on how threshold quantities should be set or what threshold quantities should be used for different offences and different drug types.

**Aims:** The ACT Government is in the process of reviewing its drug legislation. DPMP is engaged as a consultant to provide expert advice on determining amounts for trafficable, commercial and large commercial drug offences. The initial goal is to determine whether current thresholds make sense in terms of the commercial realities of the drug market and, if not, to propose alternate threshold quantities for the five main illicit drug types: heroin, methamphetamine, cocaine, ecstasy and cannabis.

**Design and Method:** A number of different metrics are being adopted to translate the current drug legislative thresholds in terms of market realities, such as market value. If relevant, new thresholds will then be proposed.

**Progress:** Four metrics have been applied.

**Funding:** Colonial Foundation Trust

**Date Commenced:** October 2010

**Expected Date of Completion:** March 2011

# COMPLETED PROJECTS

## EPIDEMIOLOGY

### 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 and Dr John Howard

**Other Investigators:** Dr 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 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.

**Funding:** The United Nations Office on Drugs and Crime

**Date Commenced:** April 2007

### Using epidemiology to inform psychiatric classification (DSM-5 and ICD-11)

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

**Other Investigators:** Professor Gavin Andrews (School of Psychiatry, UNSW at St Vincent's Hospital), Dr Andrew Baillie (School of Psychology, Macquarie University), Professor Mark Oakley Browne (University of Tasmania) and A/Prof. Ayelet Meron Ruscio (University of Pennsylvania)

**Rationale:** Classification is the cornerstone of medical science. Classification systems are essential because of their influence on the clinical, research, public policy and administrative activities of health professionals. In psychiatry, efforts to classify mental and substance use disorders have been challenged by the complexity of the phenomena, the conflicting theoretical perspectives on these phenomena, the influence of non-scientific considerations in the development of formalised systems, and the diverse and at times

competing purposes for which these systems are used. This, in turn, restricts our ability to understand, identify, prevent and cure mental and substance use disorders. Developing the most valid, reliable and useful classification system is therefore a high research priority.

**Aims:** The project aimed 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.

**Design and Method:** This project relied 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 were derived from a number of epidemiological surveys of mental disorders both in Australia (National Survey of Mental Health and Wellbeing) and overseas (National Epidemiological Survey of Alcohol and Related Conditions) to address unresolved issues in the nosology of mental and substance use disorders.

**Findings:** This project has addressed a number of unresolved issues including whether or not alcohol abuse and alcohol dependence are two separate diagnostic entities, the validity of diagnostic thresholds for alcohol use disorders, the impact of symptom heterogeneity in the alcohol and cannabis use disorders, the existence of basic dimensions that explain the co-occurrence of the major mental and substance use disorders and whether or not the classification system performs equally well across demographic sub-groups such as the young versus the old.

**Benefits:** To date, classification research in psychiatry has suffered as a result of its fragmentary nature. From a theoretical perspective, this research helped to elucidate the combination of features best representing the shift from normal to pathological psychopathological experience. From a public health perspective, this research has permitted more accurate detection and description of mental and substance use disorders and improved the understanding of the relation between disorders and important outcomes. From a clinical perspective, this research has led to diagnoses that more powerfully predict clinically significant behaviours and outcomes and hence are more informative in practice. From a scientific perspective, this research has provided an improved classification of cases that will lead to more rapid accumulation of knowledge and the development of better treatments.

**Funding:** National Health and Medical Research Council

**Date Commenced:** January 2008

### Alcohol use in pregnancy

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

**Other Investigators:** Jenny Powers and Dr Deborah Loxton (University of Newcastle), Professor Elizabeth Elliott (Sydney University) and A/Prof. Adrian Dunlop (Hunter New England Area Health Service)

**Aims:** The aims of this project were 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
- 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).

**Design and Method:** Aim 1: Using these data a number of maternal characteristics of alcohol-related pregnancies were investigated, including reasons for admission, Statistical Local Areas of residence and hospital codes to determine geographical indicators of risk. We also plotted neonatal outcomes including low birth weight, poor growth, prematurity and transfer rates to specialist care.

**Aim 2:** Analyses assessed 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 plotted 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 pattern in pregnancy. We used longitudinal analyses to identify the relationships between underlying risk factors and drinking patterns during pregnancy.

**Benefits:** These studies have contributed to our understanding of issues surrounding alcohol use in pregnancy in two large samples and have identified a number of areas in which further work would usefully target issues around alcohol use in pregnancy. Recommendations arising from findings include: the need for women drinking at low to moderate levels to receive clear and consistent messages from health professionals; to clearly establish the risks associated with different levels of alcohol consumption; to develop standardised screening programs for alcohol use in pregnancy; and, where problematic alcohol use is detected, for clear clinical guidelines on management and referral.

Two papers have also been accepted for publication.

**Funding:** NSW Health

**Date Commenced:** April 2008

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

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

**Rationale:** Opioid substitution treatment (OST) is an effective treatment for opioid dependence that reduces criminal activity and mortality. This study will analyse the effect of OST in prisons on these negative outcomes for a group of men recruited in prison in 1997-1998.

**Aims:** To determine if being in OST at time of release from prison, or remaining in OST after release from prison, affects time to new criminal convictions and re-incarceration, and to assess mortality rates overall, while in treatment, while in prison and in the first four weeks following release from prison.

**Design and Method:** Outcomes for 382 opioid-using prisoners recruited in 1997-1998 were examined by linking methadone treatment records, court appearance records, imprisonment records and mortality records. Re-incarceration and re-offending were examined using recurrent event survival analysis. Mortality was examined by calculating the standardised mortality ratio, and crude mortality ratios for various states (e.g. in treatment vs. out of treatment; in prison vs. out of prison; first 28 days after release from prison vs. all other time at liberty).

**Benefits:** The project has identified that re-incarceration is significantly reduced when people commence OST while in prison, and remain in treatment after release. Correctional authorities should institute procedures to assist inmates to transfer to community-based OST providers after release from prison.

**Output:** A report has been submitted to the funders and peer-reviewed publications are in preparation.

**Funding:** National Drug Law Enforcement Research Fund

**Date Commenced:** July 2008

## Explaining and responding to increasing ecstasy use among young women in Australia

**NDARC Staff:** Dr Rebecca McKetin, Dr Jenny Chalmers, Dr Laura Vogl, Dr Lucy Burns, Dr Tim Slade, Rachel Grove and Dr Katrina Grech

**Rationale:** The 2007 National Drug Strategy Household Survey found that rates of ecstasy use increased relative to 2004 in specific population cohorts: 14-19 year olds, 30-39 year olds and women. The trend toward increasing ecstasy use in these groups was in contrast to declining trends in the use of other illicit drugs. In order to respond to increases in ecstasy use in these cohorts, it is important to understand the types of factors that may be driving these trends.

**Aims:** The aim of the study was to provide an account of possible explanations for, and responses to, the increase in ecstasy use among 14-19 and 30-39 year old Australian women.

**Design and Method:** The first part of the research involved a literature review of existing knowledge around the risk and protective factors for drug use. The second part of the research examined ecstasy prevalence data from the National Drug Strategy Household Survey. This data was used to determine whether the apparent increase in ecstasy use was due to an increase in the up-take of ecstasy use (i.e. new users), re-initiation of ecstasy use among former users of the drug, or an ageing birth cohort of ecstasy users.

**Findings:** The use of ecstasy had declined among young men in more recent birth cohorts, but this same decline was not seen for young women. In contrast, there was a significant increase in ecstasy use among girls (14-16 years) in the most recent birth cohort included in the survey. This resurgence of ecstasy use among young women stood in contrast to decreases in the incidence of other drug use in more recent birth cohorts. To respond to this situation, school-based drug prevention interventions are recommended, possibly using a social influence model that could be tailored toward young women.

The apparent increase in ecstasy use among older adults (30-39 years) was due to an ageing birth cohort of ecstasy users. Exposure to ecstasy increased substantially among Australians born from the late 1960s through to 1981 (corresponding to the increasing use of ecstasy among young adults during the 1990s). Many of these people have continued to use ecstasy through their adulthood, which has inflated the prevalence of ecstasy use in the older age brackets. In this context, men were more likely to continue using ecstasy through their adulthood than women. Addressing this trend would require increasing desistance rates among existing ecstasy users by modifying risk factors for ongoing drug use (e.g. attitudes toward ecstasy use, availability of ecstasy and other social risk factors for drug use).

**Benefits:** The study confirmed that there has been a resurgence in ecstasy use among young women (14-16 year olds), highlighting a need for prevention interventions that are tailored to this group. The study also highlighted the long-term impact of ecstasy trends, with increases in the prevalence of ecstasy use in Australia being largely due to Australians who have persisted with ecstasy use over the course of their adulthood.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** July 2009

### **Prevalence and correlates of DSM-IV alcohol abuse and dependence in Australia: Findings of the 2007 National Survey of Mental Health and Wellbeing**

**NDARC Staff:** Professor Maree Teesson, Dr Tim Slade, Dr Katherine Mills, Rachel Grove and Louise Newton

**Other Investigators:** Professor Wayne Hall (Centre for Clinical Research, University of Queensland), Dr Andrew Baillie (Department of Psychology, Macquarie University) and Professor Paul Haber (Royal Prince Alfred Hospital, University of Sydney)

**Rationale:** Alcohol use disorders are common, with major public health consequences. Alcohol abuse is the most harmful form of substance use in the world in young and middle aged adults in developed countries, taking into account premature death, disability, suffering, and the full range of social harm arising from problem alcohol use. The most recent study of the prevalence of alcohol use disorders in Australia occurred over 10 years ago. Given that the proportion of Australians reporting risky levels of alcohol consumption in household surveys increased from 8% in 1995 to 13% in 2004-05, more recent data are needed on the prevalence, correlates and treatment of alcohol use disorders in Australian adults.

**Aims:** Describe the prevalence and patterns of alcohol use disorders in the Australian population; examine the relationship between alcohol use disorders and health service utilisation.

**Design and Method:** The 2007 National Survey of Mental Health and Wellbeing (NSMHWB) was a nationally representative household survey of 8,841 Australian adults (16-85 years) using an interview schedule that assessed symptoms of the most prevalent DSM-IV mental disorders in the lifetime and the past 12 months.

**Findings:** Prevalence of lifetime and 12-month disorders was 18.3% and 2.9% for alcohol abuse and 3.9% and 1.4% for alcohol dependence. Current alcohol abuse and dependence was significantly more common in males and younger adults. There were significant associations between current alcohol use and other drug use disorders (OR 1.8) and between anxiety disorders and alcohol dependence (OR 2.3). Only 22.4% of those with alcohol use disorders were ever treated for their alcohol disorder.

**Benefits:** Greater awareness of alcohol problems in the general community. Alcohol use disorders are highly prevalent especially among young adult males. Comorbidity between anxiety and other drug use disorders is common and remains a significant challenge for the delivery of effective health care services and treatment. The low rate of effective interventions for alcohol problems is a significant public health concern.

**Funding:** NHMRC

**Date Commenced:** 2009

## **IDENTIFICATION OF POTENTIAL HARMS**

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

**NDARC Staff:** Dr Matthew Dunn, Johanna Thomas, Dr Wendy Swift and Dr Lucy Burns

**Rationale:** Much of the literature investigating the relationship between substance use and participation in sport and physical activity has focused upon adolescent groups. The extent to which these findings may be used to inform policy decisions and messages for athletes competing at higher levels may be limited. To implement and design targeted policy and prevention messages at this group, it is necessary to have an evidence base upon which to make these decisions.

**Aims:** To conduct the first Australian study investigating issues related to illicit substances among athletes competing at the elite level. With a specific focus upon meth/amphetamine, cannabis, ecstasy, cocaine, GHB and ketamine, the aims were to:

- Assess lifetime and past-year use of illicit drugs
- Assess knowledge about the effects of illicit drugs
- Examine the sources of information that athletes use to inform their knowledge of illicit drugs
- Explore attitudes toward drugs in sport policies
- Identify the need for resources, education programs and policy approaches.

**Design and Method:** The study was conducted in two phases and comprised two components. The first component comprised surveys from 1,684 elite Australian athletes from 18 national sporting organisations and the Australian Institute of Sport. An athlete was considered 'elite' if they were eligible for state or national selection in their sport. The second component comprised qualitative interviews with 24 'key experts', who came from a wide range of positions within the sporting industry and were able to comment on issues related to drug use among athletes.

# COMPLETED PROJECTS

**Findings:** Data analysis is currently underway. Findings from the first phase of the project, which consisted of data from 974 athletes and the key experts, are available as an NDARC Technical Report with further discussion contained in peer-reviewed manuscripts (see Output section below).

**Benefits:** The project has provided an indication of levels of illicit drug use among elite athletes in Australia and has provided an evidence base from which policy decisions and education initiatives can be made.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** July 2008

## Issues related to substance use among university student athletes

**NDARC Staff:** Dr Matthew Dunn and Johanna Thomas

**Rationale:** Substance use is a concern among university students and research from North America suggests that student athletes are at a particularly heightened risk, consuming more alcohol and engaging in more frequent episodic drinking compared to students not involved in sport. While research has been conducted among this group internationally, there has been no research to date among groups from Australia.

**Aims:** The aim of this pilot study was to investigate a range of substance use issues among a sample of Australian university student athletes.

**Design and Method:** A convenience sample of 84 student athletes from various sports associated with the University of New South Wales Sport and Recreation self-completed a quantitative survey which assessed their use of alcohol, supplements and conditioning aids and illicit drugs; their drug information-seeking behaviours and how credible they rate the information they found; their attitudes toward drug testing; and their knowledge of the effects of illicit drugs.

**Findings:** Data analysis is currently underway.

**Benefits:** The project has provided the first Australian data related to substance use issues among Australian university student athletes.

**Funding:** None

**Date Commenced:** October 2009

## HEALTH ECONOMICS

### Cannabis use disorder treatment and health care costs in New South Wales (NSW) in 2007

**NDARC Staff:** Marian Shanahan and Rachel Ngui

**Rationale:** Although cannabis is the most widely used illicit drug and is often perceived as innocuous, it is the second most common principal illicit drug of concern for which treatment is sought. Despite this, to date, it appears that not much is known about the resource implications of providing treatment or treating the health consequences of cannabis use. This study estimated such costs for NSW in 2007.

**Aims:** The aims were to estimate the costs of treatment in drug treatment agencies, general practices and hospitals, and costs to treat three health consequences of cannabis use (schizophrenia/psychotic disorders, low birth weight babies, and road traffic accidents).

**Design and Method:** The costs of treatment in drug treatment agencies and general practice were estimated by identifying the resources used and then multiplying the appropriate number of occurrences (e.g. number of counsellor hours) by their associated unit costs.

**Findings:** The main estimate of total treatment and health care costs of cannabis use for NSW in 2007 was \$16.9 million with a range from \$16.9-22.0 million obtained from sensitivity analysis.

Sensitivity analysis conducted showed that the largest impact on treatment costs was for the proportions of 'cannabis drivers' killed and injured, followed by varying the length of stay in residential rehabilitation treatment.

**Benefits:** This report provides unit costs and estimates of the cost of treatment and other health burdens from cannabis for use in other research.

**Implications for policy:** This study provides detailed information on the resources and unit costs for health care and treatment related to cannabis use for one jurisdiction (NSW), and, as such, should provide useful information for researchers and policy makers. It also provides important information to inform the ongoing debate with respect to the health burden of cannabis use.

**Future research implications:** Several issues became very apparent through the conduct of this study. A key issue is the lack of data on the health care burden as a result of cannabis use. In order to complete this study several assumptions were necessary. Research on a large sample of cannabis users using linked health data would provide a much stronger basis for policy making in this area.

**Funding:** Australian Research Council

**Date Commenced:** June 2007

## DRUG MARKET ANALYSIS AND SUPPLY REDUCTION

### The influence of drug prices on the patterns of drug consumption of methamphetamine users

**NDARC Staff:** Dr Jennifer Chalmers

**Other Investigators:** Deborah Bradford, Craig Jones and Professor Don Weatherburn (NSW Bureau of Crime Statistics and Research)

**Rationale:** A key aim of supply-side drug law enforcement is to reduce drug use by increasing the retail price of drugs. Since most illicit drug users are polydrug users, the effectiveness of this strategy depends on the extent to which drug users reduce their overall consumption of drugs. The literature shows that drug users do reduce their consumption of a drug when its price increases. However, the extent of that decrease and the implications for the use of other drugs vary across studies.

**Aims:** Based on a survey of methamphetamine users, we used this experimental approach to determine:

- What effect do changes in the price of methamphetamine have on demand for methamphetamine, heroin, cocaine, cannabis, benzodiazepines, pharmaceutical opioids and alcohol?
- Likewise, what effect do changes in the price of heroin have on demand for these drugs?

**Design and Method:** A sample of 101 Australian methamphetamine users was surveyed using an approach developed by Nancy Petry and Warren Bickel to understand polydrug use with behavioural economic analyses. Petry and Bickel (1998) developed a set of hypothetical experiments to be undertaken in the field, replicating as far as possible the real life drug purchasing experience. Participants were given a hypothetical fixed drug budget, presented with a range of drug price lists and asked how many units of each drug they would purchase. Methamphetamine and heroin prices were varied independently across trials.

**Findings:** While demand for both methamphetamine and heroin was found to be price elastic, elasticity estimates were influenced by the nature of participants' drug dependence. The group least responsive to changes in methamphetamine price were those dependent only on methamphetamine, while the group most responsive were dependent only on heroin. Similar findings emerged in relation to changes in heroin price. Cross-price elasticity analysis showed limited substitution into other drugs as the price of methamphetamine increased. In contrast, for heroin, there was significant substitution into pharmaceutical opioids and, to a lesser extent, benzodiazepines and methamphetamine. However, for the most part, the decreases in methamphetamine or heroin consumption outweighed any substitution into other drugs.

**Benefits:** The reduction in overall drug consumption and expenditure in response to price increases in heroin and methamphetamine observed in this sample lend support to supply-side enforcement strategies that aim to increase the cost of purchasing drugs. Notably, this analysis highlights the importance of accounting for the nature of users' drug dependence in estimating price responsiveness.

**Funding:** Colonial Foundation Trust and BOCSAR

**Date Commenced:** August 2008

## PREVENTION AND EARLY INTERVENTIONS

### Media reporting on illicit drug use in Australia: Trends and impacts on youth attitudes to illicit drug use

**NDARC Staff:** Dr Caitlin Hughes, Bridget Spicer, Kari Lancaster and Francis Matthew-Simmons

**Other Investigators:** Paul Dillon (Drug and Alcohol Research and Training Australia)

**Rationale:** Society is constantly bombarded with mass media messages by way of television, radio, newspapers and online. News outlets have limited space to dedicate to issues, and illicit drugs are clearly newsworthy. In spite of the media being identified almost

ten years ago as a 'new battleground' for the alcohol and other drug sector (Proctor & Babor, 2001), knowledge remains scant on the nature of news media reporting in Australia - how much space is devoted to drugs, how issues are framed, who speaks and who does not.

Even less is known about the impacts of news media on attitudes towards drugs, particularly on those who are most likely to use illicit drugs - youth. Research from other fields has demonstrated that media reporting on tobacco, body image and violence can elicit short- and long-term change in attitudes and behaviour. While strategies have been developed to counter the negative effects of media coverage of violence, the alcohol and other drug sector has been slow to acknowledge or identify the potential effects of media reporting on attitudes to illicit drugs.

**Aims:** This study starts to address the intersection between news media and illicit drug use. It examines two major aspects of news media: media production - as denoted by patterns and trends in Australian news media reporting on illicit drugs; and media effects - as denoted by impacts on youth attitudes to illicit drug use.

The purpose of this study was fourfold:

- To identify the dominant media portrayals used to denote illicit drugs in Australian news media and dominant portrayals by drug type (cannabis, amphetamines, ecstasy, cocaine and heroin)
- To identify the extent to which media portrayals have changed over time (from 2003-2008), measured in terms of the number and type of media reports on illicit drugs
- To explore the impacts of different media portrayals on youth attitudes to illicit drug use, namely their perceptions of the risks and acceptability of use and their likelihood of future use
- To determine if the media differentially affects sub-populations of youth, and, if so, to identify the sub-populations of youth that are most responsive to media reporting on illicit drugs.

**Design and Method:** A three-part method was adopted. First, a retrospective media content analysis was conducted of newspaper reporting over the period from 2003 to 2008. A total of 4,397 newspaper articles were coded on multiple elements of framing including topic, source and implied moral evaluation of illicit drug use. Second, a national online 'drug media survey' was developed that included a randomised series of eight different media portrayals (denoting the two most commonly used illicit drugs - cannabis and ecstasy). Portrayals were drawn from newspapers, yet these portrayals could have appeared in any news media form - e.g. online news or radio. A total of 2,296 youth aged 16-24 years completed the survey and reported the impact of each portrayal on their perception of the risk and acceptability of illicit drug use, and their likelihood of future use. Finally, the nature of media effects was also explored using focus groups with 52 youth aged 16-24 years.

**Findings:**

#### Media analysis

The media analysis demonstrated that the dominant portrayals regarding illicit drug issues in the Australian print media tend to focus on heroin or cannabis (with 27.0% and 24.5% respectively of the sample) and rarely on ecstasy (4.9% of the sample). Despite fears that positive portrayals of drugs in the media may encourage

# COMPLETED PROJECTS

or pique interest in drug use, the sample showed that articles with a 'good' moral evaluation of drugs were extremely rare and accounted for only 1.9% of the sample. Most articles were written with a neutral tone (83.5%). The dominant portrayals depicted law enforcement or criminal justice action, and emphasised the legal problems associated with drugs/use. For example, criminal justice action regarding users or dealers amounted to 55.2% of articles within the sample.

## Survey analysis

The survey indicated that news media reporting was capable of eliciting at least short-term effects on youth attitudes to illicit drug use. The vast majority of the media portrayals affected the overall sample of youth in an 'anti-drug' manner: that is, they increased perceptions of risk, reduced perceptions of acceptability, and reduced the reported likelihood of future drug use. The type of portrayal affected both the size and direction of impact. Portrayals endorsing drug use (such as an article about Sir Richard Branson's cannabis use) tended to increase 'pro-drug' attitudes. Conversely, negative portrayals (such as an article about the link between cannabis use and psychosis) tended to reduce 'pro-drug' attitudes. The most effective portrayals for reducing pro-drug attitudes were the health and social portrayals. These were more effective than the dominant crime and arrest portrayals. Media effects were not uniform. Those most affected were females (compared to males), non users (compared to recent users and non-recent users), and those who described themselves as less interested in/susceptible to drug use.

## Focus group analysis

The focus groups confirmed that youth actively discern and accept or reject media messages on illicit drugs. This process is shaped by media literacy skills, pre-existing beliefs and message framing. Youth are more likely to accept messages that are deemed credible (e.g. use evidence appropriately, cite expert sources and use a neutral tone). They are also more likely to accept messages that are deemed meaningful. Health and social portrayals tend to be more powerful because they depict a more persuasive risk message. These portrayals also appear capable of affecting multiple sub-populations of youth as they elicit a preventative message to non-users and a harm reduction message to recent and non-recent users.

**Benefits:** The findings indicate the significance of the way in which news media frames illicit drug reporting. Portrayals in the press are not random and often over-represent criminal justice or legal problem framings. Framing affects what is said about issues, by whom and the definition of optimum solutions (Lancaster, Hughes, Spicer, Matthew-Simmons & Dillon, 2010). The current frames are likely to restrict opportunities for informed debate. That said, frames do differ somewhat between drugs and can shift with changing agendas and events. Establishing how alternate frames emerge is of critical importance for fostering more informed debate.

This study provides evidence of the potential power of news media over attitudes towards illicit drug use. While exploratory, the findings suggest that news media may be one of the many factors that affects demand for illicit drugs, and that, in the main, news media is likely to be deterring interest in and/or the uptake of illicit drug use. We believe this to be a factor that many, including the alcohol and other drug sector, have overlooked.

The anomaly is that the portrayals that were deemed most likely to deter youth, such as those denoting cannabis psychosis, are currently the least covered in Australian news media (at least as measured in print news). This leads us to conclude, albeit with some caution, that the capacity to use news media to deter or dissuade youth is currently being under-utilised.

The onus is now on the alcohol and other drug sector to recognise the potential power of the news media and to build a culture of media engagement, increase resourcing capabilities and develop more strategic targeting related to illicit drug issues. We suggest such investment is likely to pay dividends because, as summed up by one young Australian: 'Media is probably one of the few ways that prevention message(s) can keep being pushed.'

**Funding:** Australian Government Department of Health and Ageing under the National Psychostimulants Initiative

**Date Commenced:** June 2009

## CLIMATE Schools: Ecstasy Module

**NDARC Staff:** Dr Nicola Newton and Professor Maree Teesson

**Other Investigators:** Professor Gavin Andrews (Clinical Research Unit for anxiety and depression, St Vincent 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 CLIMATE Schools: Ecstasy Module is evidence-based and was 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 was designed to;

- provide information regarding short- and long-term legal, social and health consequences of using ecstasy
- challenge students' perception of inflated peer drug-use and hence peer acceptability by presenting students with conservative drug-use norms
- build resistance and harm minimisation skills
- teach skills for dealing with a drug-related emergency.

The research team consulted 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 were then developed to incorporate the proposed content within the context of an interactive teenage drama. This drama was the primary subject of the initial focus groups for teachers, students and ecstasy experts. The research team then incorporated suggested changes from these groups.

The second stage of the development process involved the production of the teacher manual which incorporates varied classroom activities. These activities were developed to ensure optimal peer involvement and interactive classroom sessions rather than promoting ineffective didactic teaching methods. The manual and the cartoons were then subjected to a second round of focus group review, again involving secondary school teachers, students and ecstasy experts. Feedback was subsequently incorporated and the module finalised. This methodology replicates the successful development of the previous CLIMATE Schools drug prevention modules which have been devised and implemented by NDARC.

**Findings:** The CLIMATE Schools Ecstasy Module was successfully developed and is now ready for evaluation.

**Benefits:** Successful development of an innovative ecstasy prevention program which overcomes traditional obstacles to implementation and is accepted by students and teachers as a means of delivering dry education in schools.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** July 2009

## TREATMENT AND OTHER INTERVENTIONS

### Long-term treatment outcomes for methamphetamine dependence: A three year follow-up of the MATES cohort

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

**Other Investigators:** Jake Najman and Abdullah Mamun (University of Queensland) and Amanda Baker (University of Newcastle)

**Rationale:** 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. However, it is not known for how long after treatment these benefits will last.

**Aims:** The aim of the MATES three year follow-up was to assess longer-term treatment outcomes for methamphetamine use for the Sydney arm of the study.

**Design and Method:** MATES is a prospective longitudinal cohort study. Participants in the Sydney arm of the MATES cohort were re-contacted and interviewed three years after their entry to drug treatment. The interviews assessed methamphetamine use, other drug use, and major drug-related harms (e.g. HIV risk, crime, psychosis).

**Findings:** Around one-third of MATES participants showed long-term recovery after drug treatment, but the majority had relapsed to dependence and/or returned to drug treatment. Long-term recovery was more likely with longer treatment exposure and more intensive treatment options (i.e. residential rehabilitation and counselling vs. detoxification). Relapse was more likely among injecting methamphetamine users, those who presented to treatment with psychotic symptoms, and those with high levels of psychological distress.

