

St. Vincent's Department of Addiction Medicine maintains an active research program with a primary focus on translating current and emerging knowledge about basic brain function and neuroscience directly into new and more effective treatments for drug and alcohol addiction.

About us

St. Vincent's Department of Addiction Medicine is one of Australia's leading centres for the medical treatment of drug or alcohol addiction. Our work includes direct patient treatment, research, education, training and policy development.

Our multidisciplinary team is committed to continually developing new and more effective treatments for addiction and to ensuring these are rapidly available to as many people as possible. We engage with patients and their families from a broad range of backgrounds, including those whose lives are extremely disadvantaged.

Our treatment and research teams include doctors, nurses and specialist counsellors, and our treatment services encompass both withdrawal and long-term

management, using state-of-the-art methods and facilities. Our research program translates current and emerging knowledge about basic brain function and neuroscience directly into new and more effective treatment for addiction.

We have a strong culture of education, training and teaching, from undergraduate students to senior clinicians across a wide range of professional disciplines. The team strives to ensure our clinical knowledge and experience informs public health policy. Ultimately we hope to achieve a more sophisticated understanding in the community of the nature and treatment of addiction and to improve the health outcomes for those seeking assistance for drug or alcohol problems.

Selected projects in progress or completed

A pilot study of subcutaneous flumazenil in the management of benzodiazepine withdrawal.

This trial examines a new pharmacological method which, if successful, would have significant impact on both hospital and community-based treatment.

A randomised controlled trial of a novel combination pharmacotherapy program for the treatment of cannabis dependence.

Cannabis is the most widely used illicit drug in Australia, especially among adolescents and young adults. This is of concern as cannabis is now increasingly recognised as a major contributor to impairment in mental

and physical health and psychosocial functioning, as well as to serious driving and workplace injury. This study evaluates a novel medical and pharmacologic treatment program for the management of cannabis dependence.

A prospective double-blind placebo-controlled trial investigating the efficacy and safety of ORG25935 in relapse prevention in subjects with alcohol dependence. This is an international multi-centre Phase IIa randomised, controlled trial sponsored by Schering-Plough Pty Ltd, which aims to evaluate a novel glycine reuptake inhibitor in the treatment of alcohol dependence.

The nature and duration of cognitive impairment after weekend binge drinking in young people. This study will use a battery of neurophysiological and neurocognitive tests. The findings will have implications for individuals themselves, for clinical practice and also for community understanding about the effects of drinking.

Evaluation of CAMELOTT (Contingency Assisted, Medication Enhanced Length of Time in Treatment), a novel medical treatment program for the management of drug and alcohol addiction. CAMELOTT has been implemented at St. Vincent's and the program is undergoing evaluation for current clinical outcomes against historical service outcomes.

Highlights

Prof Jon Currie has chaired the expert working committee of the National Health and Medical Research Council that has developed the final consultation draft of the Guidelines to Reduce Health Risks from Drinking Alcohol.

Research applications in the clinical setting

A novel and easily utilised clinical outcome assessment tool for addiction treatment (GCOS – Global Clinical Outcome Score) has been developed and implemented providing effective, outcome-based monitoring of clinical treatment. This has greatly improved the department's capacity for quality assurance monitoring and is likely to have more general application across both hospital and community-based treatment services. Novel pharmacological treatment protocols have been developed and introduced for St. Vincent's patients with addiction problems and a highly effective, sophisticated model of service delivery has been developed and implemented.

Research outcomes in relation to patient care

The effectiveness of treatment for patients with drug or alcohol addiction has been greatly improved through the development of novel medical treatment protocols and service delivery models. Clinical outcomes for patients are now significantly better than at any

previous time and are now among the best that can be achieved internationally.

The team

Prof Jon Currie, Director of Addiction Medicine, Director of Health Service Demand; Dr Yvonne Bonomo, Consultant Physician; Fiona Craig, Clinical Research Nurse; Dr Martin Lloyd-Jones, Consultant Physician; Adam Pastor, Fellow in Addiction Medicine

Grants

St. Vincent's Research Endowment Fund: A placebo-controlled, randomised clinical trial of vigabatrin in the management of acute alcohol withdrawal (2008), (\$14,905)

John T Reid Charitable Trust: A newly developed medical treatment program for cannabis dependence (2008-2009), (\$115,000)

Ian Potter Foundation: Randomised control trial of a novel medical treatment program for cannabis dependence (2008-2009), (\$100,000)

HASSELA Australia Foundation: Naltrexone research funding (2008-2009), (\$100,000)

Melbourne Lord Mayor's Charitable Fund: Development of a new, understandable and culturally-appropriate treatment program for disadvantaged and/or Aboriginal communities (2008-2009), (\$100,000)

International presentations

'Addiction is a brain disease and it matters: implications for treatment and policy.' Conference on Harm Reduction Intervention in HIV Prevention and Opioid Dependence Treatment. Hanoi, 28-29 July, 2008

'CAMELOTT: a new, long-term maintenance program for a neurobiological age.' The 9th Stapleford International Addiction Conference. Athens 24-26 May, 2008

'A novel medical treatment program for cannabis dependence.' The 9th Stapleford International Addiction Conference. Athens 24-26 May