**Benefits:** The findings from this research highlight the chronic and relapsing nature of methamphetamine dependence, particularly for injecting methamphetamine users, and the need for a more intensive treatment approach for this population, with a particular emphasis on follow-up care and relapse prevention.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** July 2009

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

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

**Rationale:** Suicide is a leading cause of death among people who misuse drugs and alcohol. The annual prevalence of attempted suicide among dependent drug users is equivalent to the lifetime prevalence in the general population. Clearly suicide represents a major clinical challenge to those treating drug dependent users, yet little is known about how suicide risk is currently managed in Australian drug and alcohol treatment settings.

**Aims:** The aims of this project were 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, outline the core components of a potential suicide risk assessment tool for drug and alcohol workers.

**Design and Method:** The study employed a cross-sectional design. A semi-structured questionnaire was used to interview treatment agency staff responsible for the case management of drug and alcohol clients about their suicide risk assessment practices. The questionnaire examined 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 were also asked about current policies and procedures relating to suicide risk assessment.

**Findings:** Of 71 generalist residential rehabilitation services across Australia, 64 (90%) agreed to participate.

#### Formal training in suicide risk assessment (SRA)

- According to managers, one-quarter of agencies had not provided staff with training in SRA. Consistent with this, almost one-quarter of staff interviewed reported they had never been formally trained in SRA
- The majority of staff (94%) reported being confident or very confident in SRA; however, 96% acknowledged they would gain some benefit from further training.

#### SRA policy

- One-third of agencies had no documented policy for the management of suicide risk, and a further 16% had a policy that did not clearly document when and how clients are to be assessed, and what procedures are to be followed in the event of risk being identified
- In agencies where the manager indicated there was a policy relating to SRA, 26% of staff were unaware of the policy's existence.

#### SRA practices

- Typically staff reported assessing suicide risk in response to an observation of the client (87%) and/or at a procedural time-point in treatment (68%). The majority of SRAs were conducted either prior to treatment (often for referral purposes), or early in treatment

# COMPLETED PROJECTS

- In more than one-third of agencies, staff were not expected to use structured SRA tools
- To varying degrees, agencies are gathering information about psychiatric comorbidity, but this does not appear to be routinely integrated into the client's SRA
- One-fifth of staff (20%) reported having lost a client to suicide
- The majority of managers and staff expressed a willingness to use a new tool to assess acute suicide risk if one were developed
- Approximately two-thirds of managers and half of staff interviewed reported some form of barrier to conducting suicide risk assessment with clients.

## Knowledge of risk and impact of training on knowledge

- Almost one-third of staff did not identify hopelessness as a suicide risk factor, and 15% were unaware that drug and alcohol clients represent a high-risk group for suicide
- Staff who had not undergone SRA training were more likely to hold the view that raising the topic of suicide with a client would increase the likelihood of them attempting suicide
- Staff who had undergone SRA training endorsed significantly more factors when asked what information they would gather from a client they believed to be acutely suicidal.

**Benefits:** The study identified the need for three new resources to improve the management of suicide risk in residential drug and alcohol treatment settings: a Policies and Procedures Pro-forma (Suicide-PPP) to assist managers in drafting guidelines for managing suicide risk, an Acute suicide risk Screener (Suicide-AS), and a standardised suicide Risk Formulation Template (Suicide-RFT). These resources are currently being developed in Stage 2 of the project.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** December 2008

## The Michael Project Evaluation

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

**Other Investigators:** Professor Paul Flatau and Kathryn Taylor (Murdoch University), Professor Richard Bryant (UNSW), Dr 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 three-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), three 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 Medibeat Nurse service.

**Benefits:** Evidence for the benefit of timely, wrap-around services for homeless men.

**Funding:** Private benefactor, through Mission Australia

**Date Commenced:** 2008

## 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

**Rationale:** To obtain rich data on barriers to accessing appropriate and effective treatment for both mental health and substance use difficulties for young people with problematic cannabis and/or psychostimulant use.

**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.

**Benefits:** By identifying perceived barriers to accessing appropriate and effective treatment for both mental health and substance use difficulties, strategies to overcome these barriers have been clarified.

**Output:** Draft report in revision.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** June 2009

## The integration of evidence-based alcohol screening and brief intervention in Aboriginal Community Controlled Health Services

**NDARC Staff:** Dr Anton Clifford, A/Prof. Anthony Shakeshaft and Catherine Deans

**Rationale:** Screening and brief intervention (SBI) is a cost-effective treatment for reducing alcohol misuse in the general population. The cost-effectiveness of alcohol SBI for Indigenous Australians is, however, yet to be rigorously demonstrated. Strategies for the effective implementation of alcohol SBI in Aboriginal Community Controlled Health Services (ACCHSs) should be rigorously examined in order to increase the likelihood of it proving cost-effective for Indigenous Australians in practice.

**Aims:** Identify factors influencing routine alcohol SBI delivery in ACCHSs; and examine the effect of a tailored intervention on the delivery of alcohol SBI among healthcare practitioners in ACCHSs.

**Design and Method:** A pre-post-test design using group interviews with healthcare practitioners to identify factors influencing delivery of alcohol SBI in ACCHSs, and a clinical audit of alcohol information in electronic patient records to examine the effect of an intervention on the frequency and quality of alcohol SBI delivery in ACCHSs.

**Findings:** Focus groups identified four key factors influencing alcohol brief intervention delivery in ACCHS settings: outcome expectancy; role congruence; utilisation of clinical systems and processes; and options for alcohol referral. An intervention combining education and tailored outreach support was implemented and evaluated in each health service. Baseline percentages of alcohol screening were less than 5% in three ACCHSs and approximately 20% in one ACCHS. There was a two- to three-fold increase in the percentage of eligible clients with some record of alcohol screening/information and those with a complete alcohol screen in two ACCHSs. There were increases in the percentage of at-risk drinkers with brief intervention in three ACCHSs.

**Benefits:** The increase in the percentage of eligible clients with a valid alcohol screen in participating ACCHSs was a main benefit of this project, especially when considered alongside increases in the overall number of clients screened for alcohol across all participating ACCHSs: approximately three times as many clients post- (n=320) versus pre-intervention (n= 107) were screened appropriately.

**Funding:** Australian Government Department of Health & Ageing (DoHA) through the National Drug Research Institute (NDRI)

**Date Commenced:** March 2008

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

**NDARC Staff:** Dr Kristy Martire and Timothy McSweeney

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

**Design and Method:** The 2008 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 2008. Analysis was conducted on an existing dataset of 2,731 referred defendants.

**Findings:** There were statistically significant reductions in both the frequency and intensity of all forms of self-reported substance use amongst accepted MERIT participants in 2008. The largest reductions were recorded for the reported use of cannabis and amphetamines. However, for most participants, levels of dependence on illicit drugs upon exit from MERIT continued to exceed established thresholds for dependency using validated measures.

Twelve months after exiting the MERIT program in 2007, 41.6% of defendants had been re-convicted for a further offence. However, program non-completers in 2007 were significantly more likely to be reconvicted for another offence during the 12 weeks in contact with MERIT (38.7% vs.13.3%), and in the six (42.3% vs. 22.9%) and 12 months (53.8% vs. 35.7%) following program exit (all at p=0.000).

**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 of the NSW Attorney General's Department

**Date Commenced:** December 2009

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

**NDARC Staff:** Dr Melissa Norberg, Robert Battisti and Professor Jan Copeland

**Other Investigators:** Dr Daniel Hermens and Professor Ian Hickie (Brain and Mind Research Institute, University of Sydney)

**Rationale:** 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 three 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.

# COMPLETED PROJECTS

Following completion of these sessions, participants complete one-month and three-month follow-up assessments. Individuals in the delayed treatment condition receive the treatment immediately after a three month wait-period.

**Findings:** Recruitment has ceased for Cannabis Check-Up Plus. Thirty-three participants entered into the study.

Participants were quite complex; for example, all enrolled participants had two or more Axis I disorders, 26 participants (78.8%) had three or more Axis I disorders, and five participants (15.2%) had four Axis I disorders. In addition, only two patients had cannabis dependence of mild severity, yet 18 were of moderate severity, and 15 were classified as severely dependent, based upon functional interference.

Mixed-effects models were used to analyse the data given the disproportionate amount of missing data from the delayed treatment group. There were no significant interactions of group and time, indicating no gains of treatment over assessment alone ( $p > .05$  for all); however, a main effect of time was present for grams of use per month ( $F(2,41) = 3.89, p < .05$ ). Frequency of use did not change over time, which indicates that the decrease in quantity was spread across the month and did not reflect abstinence behaviours.

During the next quarter, the technical report will be completed and a manuscript will be submitted to a peer-reviewed journal.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** July 2009

## Development of a cannabis withdrawal scale

**NDARC Staff:** Dr David Allsop, Dr Melissa Norberg, Jennifer Mackenzie and Professor Jan Copeland

**Other Investigators:** Dr Shanlin Fu (Department of Chemistry and Forensic Science, University of Technology, Sydney) and Professor Alan Budney (Centre for Addiction Research, Department of Psychiatry, University of Arkansas for Medical Sciences)

**Rationale:** Rates of continuous abstinence from cannabis are low under any form of treatment, and cannabis withdrawal has been reported as a potential trigger for relapse. Despite the possible importance of withdrawal, there is currently no valid and reliable psychometric instrument for measuring the syndrome in clinical or research settings.

**Aims:** To develop a clinical measurement tool for assessing the stage and severity of cannabis withdrawal.

**Design and Method:** This study recruited 45 non-treatment-seeking, cannabis-dependent participants from the community. Participants were aged 18-65 and regularly used cannabis (on average five days per week), and met DSM-IV criteria for cannabis dependence. Participants completed a baseline assessment, and provided daily withdrawal symptom information during a one week 'smoking as usual' baseline phase, followed by a two week cannabis abstinence phase.

**Findings:** A Cannabis Withdrawal Scale was developed from the existing Marijuana Withdrawal Checklist and updated from the latest literature. The most prominent and debilitating cannabis withdrawal symptoms were sleep related (nightmares and strange

dreams, insomnia, night sweats etc.), mood related (irritability, anger and mood swings), restlessness, cravings and appetite dysfunction (nausea, lack of appetite). More dependent cannabis users experienced more severe withdrawal symptoms than less dependent users, but cannabis use per se did not moderate the relationship between abstinence and withdrawal. Ranking scale items by adjusting their withdrawal magnitude by the debility they caused suggests that sleep dysfunction (including nightmares and insomnia), mood disorders (irritability, anger and mood swings) and cravings are some of the more important cannabis withdrawal symptoms. Physical tension, cravings and mood swings were all associated with relapse to cannabis use.

**Benefits:** The Cannabis Withdrawal Scale will be a useful tool for researchers and clinicians to quantify a client's stage and severity of cannabis withdrawal.

**Output:** Main manuscript currently in preparation for submission

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** July 2009

## Mail-based intervention for cannabis use

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

**Rationale:** Evidence-based treatments for cannabis rely on face-to-face contact, which people living in rural and remote areas have limited access to. Assessing the efficacy of alternative modes of treatment delivery are thus important in furthering the evidence base for cannabis dependence treatments.

**Aims:** 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.

**Findings:** A total of 86 people completed baseline assessments in this study and 34 participants went on to complete treatment. Overall, treatment completers significantly decreased ( $D2=40.82, p<0.001$ ) their cannabis use over the course of this study. Baseline observation carried forward for missing data also demonstrated a significant reduction in cannabis use ( $D2=35.93, p<0.001$ ). Furthermore, of the 34 who completed treatment, nearly one-quarter ( $n=8$ ) were abstinent at follow-up.

**Benefits:** Transposing face-to-face treatments into a postal format has shown some promise and future research is warranted to determine the efficacy of such treatments in a controlled study.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** March 2009

## Characteristics of successful versus unsuccessful cannabis quitters

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

**Rationale:** Identification of differences between successful and unsuccessful cannabis quitters potentially could improve interventions so that individuals more strongly oriented for relapse might be better helped.

**Aims:** This study compared characteristics and quitting strategies of former regular cannabis users who had been abstinent for at least a year (n = 87) with those of current regular cannabis users who had made at least one unsuccessful attempt to quit (n = 78).

**Design and Method:** Successful and unsuccessful quitters retrospectively reported on demographic and cannabis-related variables, as well as on quitting strategies, during their most recent quit attempt. Participants also reported on current mental health, personality, and social support.

**Findings:** Unsuccessful quitters had less education, higher day-to-day exposure to other cannabis users, and higher usage of cannabis prior to their most recent quit attempt. Additionally, unsuccessful quitters used significantly more motivation enhancement strategies, while successful quitters used significantly more coping strategies. This may indicate that unsuccessful quitters focus on the desire to quit, but do not sufficiently plan strategies for coping.

**Benefits:** The findings suggest that coping may be an important factor to emphasise in treatments for cannabis use disorder.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** May 2009

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

**NDARC Staff:** Dr Lucy Burns and Dr Elizabeth Conroy

**Other Investigators:** Professor Paul Haber, Dr Kirsten Black and Christine Stephens (Royal Prince Alfred Hospital, Sydney)

**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: 1) Identify the barriers to effective contraceptive use among drug-dependent women; 2) Identify the need for staff training and education in the area of contraception; and 3) Develop an effective contraception intervention that is both acceptable to opioid-dependent women and feasible to implement within a clinical setting.

**Design and Method:** The study comprised two components:

- In-depth interviews with 22 female clients attending drug health services at three sites. The interview was semi-structured and asked participants for their views regarding female reproductive health, the reliability of different contraceptive methods, barriers to contraception use, and the feasibility and acceptance of three different models for the delivery of sexual health services to drug-dependent women
- Focus groups with health service providers, including staff from Drug Health Services, Sexual Health Services, and Obstetrics and

Gynaecology. The focus groups explored how best to develop an intervention to prevent unplanned pregnancy in female substance-dependent clients and discussed the sexual health needs of this client group, barriers to contraception uptake and the pros and cons of different models of a sexual health intervention.

### Findings:

#### In-depth interviews with drug dependent women

Most participants had experienced at least one unplanned pregnancy and many had children, though often not in their care. Low use of birth control was the norm. Participants identified a number of barriers to seeking medical support with their sexual health needs including stigma and fear of being judged by their AOD caseworker/clinician, particularly for women who identified themselves as being a sex worker, and apprehension about receiving negative results. Past trauma and sexual abuse also made this a highly sensitive topic for some women, which enhanced their reluctance to seek information and advice or get regular STD screening and pap tests. A number of women cited misinformation (they had been told by a friend), which in some instances resulted in an unplanned pregnancy. In regards to the alternative sexual health services, an overwhelming majority supported keeping their sexual health needs separate from their AOD treatment, as well as a desire to have a sexual health service that was accessible and conveniently located. Many preferred to discuss their sexual health with and have any medical procedures performed by a female clinician who had specific training and expertise in sexual health, rather than their AOD caseworker/clinician.

#### Health Professional Focus Groups

Many respondents noted the low rate of sexual health testing in this group. A key issue discussed in relation to this was the need to make services immediately accessible. If women were not offered a service when they were attending for other issues, it was very unlikely they would come back for a return appointment. There was also discussion regarding the type of contraception best suited for the client group; for example, the dual benefit of condoms as contraception and protection from STD infection, and the timing of contraceptive implants following birth. A constant theme was the different needs of different subgroups of women; for example the special needs of women of CALD background; Aboriginal women; and women who were working as sex-workers.

**Benefits:** Understanding of a model of care that will be the subject of a larger project grant

**Funding:** NSW Health Mental Health and Drug and Alcohol Grants program

**Date Commenced:** 2008

## Integrating treatment for alcohol use problems and comorbid post-traumatic stress disorder

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

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

# COMPLETED PROJECTS

**Rationale:** Post-traumatic stress disorder (PTSD) and alcohol use disorder (AUD) frequently co-occur, causing considerable impairment in psychosocial functioning and more complex clinical presentations. These disorders appear to have a functional relationship in that the development of AUD and other substance use appear to follow the onset of PTSD. In addition, irrespective of aetiological relationship, once these disorders are established, they appear to maintain each other. There is strong evidence for the efficacy of treatment for each disorder but little empirical evidence to support choice of treatment when these problems are comorbid. This study tested the efficacy of the integration of 'gold standard' interventions for AUD and PTSD in a civilian population.

**Aims:** The study aimed to determine the relative efficacy of integrated cognitive behaviour therapy (CBT) for alcohol use and PTSD (Alc-PTSD) compared to alcohol use and a control condition of supportive counselling (Alc-Support) in the treatment of these disorders in the general community. It was hypothesised that both treatment conditions would be associated with significant improvements on primary and secondary measures over time and that integrated treatment (Alc-PTSD) would be associated with greater improvements in outcomes than treatment for alcohol only (Alc-Support).

**Design and Method:** The study was a randomised controlled trial with an additive design of the efficacy of CBT for both PTSD and alcohol use problems. Eligible participants were: 18 years of age or older; consumed alcohol at risky levels (drinking  $\pm 29$  drinks per week for men and  $\pm 15$  drinks per week for women); met DSM-IV diagnostic or sub-threshold criteria for PTSD (two of three Avoidance symptoms); currently stable in terms of self-harm, suicide intent or psychosis; and had basic literacy in English. Participants were randomly allocated to one of two treatment conditions: either 14 sessions of integrated treatment for PTSD and alcohol use (Alc-PTSD) or 14 sessions of treatment for alcohol use plus a control condition of supportive counselling (Alc-Support). All treatment was manual-guided; sessions were recorded and checked for adherence by independent researchers blind to treatment condition.

Treatment for alcohol use was based on motivational and CBT components, including: drink- and urge-monitoring, goal-setting, identifying risky situations, developing coping skills, managing thoughts about drinking, dealing with lapses and relapse prevention (the treatment manual is available on request). Treatment for PTSD consisted of education, common reaction to trauma, imaginal and in-vivo exposure, cognitive therapy and relapse prevention. Participants were recruited predominantly from specialist drug and alcohol and anxiety clinics, community health centres, GPs, and the print media. Recruitment and treatment were undertaken 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). Participant follow-up was conducted at the end of treatment and three- and six-months after treatment completion by an independent researcher blind to treatment condition. Primary outcomes were PTSD symptoms and number of drinks consumed. Secondary outcomes were depression, anxiety, PTSD cognitions, alcohol dependence and problems and general functioning.

**Findings:** Sixty-two participants were randomly allocated to treatment conditions and received a median of 10 sessions (71%) of treatment over a mean of four months (SD 11.69). Differences in baseline characteristics or rates of retention in treatment between the two treatment conditions were not significant. Blind follow up was conducted at the end of treatment and five (SD 2.27) and nine (SD 3.45) months after treatment completion. Approximately three-quarters of participants were re-assessed at each follow-up point.

The sample consisted of men and women in equal numbers, a mean of 41 (SD 11.91) years of age, mostly Australian-born and English-speaking, half of whom were unemployed and single. The majority (95%) were alcohol dependent, drinking a mean of 14 (SD 7.19) standard drinks per drinking day, drinking four out of five days in the previous three months. One-third consumed other substances, predominantly cannabis and 12% were substance dependent. The sample's main index trauma was violent crime (30%) followed by childhood physical or sexual abuse (22%). The sample also had extremely severe depression and state and trait anxiety and interpersonal difficulties.

During treatment, there were significant and large reductions in PTSD symptoms and drinks per drinking day. Participants receiving trauma treatment (Alc-PTSD), after the commencement of CBT for trauma (week 5), consumed significantly more alcohol than did the control group (Alc-Support) for a period of six weeks. Follow-up assessment data, analysed using Generalised Estimating Equations, revealed significant reductions and effect sizes (es) for both treatment groups in primary outcomes, alcohol use (es 0.9) and PTSD symptoms (es 0.98) and secondary outcomes (PTSD cognitions, alcohol dependence, problematic alcohol use, depression, anxiety, anxiety sensitivity and general functioning).

Study results suggest that effective treatment of AUD, among people with established alcohol dependence and complex presentations, is associated with large reductions and effect sizes in alcohol consumption and PTSD symptoms which are well maintained over time. The addition of CBT for PTSD in this population within the four-month treatment time frame does not appear to add significantly to the large benefits derived from treatment.

**Benefits:** This study is one of the first RCTs in this neglected area of research. Its evidence supports the use of current 'gold standard' treatment for alcohol use disorder. The study demonstrated that clients with these complex presentations engage well in treatment, can complete the majority of treatment sessions and derive substantial and lasting gains. Although CBT for PTSD treatment did not appear to add significantly to treatment outcome, neither did it detract in any lasting way. In view of the fact that CBT is 'gold standard' treatment for PTSD, this is an encouraging finding. This study makes a valuable contribution to a growing literature testing appropriate treatment options for people with alcohol and other substance use disorders and will help guide treatment choice for clinicians who treat people with these coexisting problems.

**Output:** Oral and poster presentations of preliminary and final results have been made at several national conferences and one international meeting, including: the Australasian Professional Society on Alcohol and other Drugs Conference, 24 November 2008; the NDARC Symposium, 28 September 2009; the Australian Psychological Society National Conference, 30 September, 2009; the Australian Psychological Society Clinical College Workshop, Sydney

16 October 2009; the Mental Health Services Conference, Sydney 14 September 2010; the Australasian Professional Society on Alcohol and other Drugs Conference, 30 November 2010; and the British Psychological Society Annual Conference, Stratford upon Avon, UK, 15 April, 2010.

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

**Date Commenced:** June 2007

## INFORMATION AND TRAINING

### 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, Mark Deady, Dr Heather Proudfoot, Dr Claudia Sannibale, Professor Richard Mattick, Professor Maree Teesson and Dr Lucy Burns

**Rationale:** Over recent decades, a large body of research has documented the extent to which mental health conditions co-occur with alcohol and other drug (AOD) use. There has also been growing recognition of the significant challenges faced by AOD workers when treating clients with co-occurring mental health conditions.

**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, to assist AOD workers in working with these clients. The purpose of the 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 were developed based on a comprehensive review of the best available evidence and the experiences 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.

**Benefits:** The guidelines have been completed and hard copies were distributed to AOD treatment services across Australia in December 2009 to January 2010.

**Funding:** Australian Government Department of Health and Ageing

**Date Commenced:** January 2008

## POLICY RESEARCH

### Development of common metrics for drug policy evaluation

**NDARC Staff:** A/Prof. Alison Ritter

**Rationale:** Measuring the success or otherwise of policies is fundamental to continuous social, economic and community improvement. For complex social problems, such as drug abuse, it is a difficult task. One challenge in the drug policy area is that it transects the multiple domains of health, law enforcement and education. The policy interventions themselves address different components of the drug problem: law enforcement is focused on reducing the supply of drugs (through seizures of drugs and dismantlement of criminal networks); health interventions are focused on reducing drug use by users (through treatment), and reducing the harms associated with drug use (through harm reduction programs); education is focused on preventing the uptake of drugs.

Each of these policy interventions are important contributions to Australia's response to drugs, but are measured by different outcomes. In reporting on the success (or otherwise) of these different policies, one single measure of impact or outcome would be highly beneficial. A single measure would enable governments to report with confidence the impact of their areas to Treasury and to the community. A single measure would also be a highly valuable research tool that could be used to compare policy options.

The drugs field has been engaged in work across the globe on composite Drug Indexes. There is the UK Drug Harm Index, the UNODC Illicit Drug Index, the New Zealand Drug Harm Index and the AFP Drug Harm Index. The work is difficult and has many methodological and conceptual challenges.

**Aims:** This project has explored the establishment of a single measure of impact - an 'Australian Drug Harm Index'.

**Findings:** This project has included a number of different types of activities:

- Two grant applications (a postdoctoral fellowship and an NHMRC partnerships grant), both of which were not successful but represented important steps in conceptualising the methodologies, and (in the case of the latter) in bringing various government departments together to discuss the Index
- An international workshop was held in March 2009 at UNODC in Vienna, where scholars met to discuss the various methodological challenges associated with Index work
- A review of the New Zealand Drug Harm Index was published (Matters of Substance)

# COMPLETED PROJECTS

- Consultation and advice provided to the Victoria Police: the Victoria Police developed a Drug Harm Index to inform strategic policing at a local command level. DPMP provided advice on methods and data sources and reviewed documentation for the Victoria Police research team.

A number of critical issues have been identified in this work:

- Data availability is a key driver of possible inclusion in an Index
- There are few, if any, measures of public amenity/safety
- There are few, if any, measures of the economic consequences associated with criminal activities such as money laundering
- Pain and suffering and productivity and welfare payments are another area where data are lacking.

In addition, prevalence and consumption estimates, required for such work, are outdated. Australia is not alone in struggling to deal with significant data gaps. The development of drug indexes requires considerable resources and a diverse multi-disciplinary team.

**Benefits:** This work has advanced thinking in the area of common metrics for measuring drug policy outcomes. A Drug Harm Index would enable decision-makers to assess and weigh up different policy options and program choices. In the absence of a common metric, valuing different types of drug interventions (e.g. health, law enforcement) is complicated.

**Funding:** Colonial Foundation Trust

**Date Commenced:** 2009

## Building a Queensland Cannabis Diversion Model

**NDARC Staff:** Dr Caitlin Hughes, Michael Lodge and A/Prof. Alison Ritter

**Other Investigators:** Dr Jennifer Badham (Critical Connections), Ben Norris, Kate Podevin, Stephen Anstis and Carol Read (Queensland Health) and Bradley Little, Murray Ryan and Gabrielle Webb (Queensland Police)

**Rationale:** Queensland has adopted a comprehensive system of police and court diversion for cannabis users. This includes the police diversion program for minor cannabis offenders, illicit drugs court diversion program for other minor illicit drug offenders, and Queensland Magistrate Early Referral into Treatment program. There are a number of questions that now arise about the future directions of the Queensland diversion system.

**Design and Method:** In conjunction with Queensland Health and Police, DPMP held a focus group with stakeholders to map out the operation of the Queensland cannabis diversion system. Amongst other options, this looked at the feasibility of building a Cannabis Diversion Model for the Queensland context.

**Findings:** A confidential report has been given to Queensland Health and Queensland Police on the diversion of drug offenders, which identified all interventions provided, flows between the criminal justice and treatment systems, and recommendations for system improvement.

**Benefits:** The project identified a number of avenues for system improvement.

**Funding:** Colonial Foundation Trust

**Date Commenced:** June 2008

## An analysis of Australian illicit drug policy coordination

**NDARC Staff:** Dr Caitlin Hughes, Michael Lodge and A/Prof. Alison Ritter

**Other Investigators:** David McDonald (Social Research and Evaluation Pty Ltd)

**Rationale:** This study sought to: identify the importance of the principles of good governance for the coordination of Australian illicit drug policy; examine the extent to which current structures/processes of coordination are consistent with good governance principles; and document changes in the coordination of Australian illicit drug policy since the adoption of the National Campaign Against Drug Abuse in terms of compliance with the good governance principles.

**Design and Method:** This project reviewed Australian illicit drug policy coordination against established principles of good governance. This was undertaken using two methods. First, a survey was devised to quantify the perceived importance and perceived application of the principles to Australian illicit drug policy coordination. The survey utilised three to six criteria that related to each principle and was administered to 36 stakeholders involved in the coordination of the National Drug Strategy. Second, the National Drug Strategy evaluations and reviews produced between 1985 and 2009 were analysed in terms of their fit with the good governance principles.

**Findings:** The good governance principles were deemed very or extremely important for coordination of the National Drug Strategy. On average, stakeholders viewed accountability and participation as the most important principles. The majority of stakeholders reported that Australian illicit drug policy coordination complied with the good governance principles and that the main area of weakness was in relation to consensus-orientation. The documentary analysis suggested that compliance with the governance principles increased between 1985 and 2009, but that this has not been an easy process, with adaptations often leading to deleterious impacts in other areas of governance.

**Benefits:** This research demonstrates that the process through which coordination and governance more generally is undertaken is important to stakeholders. Good governance does matter, and improvements in governance practice are valued and operationalised by those involved in the national advisory structures. This means that governments should ensure that the good governance principles are reflected in the operations of Australian illicit drug policy. This analysis has also demonstrated that problems in coordination take years to rectify. This reinforces the benefits of continual assessment and improvement. Finally, our findings suggest that there remain a number of areas where improvements can continue to be made, particularly in areas of responsiveness, equity and inclusiveness and the transparency of Australian illicit drug policy.

**Funding:** Colonial Foundation Trust

**Date Commenced:** 2007

# STAFF AND STUDENT LIST\*

## Acting Director

(from 9 June 2009 to 25 February 2010 and from 1 September 2010)

Alison Ritter Associate Professor, Director of DPMP

## Acting Director

(from 26 February to 31 August 2010)

Maree Teesson Professor, Senior NHMRC Research Fellow

## Executive Committee

Jan Copeland Professor, Director of NCPIC, Assistant Director  
 Louisa Degenhardt Professor, Assistant Director to 10/09/10  
 Christopher Doran Associate Professor, Assistant Director  
 Shale Preston Executive Officer

## 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  
 Catherine Chapman Senior Research Fellow  
 Anton Clifford 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  
 Sharlene Kaye Research Fellow  
 Frances Kay-Lambkin Senior NHMRC Research Fellow  
 Kristy Martire Research Fellow  
 Richard Mattick Professor  
 Rebecca McKetin Senior Research Fellow  
 Katherine Mills Senior Lecturer  
 Nicola Newton UNSW Vice-Chancellor's Post Doctoral Fellow  
 Melissa Norberg Senior Lecturer, National Clinical Services & Evaluation Manager, NCPIC  
 Heather Proudfoot Research Fellow  
 Miranda Rose Research Fellow  
 Joanne Ross Senior Lecturer  
 Claudia Sannibale Research Fellow  
 Anthony Shakeshaft Associate Professor  
 Tim Slade Senior Research Fellow  
 Wendy Swift Senior Lecturer  
 Stephanie Taplin Research Fellow  
 Laura Vogl Research Fellow

## Professional & Technical Staff - Research

Hammad Ali Senior Research Officer  
 Dion Alperstein Research Assistant, NCPIC  
 Sheena Arora Research Officer  
 Annie Banbury Project Coordinator, NCPIC  
 Robert Battisti Senior Research Officer, NCPIC  
 Ansari Bin Jainullabudeen Senior Research Officer (Health Economist)  
 Emma Black Senior Research Officer  
 Delphine Bostock Matusko Research Officer  
 Chiara Bucello Research Officer  
 Bianca Calabria Senior Research Officer  
 Gabrielle Campbell Senior Research Officer  
 Joanne Cassar Research Officer  
 Mark Deady Research Officer  
 Catherine Deans Project Officer  
 Laura Dewberry Research Officer  
 Philippa Farrugia Research Officer  
 Jenny Geddes Project Officer  
 Amy Gibson Senior Research Officer (maternity leave)  
 Maria Gomez Senior Research Officer  
 Rachel Grove Research Officer  
 Thea Gumbert Research Officer  
 Karla Heese Research Officer  
 Kate Hetherington Senior Research Officer  
 Karina Hickey Research Assistant, NCPIC  
 Leonie Jefferson Project Officer, NCPIC  
 Mary Joy Project Officer  
 Erin Kelly Research Officer  
 Laila Khawar Research Officer, NCPIC  
 Kari Lancaster Research Assistant  
 Stephanie Love Senior Research Officer  
 Jennifer Mackenzie Research Officer, NCPIC  
 Bradley Mathers Senior Research Officer  
 Sonja Memedovic Research Officer  
 Rachel Ngui Senior Research Officer  
 Judit O'Vari Research Assistant, NCPIC  
 Ursula Perry Research Officer, NCPIC  
 Benjamin Phillips Research Officer  
 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  
 Karen Schneider Research Officer  
 Megan Sety Senior Research Officer  
 Laura Scott Research Officer  
 Natasha Sindicich Senior Research Officer  
 Bridget Spicer Research Officer

# STAFF AND STUDENT LIST\*

Jennifer Stafford	Senior Research Officer	Mary Kumvaj	Librarian
Rachel Sutherland	Research Officer	Michael Lodge	Senior Research Policy Officer
Gitte Stokbaek	Research Officer, NCPIC	Etty Matalon	National Clinical Training Manager, NCPIC
Johanna Thomas	Research Officer	Morag Millington	Communications Officer, NCPIC
Michelle Torok	Research Officer	Carla Santos	Administrative Officer
Erica Valpiani	Research Officer	Caroline Santoso	Administrative Assistant (maternity leave)
Tracey Wright	Senior Research Officer, NCPIC	Barbara Toson	Statistician/Biostatistician
		Michaela Turner	Administrative Officer

## Doctoral Candidates

Emma Barrett	Doctoral Candidate/Research Officer
Courtney Breen	Doctoral Candidate/Senior Research Officer
Joshua Byrnes	Doctoral Candidate/Senior Research Officer
Bianca Calabria	Doctoral Candidate/Senior Research Officer
Elizabeth Conroy	Doctoral Candidate/Senior Research Officer
Peter Gates	Doctoral Candidate/Senior Project Coordinator, NCPIC
Alys Havad	Doctoral Candidate/Research Officer
Amy Johnston	Doctoral Candidate/Research Associate
Briony Larance	Doctoral Candidate/Senior Research Officer
Sarah Larney	Doctoral Candidate/Senior Research Officer
Lynne Magor-Blatch	Doctoral Candidate
Kristie Mammen	Doctoral Candidate
Francis Matthew-Simmons	Doctoral Candidate/Research Officer
Tim McSweeney	Doctoral Candidate
Louise Newton	Doctoral Candidate
Hector Navarro	Doctoral Candidate/Senior Research Officer
Paul Nelson	Doctoral Candidate/Research Officer
Stewart Savage	Doctoral Candidate
Marian Shanahan	Doctoral Candidate/Health Economist
Fiona Shand	Doctoral Candidate/Associate Lecturer
Edmund Silins	Doctoral Candidate/Senior Research Officer
Melanie Simpson	Doctoral Candidate/Senior Research Officer, NCPIC
Dam Anh Tran	Doctoral Candidate
Monika Wadolowski	Doctoral Candidate/Research Officer

## Professional & Technical Staff - Administrative

Eva-Marie Alis	Executive Assistant to Director
Victoria Barnes	Executive Assistant, NCPIC
Jasmin Bartlett	Administrative Assistant
Annie Bleeker	National Community Training Manager, NCPIC
Clare Chenoweth	Communications Officer, NCPIC
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 (maternity leave)
Julie Hodge	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
Trevor King	Conjoint Lecturer
Andrea Mant	Conjoint Associate Professor
Ingrid Van Beek	Conjoint Senior Lecturer
Jeffery Ward	Conjoint Senior Lecturer
Adam Winstock	Conjoint Senior Lecturer
Deborah Zador	Conjoint Senior Lecturer

## Visiting Researchers

John Lewis	Visiting Fellow
------------	-----------------

\*Note: The table lists all fixed term staff and postgraduate students who were employed or based at NDARC for more than one month. Casual staff members are not included.

# EXTERNAL APPOINTMENTS

## Dr David Bright

Chair, NSW Branch of the APS College of Forensic Psychologists (2008-present)

Committee member of the Australian and New Zealand Association of Psychiatry, Psychology, and Law (ANZAPPL, NSW Branch) & past president (2000-present)

Committee member/treasurer of the APS Evolutionary Psychology Interest Group (2008-present)

## Dr Lucy Burns

Director, Haymarket Foundation for Homeless People with Substance Abuse Problems (2004-present)

Academic member, NSW Health Drug and Alcohol Council, Research Sub Committee,

NSW Health Department (2009-present)

Trustee, NDARC Educational Trust (2009-present)

Member, University of New South Wales Women's Employment Strategy Committee (2009-present)

Member, NSW Population and Health Services Research Ethics Committee (2010-present)

Member, Perinatal Substance Use, National Special Interest Group (2010-present)

## Ms Bianca Calabria

Student member, UNSW Higher Degrees Research Committee (2010-present)

## Dr Natacha Carragher

Member, UNSW Faculty of Medicine Postdoctoral Advisory Committee (2010-present)

## Dr Jennifer Chalmers

Member, Network of Alcohol and other Drug Agencies Policy and Advocacy Subcommittee (2010)

## Professor Jan Copeland

President, Board of Management, Drug and Alcohol Multicultural Education Centre (DAMEC) (2002-2010)

Member, Board of Management of Odyssey House: The McGrath Foundation, a non-government therapeutic community; co-chair of the Operations Committee (2004-2010)

Assistant Editor, UK-based journal *Addiction* (G. Edwards, Editor) (2002-2010)

Assistant Editor, US-based *Journal of Substance Abuse Treatment* (2001-2010)

Associate Editor, *BMC Research Notes* (M. Hodgkinson, Senior Editor) (2008-2010)

Member, Editorial Board, NIDA Medline-listed journal *Addiction Science and Clinical Practice* (2010)

Member, Working Group and author of two modules for the Australian Chapter of Addiction Medicine's Opportunistic Intervention Module (NSW Health) (2010)

Member, Advisory Committee for NADA Data Information Project to advise on the data for routine drug and alcohol and mental health data in the non-government sector in NSW (2009-2010)

Content expert, NSW Department of Education's Higher Education Directorate assessment panels (2010)

Member, Cannabis Working Group for NSW Health (2007-2010)

Member, University of Melbourne Expert Advisory Panel on First Aid Guidelines for Problem Drinking and a second panel on cannabis-related issues (2010)

Member, US College on Problems of Drug Dependence (CPDD) International Committee (2010-2013)

## Professor Shane Darke

Regional Editor, *Addiction* (formerly *British Journal of Addiction*) (2006-present)

Associate Editor, *Drug and Alcohol Dependence* (1993-present)

Assistant Editor, *Journal of Drug Issues* (2006-present)

## Professor Louisa Degenhardt

Co-chair of the Expert Group on Mental Disorders and Illicit Drug Use, World Health Organization (WHO), responsible for advising on estimates of the Global Burden of Disease due to illicit drug use and dependence (2007-2011)

Technical Advisory Group member, WHO, for the eleventh revision of the International Classification of Diseases (ICD) Injury and External Causes of Injury (2009-2011)

Member of the Australian Delegation to the 53rd Commission on Narcotic Drugs, United Nations Office on Drugs and Crime, March 2010, Vienna, Austria 2010)

Member of the Procurement and Contracting Panel, Specialist Scientific Services, Australian Federal Police, for advice on illicit drug use epidemiology (2009-present)

Member, 2010 National Drug Strategy Household Survey Technical Advisory Group (2009-2011)

Member, Panel providing Specialist Scientific Services to the Australian Federal Police Forensic and Data Centres (2009-present)

Member, Reference Group for the Mortality After Release from Custody (MARC) study, University of Queensland (2008-present)

Member, Panel advising the development of First Aid Guidelines for Problem Drug Use, University of Melbourne and ORYGEN Research Centre (2008-present)

Chair, AIDS Council of NSW (ACON) Board advisory group on drug and alcohol issues (2003-2010)

Board Member, AIDS Council of NSW (ACON) (2005-2010)

Associate Faculty Member, Faculty of 1000 Medicine (2008-present)

Member, International Collaboration on ADHD and Substance Abuse (ICASA) (2008-present)

Member, Australian National Association of Research Fellows (NARF) (2007-present)

## A/Prof. Kate Dolan

Member, World Health Organization (WHO) Network for HIV and Health in the Western Pacific Region (WPR) (2009-present)

Member, ANEX's Harm Minimisation in Prisons Committee (2008-present)

## Dr Matthew Dunn

Member, APSAD Scientific Program Committee (2009 to present)

Member of the Faculty of Medicine Post Doctoral Advisory Committee (2010-present)

## Dr John Howard

Member, ANCD Asia-Pacific Drug Issues Committee (2004-present)

Member, NSW Child Death Review Team (2004-present)

Board Member, National Centre for Education and Training on Addiction (NCETA) (2005-present)

Member, Clinical Advisory Panel, Family Drug Support (2002-present)

Member, NSW Ministerial Advisory Committee on Hepatitis (2008-present)

Member, Advisory Group, NSW Department of Health, Mental Health and Drug and Alcohol Office, Quality in Treatment (QIT) (2002-present)

Member, Drug and Alcohol Multicultural Education Centre (DAMEC) - Research Subcommittee (2010-present)

Member, Consulting Editors Group, *Youth Studies Australia* (2010)

## Dr Sharlene Kaye

Assistant Editor, *Addiction* (2009-present)

Board Member (Secretary), International Collaboration on ADHD and Substance Abuse (ICASA) (2010-present)

## Ms Mary Kumvaj

Member, National Drug Sector Information Service (NDSIS) Advisory Committee (2009-present)

# EXTERNAL APPOINTMENTS

## **Professor Richard Mattick**

Member, ANCD National Illicit Drug Campaign Reference Group (2004-present)  
 Member, NSW Minister of Health Expert Advisory Group on Drugs (2004-present)  
 Member, Alcohol Beverages Advertising Code adjudication panel (2005-present)  
 Member, Sax Institute Research Partnerships for Better Health (2006-present)

## **Dr Rebecca McKetin**

Member, Editorial Board, *Journal of Contemporary Drug Problems* (2010-present)  
 Member, Editorial Board, *Drug and Alcohol Review* (2010-present)  
 Member, NSW Health Stimulant Treatment Program steering committee (2006-present)  
 Member, Scientific Program Committee, Annual Scientific Conference of the Australasian Professional Society on Alcohol and other Drugs (2008-2010)

## **Dr Katherine Mills**

Member, Trauma Informed Care and Practice Reference Group (2010-present)  
 Member, Trauma Informed Care - A National Strategy Expert Forum (2010)  
 Member, NHMRC Public Health Postgraduate Scholarships Review Panel (2009 & 2010)  
 Member, Expert Advisory Group for the second Australian National Survey of Mental Health and Wellbeing (2007-present)  
 Assistant Editor, *Addiction* (2010-present)  
 Deputy Editor, *Drug and Alcohol Review* (2010-present)

## **Mr Paul Nelson**

Member, UNSW Academic Board's Committee on Research (2010)

## **Dr Nicola Newton**

Board Member, Angelus Foundation (Expert committee on Legal Highs in UK) (2010-present)

## **A/Prof. Alison Ritter**

Immediate Past President, Australasian Professional Society on Alcohol & Drugs (2007-2011)  
 Vice President, International Society for the Study of Drug Policy (2007-present)  
 Alcohol and Drug Council of Australia, Board of Directors (from 2010)  
 Executive Editor, *Drug and Alcohol Review* (2006-present)  
 Associate Editor, *Journal of Drug Policy Analysis* (2010-present)

Editorial Board, *International Journal of Drug Policy* (2010-present)

Chair, Expert Reference Group, National Drug and Alcohol Clinical Care and Prevention Modelling Project (2010 to 2012)

Member, NSW Health OTP Strategic Plan Expert Advisory Group (2009-2010)

Member, Quality Improvement Treatment Committee, NSW Health (from 2010)

Member, National Cannabis Prevention and Information Centre (NCPIC) Management Advisory Group (2009-2010)

Member, National Drug Strategy Household Survey Technical Advisory Group (2009-2011)

Member, Evaluation Advisory Group - evaluation of drug policies and services at the ACT's Alexander Maconochie Centre (2010-2011)

## **Dr Joanne Ross**

Assistant Editor, *Addiction* (2006-present)

## **Dr Claudia Sannibale**

Member, NSW Health Drug and Alcohol Allied Health Workers Advisory Committee (2000-present)

## **A/Prof. Anthony Shakeshaft**

Conjoint A/Prof., School of Medicine and Public Health, Faculty of Health, University of Newcastle

## **Dr Stephanie Taplin**

Member, Association of Child Welfare Agencies (ACWA) Research Ethics Working Group (2010)  
 Member, ACWA Research Forum (2007-2010)

## **Professor Maree Teesson**

Assistant Editor, *Current Drug Abuse Reviews* (2007-present)  
 Assistant Editor, *Addiction* (2008-present)  
 University of New South Wales Promotions Panel, Professor (2008-2010)  
 Sydney Alcohol Treatment Group (2008-present)  
 Founding Member, The Mental Health Services Conference Inc. (1991-present)

# POSTGRADUATE STUDENTS

## Emma Barrett (2007-present).

*Aggression and violent crime among substance users with post-traumatic stress disorder.*

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

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

Expected date of submission: March 2011.

## Courtney Breen (2004-2010).

*Alcohol consumption and related harms in regional communities: Exploring individual and community factors.*

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

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

Date of submission: 31 August 2010.

## Joshua Byrnes (2008-present).

*The impact of price on alcohol consumption and the cost effectiveness of a volumetric tax in Australia.*

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

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

Expected date of submission: March 2011.

## Bianca Calabria (2010-present)

*Family-focused alcohol intervention for Indigenous Australians.*

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

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

Expected date of submission: March 2013.

## Elizabeth Conroy (2005-2010).

*The importance of child maltreatment as a correlate of mental disorder among opioid-dependent persons.*

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

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

Conferred: December 2010

## Peter Gates (2008-present).

*The cannabis information and helpline: Evaluation and randomised controlled trial.*

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

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

Expected date of submission: August 2011.

## Alys Havard (2007-2010).

*Targeting alcohol problems among patients of rural Australian emergency departments: Establishing an evidence base.*

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

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

Date of submission: October 2010

## Amy Johnston (2008-present).

*Suicidality in the general population.*

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

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

Expected date of submission: December 2011.

## Briony Larance (2006-present).

*The diversion and injection of, and adherence with, methadone, buprenorphine and buprenorphine-naloxone.*

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

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

Expected date of submission: March 2011.

## Sarah Larney (2007-present).

*Opioid substitution treatment in prisons and post-release: Effects on criminal recidivism and morality.*

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

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

Date of submission: 8 October 2010.

## Lynne Magor-Blatch (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 & Community Medicine, UNSW.

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

Expected date of submission: June 2013.

## Kristie Mammen (2006-present).

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

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

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

Expected date of submission: January 2013.

## Francis Matthew-Simmons (2007-present).

*Public opinion, the media, and illicit drug policy.*

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

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

Expected date of submission: March 2011.

## Tim McSweeney (2009-present).

*Promoting compliance, 'recovery' and 'desistance': Comparative case studies of pre-sentence diversion schemes for drug misusing arrestees in Australia and England.*

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

Supervisor/s: Dr Caitlin Hughes, A/Prof. Alison Ritter and Paul Turnbull (Institute for Criminal Policy Research, University of London).

Expected date of submission: January 2013.

## Louise Mewton (2008-present).

*The classification of substance use disorders in young adults.*

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

Supervisor/s: Professor Maree Teesson, Dr Tim Slade. Expected date of submission:

June 2011.

# POSTGRADUATE STUDENTS

**Hector Navarro** (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 & Community Medicine, UNSW.

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

Expected date of submission: July/August 2011.

**Paul Nelson** (2008-present).

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

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

Supervisor/s: Professor Louisa Degenhardt, Professor Dianna Kenny, Dr Wendy Swift.

Expected date of submission: August 2011.

**Stewart Savage** (2008-discontinued in March 2010).

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

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

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

**Marian Shanahan** (2007-present).

*Assessing the economic consequences of cannabis policy options.*

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

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

Expected date of submission: March 2011.

**Fiona Shand** (2007-present).

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

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

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

Date of submission: 11 November 2010.

**Edmund Silins** (2008-present).

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

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

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

Expected date of submission: August 2011.

**Melanie Simpson** (2008-present).

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

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

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

Expected date of submission: December 2011.

**Dam Anh Tran** (2009-present).

*Accessibility to anti retroviral (ARV) treatment in Vietnam.*

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

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

Expected date of submission: June 2013.

**Monika Wadolowski** (2010-present)

*Parental modelling and supply of alcohol: Does this improve or worsen drinking outcomes in young Australians?*

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

Supervisor/s: Professor Richard Mattick, Dr Delyse Hutchinson.

Expected date of submission: July 2013.

# RESEARCH GRANTS AND FUNDING

PROJECTS	FUNDING SOURCE	TOTAL AWARD		EXPENDITURE 2009	EXPENDITURE 2010
New centre core funding (disaggregated multi-schedule agreement)	AGDHA	\$8,818,029	3 years	\$2,652,120	\$2,862,011
Old centre core funding		\$8,149,235	5.5 years	\$23,460	-\$23,777
Schedule 4 - Foetal alcohol spectrum disorder monograph	AGDHA	\$5,818	1 year	\$3,796	\$1,595
Schedule 5 - CLIMATE Schools ecstasy module - the development and evaluation of an interactive computer based prevention program for ecstasy	AGDHA	\$187,614	2 years	\$39,313	\$148,617
Schedule 6 - Injecting drug users interview component (IDRS)	AGDHA	\$745,964	2 years	\$0	\$170,647
Schedule 7 - Ecstasy and Related Drugs Reporting System (EDRS)	AGDHA	\$924,902	2 years	\$205,894	\$241,382
Schedule 8 - Brief intervention - the Ecstasy Check-Up	AGDHA	\$198,655	2 years	\$51,210	\$59,119
Schedule 9 - Redevelopment and reprint of On Thin Ice: a users guide	AGDHA	\$54,540	2 years	\$119	\$0
Schedule 10 - Evaluation of treatment outcomes for methamphetamines (MATES) - follow-up study	AGDHA	\$126,000	2 years	\$23,533	\$96,369
Schedule 11 - Illicit drugs and the media	AGDHA	\$149,473	2 years	\$33,004	\$116,469
Schedule 12 - Ecstasy use among young women in Australia	AGDHA	\$49,624	2 years	\$0	\$39,944
Schedule 13 - National comorbidity guidelines reprint and distribution	AGDHA	\$60,071	1 year	\$0	\$60,071
Schedule 14 - Information booklet for substance users	AGDHA	\$135,812	2 years	\$0	\$72
Schedule 15 - Suicide risk assessment and intervention strategies Part 2	AGDHA	\$119,625	2 years	\$0	\$42,030
Schedule 16 - Ecstasy and Related Drugs Reporting System (EDRS)	AGDHA	\$429,616	2 years	\$0	\$1,369
United Nations Office on Drugs	UNODC	\$35,752	2 years	\$0	\$3,802
Development of Guidelines: Drug Detoxification and Drug Treatment in Areas of High Prevalence or Risk	WHO	\$186,000	2 years	\$0	\$13,266
Illicit Drug Reporting System (IDRS)	AGDHA	\$735,025	4 years	\$82,328	-\$16,805
Monitoring party drug markets in Australia (EDRS)	AGDHA	\$1,417,582	5 years	\$39,100	-\$39,720
Effective treatments for depression & substance use comorbidity	NHMRC	\$259,000	4 years	\$0	\$77,029
Capacity Building of local organisation in Myanmar	UNODC	\$67,820	1 year	\$0	\$54,083
Asian Harm Reduction Network	AIDS FONDS NL	\$86,446	2 years	\$0	\$40,726
Can parents teach their children to drink responsibly?	ARC	\$760,000	5 years	\$0	\$111,406
Economic evaluation - harm reduction	NHMRC	\$568,500	3 years	\$0	\$39,250
The Impact of Parental Substance Use on Infant Development and Family Functioning	NHMRC	\$1,910,470	4 years	\$0	\$359,036
The Ecstasy Check-Up: a multi-site trial of a brief intervention	NHMRC	\$446,250	2 years	\$0	\$73,250
A family-based intervention for Indigenous Australians	NHMRC	\$212,500	2 years	\$0	\$63,734
Epidemiology, classification and treatment of comorbid substance use and post traumatic stress disorder	NHMRC CDA	\$377,000	4 years	\$0	\$93,847
Alcohol use disorders in young adults	NHMRC	\$193,650	2 years	\$0	\$36,366
Preventing adolescent cannabis use web based	ROTARY HEALTH	\$18,000	1 year	\$0	-\$2,912
Alcohol use amongst elderly people who are homeless	AERF	\$20,000	1 year	\$0	\$16,548
Development of an aberrant drug behaviour scale	RECKITT BENCKISER	\$160,000	1 year	\$0	\$54,856
The Salvation Army (NSW) Property Trust/ANCD	ANCD	\$54,512	1 year	\$0	\$18,274
Dept of Health Victoria - Victorian Pharmacotherapy review	DoH VIC	\$86,340	1 year	\$0	\$15,572
Impact of alcohol use during pregnancy	AERF	\$15,301	1 year	\$0	\$5,210

# RESEARCH GRANTS AND FUNDING

PROJECTS	FUNDING SOURCE	TOTAL AWARD		EXPENDITURE 2009	EXPENDITURE 2010
The cost of homelessness and benefit of programs	AHURI	\$34,692	3 years	\$0	\$13,716
Drug use in pregnancy, birth and early years of new born	HAC	\$27,273	1 year	\$0	\$9,043
A randomised controlled trial (RCT) - suboxone film protocol	SESIAHS	\$65,000	1 year	\$0	\$15,000
Pap screening for cervical cancer among women	HAC	\$18,535	1 year	\$0	\$4,276
PTSD brief intervention	HAC	\$45,625	2 years	\$0	\$18,708
Use of IT system for Indigenous health practitioners	AIATSI	\$26,299	1 year	\$0	\$6,202
Outreach evaluation of the inner city youth at risk project	HAC	\$159,346	4 years	\$0	\$24,039
Reducing alcohol-related harm in rural communities: a randomised control trial	AERF (via UNEWC)	\$1,200,000	5 years	\$532,841	\$389,363
Drug Policy Modelling Program - Stage Two	CF	\$7,661,973	5 years	\$1,163,277	\$888,500
Evaluation of the MDECC parents' prepared program	MDECC	\$34,722	3 years	\$9,644	\$0
Using population health data to improve health services, policy and planning	NHMRC	\$497,367	5 years	\$12,790	\$0
Longitudinal treatment outcomes for methamphetamine dependence: a treatment cohort study	NHMRC	\$720,500	4 years	\$77,233	\$620
An empirical investigation of psychosis proneness in amphetamine users	NHMRC (via GU)	\$160,750	3 years	\$9,575	\$0
CLIMATE Schools: psychostimulant and cannabis module	AGDHA	\$250,046	3 years	\$67,114	-\$936
Illicit drug use in Australia - epidemiology, use patterns and associated harm	AGDHA	\$23,400		\$102	\$0
Development of clinical guidelines for the management of cannabis use disorder	AGDHA	\$238,631	2 years	\$73,924	-\$17,129
Review of literature on the secondary supply of alcohol to minors	AGDHA	\$36,140		\$2,422	\$0
Establishment of the National Cannabis Prevention and Intervention Centre (NCPIC)	AGDHA	\$11,579,090	4 years	\$4,822,555	\$4,023,089
Fear, sadness and alcohol use in adolescence: a test of new curriculum models to prevent adverse outcomes	ARC	\$270,000	3 years	\$137,597	-\$6,042
Development and evaluation of specialist services for female drug users in Iran	DROSOS	\$277,778	2 years	\$131,303	-\$1,136
Comparative rates of violent crime amongst methamphetamine and opioid users	NDLERF	\$194,051	3 years	\$48,100	-\$6,841
The efficacy of an intervention for PTSD among illicit drug users	NHMRC	\$558,125	3 years	\$249,627	\$32,918
Integrating treatment for alcohol use problems and comorbid PTSD	NHMRC	\$651,725	3 years	\$236,011	\$58,025
Longitudinal study of opioid maintenance treatment in NSW: mortality among opioid dependent persons in pharmacotherapy 1985-2006	NHMRC	\$144,500	2 years	\$17,686	\$21,403
Investigating the availability and nature of hepatitis C antiviral therapy in NSW, particularly for illicit drug users	SCHER	\$6,097		\$140	\$0
Secretariat for the United Nations Reference Group on HIV/AIDS and injecting drug use	UNOV	\$592,593	3 years	\$350,800	\$45,500
Developing a model to assess the economic consequences of cannabis policy options	ARC	\$244,310	3 years	\$97,033	\$97,606
Organic brain damage after non-fatal opioid overdose	NHMRC	\$235,500	3 years	\$66,653	\$68,143
Using epidemiology to inform psychiatric classification	NHMRC	\$363,300	3 years	\$159,493	\$120,936
The statistical relationship between alcohol-related crime and liquor outlets in the City of Sydney	CCS	\$16,063	5 years	\$1,372	\$297
Examining the relative cost effectiveness of different types of law enforcement directed towards methamphetamine	NDLERF	\$377,813	3 years	\$202,129	\$91,607

PROJECTS	FUNDING SOURCE	TOTAL AWARD		EXPENDITURE 2009	EXPENDITURE 2010
Enhancing the management of alcohol-related problems among Indigenous Australians	AGDHA	\$142,295	2 years	\$68,887	\$18,103
Alcohol use in pregnancy	HAC	\$99,710	2 years	\$75,707	-\$2,542
Athletes and illicit drug use	AGDHA	\$240,454	2 years	\$241,030	\$331,981
The long-term impact of methadone maintenance treatment on criminal behaviour and imprisonment	NDLERF	\$54,353	2 years	\$10,269	\$30,123
Building capacity in health economic evaluation	NHMRC	\$1,502,000	4 years	\$162,781	\$101,207
Michael Project	MA	\$114,266	3 years	\$62,010	\$47,050
Foetal alcohol spectrum disorder monograph	DASSA	\$12,430	2 years	\$5,715	\$0
Improving hepatitis C and methadone treatment services	NSW Health	\$57,837	1 year	\$38,366	\$19,259
Second national survey of mental health and wellbeing	AGDHA	\$220,480	2 years	\$103,352	\$158,607
CBT intervention for regular amphetamine use and depression: a stepped care approach	HAC (via UNEWC)	\$18,000	1 year	\$18,000	\$0
The diversion and misuse of stimulant medication for attention deficit hyperactivity disorder (ADHD) among illicit psychostimulant users	NHMRC	\$148,000	2 years	\$44,954	\$102,226
Suicide risk assessment and intervention strategies: current practice among drug and alcohol treatment providers	AGDHA	\$160,042	2 years	\$110,903	\$39,191
The range and magnitude of alcohol's harm to others	AERF	\$94,174	2 years	\$6,072	\$85,106
Cannabis Cohort Research Consortium: fostering collaborative partnerships to investigate the causes and consequences of cannabis and other drug use	ARACY	\$43,667	1 year	\$23,118	\$26,007
Comorbidity Stage 1 and 2 - pilot, print and disseminate the National Comorbidity Guidelines	AGDHA	\$203,238	2 years	\$115,929	\$87,310
Homelessness and services and system integration	AHURI	\$105,450	2 years	\$17,512	\$64,231
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	\$6,321	\$140,326
Alcohol action in rural communities (NHMRC Newcastle)	NHMRC (via UNEWC)	\$126,000	3 years	\$651	\$0
Stepped-care for patients with alcoholism and panic disorder	NSW Health	\$36,000	1 year	\$23,068	\$6,299
Improving shared care hepatitis C antiviral and methadone services	SWSAHS	\$92,565	3 years	\$90,394	\$39,877
Intergenerational homelessness	AHURI	\$16,578	3 years	\$13,032	\$7,259
Development of a sexual health and contraception intervention for woman who are drug dependent	NSW Health	\$19,000	1 year	\$4,384	\$16,223
<b>SUB-TOTAL FOR PROJECTS</b>		<b>\$58,132,905</b>		<b>\$12,865,753</b>	<b>\$12,047,486</b>

See inside back cover for Acronyms definitions

# RESEARCH GRANTS AND FUNDING

SCHOLARSHIPS AND FELLOWSHIPS	FUNDING SOURCE	TOTAL AWARD		EXPENDITURE 2009	EXPENDITURE 2010
Career Development Award - Responding to illicit drugs in Australia: towards evidence-based strategic policy	NHMRC	\$441,250	5 years	\$97,768	\$45,883
Public Health Fellowship - Developing and disseminating effective treatments for depression and substance use comorbidity	NHMRC	\$269,000	4 years	\$102,964	\$6,945
Senior Research Fellowship for Maree Teesson	NHMRC	\$607,500	5 years	\$203,403	-\$20,103
Senior Research Fellowship for Louisa Degenhardt	NHMRC	\$607,500	5 years	\$203,131	-\$29,060
Reducing alcohol-related harm in rural Aboriginal communities	NHMRC	\$259,000	4 years	\$94,873	\$47,663
Child protection and mothers in substance abuse treatment - Fellowship	DOCS	\$201,000	3 years	\$70,727	\$59,984
Vice-Chancellor's Postdoctoral Fellowship	UNSW	\$288,000	3 years	\$103,689	\$4,000
PhD Scholarship	AERF	\$121,709	4 years	\$5,549	\$66,942
PhD Scholarship	DH	\$133,653	3 years	\$4,446	\$0
PhD Scholarship	NDARC	\$484,735	3 years	\$304,954	\$192,265
NHMRC PhD Scholarship	NHMRC	\$62,043	3 years	\$4,797	\$7,084
APA (3)	DEST	\$235,602	3 years	\$79,315	\$9,620
PhD Scholarship	DPMP	\$98,996	4 years	\$0	\$24,817
PhD Scholarship	ARC	\$81,441	3 years	\$0	\$13,723
Faculty Support for Research Fellow Projects	UNSW	\$165,329		\$165,329	\$166,000
Early Career Research	UNSW	\$108,000	3 years	\$0	\$36,000
<b>SUB-TOTAL FOR SCHOLARSHIPS AND FELLOWSHIPS</b>		<b>\$4,164,758</b>		<b>\$1,440,945</b>	<b>\$631,763</b>

FACULTY RESEARCH	FUNDING SOURCE	TOTAL AWARD		EXPENDITURE 2009	EXPENDITURE 2010
Research Suspense NDARC	NDARC	\$500,000		\$160,387	-\$68,295
Research Surplus NDARC	NDARC	\$81,337		\$71,693	\$0
Research Initiatives	NDARC	\$883,769		\$485,407	\$51,042
NDARC External Consultancy Research	NDARC	\$4,220	10 years	\$3,408	-\$789
Offence-related debt offenders	NDARC	\$14,650	2 years	\$0	\$7,191
Adolescents & substance abuse	NDARC	\$23,012	1 year	\$0	\$23,012
UNAIDS Global Report IDU HIV	NDARC	\$54,000	2 years	\$0	\$30,001
Mental health and wellbeing	NDARC	\$42,670	2 years	\$0	\$12,804
Non-GMO Research Income	NDARC	\$37,461	10 years	\$0	\$35,441
<b>SUB-TOTAL FOR FACULTY RESEARCH</b>		<b>\$1,641,119</b>		<b>\$720,895</b>	<b>\$90,407</b>

INFRASTRUCTURE	FUNDING SOURCE	ANNUAL AWARD		EXPENDITURE 2009	EXPENDITURE 2010
Faculty Support for Research Infrastructure	UNSW			\$784,619	\$1,339,905
DVC Strategic Support for Research Infrastructure	UNSW			\$432,949	\$449,959
<b>SUB-TOTAL FOR INFRASTRUCTURE</b>		<b>\$1,217,569</b>		<b>\$1,217,568</b>	<b>\$1,789,864</b>

<b>GRAND TOTAL OF RESEARCH AWARDS TO NDARC</b>		<b>\$65,156,351</b>		<b>\$16,245,161</b>	<b>\$14,559,520</b>
--	--	---------------------	--	---------------------	---------------------

# SEMINARS

## In House Seminars

### February 18

*Attempted suicide, self-harm and violent victimisation amongst regular illicit drug users*

Professor Shane Darke

### February 25

*Mortality among dependent users of heroin and other opioids: A systematic review and meta-analysis of cohort studies*

Professor Louisa Degenhardt

### March 11

*Suicide risk assessment practices in drug treatment agencies*

Dr Joanne Ross

### March 18

*Opening doors: Increasing young people's access to harm reduction services*

Sarah Larney, Dr John Howard

### April 8

*Measuring preferences for cannabis policies using a discrete choice experiment*

Marian Shanahan

### April 15

*How successful have global efforts to expand HIV prevention for people injecting drugs been?*

Dr Bradley Mathers

### April 29

*Characteristics of clients presenting to treatment for co-occurring substance use and post traumatic stress disorder*

Philippa Farrugia

### May 13

*Family-based intervention for Indigenous people who have alcohol use problems*

Bianca Calabria

### May 20

*Confirmatory factor analysis of DSM-IV post-traumatic stress disorder symptoms in the Australian population*

Dr Natacha Carragher

### May 20

*From victim to victimiser: Violence among substance users with PTSD*

Emma Barrett

### June 17

*The assessment of post traumatic stress disorder in emergency service workers*

Delphine Bostock Matusko

### June 17

*Criminal justice outcomes for young offenders: The role of conduct disorder*

Paul Nelson

### July 15

*Fines and debt among NSW prisoners with a history of problematic substance use*

Dr Kristy Martire

### July 22

*Naltrexone and methadone in the Australian print media 1997-2007*

Francis Matthew-Simmons

### July 29

*The Global Financial Crisis: Impacts on alcohol and drug consumption*

A/Prof. Alison Ritter

### August 9

*Risks in and after prison: An overview of drugs in prison*

Professor Michael Farrell

### September 9

*Capacity building among researchers in Burma: A needs assessment*

A/Prof. Kate Dolan

### September 9

*Interactions between opioid substitution treatment and incarceration across ten years*

Sarah Larney

### September 16

*Media: The new battleground for the alcohol and drug sector*

Dr Caitlin Hughes, Kari Lancaster, Bridget Spicer

### September 30

*The impact of parental substance use on child development and family functioning*

Dr Delyse Hutchinson

### October 14

*ADHD and psychostimulant use*

Dr Sharlene Kaye

### October 14

*An RCT of treatment for PTSD and alcohol use disorders: Post-treatment functioning*

Dr Claudia Sannibale

### October 21

*Mothers on the Opioid Treatment Program - first results from a NSW study*

Dr Stephanie Taplin

### October 21

*Quantifying cannabis use: Initial findings using a modified timeline followback method*

Jen MacKenzie

### October 28

*Can we build an integrated policy and research culture? Thoughts from a year in the middle*

A/Prof. Anthony Shakeshaft

### November 4

*Referral and the research interview*

Dr Frances Kay-Lambkin

### November 11

*A randomised controlled trial of a Brief Cannabis Intervention delivered by telephone*

Peter Gates

### November 11

*The business cycle and drug use in Australia*

Dr Jenny Chalmers

### November 18

*Correlates and predictors of cannabis use moderation in young adults*

Ed Silins

### November 18

*Is physical activity a useful intervention for substance use? A systematic review*

Dr Matthew Dunn

## Invited Seminars

### 8 March

*PRIME theory of motivation and its application to addiction*

Professor Robert West (Cancer Research UK Health Behaviour Research Centre, University College London)

# SEMINARS

## 25 March

*Liquor licensing enforcement and assault on licensed premises*

Dr Don Weatherburn (Director, Bureau of Crime and Research)

## 22 April

*Drug and alcohol trends in juvenile justice detainees*

Dr Devon Indig (Head of Research, Centre for Health Research in Criminal Justice)

## 6 May

*Ethics approvals: Philosophy, processes and issues*

Dr Ute Vollmer-Connor & Margaret Wright from the UNSW Ethics Committee

## 24 May

*The impact of OST on the natural history of injection and the prevention of drug-related mortality*

Professor Matt Hickman (Reader, Dept of Social Medicine, University of Bristol)

## 27 May

*Forensic pathology and the Coronial process*

Dr Johan Duflo (Chief Forensic Pathologist, NSW Department of Forensic Medicine)

## 10 June

*Prescription opiate dependence: The role of stress and conditioned drug cues*

A/Prof. Sudie Back (Medical University of South Carolina)

## 23 June

*Can HCV treatment of active injecting drug users (IDUs) lead to a reduction in HCV transmission? A modelling analysis*

Dr Peter Vickerman (Senior Modeller, HIV Tools Research Group & the Centre for Research on Drugs & Health Behaviour)

## 8 July

*Studies in bipolar disorder*

Professor Philip Mitchell (Scientia Professor and Head of UNSW School of Psychiatry)

## 19 August

*The World Drug Report 2010 and the UNODC's response to emerging trends*

Mr Gary Lewis (United Nations Office on Drugs and Crime)

## 26 August

*Taking a reinforcing approach to behaviour change*

Professor Martin Iguchi (Department of Public Health, University of California, Los Angeles)

## 23 September

*Substance abuse and risk assessment in serious crime*

Dr Chris Lennings (LSC Psychology)

## 25 November

*Preparedness for hepatitis C candidate vaccine trials*

Professor Lisa Maher (National Centre for HIV Epidemiology and Clinical Research, UNSW)

## 7 December

*Methamphetamine use and treatment outcomes: A long-term perspective*

Dr Mary-Lynn Brecht (Research Statistician, UCLA Integrated Substance Abuse Programs)

# PUBLICATIONS

## NDARC MONOGRAPH

**62. Degenhardt, L., & Hall, W.** (ed.) (2010). *The health and psychological effects of 'ecstasy' (MDMA) use*. Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

## NDARC TECHNICAL REPORTS

**307. Calabria, B., Degenhardt, L., Nelson, P., Bucello, C., Roberts, A., Lynskey, M., Hall, W., & McLaren, J.** (2010). *What do we know about the extent of cannabis use and dependence?* Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

**308. Bucello, C., Degenhardt, L., Calabria, B., Nelson, P., Roberts, A., Medina-Mora, M. E., & Compton, W.M.** (2010). *What do we know about the extent of cocaine use and dependence?* Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

**309. Nelson, P., McLaren, J., Degenhardt, L., Bucello, C., Calabria, B., Roberts, A., Briegleb, C., Clark, N., & Wiessing, L.** (2010). *What do we know about the extent of opioid use and dependence?* Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

**310. Degenhardt, L., Calabria, B., Nelson, P., Bucello, C., Roberts, A., Thomas, J., & Hall, W.** (2010). *What do we know about the extent of illicit meth/amphetamine use and dependence?* Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

**311. Campbell, G., Darke, S., & Popple, G.** (2010). *Characteristics of clients admitted to WHOS Therapeutic Community AOD treatment services, 2002-2009*. Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

**312. McKetin, R., Sutherland, R., Ross, J., Najman, J., Mamun, A., Baker, A., Mattick, R., & Rosenfeld, J.** (2010). *Methamphetamine treatment evaluation study (MATES)*. Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

**313. McKetin, R., Chalmers, J., Burns, L., Vogl, L., Grech, K., Slade, T., & Grove, R.** (2010). *Research to explain and respond to the ecstasy situation in Australia*. Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

**314. Ali, H., Calabria, B., Phillips, B., Singleton, J., Sigmundsdottir, L., Roberts, A., Congreve, E., McLaren, J., Mathers, B., & Degenhardt, L.** (2010). *Searching the grey literature to access information on drug, alcohol and HIV research: An update*. Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

**315. Ross, J., Darke, S., Kelly, E., & Hetherington, K.** (2010). *Suicide risk assessment and intervention strategies*. Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

**316. Campbell, G., Darke, S., & Popple, G.** (2010). *Effects of client characteristics and mental health on treatment in a Therapeutic Community*. Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.

## AUSTRALIAN DRUG TRENDS SERIES

**37. Stafford, J., & Burns, L.** (2010). *Australian drug trends 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**38. Phillips, B., & Burns, L.** (2010). *NSW drug trends 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**39. Cassar, J., & Burns, L.** (2010). *ACT drug trends 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**40. Horyniak, D., Dietze, P., & McElwee, P.** (2010). *Victorian drug trends 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**41. de Graaff, B., & Bruno, R.** (2010). *Tasmanian drug trends 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**42. White, N., Vial, R., & Ali, R.** (2010). *SA drug trends 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**44. Moon, C.** (2010). *NT drug trends 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**45. Rainbow, R., Kennedy, L., Cassar, J., & Alati, R.** (2010). *Queensland drug trends 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**46. Sindicich, N., & Burns, L.** (2010). *Australian trends in ecstasy and related drug markets 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**47. Scott, L., & Burns, L.** (2010). *New South Wales trends in ecstasy and related drug markets 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**48. Cassar, J., & Burns, L.** (2010). *ACT trends in ecstasy and related drug markets 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**49. Kong, F., Dietze, P., & McElwee, P.** (2010). *Victorian trends in ecstasy and related drug markets 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**50. Matthews, A., & Bruno, R.** (2010). *Tasmanian trends in ecstasy and related drug markets 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**51. White, N., Vial, R., & Ali, R.** (2010). *SA trends in ecstasy and related drug markets 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**52. Rainsford, C., Fetherston, J., & Lenton, S.** (2010). *WA trends in ecstasy and related drug markets 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**53. Phillips, B., & Burns, L.** (2010). *NT trends in ecstasy and related drug markets 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**54. Kennedy, L., Rainbow, R., & Alati, R.** (2010). *Queensland trends in ecstasy and related drug markets 2009*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

## DRUG POLICY MODELLING PROGRAM (DPMP) MONOGRAPHS

**18. Hughes, C., Lodge, M., & Ritter, A.** (2010). *The coordination of Australian illicit drug policy: A governance perspective*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**19. Hughes, C., Spicer, B., Lancaster, K., Matthew-Simmons, F., & Dillon, P.** (2010). *Media reporting on illicit drugs in Australia: Trends and impacts on youth attitudes to illicit drug use*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

**20. Ngui, R., & Shanahan, M.** (2010). *Cannabis use disorder treatment and associated health care costs in New South Wales, 2007*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.

## OTHER REPORTS

**Badham, J.** (2010). A compendium of modelling techniques. *Integration Insights*, No. 12 (May), 1-25.

**Bammer, G., Strazdins, L., McDonald, D., Berry, H., Ritter, A., Deane, P., & Van Kerkhoff, L.** (2010). *Expanding the deliberations about the research-policy gap: Useful ideas from the literature*. Canberra: ANU E Press.

**de Graaff, B., & Bruno, R.** (2010). The health and wellbeing of a group of Tasmanian regular injecting drug users. *Drug Trends Bulletin*, December, 1-7.

# PUBLICATIONS

- Dolan, K.** (2010). *Advancing the sexual and reproductive health and human rights of prisoners living with HIV*. Amsterdam: GNP+.
- Dunn, M., & Thomas, J.** (2010). Attitudes toward, knowledge of, and prevalence of recreational drug use among elite Australian athletes. *EDRS Drug Trends Bulletin*, April 2010, [1-5].
- Flaherty, I., Donato-Hunt, C., Arcuri, A., & Howard, J.** (2010). *Finding the right help: Pathways for culturally diverse clients with cannabis use and mental health issues*. Sydney: DAMEC & NCPIC.
- Flatau, P., Conroy, E., Clear, A., & Burns, L.** (2010). *The integration of homelessness, mental health and drug and alcohol services in Australia*. Melbourne: Australian Housing and Urban Research Institute (AHURI).
- Gates, P., Roxburgh, A., & Copeland, J.** (2010). Cannabis and other drug use in the Australian workforce: Findings from the 2007 NDSHS data. *National Cannabis Prevention and Information Centre (NCPIC), Bulletin Series no. 8*, 1-9.
- Hickey, S., McLlwraith, R., & Alati, R.** (2010). Licit drug use by ecstasy users, nationally and in Queensland: Are there gender differences? *EDRS Drug Trends Bulletin*, July 2010, [1-4].
- Howard, J., Ali, H., & Robins, L.** (2010). Young people and cannabis in the Western Pacific region. *National Cannabis Prevention and Information Centre (NCPIC) Bulletin Series no. 10*, 1-11.
- Hughes, C.** (2010). Legislative thresholds for drug possession and traffic: An overview of state and territory differences in Australia. *DPMP Bulletin Series, Bulletin no.18*, 1-3.
- Hughes, C.** (2010). *The Australian (illicit) drug policy timeline: 1985-2010, Drug Policy Modelling Program*.
- Hughes, C., Spicer, B., Lancaster, K., Matthew-Simmons, F., & Dillon, P.** (2010). Drugs in the Australian news media: Trends and impacts on youth attitudes to illicit drug use. *DPMP Bulletin Series, Bulletin no. 20*, 1-4.
- Iversen, J., Topp, L., & Maher, L.** (2010). Drug injection trends among participants in the Australian Needle and Syringe Program Survey, 2005-2009. *Drug Trends Bulletin*, July 2010 (supplement), 1-5.
- Kwong, A., Howard, J., & Arcuri, A.** (2010). Self-managed change from problematic cannabis use. *National Cannabis Prevention and Information Centre (NCPIC), Bulletin Series no.12*, 1-27.
- Laslett, A.-M., Catalano, P., Chikritzhs, T., Dale, C., Doran, C., Ferris, J., Jainullabudeen, T., Livingston, M., Matthews, S., Mugavin, J., Room, R., Schlotterlein, M., & Wilkinson, C.** (2010). *The range and magnitude of alcohol's harm to others*. Fitzroy, Vic: AER Centre for Alcohol Policy Research, Turning Point Alcohol and Drug Centre, Eastern Health.
- Leung, R., Kennedy, V., Kelly, A. B., Toumbourou, J. W., & Hutchinson, D.** (2010). *Preventing alcohol harms in young people*. Sydney: NSW Health.
- Lewis, J.** (2010). Clinical and medico-legal implications of drug testing for cannabis. *National Cannabis Prevention and Information Centre (NCPIC), Bulletin Series no. 7*, 1-6.
- Matheson, A., Roxburgh, A., Degenhardt, L., Howard, J., & Down, I.** (2010). *Drug use, dependence and mental health among gay, lesbian and bisexual people reporting regular methamphetamine use: Sydney, Australia*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales; ACON.
- Matthews, A. J., & Bruno, R.** (2010). Mephedrone use among regular ecstasy consumers in Australia. *EDRS Drug Trends Bulletin*, December, 1-7.
- Matthew-Simmons, F., Shanahan, M., & Ritter, A.** (2010). Estimating the street value of a cannabis plant in Australia. *DPMP Bulletin Series, Bulletin no. 19*, 1-2.
- Moon, C.** (2010). Opioid use in the Northern Territory. *Drug Trends Bulletin, July 2010*, [1-4].
- Newton, N., Teesson, M., & Newton, K.** (2010). *Climate Schools: Ecstasy Module*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.
- Newton, N., Teesson, M., Newton, K.** (2010). *Developing the Climate Schools: Ecstasy Module: A universal internet-based drug prevention program*. Report for the Australian Government Department of Health and Ageing.
- Newton, N., Vogl, L., & Teesson, M.** (2010). CLIMATE Schools: Cannabis prevention programs. *National Cannabis Prevention and Information Centre (NCPIC), Bulletin Series no. 9*, 1-5.
- Rainsford, C., Lenton, S., & Featherston, J.** (2010). Indicators of changing trends in heroin and other opioid use in IDRS data nationally and in Western Australia. *Drug trends bulletin*, April 2010, [1-6].
- Reference Group to the United Nations on HIV and Injecting Drug Use** (2010). *Consensus statement of the Reference Group to the United Nations on HIV and Injecting Drug Use 2010*. Sydney, NSW: The Secretariat of the Reference Group to the United Nations on HIV and Injecting Drug Use, National Drug and Alcohol Research Centre, The University of New South Wales.
- Roberts, A., Mathers, B., Degenhardt, L., & Reference Group to the United Nations on HIV and Injecting Drug Use** (2010). *Women who inject drugs: A review of their risks, experiences and needs*. Sydney, NSW: Secretariat of the Reference Group to the United Nations on HIV and Injecting Drug Use, National Drug and Alcohol Research Centre, The University of New South Wales.
- Roxburgh, A., & Burns, L.** (2010). *Drug-related hospital stays in Australia 1993-2008*. Sydney, NSW: National Drug and Alcohol Research Centre, The University of New South Wales.
- Simpson, M., Howard, J., Rodas, A., & Kalmar, D.** (2010). FYRST STOP Youth Cannabis Clinic: Evaluation using routinely collected data. *National Cannabis Prevention and Information Centre (NCPIC), Bulletin Series no.11*, 1-6.
- Sindicich, N., & Burns, L.** (2010). An overview of the 2010 EDRS: The regular ecstasy user survey findings. *EDRS Drug Trends Bulletin*, October 2010, [1-5].
- Smith, J., McLaughlan, K., & Howard, J.** (2010). *The value of going beyond recognition in a generalist youth service setting to a formal process of screening for co-morbidity concerns*. Sydney: WAYS Youth Services. <5196>
- Stafford, J., & Burns, L.** (2010). An overview of the 2010 IDRS: The Injecting Drug Users survey key findings. *Drug Trends Bulletin*, October 2010, [1-4].

## BOOK CHAPTERS

- Bammer, G., Strazdins, L., McDonald, D., Berry, H., Ritter, A., Deane, P., & Van Kerckhoff, L.** (2010). Expanding the deliberations about the research-policy gap: Useful ideas from the literature. In: Bammer, G., Michaux, A., & Sanson, A. (eds), *Bridging the 'know-do' gap: Knowledge brokering to improve child wellbeing* (pp. 135-155). Canberra: ANU E Press.
- Byrnes, J., Doran, C., & Shakeshaft, A.** (In press). Taxation and the rise of alco-pops in Australia. In Tavidze, A. (ed.), *Progress in Economics Research, Vol. 18* (pp. [1-5]). Hauppauge, NY: Nova Publishers.
- Darke, S.** (2010). Scales for research in the addictions. In Miller, P.G., Strang, J., & Miller, P.M. (eds), *Addiction Research Methods* (pp. 127-145). Oxford, UK: Wiley-Blackwell.
- Degenhardt, L., Conroy, E., Gilmour, S., & Collins, L.** (2010). The effect of a reduction in heroin supply in Australia upon drug distribution and acquisitive crime. In Natarjan, M. (ed.), *Drugs and crime, vol. II* (pp. 437-459). Farnham, UK: Ashgate Publishing Limited
- Hall, W., & Degenhardt, L.** (2010). Schizophrenia secondary to cannabis use. In Sachdev, P.S., & Keshavan, M.S. (eds), *Secondary schizophrenia* (pp. 169-178). NY: Cambridge University Press.
- Hall, W., Degenhardt, L., & Sindicich, N.** (2010). Illicit drug use and the burden of disease. In Patel, V. (ed.), *Mental and neurological public health: A global perspective* (pp. 57-64). San Diego, CA: Academic Press.
- Lemon, J., Degenhardt, L., Slade, T., & Mills, K.** (2010). Quantitative data analysis. In Miller, P.G., Strang, J., & Miller, P.M. (eds), *Addiction Research Methods* (pp. 163-183). Oxford, UK: Wiley-Blackwell.

**McGrath, J., & Degenhardt, L.** (2010). Cannabis: A clue or a distraction in the search for 'causes' of psychosis? In Gattaz, W. F., & Busatto, G. (eds), *Advances in Schizophrenia Research 2009* (pp. 367-376). New York: Springer.

**McKetin, R., McLaren, J., Kelly, E., & Chalmers, J.** (2010). The market for crystalline methamphetamine in Sydney, Australia. In Bouchard, M., & Wilkins, C. (ed.), *Illegal markets and the economics of organized crime* (pp. 109-119). Abingdon, UK: Routledge.

**Teesson, M., & Deady, M.** (2010). Outcome measurement in drug and alcohol services. In Trauer, T. (ed.), *Outcome measurement in mental health: Theory and practice* (pp. 173-181). Cambridge: Cambridge University Press.

## JOURNAL ARTICLES

**Adamson, S. J., Kay-Lambkin, F. J., Baker, A. L., Lewin, T., Thornton, L., Kelly, B. J., & Sellman, J. D.** (2010). An improved brief measure of cannabis misuse: The Cannabis Use Disorders Identification Test-Revised (CUDIT-R). *Drug and Alcohol Dependence*, 110(1-2), 137-143.

**Alati, R., Maloney, E., Hutchinson, D. M., Najman, J. M., Mattick, R. P., Bor, W., & Williams, G. M.** (2010). Do maternal parenting practices predict problematic patterns of adolescent alcohol consumption? *Addiction*, 105(5), 872-880.

**Baillie, A. J., Stapinski, L., Crome, E., Morley, K., Sannibale, C., Haber, P., & Teesson, M.** (2010). Some new directions for research on psychological interventions for comorbid anxiety and substance use disorders. *Drug and Alcohol Review*, 29(5), 518-524.

**Baillie, A. J., & Teesson, M.** (2010). Continuous, categorical and mixture models of DSM-IV alcohol and cannabis use disorders in the Australian community. *Addiction*, 105(7), 1246-1253.

**Baker, A., Richmond, R., Lewin, T. J., & Kay-Lambkin, F.** (2010). Cigarette smoking and psychosis: Naturalistic follow up 4 years after an intervention trial. *Australian and New Zealand Journal of Psychiatry*, 44(4), 342-350.

**Bashford, J., Flett, R., & Copeland, J.** (2010). The Cannabis Use Problems Identification Test (CUPIT): Development, reliability, concurrent and predictive validity among adolescents and adults. *Addiction*, 105(4), 615-625.

**Battisti, R., Roodenrys, S., Johnstone, S. J., Respondek, C., Hermens, D. F., & Solowij, N.** (2010). Chronic use of cannabis and poor neural efficiency in verbal memory ability. *Psychopharmacology*, 209(4), 319-330.

**Battisti, R. A., Roodenrys, S., Johnstone, S. J., Pesa, N., Hermens, D. F., & Solowij, N.** (2010). Chronic cannabis users show altered neurophysiological functioning on Stroop task conflict resolution. *Psychopharmacology*, 212(4), 613-624.

**Boughtwood, D., & Halse, C.** (2010). Other than obedient: Girls' constructions of doctors and treatment regimes for anorexia nervosa. *Journal of Community & Applied Social Psychology* 20, 83-94.

**Breen, C. L., Shakeshaft, A., Doran, C. M., Sanson-Fisher, R. W., & Mattick, R. P.** (2010). Cost-effectiveness of follow-up contact for a postal survey: A randomised controlled trial. *Australian and New Zealand Journal of Public Health*, 34(5), 508-512.

**Bright, D. A.** (2010). Cocaine trafficking in Latin America: EU and US policy responses [Book review]. *Drug and Alcohol Review*, 29(2), 229-230.

**Bright, D. A., & Goodman-Delahunty, J.** (2010). Mock juror decision making in a civil negligence trial: The impact of gruesome evidence, injury severity, and information processing route. *Psychiatry, Psychology and Law, Advance online publication*, [1-22].

**Bright, D. A., & Ritter, A.** (2010). Australian trends in drug user and drug dealer arrest rates: 1993 to 2006-07. *Psychiatry, Psychology and Law, Advance online publication*, [1-13].

**Bright, D. A., & Ritter, A.** (2010). Retail price as an outcome measure for the effectiveness of drug law enforcement. *International Journal of Drug Policy*, 21(5), 359-363.

**Burns, L.** (2010). Editorial: Drinking and women's health: Time for action. *Addiction Research and Theory*, 18(2), 119-121.

**Burns, L., Conroy, E., & Mattick, R. P.** (2010). Infant mortality among women on a methadone program during pregnancy. *Drug and Alcohol Review*, 29(5), 551-556.

**Burns, L., Conroy, E., & Mattick, R. P.** (2010). Main reasons for hospital admissions by women with a history of methadone maintenance. *Drug and Alcohol Review*, 29(6), 669-675.

**Buykx, P., Dietze, P., Ritter, A., & Loxley, W.** (2010). Characteristics of medication overdose presentations to the ED: How do they differ from illicit drug overdose and self-harm cases? *Emergency Medicine Journal*, 27, 499-503.

**Buykx, P., Loxley, W., Dietze, P., & Ritter, A.** (2010). Medications used in overdose and how they are acquired - an investigation of cases attending an inner Melbourne emergency department. *Australian and New Zealand Journal of Public Health*, 34(4), 401-404.

**Byrnes, J. M., Cobiac, L. J., Doran, C. M., Vos, T., & Shakeshaft, A. P.** (2010). Cost-effectiveness of volumetric alcohol taxation in Australia. *Medical Journal of Australia*, 192(8), 439-443.

**Calabria, B., Degenhardt, L., Briegleb, C., Vos, T., Hall, W., Lynskey, M., Callaghan, B., Rana, U. & McLaren, J.** (2010). Systematic review of prospective studies investigating 'remission' from amphetamine, cannabis, cocaine or opioid dependence. *Addictive Behaviors*, 35(8), 741-749.

**Calabria, B., Degenhardt, L., Hall, W., & Lynskey, M.** (2010). Does cannabis use increase the risk of death? Systematic review of epidemiological evidence on adverse effects of cannabis use. *Drug and Alcohol Review*, 29(3), 318-330.

**Calabria, B., Doran, C. M., Vos, T., Shakeshaft, A. P., & Hall, W.** (2010). Epidemiology of alcohol-related burden of disease among Indigenous Australians. *Australian and New Zealand Journal of Public Health*, 34(S1), S47-51.

**Carragher, N., Adamson, G., Bunting, B., & McCann, S.** (2010). Treatment-seeking behaviours for depression in the general population: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Affective Disorders*, 121, 59-67.

**Carragher, N., Newton, L., Slade, T., & Teesson, M.** (2010). An item response analysis of the DSM-IV criteria for major depression: Findings from the Australian National Survey of Mental Health and Wellbeing. *Journal of Affective Disorders, Advance online publication*, [1-7].

**Carragher, N., Mills, K., Slade, T., Teesson, M., & Silove, D.** (2010). Factor structure of posttraumatic stress disorder symptoms in the Australian general population. *Journal of Anxiety Disorders*, 24(5), 520-527.

**Chalmers, J., Bradford, D., & Jones, C.** (2010). The effect of methamphetamine and heroin price on polydrug use: A behavioural economics analysis in Sydney, Australia. *International Journal of Drug Policy*, 21(5), 381-389.

**Chambers, G. M., Sullivan, E. A., Shanahan, M., Ho, M. T., Priester, K., & Chapman, M. G.** (2010). Is in vitro fertilisation more effective than stimulated intrauterine insemination as a first-line therapy for subfertility? A cohort analysis. *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 50(3), 280-288.

**Ciketic, S., Hayatbakhsh, M. R., & Doran, C. M.** (2010). Drinking water fluoridation in South East Queensland: A cost-effectiveness evaluation. *Health Promotion Journal of Australia*, 21(1), 51-56.

**Clifford, A., Pulver, L. J., Richmond, R., Shakeshaft, M., & Ivers, R.** (2010). Brief intervention resource kits for Indigenous Australians: generally evidence-based, but missing important components. *Australian and New Zealand Journal of Public Health*, 34(S1), S80-86.

**Clifford, A., Pulver, L. J., Richmond, R., Shakeshaft, A., & Ivers, R.** (2010). Smoking, nutrition, alcohol and physical activity interventions targeting Indigenous Australians: Rigorous evaluations and new directions needed. *Australian and New Zealand Journal of Public Health, Advance online publication*, [1-9].

## PUBLICATIONS

- Clinton-McHarg, T., Carey, M., Sanson-Fisher, R., Shakeshaft, A., & Rainbird, K.** (2010). Measuring the psychosocial health of adolescent and young adult (AYA) cancer survivors: A critical review. *Health and Quality of Life Outcomes*, 8(25), 1-13.
- Copeland, J., & Martin, G.** (2010). The Adolescent Cannabis Check-up: A motivational intervention for young users. *Counselor*, 11(3), 32-38.
- Crome, E., Baillie, A., Slade, T., & Ruscio, A. M.** (2010). Social phobia: Further evidence of dimensional structure. *Australian and New Zealand Journal of Psychiatry*, 44, 1012-1020.
- Czech, S., Shakeshaft, A., Breen, C., & Sanson-Fisher, R.** (2010). Whole-of-community approaches to reducing alcohol-related harm: What do communities think? *Journal of Public Health*, 18, 543-551.
- Czech, S., Shakeshaft, A., Byrnes, J. M., & Doran, C. M.** (2010). Comparing the cost of alcohol-related traffic crashes in rural and urban environments. *Accident Analysis and Prevention*, 42(4), 1195-1198.
- Darke, S.** (2010). The toxicology of homicide offenders and victims: A review. *Drug and Alcohol Review*, 29(2), 202-215.
- Darke, S., Duffou, J., & Torok, M.** (2010). A reduction in blood morphine concentrations amongst heroin overdose fatalities associated with a sustained reduction in street heroin purity. *Forensic Science International*, 198, 118-120.
- Darke, S., Duffou, J., & Torok, M.** (2010). Comparative toxicology of intentional and accidental heroin overdose. *Journal of Forensic Sciences*, 55(4), 1015-1018.
- Darke, S., Duffou, J., & Torok, M.** (2010). The comparative toxicology and major organ pathology of fatal methadone and heroin toxicity cases. *Drug and Alcohol Dependence*, 106(1), 1-6.
- Darke, S., Mills, K. L., Ross, J., & Teesson, M.** (2010). Rates and correlates of mortality amongst heroin users: Findings from the Australian Treatment Outcome Study (ATOS), 2001-2009. *Drug and Alcohol Dependence*, Advance online publication, 1-6.
- Darke, S., Ross, J., Mills, K., Teesson, M., Williamson, A., & Havard, A.** (2010). Benzodiazepine use among heroin users: Baseline use, current use and clinical outcome. *Drug and Alcohol Review*, 29(3), 250-255.
- Darke, S., Torok, M., Kaye, S., & Duffou, J.** (2010). Cardiovascular disease risk factors and symptoms among regular psychostimulant users. *Drug and Alcohol Review*, 29(4), 371-377.
- Darke, S., Torok, M., Kaye, S., & Ross, J.** (2010). Attempted suicide, self-harm and violent victimization among regular illicit drug users. *Suicide and Life-Threatening Behavior*, 40, 578-596.
- Darke, S., Torok, M., Kaye, S., Ross, J., & McKetin, R.** (2010). Comparative rates of violent crime among regular methamphetamine and opioid users: Offending and victimization. *Addiction*, 105(5), 916-919.
- De Graaf, R., Radovanovic, M., Van Laar, M., Fairman, B., Degenhardt, L., Aguilar-Gaxiola, S., Bruffaerts, R., De Girolamo, G., Fayyad, J., Gureje, O., Hario, J.M., Huang, Y., Kostychenko, S., Lepine, J., Matschinger, H., Medina Mora, M.E., Neumark, Y., Ormel, J., Posada-Villa, J., Stein, D.J., Tachimori, H., Wells, J. E., & Anthony, J.C.** (2010). Early cannabis use and estimated risk of later onset of depression spells: Epidemiologic evidence from the population-based World Health Organization world mental health survey initiative. *American Journal of Epidemiology*, 172(2), 149-159.
- Degenhardt, L., Bruno, R., & Topp, L.** (2010). Is ecstasy a drug of dependence? *Drug and Alcohol Dependence*, 107(1), 1-10.
- Degenhardt, L., Coffey, C., Carlin, J. B., Swift, W., Moore, E., & Patton, G. C.** (2010). Outcomes of occasional cannabis use in adolescence: 10-year follow-up study in Victoria, Australia. *The British Journal of Psychiatry*, 196, 290-295.
- Degenhardt, L., Dierker, L., Chiu, W. T., Medina-Mora, M. E., Neumark, Y., Sampson, N., & Kessler, R.C.** (2010). Evaluating the drug use 'gateway' theory using cross-national data: Consistency and associations of initiation of drug use among participants in the WHO World Mental Health Surveys. *Drug and Alcohol Dependence*, 108(1-2), 84-97.
- Degenhardt, L., Mathers, B., Guarinieri, M., Panda, S., Phillips, B., Strathdee, S. A., Tyndall, M., Wiessing, L., Wodak, A., Howard, J., & Reference Group to the United Nations on HIV and Injecting Drug Use** (2010). Meth/amphetamine use and associated HIV: Implications for global policy and public health. *International Journal of Drug Policy*, 21(5), 347-358.
- Degenhardt, L., Mathers, B., Vickerman, P., Rhodes, T., Latkin, C., & Hickman, M.** (2010). HIV in people who use drugs 2: Prevention of HIV infection for people who inject drugs - why individual, structural, and combination approaches are needed. *The Lancet*, 376(9737), 285-301.
- Dolan, K., Larney, S.** (2010). HIV in Indian prisons: Risk behaviour, prevalence, prevention & treatment. *Indian Journal of Medical Research*, 132, 696-700.
- Dolan, K., Teutsch, S., Scheuer, N., Levy, M., Rawlinson, W., Kaldor, J., Lloyd, A., & Haber, P.** (2010). Incidence and risk for acute hepatitis C infection during imprisonment in Australia. *European Journal of Epidemiology*, 25(2), 143-148.
- Doran, C. M.** (2010). Critique of an economic evaluation using the Drummond checklist [Editorial]. *Applied Health Economics and Health Policy*, 8, 1-3.
- Doran, C. M., Byrnes, J. M., Higashi, H., & Truong, K.** (2010). Revenue implications to the Vietnamese Government of using taxes to curb cigarette smoking. *Addictive Behaviors*, 35(12), 1089-1093.
- Doran, C. M., Chang, D. H., Kiat, H., & Bensoussan, A.** (2010). Review of economic methods used in complementary medicine. *The Journal of Alternative and Complementary Medicine*, 16(5), 591-595.
- Doran, C. M., Hall, W. D., Shakeshaft, A., Vos, T., & Cobiac, L. J.** (2010). Alcohol policy reform in Australia: What can we learn from the evidence? *Medical Journal of Australia*, 192(8), 468-470.
- Doran, C. M., & Jainullabudeen, T. A.** (2010). Economic efficiency of alcohol policy. *Applied Health Economics and Health Policy*, 8(5), 351-354.
- Dore, G. J., Hellard, M., Matthews, G. V., Grebely, J., Haber, P. S., Petoumenos, K., Yeung, B., Marks, P., Van Beek, I., McCaughan, G., White, P., French, R., Rawlinson, W., Lloyd, A. R., Kaldor, J. M., & Australian Trial in Acute Hepatitis C Study Group** (2010). Effective treatment of injecting drug users with recently acquired hepatitis C virus infection. *Gastroenterology*, 138, 123-135.
- Duffou, J. A., Brouwer, I. G., & Darke, S.** (2010). Levamisole as an adulterant in a cocaine overdose fatality. *Medical Journal of Australia*, 192(12), 724.
- Dunn, M.** (2010). The non-medical use of steroids in Australia: Results from a general population survey. *Australian and New Zealand Journal of Public Health*, 34(5), 531-532.
- Dunn, M., Day, C., Bruno, R., Degenhardt, L., & Campbell, G.** (2010). Sexual and injecting risk behaviours among regular ecstasy users. *Addictive Behaviors*, 35, 157-160.
- Dunn, M., Degenhardt, L., & Bruno, R.** (2010). Transition to and from injecting drug use among regular ecstasy users. *Addictive Behaviors*, 35(10), 909-912.
- Dunn, M., Thomas, J. O., Swift, W., Burns, L., & Mattick, R. P.** (2010). Drug testing in sport: The attitudes and experiences of elite athletes. *International Journal of Drug Policy*, 21(4), 330-332.
- George, J., Kinner, S. A., Bruno, R., Degenhardt, L., & Dunn, M.** Contextualising psychological distress among regular ecstasy users. *Drug and Alcohol Review*, 29(3), 243-249.
- Gilligan, C., Sanson-Fisher, R., & Shakeshaft, A.** (2010). Appropriate research designs for evaluating community-level alcohol interventions: What next? *Alcohol and Alcoholism*, 45(5), 481-487.

- Grebely, J., Petoumenos, K., Matthews, G. V., Haber, P., Marks, P., Lloyd, A. R., Kaldor, J. M., Dore, G. J., Hellard, M., & ATAH Study Group** (2010). Factors associated with uptake of treatment for recent hepatitis C virus infection in a predominantly injecting drug user cohort: The ATAH Study. *Drug and Alcohol Dependence*, 107, 244-249.
- Grisham, J., & Norberg, M. M.** (2010). Compulsive hoarding: Current controversies and new directions. *Dialogues in Clinical Neuroscience*, 12, 233-240.
- Grisham, J. R., Norberg, M. M., Williams, A. D., Certoma, S. P., & Kadib, R.** (2010). Categorization and cognitive deficits in compulsive hoarding. *Behaviour Research and Therapy*, 48(9), 866-872.
- Grove, R., McBride, O., & Slade, T.** (2010). Towards DSM-V: Exploring thresholds for alcohol dependence and abuse. *Alcohol & Alcoholism*, 45(1), 45-52.
- Hall, W., & Degenhardt, L.** (2010). Adverse health effects of non-medical cannabis use - Authors' reply. *The Lancet*, 375(9710), 197.
- Hall, W., & Degenhardt, L.** (2010). What are the policy implications of the evidence on cannabis use and psychosis? *Addiction*, 105(8), 1332-1333.
- Hall, W. D., Wallace, A. L., Cobiac, L. J., Doran, C. M., & Vos, T.** (2010). How can we reduce alcohol-related road crash deaths among young Australians? *Medical Journal of Australia*, 192(8), 464-466.
- Haswell, M. R., Kavanagh, D., Tsey, K., Reilly, L., Cadet-James, Y., Laliberte, A., Wilson, A., & Doran, C. M.** (2010). Psychometric validation of the Growth and Empowerment Measure (GEM) applied with Indigenous Australians. *Australian and New Zealand Journal of Psychiatry*, 44(9), 791-799.
- Havard, A., Shakeshaft, A. P., Conigrave, K. M., & Sanson-Fisher, R.** (2010). The prevalence and characteristics of alcohol-related presentations to emergency departments in rural Australia. *Emergency Medicine Journal, Advance online publication*, [1-6].
- Hayatbakhsh, M. R., Kingsbury, A. M., Flenady, V., Gilshenan, K. S., Hutchinson, D. M., & Najman, J. M.** (2010). Illicit drug use before and during pregnancy at a tertiary maternity hospital 2000-2006. *Drug and Alcohol Review, Advance online publication*, [1-7].
- Horwood, L. J., Fergusson, D. M., Hayatbakhsh, M. R., Najman, J. M., Coffery, C., Patton, G. C., Silins, E., & Hutchinson, D. M.** (2010). Cannabis use and educational achievement: Findings from three Australasian cohort studies. *Drug and Alcohol Dependence*, 110(3), 247-253.
- Horyniak, D., Dietze, P., Larance, B., Winstock, A., & Degenhardt, L.** (2010). The prevalence and correlates of buprenorphine inhalation amongst opioid substitution treatment (OST) clients in Australia. *International Journal of Drug Policy, Advance online publication*, 1-5.
- Hughes, C.** (2010). Coordinating the National Drug Strategy: Where to from here? *ADCA News*, 50, 9.
- Hughes, C.** (2010). Diversion: Australia's alternative to drug law reform. *Matters of Substance*, 20, 15-17.
- Hughes, C.** (2010). Drug policy and the public good [Book review]. *Drug and Alcohol Review*, 26(5), 577-578.
- Hughes, C., Lancaster, K., Matthew-Simmons, F., & Dillon, P.** (2010). News values. *Druglink, Sept-Oct*, 16-17.
- Hughes, C., Lancaster, K., Matthew-Simmons, F., Spicer, B., & Dillon, P.** (2010). Youth, drugs and the media: Creating attitude. *Of Substance*, 8, 16-17.
- Hughes, C., & Stevens, A.** (2010). What can we learn from the Portuguese decriminalization of illicit drugs? *British Journal of Criminology*, 50, 999-1022.
- Hutchinson, D. M., Rapee, R. M., & Taylor, A.** (2010). Body dissatisfaction and eating disturbances in early adolescence: A structural modeling investigation examining negative affect and peer factors. *The Journal of Early Adolescence*, 30(4), 489-517.
- Indig, D., Copeland, J., Conigrave, K. M., & Arcuri, A.** (2010). Characteristics and comorbidity of drug and alcohol-related emergency department presentations detected by nursing triage. *Addiction*, 105(5), 897-906.
- Islam, M. M., Day, C. A., & Conigrave, K. M.** (2010). Harm reduction healthcare: From an alternative to the mainstream. *International Journal of Drug Policy*, 21(2), 131-133.
- Kay-Lambkin, F.** (2010). Mindfulness- & acceptance-based behavioral therapies in practice [book review]. *Drug and Alcohol Review*, 29(4), 463-464.
- Kay-Lambkin, F., Baker, A. L., McKetin, R., & Lee, N.** (2010). Stepping through treatment: Reflections on an adaptive treatment strategy among methamphetamine users with depression. *Drug and Alcohol Review*, 29(5), 475-482.
- Lancaster, K., Hughes, C. E., Spicer, B., Matthew-Simmons, F., & Dillon, P.** (2010). Illicit drugs and the media: Models of media effects for use in drug policy research. *Drug and Alcohol Review, Advance online publication*, [1-6].
- Larney, S.** (2010). Does opioid substitution treatment in prisons reduce injecting-related HIV risk behaviours? A systematic review. *Addiction*, 105, 216-223.
- Larney, S., & Dolan, K.** (2010). Compulsory detoxification is a major challenge to harm reduction in China. *International Journal of Drug Policy*, 21, 165-166.
- Larney, S., & Martire, K. A.** (2010). Factors affecting criminal recidivism among participants in the Magistrates Early Referral Into Treatment (MERIT) Program in New South Wales, Australia. *Drug and Alcohol Review*, 29(6), 684-688.
- Lee, N., Jenner, L., Baker, A., Ritter, A., Hides, L., Norman, J., Kay-Lambkin, F., Hall, K., Dann, F., & Cameron, J.** (2010). Screening and intervention for mental health problems in alcohol and other drug settings: Can training change practitioner behaviour? *Drugs: Education, Prevention and Policy, Advance online publication*, 1-4.
- Lee, N. K., Pohlman, S., Baker, A., Femis, J., & Kay-Lambkin, F.** (2010). It's the thought that counts: Craving metacognitions and their role in abstinence from methamphetamine use. *Journal of Substance Abuse Treatment*, 38(3), 245-250.
- Leung, L. S., Abdallah, A. B., Copeland, J., & Cottler, L. B.** (2010). Modifiable risk factors of ecstasy use: Risk perception, current dependence, perceived control, and depression. *Addictive Behaviors*, 35(3), 201-208.
- Lynagh, M., Sanson-Fisher, R., & Shakeshaft, A.** (2010). Alcohol-related harm: Perceptions of ambulance officers and health promotion actions they do and would do. *Health Promotion Journal of Australia*, 21(1), 19-25.
- Maloney, E., Degenhardt, L., Darke, S., & Nelson, E. C.** (2010). Investigating the co-occurrence of self-mutilation and suicide attempts among opioid-dependent individuals. *Suicide & Life-Threatening Behavior*, 40(1), 50-61.
- Maloney, E., Hutchinson, D., Burns, L., & Mattick, R. P.** (2010). Prevalence and patterns of problematic alcohol use among Australian parents. *Australian and New Zealand Journal of Public Health*, 34(5), 495-501.
- Maloney, E., Hutchinson, D., Burns, L., & Mattick, R. P.** (2010). Prevalence of and characteristics associated with persistent smoking among Australian mothers and fathers: Findings from the Longitudinal Study of Australian Children (LSAC). *Journal of Family Studies*, 16, 165-175.
- Martin, G., & Copeland, J.** (2010). Brief intervention for regular ecstasy (MDMA) users: Pilot randomized trial of a Check-up model. *Journal of Substance Use*, 15(2), 131-142.
- Martire, K. A.** (2010). An examination of the implications of financial strain for forensic psychology. *Journal of Forensic Psychology Practice*, 10(3), 169-176.
- Martire, K. A., & Larney, S.** (2010). An estimate of the number of inmate separations from Australian prisons 2000/01 and 2005/06. *Australian and New Zealand Journal of Public Health*, 34(3), 255-257.

## PUBLICATIONS

- Mathers, B. M., Cook, C., & Degenhardt, L.** (2010). Improving the data to strengthen the global response to HIV among people who inject drugs. *International Journal of Drug Policy, 21*(2), 100-102.
- Mathers, B. M., Degenhardt, L., Ali, H., Wiessing, L., Hickman, M., Mattick, R. P., Myers, B., Ambekar, A., & Strathdee, S. A.** (2010). HIV prevention, treatment, and care services for people who inject drugs: A systematic review of global, regional, and national coverage. *The Lancet, 375*(9719), 1014-1028.
- McBride, O., Teesson, M., Slade, T., & Baillie, A.** (2010). Theoretical and observed subtypes of DSM-IV alcohol- and cannabis-use disorders in the Australian population. *Journal of Studies on Alcohol and Drugs, 71*(4), 597-606.
- McGrath, J., Welham, J., Scott, J., Varghese, D., Degenhardt, L., Hayatbakhsh, M. R., Alati, R., Williams, G. M., Bor, W., & Najman, J. M.** (2010). Association between cannabis use and psychosis-related outcomes using sibling pair analysis in a cohort of young adults. *Archives of General Psychiatry, 67*(5), 440-447.
- McKetin, R.** (2010). The Golden Triangle: Inside Southeast Asia's drug trade [Book review]. *Pacific Affairs, 83*(3), 634-635.
- McKetin, R.** (2010). Methamphetamine addiction: Biological foundations [Book review]. *Drug and Alcohol Review, 29*(2), 231.
- McKetin, R., Hickey, K., Devlin, K., & Lawrence, K.** (2010). The risk of psychotic symptoms associated with recreational methamphetamine use. *Drug and Alcohol Review, 29*(4), 358-363.
- McLaren, J. A., Silins, E., Hutchinson, D., Mattick, R. P., & Hall, W.** (2010). Assessing evidence for a causal link between cannabis and psychosis: A review of cohort studies. *International Journal of Drug Policy, 21*(1), 10-19.
- Medlow, S., Kelk, N., Cohen, A., & Hickie, I.** (2010). Facilitating early intervention: Experiences of young people and implications for the shaping of headspace services. *Australasian Psychiatry, 18*(4), 335-339.
- Mewton, L., Teesson, M., & Slade, T.** (2010). 'Youthful epidemic' or diagnostic bias? Differential item functioning of DSM-IV cannabis use criteria in an Australian general population survey. *Addictive Behaviors, 35*(5), 408-413.
- Mewton, L., Teesson, M., Slade, T., & Grove, R.** (2010). The epidemiology of DSM-IV alcohol use disorders amongst young adults in the Australian population. *Alcohol and Alcoholism, Advance online publication*, [1-7].
- Miller, P. G., Hall, W., West, R., Marsden, J., & Darke, S.** (2010). A renewed call for action on alcohol policy: Editorial. *Addiction, 105*(5), 767-768.
- Miller, P. G., Johnston, J., Dunn, M., Fry, C. L., & Degenhardt, L.** (2010). Comparing probability and non-probability sampling methods in ecstasy research: Implications for the internet as a research tool. *Substance Use & Misuse, 45*(3), 437-450.
- Morley, K. C., Teesson, M., Sannibale, C., Baillie, A., & Haber, P. S.** (2010). Clinical predictors of outcome from an Australian pharmacological relapse prevention trial. *Alcohol and Alcoholism, 45*(6), 520-526.
- Murray, J. M., & Ritter, A.** (2010). Findings regarding reduced prevalence with hepatitis C treatment are still valid: A reply to Vickerman et al. *Drug and Alcohol Dependence, Advance online publication*, [1-2].
- Navarro, H. J., Doran, C. M., & Shakeshaft, A.** (2010). Measuring costs of alcohol harm to others: A review of the literature. *Drug and Alcohol Dependence, Advance online publication*, [1-13].
- Newton, N., Teesson, M., Vogl, L. E., & Andrews, G.** (2010). Internet-based prevention for alcohol and cannabis use: Final results of the Climate Schools course. *Addiction, 105*(4), 749-759.
- Norberg, M. M., Norton, A. R., Olivier, J., & Zvolensky, M. J.** (2010). Social anxiety, reasons for drinking, and college students. *Behavior Therapy, 41*(4), 555-566.
- Olivier, J., & Norberg, M. M.** (2010). Positively skewed data: Revisiting the Box-Cox power transformation. *International Journal of Psychological Research, 3*, [1-11].
- Petrie, D. J., Doran, C. M., Shakeshaft, A. P., & Sanson-Fisher, R.** (2010). The relationship between risky alcohol consumption, crime and traffic accidents in Australian rural communities. *Addictive Behaviors, 35*(4), 359-362.
- Pirkis, J., Burgess, P. M., Hardy, J., Harris, M., Slade, T., & Johnston, A.** (2010). Who cares? A profile of people who care for relatives with a mental disorder. *Australian and New Zealand Journal of Psychiatry, 44*(10), 929-937.
- Pirkis, J. E., Burgess, P. M., Johnston, A. K., & Whiteford, H. A.** (2010). Use of selective serotonin reuptake inhibitors and suicidal ideation: Findings from the 2007 National Survey of Mental Health and Wellbeing [Letter]. *Medical Journal of Australia, 192*(1), 53.
- Pluddemann, A., Fisher, A. J., McKetin, R., Parry, C. D., & Lombard, C. J.** (2010). A prospective study of methamphetamine use as a predictor of high school non-attendance in Cape Town, South Africa. *Substance Abuse Treatment, Prevention, and Policy, 5*(25), 1-7.
- Powers, J. R., Loxton, D. J., Burns, L. A., Shakeshaft, A., Elliott, E. J., & Dunlop, A. J.** Assessing pregnant women's compliance with different alcohol guidelines: An 11-year prospective study. *Medical Journal of Australia, 192*(12), 690-693.
- Proudfoot, H., Vogl, L., Swift, W., Martin, G., & Copeland, J.** (2010). Development of a short cannabis problems questionnaire for adolescents in the community. *Addictive Behaviors, 35*(7), 734-737.
- Ritter, A.** (2010). Conceptualising 'balance' in national drug policy. *Drug and Alcohol Review, 29*(4), 349-351.
- Ritter, A.** (2010). Illicit drugs policy through the lens of regulation. *International Journal of Drug Policy, 21*(4), 265-270.
- Ritter, A., & Bammer, G.** (2010). Models of policy-making and their relevance for drug research. *Drug and Alcohol Review, 29*, 352-357.
- Rooke, S., Thorsteinsson, E., Karpin, A., Copeland, J., & Allsop, D.** (2010). Computer-delivered interventions for alcohol and tobacco use: A meta-analysis. *Addiction, 105*(8), 1381-1390.
- Roxburgh, A., Hall, W. D., Degenhardt, L., McLaren, J., Black, E., Copeland, J., & Mattick, R. P.** (2010). The epidemiology of cannabis use and cannabis-related harm in Australia 1993-2007. *Addiction, 105*(6), 1071-1079.
- Sanson-Fisher, R., Brand, M., Shakeshaft, A., Haber, P., Day, C., Conigrave, K., Mattick, R., Lintzeris, N., & Teesson, M.** (2010). Forming a national multicentre collaboration to conduct clinical trials: Increasing high-quality research in the drug and alcohol field. *Drug and Alcohol Review, 29*(5), 469-474.
- Shakeshaft, A.** (2010). On Tsunamis, Economies and Roman Senators. *Asia Pacific Journal of Life Sciences, 4*(1), 34-8.
- Shakeshaft, A., Clifford, A., & Shakeshaft, M.** (2010). Reducing alcohol-related harm experienced by Indigenous Australians: Identifying opportunities for Indigenous primary health care services. *Australian and New Zealand Journal of Public Health, 34*(S1), S41-45.
- Shand, F. L., Degenhardt, L., Nelson, E. C., & Mattick, R. P.** (2010). Predictors of social anxiety in an opioid dependent sample and a control sample. *Journal of Anxiety Disorders, 24*(1), 49-54.
- Shearer, J., Shanahan, M., Darke, S., Rodgers, C., van Beek, I., McKetin, R., & Mattick, R. P.** (2010). A cost-effectiveness analysis of modafinil therapy for psychostimulant dependence. *Drug and Alcohol Review, 29*(3), 235-242.
- Silins, E., Bleeker, A. M., Copeland, J., Dillon, P., Devlin, K., van Bakkum, F., & Noijen, J.** (2010). The importance of peer educator qualities: As perceived by ecstasy users. *SuchtMagazin, 5*, 17-20.
- Silins, E., Copeland, J., & Dillon, P.** (2010). Perceptions of methamphetamine- and GHB-related presentations among emergency medicine healthcare professionals: An exploratory study. *Drugs: education, prevention and policy, 17*(2), 181-187.

**Slade, T., & Sunderland, M.** (2010). Quantifying point prevalence of major depressive episode using lifetime structured diagnostic interviews. *Journal of Affective Disorders, 121*(1-2), 39-44.

**Sunderland, M., Mewton, L., Slade, T., & Baillie, A.J.** (2010). Investigating differential symptom profiles in major depressive episode with and without generalized anxiety disorder: True co-morbidity or symptom similarity? *Psychological Medicine, 40*, 1113-1123.

**Swendsen, J., Conway, K. P., Degenhardt, L., Glantz, M., Jin, R., Merikangas, K. R., Sampson, N. & Kessler, R. C.** (2010). Mental disorders as risk factors for substance use, abuse and dependence: Results from the 10-year follow-up of the National Comorbidity Survey. *Addiction, 105*(6), 1117-1128.

**Swift, W., Jones, C., & Donnelly, N.** (2010). Cannabis use while driving: A descriptive study of Australian cannabis users. *Drugs: education, prevention and policy, 17*(5), 573-586.

**Teesson, M.** (2010). What does self-change mean for how we deliver treatment? *Addiction, 105*(9), 1522-1523.

**Teesson, M., Hall, W., Slade, T., Mills, K., Grove, R., Mewton, L., Baillie, A. J., & Haber, P.** (2010). Prevalence and correlates of DSM-IV alcohol abuse and dependence in Australia: Findings of the 2007 National Survey of Mental Health and Wellbeing. *Addiction, 105*(12), 2085-2094.

**Teutsch, S., Luciani, F., Scheuer, N., McCredie, L., Parastu, H., Rawlinson, W., Kaldor, J., Dore, G.J., Dolan, K., Ffrench, R., Lloyd, A., & Haber, P., Levy, M.** (2010). Incidence of primary hepatitis C infection and risk factors for transmission in an Australian prisoner cohort. *BMC Public Health, 10*(633), 1-9.

**Thomas, J. O., Dunn, M., Swift, W., & Burns, L.** (2010). Elite athletes' perceptions of the effects of illicit drug use on athletic performance. *Clinical Journal of Sports Medicine, 20*(3), 189-192.

**Winstock, A. R., & Lea, T.** (2010). Diversion and injection of methadone and buprenorphine among clients in public opioid treatment clinics in New South Wales, Australia. *Substance Use & Misuse, 45*(1-2), 240-252.

**Winstock, A. R., Lea, T., & Sheridan, J.** (2010). Problems experienced by community pharmacists delivering opioid substitution treatment in New South Wales and Victoria, Australia. *Addiction, 105*(2), 335-342.

**Woodrow, A. C., & Bright, D. A.** (2010). Effectiveness of a Sex Offender Treatment Programme: A risk band analysis. *International Journal of Offender Therapy and Comparative Criminology, Advance online publication*, [1-13].

**Zeiler, I., Langlands, T., Murray, J. M., & Ritter, A.** (2010). Optimal targeting of hepatitis C virus treatment among injecting drug users to those not enrolled in methadone maintenance programs. *Drug and Alcohol Dependence, 110*(3), 228-233.

# CONFERENCE PRESENTATIONS

**Allsop, D., Mackenzie, J., Norberg, M., & Copeland, J.** *Development of a cannabis withdrawal scale.* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.

**Allsop, D., Mackenzie, J., Norberg, M., & Copeland, J.** *Development of a cannabis withdrawal scale.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Allsop, D., Mackenzie, J., Norberg, M., & Copeland, J.** *Development of a cannabis withdrawal scale.* Poster presented at the Advances in Public Health and Health Services Research Symposium at UNSW, Sydney, 7 May.

**Barrett, E., Mills, K., & Teesson, M.** *From victim to victimiser: Violence among substance users with PTSD.* Paper presented at the 10th Annual International Association of Forensic Mental Health Services Conference (IAFMHS): Mental Health & Forensic Practice across the Lifespan: Prevention and Promotion, Vancouver, Canada, 25-27 May.

**Barrett, E., Mills, K., & Teesson, M.** *Hurt people who hurt people: The relationship between PTSD, substance use and aggression.* Paper presented at the Australian Conference on Traumatic Stress (ACOTS), Brisbane, 2-4 September.

**Barrett, E., Mills, K., & Teesson, M.** *Hurt people who hurt people: The relationship between substance use, PTSD and aggression.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Barrett, E., Mills, K., Teesson, M.** *Hurt people who hurt people: Violence among substance users with Posttraumatic Stress Disorder.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Battisti, R.** *Brief interventions for young people with comorbid cannabis and mental health concerns.* Paper presented at the 27th International Congress of Applied Psychology, Melbourne, 11-16 July.

**Battisti, R.** *Chronic cannabis use, neurophysiological biomarkers, and cognition.* Paper presented at the Australian Society for Medical Research (ASMR) NSW Scientific Meeting 2010, Sydney, 7 June.

**Battisti, R.** *Neurophysiological biomarkers for chronic cannabis use: Cognitive impairment and neuroadaptation.* Paper presented at the Australasian Society for Psychiatric Research (ASPR) 2010 Conference, Sydney, 5-8 December.

**Battisti, R.** *Neurophysiological biomarkers for chronic cannabis use: Cognitive impairment and neuroadaptation.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Battisti, R., Roodenrys, S., Johnstone, S., Hermens, D., & Solowij, N.** *Novel neural biomarkers and impacts upon cognitive functioning associated with the chronic use of cannabis.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Bleeker, A.** *Guidelines on the management of cannabis use disorder.* Paper presented at the Inaugural National Indigenous Drug and Alcohol Conference 2010: Listening, Learning and Leading, Adelaide, 16-18 June.

**Breen, C., Shakeshaft, A., Slade, T., Love, S., D'Este, C., & Mattick, R.** *Do community characteristics predict alcohol-related crime?* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Bright, D.** *Targeting traffickers: The effectiveness of law enforcement interventions directed at various levels of the methamphetamine supply chain.* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.

**Bull, D.** *Guidelines on the management of cannabis use disorder.* Paper presented at the Illawarra TAFE Counsellors Conference, Bundanoon, NSW, 10 June.

**Burns, L.** *Alcohol, pregnancy and parenting.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Burns, L.** *Alcohol use in pregnancy.* Paper presented at the 2010 Creating Synergy Drug and Alcohol Conference, Wollongong, 3-5 November.

**Burns, L.** *National IDRS & EDRS overview.* Paper presented at the National Drug Trends Conference 'Reflecting on the last 10 years', Sydney, 15 October.

**Burns, L.** *Women, drugs and alcohol: How should the policy makers respond?* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.

**Burns, L., Maloney, E., Black, E., & Hutchinson, D.** *Alcohol and parenting: What and where is the risk?* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Calabria, B.** *Reducing alcohol-related harms among Indigenous Australians: A systematic review of family-based approaches.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Calabria, B., Clifford, A., Shakeshaft, A., & Doran, C.** *Reducing alcohol-related harms among Indigenous Australians: A systematic review of family-based approaches.* Poster presented at the School of Public Health and Community Medicine (SPHCM) 8th Annual Postgraduate Student Research Conference, Sydney, 22 October.

**Calabria, B., Clifford, A., Shakeshaft, A., Doran, C., Allan, J., Rose, M., & Tsey, K.** *Family-based approaches to reduce alcohol-related harms among Indigenous Australians.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Carragher, N.** *An item response analysis of the DSM-IV criteria for major depression: Findings from the Australian National Survey of Mental Health and Wellbeing.* Paper presented at the 44th Annual Convention of the Association for Behavioural and Cognitive Therapies, San Francisco, USA, 18-21 November.

**Carragher, N.** *The latent structure of Posttraumatic Stress Disorder: A taxometric analysis.* Paper presented at the 27th International Congress of Applied Psychology Annual Conference, Melbourne, 11-16 July.

**Cassar, J., & Burns, L.** *Homelessness amongst an Australian sample of people who inject drugs (PWID) and the impact of social networks.* Paper presented at the Public Health Association of Australia (PHAA) 40th Annual Conference, Adelaide, 27-29 September.

**Cassar, J., De Graaff, B., Phillips, B., Bruno, R., Nielsen, S., & Burns, L.** *Over the counter codeine use by people who inject drugs regularly in Australia.* Poster presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Chalmers, J.** *Cross-national tradeoffs between mothers' care-time and earnings: Which policies make a difference?* Paper presented at the International Association for Feminist Economics (IAFFE) 19th Annual Conference on Feminist Economics, Buenos Aires, Argentina, 22-24 July.

**Chalmers, J.** *Riding out the global financial crisis? The implications of recession for alcohol and illicit drug use.* Paper presented at the 4th Annual Conference of the International Society for the Study of Drug Policy (ISSDP), Santa Monica, USA, 15-16 March.

**Chenoweth, C.** *Cannabis: It's not our culture.* Paper presented at the 7th NSW Aboriginal Drug and Alcohol Symposium, Newcastle, 21-23 April.

**Chenoweth, C.** *Cannabis: It's not our culture.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Clifford, A.** *The effect of a multi-component intervention on alcohol screening and brief intervention in Indigenous community controlled health services.* Paper presented at the National Indigenous Drug and Alcohol Conference 2010: Listening, learning and leading, Adelaide, 16-18 June.

- Conroy, E.** *The integration of homelessness, mental health and drug and alcohol services in Australia.* Paper presented at the 6th National Homelessness Conference, Many Ways Home: Ending Homelessness by 2020, Brisbane, 1-3 September.
- Conroy, E.** *System and services integration for homeless persons with substance use and other mental disorder: An Australian perspective.* Poster presented at the National Institute on Drug Abuse (NIDA) International Forum, Scottsdale, USA, 11-15 June.
- Conroy, E.** *System and services integration for homeless persons with substance use and other mental disorder.* Poster presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Copeland, J.** *A comprehensive approach to examine the use and impact of cannabis: From brain effects to the epidemiological impact across the world.* Discussant at the 72nd Annual Meeting for the College on Problems of Drug Dependence (CPDD), Scottsdale, USA, 12-17 June.
- Copeland, J.** *Brief motivational interventions for adolescent cannabis users.* Paper presented at the Studiedag Cannabiskwestie: Wetenschap en Praktijk (Cannabis Study Issue: Science and Practice), Utrecht, The Netherlands, 12 October.
- Copeland, J., Dillon, P., Howard, J., & Chenoweth, C.** *Cannabis: It's not our culture. Engaging with Indigenous Australians about cannabis and their community.* Paper presented at the National Institute on Drug Abuse (NIDA) International Forum, Scottsdale, USA, 11-15 June.
- Darke, S.** *Opioids and drug epidemics.* Paper presented at the National Drug Trends Conference 'Reflecting on the last 10 years', Sydney, 15 October.
- Darke, S.** *Toxicology and characteristics of fatal oxycodone toxicity cases in New South Wales, Australia, 1999-2008.* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.
- Deady, M., Mills, K., & Bell, A.** *Guidelines on the management of co-occurring mental health conditions in alcohol and other drug treatment settings: How useful are they?* Poster presented at the National Indigenous Drug and Alcohol Conference 2010: Listening, learning and leading, Adelaide, 16-18 June.
- Degenhardt, L.** *Drug use and sexual behaviour: A brief review of levels and trends among teenagers.* Paper presented at the Royal Children's Hospital Campus Research Week, Melbourne, 4-8 October.
- Degenhardt, L.** *International data on illicit drug use: What do we know?* Keynote paper presented at the National Drug Trends Conference 'Reflecting on the last 10 years', Sydney, 15 October.
- Degenhardt, L.** *Update: Progress on the work of the Mental Disorders and Illicit Drug Use Expert Group.* Paper presented to the Global Burden of Disease: Mental Disorders and Illicit Drug Use Expert Group, Seattle, USA, 11-15 May.
- Degenhardt, L., Mathers, B., Vickerman, P., Rhodes, T., Latkin, C., & Hickman, M.** *Prevention of HIV infection for people who inject drugs: Why individual, structural, and combination approaches are needed.* The Lancet Symposium on HIV among people who use drugs. Invited paper presented at the International AIDS Conference, Vienna, Austria, 18-23 July.
- Dillon, P., Hughes, C., Lancaster, K., Spicer, B., & Matthew-Simmons, F.** *Australian media report on drugs.* Paper presented at the 6th International Conference on Nightlife, Substance Use and Related Health Issues - Club Health, Zurich, Switzerland, 7-9 June.
- Dolan, K.** *Implementation of drug treatment in prisons - the public health point of view.* Keynote presentation at the 10th Taipei International Conference on HIV/AIDS, Taipei, Taiwan, 24-25 September.
- Dolan, K., Salimi, S., Mohsenifar, S., Nassirimanesh, B., Aillsop, D., & Mokri, A.** *HIV and HCV seroincidence among female drug users in Tehran, Iran.* Poster presented at the Australasian HIV/AIDS Conference 2010, Sydney, 20-22 October.
- Donato-Hunt, C., Flaherty, I., Arcuri, A., & Howard, J.** *The impact of cultural diversity on accessing services for co-existing issues.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Doran, C.** *Alcohol policy in Australia: Evidence in favour of a complete rethink.* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.
- Doran, C.** *Assessing cost-effectiveness of interventions to reduce the burden of harm associated with alcohol misuse: ACE Alcohol.* Keynote paper presented at the 2nd International Conference on Public Health among Greater Mekong Sub-Regional Countries, Hue City, Vietnam, 30-31 August.
- Doran, C.** *Assessing cost-effectiveness of interventions to reduce the burden of harm associated with alcohol misuse: ACE Alcohol.* Keynote paper presented at ATDC 2010: Reducing Harm across the Lifespan, Hobart, 18-20 October.
- Doran, C.** *Economic issues in determining the value of pharmacists interventions.* Paper presented at the Pharmacy Practice Research Summit, Canberra, 2-4 March.
- Dunn, M.** *Horse tranquilizers, paint stripper and plant food: 'Niche' drugs and why we need to keep them in our sights.* Keynote paper presented at the National Drug Trends Conference 'Reflecting on the last 10 years', Sydney, 15 October.
- Dunn, M.** *Non-medical use of steroids in Australia: Results from a general population survey, Canberra.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Dunn, M., & White, V.** *The epidemiology of anabolic-androgenic steroid use among Australian secondary school students.* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.
- Farrugia, P., Mills, K., Barrett, E., Rosenfeld, J., Merz, S., Teesson, M., Baker, A., Sannibale, C., Hopwood, S., Back, S., & Brady K.** *Childhood trauma among clients with co-occurring substance use disorder and post traumatic stress disorder.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Farrugia, P., Mills, K., Sannibale, C., Teesson, M., & Roche, A.** *The prevalence and correlates of secondary traumatic stress among alcohol and other drug (AOD) workers in Australia.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Gates, P., Copeland, J., Norberg, M., & Digiusto, E.** *Randomised control trial of a brief cannabis intervention delivered by telephone.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Gates, P., Copeland, J., Norberg, M., & Digiusto E.** *Randomised control trial of a brief cannabis intervention delivered by telephone.* Poster presented at the Advances in Public Health and Health Services Research at UNSW, Sydney, 7 May.
- Gates, P., Copeland, J., Norberg, M., & Digiusto E.** *Randomised control trial of a brief cannabis intervention delivered by telephone.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Gong, W.** *Understanding the dynamics of Australian methamphetamine markets: Making better use of the price data to measure the drug law enforcement effectiveness.* Paper presented at the 4th Annual Conference of the International Society for the Study of Drug Policy (ISSDP), Santa Monica, USA, 15-16 March.
- Gong, W., Ritter, A., Doran, C., & Bright, D.** *Seizure data used in evaluating the effectiveness of law enforcement interventions.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Havard, A.** *Mailed personalised feedback for problem drinkers in the emergency department: The short-term impact.* Paper presented at the 7th Conference of the International Network on Brief Interventions for Alcohol Problems (INEBRIA), Gothenburg, Sweden, 9-10 September.

# CONFERENCE PRESENTATIONS

**Hickey, K., Wright, T., Norberg, M., & Copeland, J.** *Treating dependent cannabis users with a postal intervention.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Howard, J.** *A training tool to assist in increasing the capacity of those who work with young cannabis users to engage and enhance motivation to change.* Paper presented at the Alcohol & Drug Foundation of Queensland Winter School Conference, Brisbane, 21-23 June.

**Howard, J.** *A training tool to assist in increasing the capacity of those who work with young cannabis users to engage and enhance motivation for change.* Paper presented at the 2nd International Congress of the European Association for Forensic Child and Adolescent Psychiatry, Psychology and other involved Professions (EFCAP), Basel, Switzerland, 7-10 September.

**Howard, J.** *Lessons for Australia from the ESCAP project - Building capacity for community-based treatment for young drug users in the Greater Mekong Sub-region.* Keynote paper presented at the Community Southwest Conference towards 2020 Collaboration - Doing it Better 2020, Warrnambool, Victoria, 25-26 March.

**Howard, J.** *Opening doors to treatment for younger drug users: Informing Australia's drug policy to better meet the needs of young drug users.* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.

**Howard, J.** *Raising issues and setting the agenda for young injecting drug users.* Panellist at the Response Beyond Borders: 2nd Asian Consultation on the Prevention of HIV Related to Drug Use, Bangkok, Thailand, 21-23 January.

**Howard, J., Ali, H., & Robins, L.** *Alcohol, cannabis, ATS and IDU among young Pacific Islanders.* Paper presented at the 19th World Congress of the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP), Beijing, China, 2-6 June.

**Howard, J., Ali, H., & Robins, L.** *Cannabis, ATS, alcohol and IDU among young Pacific Islanders.* Paper presented at the 14th Pacific Rim College of Psychiatrists Scientific Meeting, Brisbane, 28-30 October.

**Howard, J., Battisti, R., Norberg, M., & Copeland, J.** *Brief interventions for young people with comorbid cannabis and mental health concerns.* Paper presented at the 27th International Congress of Applied Psychology, Melbourne, 11-16 July.

**Howard, J., Copeland, J., & Dillon, P.** *NCPIC, cannabis and young people.* Poster presented at the 1st International Youth Mental Health (IYMH) Conference, Melbourne, 29-30 July.

**Howard, J., de Kort, G., Pandey, B., Jian, L., Zhang, C., Kaplan, K., Joshi, S., & Suwannawong, P.** *'Opening Doors' - A participatory approach to increasing access to and participation in youth friendly harm reduction.* Paper presented at the Anex 2010 Australian Drugs Conference: Public Health and Harm Reduction, Melbourne, 25-26 October.

**Howard, J., de Kort, G., Pandey, B., Jian, L., Zhang, C., Kaplan, K., Joshi, S., & Suwannawong, P.** *'Opening Doors: Increasing access to and participation in youth friendly harm reduction in Kathmandu, Bangkok and Kunming.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Sydney, 28 November-1 December.

**Howard, J., de Kort, G., Pandey, B., Joshi, S., Sharma, I., Larney, S., I., Luo, J., & Kaplan, K.** *'Opening Doors': Increasing access to and participation in youth friendly harm reduction in Kathmandu, Bangkok and Kunming.* Poster presented at the XVIII International AIDS Conference, Vienna, Austria, 18-23 July.

**Howard, J., de Kort, G., Pandey, B., Luo, J., Kaplan, K., & Larney, S.** *'Opening Doors' - A participatory approach to increasing access to and participation in youth friendly harm reduction.* Paper presented at the 2nd International Congress of the European Association for Forensic Child and Adolescent Psychiatry, Psychology and other involved Professions (EFCAP), Basel, Switzerland, 7-10 September.

**Howard, J., Kwong, A., Arcuri, A., & Copeland, J.** *Self managed change from problematic cannabis use.* Paper presented at the Alcohol & Drug Foundation of Queensland Winter School Conference, Brisbane, 21-23 June.

**Howard, J., Larney, S., de Kort, G., Pandey, B., Joshi, S., Sharma, I., Luo, J., & Kaplan, K.** *'Opening Doors': A participatory approach to increasing access to and participation in youth friendly harm reduction.* Paper presented at Harm Reduction 2010: IHRA's 21st International Conference, Liverpool, UK, 25-29 April.

**Howard, J., Larney, S., de Kort, G., Pandey, B., Joshi, S., Sharma, I., Luo, J., & Kaplan, K.** *'Opening Doors': A participatory approach to increasing access to and participation in youth friendly harm reduction.* Paper presented at the 19th World Congress of the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP), Beijing, China, 2-6 June.

**Howard, J., Pandey, B., Jian, L., Kaplan, K., Joshi, S., Suwannawong, P., & de Kort, G.** *'Opening Doors' - A participatory approach to increasing access to and participation in youth friendly harm reduction.* Poster presented at the 14th Pacific Rim College of Psychiatrists Scientific Meeting, Brisbane, 28-30 October.

**Hughes, C.** *Would it make me take drugs in a heartbeat? No, but. The impact of media reporting on Australian youth attitudes to illicit drugs.* Poster presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Hughes, C., Christian, F., Ritter, A., & Ward, P.** *MDMA versus cannabis offenders: Offending profiles and implications for policing MDMA use.* Paper presented at the 5th Australasian Drug Strategy Conference, Melbourne, 8-11 March.

**Hughes, C., & James, S.** *The drug law enforcement performance monitoring impasse: Critical analysis and strategies to move forward.* Paper presented at the 4th Annual Conference of the International Society for the Study of Drug Policy (ISSDP), Santa Monica, USA, 15-16 March.

**Hughes, C., & Lancaster, K.** *Youth, drugs and media: Patterns of media consumption and perceptions of reporting of illicit drugs in the Australian news media.* Paper presented at the Communications Policy & Research Forum, Sydney, 15-16 November.

**Hughes, C., Lancaster, K., & Bright, D.** *Media, laws and networks gone bad? Examining the implications of media, law reform and criminal network structure for illicit drugs policy.* Paper presented at ANZCCC 2010: The Australian and New Zealand Critical Criminology Conference, Sydney, 1-2 July.

**Hughes, C., & Stevens, A.** *A dangerous experiment? Drug law reform in Portugal.* Paper presented at ANZCCC 2010: The Australian and New Zealand Critical Criminology Conference, Sydney, 1-2 July.

**Hughes, C., & Stevens, A.** *Decriminalising illicit drug use in Portugal: A dangerous experiment?* Paper presented at the Anex 2010 Australian Drugs Conference: Public Health and Harm Reduction, Melbourne, 25-26 October.

**Hutchinson, D., Maloney, E., Mattick, R., Allsop, S., Najman, J., Elliott, E., Burns, L., & Jacobs, S.** *Parental substance use during pregnancy: Assessing maternal psychosocial characteristics, obstetric and neonatal outcomes.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Jainullabudeen, T., Doran, C., & Chikritzhs, T.** *Victim costs of alcohol related road crashes.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Johnston, A., Darke, S., Slade, T., & Ross, J.** *Prevalence and correlates of suicidal thoughts and attempts, Australia 2007.* Paper presented at the School of Public Health and Community Medicine (SPHCM) 8th Annual Postgraduate Student Research Conference, Sydney, 22 October.

- Kelly, E., Hutchinson, D., Mattick, R., Burns, L., & Black, E.** *Substance use and mental health among pregnant women: Correlates and consequences.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Lancaster, K.** *Stop the press! Reporting the trends and dominant portrayals of illicit drugs in the Australian media, 2003-2008.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Lancaster, K., Hughes, C., Spicer, B., Matthew-Simmons, F., & Dillon, P.** *Curiosity killed the M-cat: An examination of illicit drugs and the media.* Paper presented at the ANZCCC 2010: The Australian and New Zealand Critical Criminology Conference, Sydney, 1-2 July.
- Larance, B., & Degenhardt, L.** *The prevalence and correlates of aberrant drug behaviours among a sample of Australian opioid substitution treatment (OST) clients.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Larance, B., Degenhardt, L., & Mattick, R.** *Aberrant drug behaviours in a sample of Australian opioid substitution treatment clients.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Larance, B., Degenhardt, L., & Mattick, R.** *Prevalence and correlates of aberrant drug behaviours among a sample of Australian opioid substitution treatment clients.* Poster presented at the National Institute on Drug Abuse (NIDA) International Forum, Scottsdale, USA, 11-15 June.
- Larney, S., & Dolan, K.** *Developing guidelines for withdrawal management and treatment in compulsory drug treatment centres.* Poster presented at Addictions 2010: The New Frontier in Addiction Treatment: Evidence-Based Policy and Practice, Washington, D.C., USA, 28-31 October.
- Larney, S., & Dolan, K.** *Opioid substitution treatment in correctional facilities: Treatment entry, retention and re-incarceration.* Poster presented at Addictions 2010: The New Frontier in Addiction Treatment: Evidence-Based Policy and Practice, Washington, D.C., USA, 28-31 October.
- Larney, S., & Dolan, K.** *Ten-year natural history of incarceration and interactions with opioid substitution treatment in a cohort of heroin users.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Love, S.** *The impact of community wide approaches to reducing alcohol-related crime in rural NSW: A randomised controlled trial.* Paper presented at the 2nd European conference of the CONNECTIONS project: Drugs, Alcohol and Criminal Justice: Ethics, effectiveness and economics of intervention, London, UK, 24-25 June.
- Mackenzie, J., Norberg, M., & Copeland, J.** *Quantifying cannabis use: Initial findings using a modified timeline followback method.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Mackenzie, J., Norberg, M., Lim-Howe, N., & Copeland, J.** *Quantifying cannabis users: What is the average sized joint and cone?* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Magor-Blatch, L., Copeland, J., & Howard, J.** *Using a specialized treatment intervention with amphetamine users: Early results.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Magor-Blatch, L., Copeland, J., Howard, J., & Pitts, J.** *Can earlier intervention with amphetamine users prevent an escalation of use or relapse following treatment?* Paper presented at the 27th International Congress of Applied Psychology, Melbourne, 11-16 July.
- Martire, K.** *An analysis of MERIT (Magistrates Early Referral Into Treatment) and RAD (Rural Alcohol Diversion): Client characteristics and outcomes by principal drug of concern.* What does this mean for the future direction of the programs? Paper presented at the NDARC Annual Symposium, Sydney, 10 August.
- Martire, K.** *Substance use among sexual offenders and their victims: A descriptive analysis.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Martire, K.** *Unpaid fines as a barrier to reintegration for NSW prisoners.* Paper presented at the Reintegration Puzzle Conference, Hobart, 23-25 June.
- Martire, K., Sunjic, S., Topp, L., & Indig, D.** *Debt among incarcerated substance users.* Poster presented at the Advances in Public Health and Health Services Research Symposium at UNSW, Sydney, 7 May.
- Martire, K., Sunjic, S., Topp, L., Indig, D.** *Debt among incarcerated substance users.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Matalon, E.** *ACCU - The Adolescent Cannabis Check-Up.* Paper presented at WCIM 2010: The World Congress of Internal Medicine, Melbourne, 20-25 March.
- Matalon, E.** *ACCU - The Adolescent Cannabis Check-Up.* Paper presented at the 11th International Mental Health Conference - Personality Disorders: Out of the Darkness, Surfers Paradise, 18-20 August.
- Matalon, E.** *ACCU - The Adolescent Cannabis Check-Up.* Paper presented at the 17th Western Australian Drug and Alcohol Symposium, Fremantle, 30 August-1 September.
- Matalon, E.** *Guidelines on the management of cannabis use disorder.* Paper presented at WCIM 2010: The World Congress of Internal Medicine, Melbourne, 20-25 March.
- Matalon, E.** *Guidelines on the management of cannabis use disorder.* Paper presented at the Alcohol & Drug Foundation of Queensland Winter School Conference, Brisbane, 21-23 June.
- Matalon, E.** *Guidelines on the management of cannabis use disorder.* Paper presented at the Drug and Alcohol Nurses of Australasia 2010 Conference, Gold Coast, 14-16 July.
- Matalon, E.** *Guidelines on the management of cannabis use disorder.* Paper presented at the Mental Health Services Conference, Sydney, 14-17 September.
- Mathers, B.** *Drug treatment: What works for HIV prevention?* Paper presented at the XVIII International AIDS Conference, Vienna, Austria, 18-23 July.
- Mathers, B.** *How successful have global efforts to expand HIV prevention been? Results of a global systematic review.* Paper presented at Harm Reduction 2010: IHRA's 21st International Conference, Liverpool, UK, 25-29 April.
- Mathers, B.** *Recent findings from the Reference Group to the United Nations on HIV and Injecting Drug Use.* Paper presented at the Side Event to Session 53 of the Commission on Narcotic Drugs, Vienna, Austria, 8-12 March.
- Mathers, B., Degenhardt, L., Ali, H., Mattick, R., Hickman, M., Strathdee, S., Ambekar, A., Myers, B., & Wiessing, L.** *on behalf of the Reference Group to the United Nations on HIV and Injecting Drug Use.* *HIV prevention, treatment and care for people who inject drugs: A systematic review of global, regional and country level coverage.* Paper presented at the Advances in Public Health and Health Services Research Symposium at UNSW, Sydney, 7 May.
- Matthew-Simmons, F.** *'Miracle cure' vs. 'life sentence': Methadone and naltrexone in the Australian news.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Matheson, A., Roxburgh, A., Epstein, A., Degenhardt, L., & Howard, J.** *Connecting practice with research: Building an evidence base for working with LGBT drug users through NGO and research centre partnership.* Paper presented at Harm Reduction 2010: IHRA's 21st International Conference, Liverpool, UK, 25-29 April.
- Matheson, A., Roxburgh, A., Howard, J., & Degenhardt, L.** *Regular methamphetamine use and drug treatment access among a sample of gay, lesbian and bisexual Sydneysiders.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

# CONFERENCE PRESENTATIONS

**Mewton, L.** *An evaluation of the proposed DSM-5 alcohol use disorder criteria using Australian national data.* Paper presented at the Australasian Society for Psychiatric Research (ASPR) Conference, Sydney, 5-8 December.

**Mewton, L.** *The epidemiology of DSM-IV alcohol use disorders amongst young adults in the Australian population.* Paper presented at the School of Public Health and Community Medicine (SPHCM) 8th Annual Postgraduate Student Research Conference, Sydney, 22 October.

**Mewton, L.** *'Youthful epidemic' or diagnostic bias? Differential item functioning of DSM-IV cannabis use criteria in an Australian general population survey.* Paper presented at the 27th International Congress of Applied Psychology Annual Conference, Melbourne, 11-16 July.

**Mewton, L.** *'Youthful epidemic' or diagnostic bias? Differential item functioning of DSM-IV cannabis use criteria in an Australian general population survey.* Poster presented at the 72nd Annual Meeting for the College on Problems of Drug Dependence (CPDD), Scottsdale, Arizona, USA, 12-17 June.

**Mewton, L.** *'Youthful epidemic' or diagnostic bias? Differential item functioning of DSM-IV cannabis use criteria in an Australian general population survey.* Poster presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Mewton, L., Teesson, M., & Slade, T.** *'Youthful epidemic' or diagnostic bias? Differential item functioning of DSM-IV cannabis use criteria in an Australian general population survey.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Mills, K.** *Comorbid substance use and mental health disorders.* Paper presented at the 5th Australasian Drug Strategy Conference, Melbourne, 8-11 March.

**Mills, K.** *National comorbidity guidelines for the AOD workforce: How useful are they?* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Mills, K.** *Treating traumatised clients: What is the evidence?* Keynote paper presented at Outside In: Research into Practice Conference, Sydney, 6-7 December.

**Mills, K., Barrett, E., Farrugia, P., Rosenfeld, J., Merz, S., Teesson, M., Baker, A., Sannibale, C., Hopwood, S., Back, S., & Brady, K.** *What are the treatment needs of substance using clients with post traumatic stress disorder?* Paper presented at the Alcohol & Drug Foundation of Queensland Winter School Conference, Brisbane, 21-23 June.

**Mills, K., & Bell, A.** *The clinical utility of guidelines on the management of co-occurring mental health conditions in alcohol and other drug treatment settings.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Mills, K., Bell, A., & Deady, M.** *Guidelines on the management of co-occurring mental health conditions in alcohol and other drug treatment settings: How useful are they?* Poster presented at the Inaugural National Indigenous Drug and Alcohol Conference 2010: Listening, learning and leading, Adelaide, 16-18 June.

**Mills, K., Teesson, M., Baker, A., Hopwood, S., & Back, S.** *Treating PTSD among people with substance use disorders: Findings from a randomized controlled trial of exposure therapy.* Paper presented at the International Society for Traumatic Stress Studies (ISTSS) 26th Annual Conference, Montreal, Canada, 4-6 November.

**Mills, K., Teesson, M., Barrett, E., Merz, S., Rosenfeld, J., Farrugia, P., Sannibale, C., Hopwood, S., Baker, A., Back, S., & Brady, K.** *Feasibility of stepped care for posttraumatic stress disorder and substance use disorder.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Mills, K., Teesson, M., Barrett, E., Merz, S., Rosenfeld, J., Farrugia, P., Sannibale, C., Hopwood, S., Baker, A., Back, S., & Brady, K.** *Is exposure therapy for post traumatic stress disorder (PTSD) efficacious among people with substance use disorders (SUD)? Results from a randomised controlled trial.* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.

**Mills, K., Teesson, M., Barrett, E., Merz, S., Rosenfeld, J., Farrugia, P., Sannibale, C., Hopwood, S., Baker, A., Back, S., & Brady, K.** *Is exposure therapy for post traumatic stress disorder (PTSD) efficacious among people with substance use disorders (SUD)? Results from a randomised controlled trial.* Paper presented at the Australian Conference on Traumatic Stress (ACOTS), Brisbane, 2-4 September.

**Mills, K., Teesson, M., Barrett, E., Merz, S., Rosenfeld, J., Farrugia, P., Sannibale, C., Hopwood, S., Baker, A., Back, S., & Brady, K.** *Is exposure therapy for post traumatic stress disorder (PTSD) efficacious among people with substance use disorders (SUD)? Results from a randomised controlled trial.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Mills, K., Teesson, M., Barrett, E., Merz, S., Rosenfeld, J., Farrugia, P., Sannibale, C., Hopwood, S., Baker, A., Back, S., & Brady, K.** *Is exposure therapy for post traumatic stress disorder (PTSD) efficacious among people with substance use disorders (SUD)? Results from a randomised controlled trial.* Paper presented at the Australasian Society for Psychiatric Research (ASPR) Conference, Sydney, 5-8 December.

**Nassirimanesh, B. Mohsenifar, S., Mokri, A., & Dolan, K.** *Development and evaluation of specialist services for female drug users in Iran.* Paper presented at the National Institute on Drug Abuse (NIDA) International Forum, Scottsdale, USA, 11-15 June.

**Navarro, H.** *Can brief intervention for alcohol misuse delivered by Australian rural community pharmacists influence community-level risky drinking? A cost-effective analysis.* Paper presented at the School of Public Health and Community Medicine (SPHCM) 8th Annual Postgraduate Student Research Conference, Sydney, 22 October.

**Navarro, H.** *Can brief intervention for alcohol misuse delivered by Australian rural community pharmacists influence community-level risky drinking? A cost-effective analysis.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Navarro, H.** *Can brief intervention for alcohol misuse delivered by general practitioners influence community-level risky drinking? A cost-effectiveness analysis.* Poster presented at the 8th European Conference on Health Economics, Helsinki, Finland, 7-10 July.

**Nelson, P.** *Self-reported antisocial behaviour and conviction outcomes for adolescents.* Paper presented at the 4th Australian and New Zealand Society of Criminology (ANZSOC) Postgraduate and Early Career Researcher Conference, Alice Springs, 27 September.

**Nelson, P., Degenhardt, L., Kenny, D., & Carragher, C.** *Examining approaches to the classification of antisocial behaviour in a high risk cohort.* Paper presented at the 23rd Annual Australian and New Zealand Society of Criminology (ANZSOC) Conference, Alice Springs, 28-30 September.

**Nelson, P., Degenhardt, L., Kenny, D., & Lennings, C.** *Patterns of drug use and conduct problems that independently predict reoffending: Results from a prospective cohort study of serious young offenders.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Nelson, P., Degenhardt, L., Kenny, D., Lennings, C., & Carragher, N.** *Conduct Disorder severity and recidivism of adolescent offenders.* Paper presented at the World Psychiatric Association Section on Epidemiology and Public Health Meeting, Lisbon, Portugal, 11-14 July.

- Nelson, P., Degenhardt, L., Kenny, D., Lennings, C., & Toson, B.** *What information do we need to predict recidivism by serious young offenders?* Paper presented at the 30th Annual Congress of the Australian and New Zealand Association of Psychology, Psychiatry and Law (Queensland): Prediction: The Holy Grail, Surfers Paradise, 26-29 August.
- Nelson, P., Degenhardt, L., Kenny, D., & Swift, W.** *The impact of psychiatric comorbidity on youth justice outcomes.* Paper presented at the School of Public Health and Community Medicine (SPHCM) 8th Annual Postgraduate Student Research Conference, Sydney, 22 October.
- Newton, N., Conrod, P., & Teesson, M.** *Effective school-based programs to prevent substance misuse, emotional problems and risky behaviour among adolescents.* Invited paper presented at the VAD conference, Brussels, Belgium, 26 November.
- Newton, N., Havard, A., Teesson, M., Vogl, L., & Andrews, G.** *The psychosocial influences on alcohol and cannabis use among adolescents.* Poster presented at the Australasian Society for Psychiatric Research (ASPR) 2010 Conference, Sydney, 5-8 December.
- Newton, N., Havard, A., Teesson, M., Vogl, L., Swift, W., Havard, A., & Dillon, P.** *CLIMATE schools: Delivering prevention for alcohol and cannabis over the internet.* Poster presented at the Advances in Public Health and Health Services Research Symposium at UNSW, Sydney, 7 May.
- Newton, N., Teesson, M., Vogl, L., & Andrews, G.** *Universal drug prevention.* Paper presented at the 6th World Conference on the Promotion of Mental Health and Prevention of Mental and Behavioral Disorders, Washington, DC, USA, 17-19 November.
- Ngui, R., & Shanahan, M.** *Cannabis use disorder and health consequences treatment in New South Wales (NSW), 2007.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Norberg, M.** *ACCU - The Adolescent Cannabis Check-Up.* Paper presented at GP10, Cairns, 6-9 October.
- Norberg, M.** *Guidelines on the management of cannabis use disorder.* Paper presented at GP10, Cairns, 6-9 October.
- Norberg, M.** *Symposium Chair: Using and quitting marijuana.* Implications for advancing treatment. The 44th Annual Convention of the Association for Behavioural and Cognitive Therapies, San Francisco, USA, 18-21 November.
- Norberg, M., Rooke, S., & Copeland, J.** *Successful and unsuccessful cannabis quitters: Comparing group characteristics and quitting strategies.* Paper presented at the 44th Annual Convention of the Association for Behavioural and Cognitive Therapies, San Francisco, USA, 18-21 November.
- Phillips, B.** *The prevalence & correlates of pain among a sample of people who inject drugs regularly.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.
- Phillips, B., & Spicer, B.** *Heroin, Methamphetamines, cocaine and pharmaceutical opioids: What makes NSW unique?* Paper presented at the 2010 NSW Needle and Syringe Program (NSP) Worker's Forum, Sydney, 20-21 September.
- Ritter, A.** *Assessment of treatment systems.* World Health Organization Technical Meeting on Assessment of Treatment Systems Using the WHO-SAAMS (Substance Abuse Instrument for Mapping Services), Valencia, Spain, 16-17 December.
- Ritter, A.** *Different models of treatment systems for substance use disorders: How they respond to population needs.* World Health Organization International Seminar on Treatment Systems for Substance Use Disorder, Valencia, Spain, 14-15 December.
- Ritter, A.** *The Drug Policy Modelling Program experience.* Paper presented at the National Institute on Drug Abuse (NIDA) International Forum, Scottsdale, USA, 11-15 June.
- Ritter, A.** *Modelling hepatitis C.* Paper presented at the 4th Annual Conference of the International Society for the Study of Drug Policy (ISSDP), Santa Monica, USA, 15-16 March.
- Ritter, A.** *Session Chair: Developing Research Projects to Inform Policy.* The National Institute on Drug Abuse (NIDA) International Forum, Scottsdale, USA, 11-15 June.
- Ritter, A.** *Session I Chair: Policy.* The NDARC Annual Symposium, Sydney, 10 August.
- Ritter, A.** *Symposium II Chair: A comprehensive approach to examine the use and impact of cannabis. From brain effects to epidemiological impact across the world.* The 72nd Annual Meeting for the College on Problems of Drug Dependence (CPDD), Scottsdale, USA, 12-17 June.
- Ritter, A., & Lancaster, K.** *Influencing drug policy: An examination of the role of the IDRS and EDRS.* Paper presented at the National Drug Trends Conference 'Reflecting on the last 10 years', Sydney, 15 October.
- Roberts, A.** *A global examination of violence in the lives of female injecting drug users.* Paper presented at the XVIII International AIDS Conference, Vienna, Austria, 18-23 July.
- Roberts, A.** *Invisible women: A look at the global experiences and HIV risks of female injecting drug users.* Poster presented at the XVIII International AIDS Conference, Vienna, Austria, 18-23 July.
- Roberts, A.** *Transition to injection: An examination of the HIV risks and contexts of women's initiation to injection drug use.* Poster presented at the XVIII International AIDS Conference, Vienna, Austria, 18-23 July.
- Roberts, A., Mathers, B., & Degenhardt, L.** *Invisible women: A look at the global experiences and HIV risks of female injection drug users who engage in sex work.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.
- Ross, J., & Darke, S.** *Current suicide risk assessment practices in Australian drug and alcohol residential rehabilitation services.* Poster presented at the 13th European Symposium on Suicide and Suicidal Behaviour, Rome, Italy, 1-4 September.
- Roxburgh, A.** *Drug use, dependence and treatment attendance among lesbian, gay and bisexual people who report regular methamphetamine use.* Poster presented at Harm Reduction 2010: IHRA's 21st International Conference, Liverpool, UK, 25-29 April.
- Roxburgh, A.** *The epidemiology of prescription opioid use and harms in Australia.* Poster presented at the College on Problems of Drug Dependence (CPDD) 72nd Annual Meeting, Scottsdale, Arizona, USA, 12-17 June.
- Roxburgh, A.** *Illicit drug-related harms in Australia. What do we know and where are the gaps?* Invited paper presented at the 3rd Annual ACT Alcohol and Other Drugs Sector Conference - All Things Being Equal: Exploring the Burdens of Harm, Canberra, 24 June.
- Roxburgh, A.** *Pharmaceutical opioids.* Paper presented at the National Drug Trends Conference 'Reflecting on the last 10 years', Sydney, 15 October.
- Roxburgh, A.** *Reporting drug-related deaths in Australia.* The impact of changing procedures. Paper presented at the Australian Mortality Data Interest Group Meeting, Melbourne, 18-19 November.
- Roxburgh, A.** *Trends in the prescribing of oxycodone and morphine and related morbidity.* Invited paper at the Anex 2010 Australian Drugs Conference: Public Health and Harm Reduction, Melbourne, 25-26 October.
- Roxburgh, A.** *What do we know about morphine and oxycodone use and harms in Australia: Findings from two Australian monitoring systems.* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.
- Roxburgh, A., Degenhardt, L., & Howard, J.** *Patterns of drug use among same sex attracted Australians: A general population survey.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

# CONFERENCE PRESENTATIONS

**Roxburgh, A., Matheson, A., Degenhardt, L., & Howard, J.** *Mental health, drug use and risk among gay, lesbian and bisexual community members in Sydney Australia who report regular methamphetamine use.* Poster presented at Harm Reduction 2010: IHRA's 21st International Conference, Liverpool, UK, 25-29 April.

**Roxburgh, A., Matheson, A., Degenhardt, L., & Howard, J.** *Patterns of drug use and dependence, and treatment attendance among gay, lesbian and bisexual community members in Sydney, Australia, who report regular methamphetamine use.* Poster presented at Harm Reduction 2010: IHRA's 21st International Conference, Liverpool, UK, 25-29 April.

**Sannibale, C., & Mills, K.** *The management of mental health problems among people with substance use disorders.* Paper presented at the Salvation Army's 'Addiction matters' tri-territorial AOD (Alcohol and Other Drugs) 2010 Conference, Geelong, 18-21 April.

**Sannibale, C., Sutherland, K., Taylor, K., Visser, A., Peek-O'Leary, M., Bostock-Matusko, D., Teesson, M., Mills, K., Sitharthan, T., & Creamer, M.** *Treatment of Posttraumatic Stress Disorder and alcohol problems: Preliminary results of a randomised controlled trial.* Poster presented at the British Psychological Society Annual Conference 2010, Stratford-upon-Avon, UK, 14-16 April.

**Sannibale, C., Sutherland, K., Taylor, K., Visser, A., Peek-O'Leary, M., Bostock-Matusko, D., Teesson, M., Mills, K., Sitharthan, T., Creamer, M., & Bryant, R.** *Does integrated treatment improve outcome among people with Alcohol Use Disorder and Posttraumatic Stress Disorder? Results of a randomised controlled trial of cognitive behaviour therapy.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Sannibale, C., Sutherland, K., Taylor, K., Visser, A., Peek-O'Leary, M., Bostock-Matusko, D., Teesson, M., Mills, K., Sitharthan, T., Creamer, M., & Bryant, R.** *Randomised controlled trial of integrated treatment for Posttraumatic Stress and Alcohol Use Disorders: Six months post-treatment results.* Paper presented at the Mental Health Services Conference, Sydney, 14-17 September.

**Scott, L., & Burns, L.** *Ecstasy, pot and speed: The impact of comorbid cannabis and methamphetamine use on the mental health of regular ecstasy users (REU).* Paper presented at the 11th International Mental Health Conference - Personality Disorders: Out of the Darkness, Surfers Paradise, 18-20 August.

**Scott, L., & Burns, L.** *The impact of comorbid cannabis and methamphetamine use on drug related harm and risk behaviours among regular ecstasy users.* Paper presented at the 2nd International MDMA/Ecstasy Conference, Melbourne, 19 July.

**Shakeshaft, A.** *A model for combining research evidence, expert opinion and consumer views to determine community-level interventions.* Paper presented at the Kettil Bruun Society (KBS) Thematic Conference on Alcohol and Violence, Melbourne, 15-18 March.

**Shanahan, M.** *Evaluating cannabis policies: Using contingent valuation to value stigma.* Paper presented at the School of Public Health and Community Medicine (SPHCM) 8th Annual Postgraduate Student Research Conference, Sydney, 22 October.

**Shanahan, M.** *Evaluating cannabis policies: Willingness-to-pay to avoid stigma.* Paper presented at the Health Economists' Study Group (HESG) 2010 Summer Conference, Cork, Ireland, 23-25 June.

**Shanahan, M.** *Evaluating cannabis policies: Willingness-to-pay (WTP) to avoid stigma.* Paper presented at the 32nd Australian Conference of Health Economists, Sydney, 30 September-1 October.

**Shanahan, M.** *Using discrete choice modelling (DCE) to explore preferences for different cannabis policies.* Poster presented at the NDARC Annual Symposium, Sydney, 10 August.

**Shanahan, M.** *Using discrete choice modelling (DCE) to explore trade-offs between different policies for cannabis.* Poster presented at the 8th European Conference on Health Economics, Helsinki, Finland, 7-10 July.

**Shand, F.** *Comorbidity & severity of heroin dependence: Untangling the impact of each on overdose, suicidality, treatment history and criminality.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Silins, E., Bleeker, A., Copeland, J., & Dillon, P.** *The importance of experience with illicit drug use and other peer educator qualities: As perceived by ecstasy users in Australia and the Netherlands.* Paper presented at the 6th International Conference on Nightlife, Substance Use and Related Health Issues - Club Health, Zurich, Switzerland, 7-9 June.

**Silins, E., Hutchinson, D., Swift, W., Slade, T., & Rodgers, B.** *Correlates and predictors of cannabis use moderation in young adults.* Paper presented at PATH Research Conference, Canberra, 30 November.

**Silins, E., Hutchinson, D., Swift, W., Slade, T., Rodgers, B., & Toson, B.** *Correlates of cannabis exposure and moderation in a community sample of young adults.* Poster presented at the School of Public Health and Community Medicine (SPHCM) 8th Annual Postgraduate Student Research Conference, Sydney, 22 October.

**Silins, E., Hutchinson, D., Swift, W., Slade, T., Rodgers, B., & Toson, B.** *Correlates of cannabis exposure and moderation in a community sample of young adults.* Poster presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Simpson, M.** *The social context of cannabis initiation: Is there any relationship to current substance use and crime among a sample of criminally involved youth?* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Simpson, M., Howard, J., & Copeland, J.** *The social context of cannabis initiation among a sample of criminally involved youth.* Paper presented at the 2nd International Congress of the European Association for Forensic Child and Adolescent Psychiatry, Psychology and other involved Professions (EFCAP), Basel, Switzerland, 7-10 September.

**Sindicich, N., & Burns, L.** *National trends in Ecstasy and related drug markets around Australia.* Paper presented at the 2nd International MDMA/Ecstasy Conference, Melbourne, 19 July.

**Sindicich, N., & Burns, L.** *Problems faced by club drug users: Where do they go for help?* Paper presented at the 6th International Conference on Nightlife, Substance Use and Related Health Issues - Club Health, Zurich, Switzerland, 7-9 June.

**Sindicich, N., Burns, L., & Scott, L.** *A look at alcohol consumption patterns and risky practices in a sample of regular ecstasy users in Australia, 2003-2009.* Paper presented at the 6th International Conference on Nightlife, Substance Use and Related Health Issues - Club Health, Zurich, Switzerland, 7-9 June.

**Slade, T.** *Assessing the dimensionality of lifetime DSM-IV alcohol use disorders and a quantity-frequency alcohol use criterion in the Australian population: A factor mixture modelling approach.* Paper presented at KBS 2010: 36th Annual Alcohol Epidemiology Symposium of the Kettil Bruun Society, Lausanne, Switzerland, 31 May-4 June.

**Slade, T.** *Towards DSM-V: A comprehensive exploration of the latent structure of problematic cannabis use in a community sample.* Poster presented at the 72nd Annual Meeting for the College on Problems of Drug Dependence (CPDD), Scottsdale, USA, 12-17 June.

**Slade, T.** *Trends over time in alcohol and drug use: Results from the National Survey of Mental Health and Wellbeing. What does this mean for government policy?* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.

**Spicer, B., Burns, L., Conroy, E., Black, K., Minnis, J., Stephens, C., & Haber, P.** *Development of a contraception and sexual health intervention for women who are drug dependent.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Stafford, J.** *Ten years findings from the Illicit Drug Reporting System (IDRS) in Canberra.* Poster presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Swift, W., Coffey, C., Degenhardt, L., Carlin, J., Romaniuk, H., & Patton, G.** *Cannabis use and other substance use in young adulthood: Findings from a prospective Australian cohort study.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 28 November-1 December.

**Swift, W., Degenhardt, L., Calabria, B., Patton, G., Coffey, C., Carlin, J., Moore, E., & Romaniuk, H.** *Cannabis use and its impact into young adulthood: Findings and implications from a prospective Australian cohort study.* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.

**Taplin, S.** *Family Drug Courts - An Option for the CP system in Australia.* Paper presented at the Non-Adversarial Justice: Implications for the Legal System and Society Conference, Melbourne, 4-7 May.

**Taplin, S., & Mattick, R.** *Substance use, women and parenting.* Paper presented at the Association of Children's Welfare Agencies (ACWA) Conference, Sydney, 2-4 August.

**Taplin, S., & Mattick, R.** *Being a mother on the NSW Opioid Treatment Program.* Paper presented at the 2010 Creating Synergy Drug and Alcohol Conference, Wollongong, 3-5 November.

**Taplin, S., & Mattick, R.** *Mothers in Pharmacological Treatment.* Poster presented at National Drug & Alcohol Research Centre (NDARC) Annual Symposium, Sydney, 10 August.

**Taplin, S., & Mattick, R.** *Mothers in the NSW Opioid Treatment Program.* Paper presented at the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference, Canberra, 29 November-1 December.

**Teesson, M.** *Alcohol and the adolescent brain - Implications for clinical practice.* Paper presented at the NDARC Annual Symposium, Sydney, 10 August.

**Thomas, J., & Dunn, M.** *Alcohol and illicit drug use among university athletes.* Paper presented at the 2010 Asics Conference of Science and Medicine in Sport (ACSMS), Port Douglas, 4-6 November.

**Trigueiros, F., Stevens, A., & Hughes, C.** *National strategy on drugs in Portugal: Innovation and evidence.* Paper presented at Harm Reduction 2010: IHRA's 21st International Conference, Liverpool, UK, 25-29 April.

**Vos, T., Carter, R., & Doran, C.** *Economics of prevention in Australia.* Paper presented at the Advances in Public Health and Health Services Research Symposium at UNSW, Sydney, 7 May.

**Wright, T., Norberg, M., Hickey, K., & Copeland, J.** *A mail-based treatment for dependent cannabis users.* Paper presented at the 9th National Services for Australian Rural and Remote Allied Health (SARRAH) Conference, Broome, 20-23 October.

**Wright, T., Norberg, M., Hickey, K., & Copeland, J.** *A mail-based intervention for cannabis users.* Poster presented at the 44th Annual Convention of the Association for Behavioural and Cognitive Therapies, San Francisco, USA, 18-21 November.

# WORKSHOPS & PRESENTATIONS

- Bleeker, A.** *Cannabis: Everything you need to know.* Presentation to: Southern Drug & Alcohol Services, Wollongong, 3-4 February; Southern Drug & Alcohol Services, Nowra, 5 February; OzCare, Townsville, 22 February; ATODS, Townsville, 22 February; Ballarat Health Psychiatric Services, Ballarat, 23 March; Ballarat Health Psychiatric Services, Stawell, 24 March; CatholicCare, Canberra, 14 April; Child & Youth Mental Health Service, Fortitude Valley, 6 May; Child & Youth Mental Health Service, Nundah, 7 May; Hanover Welfare Homeless Drug Dependency, Melbourne, 23 June; Far North Region Drug Squad, Cairns, 2 September; Lifeline, Maroochydore, 12 October; Lifeline, Gordon, 28 October; Alcohol & Drug Service Central Australia, Alice Springs, 3 November; Alcohol & Other Drugs, Charles Darwin University, Nhulunbuy Gove, 5 November; Cape York Cannabis Project, James Cook University, Cairns, 8 November; Child & Youth Mental Health Service, Spring Hill, 15 November; Child & Youth Mental Health Service, Strathpine, 16 November; Child & Youth Mental Health Service, Nundah, 16 November; Manly Drug Education Counselling Centre, Manly, 22 November; and Tweed/Byron Network Cannabis Clinics, Tweed Heads, 29 November.
- Bleeker, A.** *Cannabis: Everything you need to know - Indigenous.* Presentation to: Lyons House, Cairns, 23 February; Albury Wodonga Aboriginal Health Service, Glenroy, 17 May; Albury Wodonga Aboriginal Health Service, Glenroy, 18 May; ATODS, Cooktown, 4 June; Cape York Cannabis Project, Cairns, 9 June; Cape York Cannabis Project, Weipa, 10 June; ATODS, Weipa, 11 June; Lotus Glen Correctional Centre, Mareeba, 30 & 31 August; Upper Murray Family Care, Wodonga, 23 September; Albury Wodonga Aboriginal Health Service Glenroy, 24 September; Indigenous ATODS South West District Health Service, Roma, 18 October; Indigenous ATODS South West District Health Service, St George, 19 October; RHealth, Charleville, 21 October; RHealth, Cunnamulla, 22 October; Alcohol & Other Drugs Program Royal Darwin Hospital, Darwin, 4 November; and Djunbunji Ltd Land and Sea Program, Cairns, 8 November.
- Bright, D.** *'Attack of the nodes': Scale-free criminal networks and vulnerability to targeted law enforcement interventions.* Presentation to: Illicit Networks Workshop, Wollongong, 6 December.
- Bright, D.** *Risk perception among illicit drug dealers: Impact on deterrence and costs.* Presentation to: 2010 DPMP Seminar, Sydney, 17 August.
- Bull, D.** *Cannabis & other drugs & the workplace - Executive.* Presentation to: Australian Council of Trade Unions, Melbourne, 22 March; Australian Industry Group, Sydney, 28 April; Australian Industry Group, Melbourne, 29 April; Australian Industry Group, Brisbane, 5 May; Country Energy, Port Macquarie, 30 September; Australian Industry Group, Melbourne, 7 December; Australian Industry Group, Sydney, 8 December; Australian Industry Group, Brisbane, 9 December; Australian Industry Group, Adelaide, 14 December; and Australian Industry Group, Albury, 16 December.
- Bull, D.** *Cannabis & other drugs & the workplace - EAP.* Presentation to: AUSe.PSYCH, Melbourne, 28 May; Railcorp, Sydney, 23 June; Drake WorkWise, Sydney, 25 June; Psylution Worx, Townsville, 7 & 8 September; Working Edge Psychology, East Ballina, 15 October; and Interrelate Family Centre, Port Macquarie, 9 November.
- Bull, D.** *Cannabis & other drugs & the workplace - OHS & Supervisors.* Presentation to: Country Energy, Port Macquarie, 24 June; Newlyweds Foods, Wetherill Park, 18 August; and Country Energy, Queanbeyan, 26 August.
- Bull, D. Clinical guidelines for the treatment of cannabis. Presentation to: ATODS, Nambour Hospital, Nambour, 15 April; St John of God Burwood Hospital, Burwood, 2 June; St John of God Richmond Hospital, Richmond, 2 June; Peninsular Health Drug & Alcohol Program, Frankston, 18 June; Alcohol & Drug Service, Royal Brisbane & Women's Hospital, Brisbane, 21 June; Caboolture Adult Mental Health Unit, Caboolture, 21 June; Network of Alcohol & Other Drugs, Sydney, 23 June; Drug & Alcohol Clinical Services Newcastle, 30 June; and APSAD Workshop, Sydney, 23 September.
- Bull, D.** *Clinical guidelines for the treatment of cannabis - Indigenous.* Presentation to: Aboriginal Medical Service, Griffith, 28 June.
- Burns, L.** *Drug use in marginalised populations.* Lecture to: Graduate nursing students, University of Technology, Sydney, 14 April.
- Burns L.** *Meeting of the minds: Researching drug use in marginalised populations.* SWSAHS Drug and Alcohol Services, Kogarah, 22 May.
- Cassar, J., Sindicich, N., & Burns, L.** *What are the Illicit Drug Reporting System and Ecstasy and Related Drugs Reporting System? Key findings from the 2009 Australian Capital Territory (ACT) Illicit Drug Reporting System (IDRS) and Ecstasy and Related Drugs Reporting System (EDRS).* Presentation to: Australian Capital Territory Youth Coalition 2010, Canberra, 28 January.
- Chalmers, J.** *The relationship between cannabis use and the state of the economy.* Presentation to: DPMP Team Meeting, Sydney, 17 & 18 August.
- Copeland, J.** *A public health approach to cannabis use disorder: NCPIC.* Presentation to: London School of Hygiene and Tropical Medicine, London, UK, 27 October.
- Copeland, J.** *The Australian Adolescent Cannabis Check-up. A clinical training seminar for Dutch clinicians.* Presentation to: The Trimbos Institute, Utrecht, the Netherlands, 11 & 13 October.
- Copeland, J.** *The Australian National Cannabis Centre: Overview and intervention update.* Presentation to: Institute of Psychiatry, Kings College, London, UK, 4 November.
- Copeland, J.** *The National Cannabis Prevention & Information Centre: An update of activities and interventions.* Presentation to: the Drug Monitoring Group, The Trimbos Institute, Utrecht, the Netherlands, 15 October.
- Dolan, K.** *Measuring HIV seroincidence among IDUs in Myanmar.* Presentation to: United Nations Office on Drugs and Crime (UNODC) Yangon, Myanmar, May.
- Doran, C.** *Improving the efficiency of narcotics control in Thailand.* Presentation invited by General Krisna Polananta, Head, Office of the Narcotics Control Board, Bangkok, Thailand, March.
- Dunn, M.** *Alcohol and drugs.* Presentation to: New South Wales Institute of Sport, Sydney, 18 September.
- Dunn, M.** *Alcohol and sport.* Presentation to: South Australian Sports Institute, Adelaide, 21 September; and Victorian Institute of Sport, Melbourne, 22 & 29 September.
- Dunn, M.** *Alcohol, drugs and the swimmer: What you should know as a coach.* Presentation to: Australian Institute of Sport, Canberra, 12 September.
- Dunn, M.** *Alcohol, sport and you.* Presentation to: Australian Institute of Sport, Parramatta, 21 April; New South Wales Institute of Sport, Sydney, 15 August; Australian Institute of Sport, Canberra, 27 August; South Australian Sports Institute, Adelaide, 21 September; and Victorian Institute of Sport, Melbourne, 29 September.
- Dunn, M.** *Ecstasy and other 'party drugs'.* Paper presented at Macquarie University, Sydney, 21 October.
- Hickey, K.** *Cannabis: Everything you need to know.* Presentation to: Central Coast Mental Health Service, Gosford, 27 January; Drug & Alcohol Service, Gosford Hospital, Gosford, 28 January; Uniting Care Burnside, Fairfield, 10 February; Sunraysia Community Health Services, Mildura, 15 February; South West Area Health Drug & Alcohol Unit, Auburn, 25 March; Institute of Child & Adolescent Psychiatry, Keperra, 29 March; 'Oasis Youth Forum' Salvation Army, Sydney, 25 May; Kurri Kurri TAFE, Kurri Kurri, 11 June; Department of Education & Children's Services, Whyalla, 16 & 17 June; Drug Health Service, Bankstown, 25 June; Southern Drug and Alcohol Services, Ulladulla, 18 October; Southern Drug and Alcohol Services, Wollongong, 19 October; 'Achieving Healthier Communities' WESDARC Forum, Penrith, 21 October; Southern Drug and Alcohol Services, Prince of Wales Hospital, Randwick, 25 October; and Southern Drug and Alcohol Services, Rockdale, 15 November.

**Hickey, K.** *Cannabis: Everything you need to know - Indigenous*. Presentation to: Aboriginal Service, Moree, 11 May; Armajun AMS, Inverell, 9 June; and South Coast Medical Service Aboriginal Corporation, Nowra, 22 June.

**Howard, J.** *Motivational enhancement with young cannabis users: '5 Key Questions' to assist in identifying needs and enhance referral*. Presentation at: Milton Lugar Day, Odyssey House, Sydney, 29 June.

**Howard, J.** *Raising issues and setting the agenda for young injecting drug users*. Panelist at Response beyond borders: Second consultation on the prevention of HIV related to drug use, Bangkok, Thailand, 20-23 January.

**Howard, J.** *Relapse prevention and young people*. Presentation to: Salvation Army Youth Forum, Sydney, 25 May.

**Howard, J.** *Young people & cannabis*. Presentation to: Randwick City Council, Randwick, 17 February; Southern Drug & Alcohol Services, Wollongong, 26 February; Southern Drug & Alcohol Services, Nowra, 9 March; Department of Education & Early Childhood Development, Footscray, 24 March; Atherton High School, Atherton, 12 April; Randwick Council, Randwick, 14 April; South East Drug & Alcohol Counselling Services, Mount Gambier, 19 April; South Australian Network of Drug and Alcohol Services, Adelaide, 20 April; Hill Youth Centre, Gosford, 21 May; 'Oasis Youth Forum' Salvation Army, Surry Hills, 25 May; Manning Mental Health, Taree, 28 May; Odyssey House, Melbourne, 31 May; ATODS, Townsville, 22 & 23 June; Alcohol & Drug Services, Launceston, 25 June; Creative Youth Initiatives Mission Australia, Surry Hills, 7 July; Rosemount Good Shepherd Youth & Family Services, Marrickville, 9 July; Francis Greenway High School, Beresfield, 23 July; Secondary School Nurses Program, Glenroy, 28 July; South Australian Network of Drug & Alcohol Services, Adelaide, 5 & 6 August; Goldfields Centrecare, Kalgoorlie, 23 September; Drug & Alcohol Office, Mount Lawley, 24 September; Lifeline, Gordon, 27 September; Early Psychosis Support Service, Windsor, 14 October; Eyre Futures Inc., Whyalla, 18 October; Youth Health Service, MacArthur, 22 October; and Odyssey House, Melbourne, 27 October.

**Howard, J.** *Young people & cannabis - Indigenous*. Presentation to: Gippsland and East Gippsland Aboriginal Cooperative, Bairnsdale, 22 March.

**Howard, J., Larney, S.** *Young people and substance use: Issues of young drug users; Treatment approaches for young drug users; Providing youth friendly services for young drug users; Managing behaviours of young drug users; Role of community in providing services for young drug users*. Presentations to: Youth Vision Outreach Worker Training, Kathmandu, Nepal 9-11 February.

**Hughes, C.** *Drugs in the media: Where to from here?* Presentation to: DPMP Team Meeting, Sydney, 17 August.

**Hughes, C., & Lancaster, K.** *Media: The new battleground for the alcohol and drug sector*. Presentation to: NSW Health, Sydney, 8 November; and NSW Users and Aids Association (NUAA), Sydney, 23 November.

**Kaye, S.** *Psychostimulant drug use and the heart*. Presentation to: North Shore Heart Research Foundation, Royal North Shore Hospital, Sydney, 20 August.

**Lancaster, K.** *Drugs and politics in the Australian election cycle*. Presentation to: DPMP Team Meeting, Sydney, 17 & 18 August.

**Martire, K.** *MERIT - Why divert?* Presentation to: NSW Police Drug & Alcohol Coordination Unit Conference, Lismore, 27 July.

**Martire, K.** *Where there's smoke there's fire: Tobacco, financial strain and social disadvantage*. Presentation to: Annual Conference of the NSW Financial Counsellors Association, Sydney, 2 August.

**Matalon, E.** *ACCU - The Adolescent Cannabis Check-Up*. Presentation to: Tablelands Drug & Alcohol Counselling Centre, Atherton, 8 March; Sunraysia Community Health Services, Mildura, 22 March; Hampton Bayside Medical Centre, Hampton, 28 April; Community Alcohol & Drug Service, Wellington, New Zealand, 10 August; Children & Young People's Mental Health Service, Gosford, 20 October; Palmerston Centre, Hornsby Hospital, Hornsby, 27 October; and Kurri Kurri TAFE, Kurri Kurri, 9 December.

**Matalon, E.** *Cannabis: Everything you need to know*. Presentation to: Tablelands Drug & Alcohol Counselling Centre, Atherton, 8 March; and Community Alcohol & Drug Service, Wellington, New Zealand, 10 August.

**Matalon, E.** *Clinical guidelines for the treatment of cannabis*. Presentation to: Sunraysia Community Health Services, Mildura, 22 March; Ballarat Health Psychiatric Services, Ballarat, 23 March; Central Coast Mental Health, Gosford, 31 March; Bayside General Practice, Bayside, 27 April; Salvation Army, Hobart, 8 June; Holyoake Drug & Alcohol Services, Hobart, 8 June; Meadowbank TAFE, Meadowbank, 11 June; Community Alcohol & Drug Service, Wellington, New Zealand, 10 August; Bayside Mental Health Service, Redland Hospital, Cleveland, 20 August; Western Australian Network of Alcohol & Other Drug Agencies, Perth, 2 September; Drug & Alcohol Services South Australia, Adelaide, 2 November; Royal Australian College of General Practitioners, Adelaide, 3 November; South Australian Network of Drug & Alcohol Services, Adelaide, 4 November; Dual Diagnosis Team Mental Health Unit, Ipswich Hospital, Ipswich, 1 December; and Dual Diagnosis Team Mental Health Unit, Toowoomba Hospital, Toowoomba, 2 December.

**Matalon, E.** *Clinical Train the Trainer*.

Presentation to: Australian Drug Foundation, Melbourne, 28 & 29 April; National Cannabis Prevention & Information Centre, Sydney, 4 & 5 May; National Cannabis Prevention & Information Centre, Sydney, 18 & 19 May; CatholicCare, Canberra, 25 & 26 May; Child & Youth Mental Health, Brisbane, 31 May & 1 June; ATODS, Townsville, 2 & 3 June; Hindmarsh Education Centre, Adelaide, 15 & 16 June; and City Mission Evandale, Launceston, 29 & 30 June.

**Matalon, E.** *Quitting cannabis 1-6: Brief intervention for cannabis use*. Presentation to: OzCare, Townsville, 22 February; ATODS, Townsville, 22 February; Tablelands Drug & Alcohol Counselling Centre, Atherton, 8 March; University of Western Sydney Counselling & Disability Services, Penrith, 20 July; and Community Alcohol & Drug Service, Wellington, New Zealand, 11 August.

**Mills, K.** *Management of comorbid mental health conditions in substance use treatment settings*. Presentation to: Double Trouble Workshop at the Mental Health Services Conference, Sydney, 14-17 September.

**Mills, K.** *Trauma, post traumatic stress disorder and substance use*. Presentation to: Alcohol, Tobacco and Other Drug Association ACT, Canberra, October.

**Mills, K.** *Young people, substance use and mental health*. Presentation to: The Richmond Fellowship NSW, Penrith, October.

**Mills, K., Teesson, M., Barrett, E., Merz, S., Rosenfeld, J., Farrugia, P., Sannibale, C., Hopwood, S., Baker, A., Back, S., & Brady, K.** *Is exposure therapy for post traumatic stress disorder (PTSD) efficacious among people with substance use disorders (SUD)? Results from a randomised controlled trial*. Presentation to: NSW Justice Health, November; Department of Clinical Psychology, New York City College, New York City, USA, November; and Mater Hospital, Newcastle, December.

**Ritter, A.** *Alcohol policy and drug policy: Synergies and tensions?* Presentation to: DPMP Team Meeting, Sydney, 18 August.

**Ritter, A.** *Drug policy and governance*. Presentation to: Drug Strategy Branch Talking Head's Series, Canberra, 31 May.

**Ritter, A.** *Drug Policy Modelling Program overview*. Presentation to: QIT meeting, Sydney, 11 November.

**Ritter, A.** *Keynote address: Illicit drugs: Managing illicit drug issues*. Presentation to: Commonwealth Department of Health and Ageing, Drug Strategy Branch Planning Day, Canberra, 3 May.

**Ritter, A.** *Seminar Chair: Criminal justice responses to the drug use and offending: A continuum of strategies* at Corrective Services NSW Open Seminar, Sydney, May.

## WORKSHOPS & PRESENTATIONS

**Ritter, A.** *Workshop: National hospitals and healthcare reform and drug and alcohol treatment: The great leap forward or stuck in the backblocks?* Presentation to: Australian Professional Society on Alcohol and Other Drugs (APSAD), Canberra, 30 November.

**Sannibale, C.** *Psychological treatment of people with substance use disorders.* Presentation to: General Practitioners Postgraduate Mental Health Programme, Institute of Psychiatry, Sydney, 29 May.

**Sannibale, C., & Baillie, A.** *Comorbidity between anxiety disorders and substance use disorders: Formulation and treatment.* Presentation to: Australian Psychological Society Clinical College Workshop, Sydney, 16 October.

**Shakeshaft, A.** *Using policy and program roll-out to generate research evidence: Can we do it routinely?* Presentation to: Social and Public Health Sciences Unit, Glasgow, UK, 30 June.

**Shanahan, M.** *Cost-benefit analysis of NSW cannabis policy options.* Presentation to: DPMP Team Meeting, Sydney, 17 & 18 August.

**Shanahan, M.** *Stigma - does society care?* Presentation to: DPMP Team Meeting, Sydney, 17 & 18 August.

**Spicer, B.** *Comparing an online youth survey with the NDSHS results: Is youth drug use in Australia accurately represented?* Presentation to: DPMP Team Meeting, Sydney, 17-18 August.

# ACRONYMS

<b>ACTDH</b>	ACT Dept of Health	<b>NCETA</b>	National Centre for Education and Training on Addiction
<b>AGDHA</b>	Australian Government Department of Health and Ageing	<b>NCPIC</b>	National Cannabis Prevention and Information Centre
<b>AERF</b>	Alcohol Education and Rehabilitation Foundation Ltd	<b>NDARC</b>	National Drug & Alcohol Research Centre
<b>AIDSFONDS NL</b>	Aids Fonds Netherlands	<b>NDLERF</b>	National Drug Law Enforcement Research Fund
<b>APSAD</b>	Australasian Professional Society on Alcohol and Other Drugs	<b>NDRI</b>	National Drug Research Institute
<b>ARC</b>	Australian Research Council	<b>NHMRC</b>	National Health and Medical Research Council
<b>CCS</b>	Council of the City of Sydney	<b>NIH</b>	National Institute of Health (USA)
<b>CF</b>	Colonial Foundation	<b>NBCSR</b>	NSW Bureau of Crime Statistics and Research
<b>CLIMATE</b>	Clinical Management & Treatment Education	<b>PTSD</b>	Post Traumatic Stress Disorder
<b>DASSA</b>	Drug & Alcohol Services South Australia	<b>QADREC</b>	Queensland Alcohol and Drug Research and Education Centre
<b>DEST</b>	Department of Education, Science and Training	<b>RB</b>	Reckitt Benckiser
<b>DoH VIC</b>	Department of Health, Victoria	<b>RTA</b>	Roads & Traffic Authority, NSW
<b>DOCS</b>	Department of Community Services, NSW	<b>SALV</b>	Salvation Army
<b>DPMP</b>	Drug Policy Modelling Program	<b>SCHER</b>	Schering Pty Ltd
<b>DROSOS</b>	Drosos Foundation, Switzerland	<b>TP</b>	Turning Point Alcohol & Drug Centre
<b>EDRS</b>	Ecstasy and related Drugs Reporting System	<b>UNEW</b>	University of Newcastle
<b>GU</b>	Griffith University	<b>UNAIDS</b>	United Nations Programme on HIV/AIDS
<b>HAC</b>	Health Administration Corporation	<b>UNODC</b>	United Nations Office on Drugs and Crime
<b>HERON</b>	Health Evaluation Research Outcomes Network	<b>UNOV</b>	United Nations Office in Vienna
<b>IDRS</b>	Illicit Drugs Reporting System	<b>UNSW</b>	The University of New South Wales
<b>MA</b>	Mission Australia	<b>WHO</b>	World Health Organisation
<b>MDECC</b>	Manly Drug Education & Counselling Centre	<b>WU</b>	Washington University, USA

National Drug and Alcohol Research Centre Annual Report 2010

Editor: Marion Downey

Layout: John Fear

Production: Michaela Turner

Printed by: P<sup>3</sup> PRINTPOSTplus





Medicine

National Drug and Alcohol Research Centre

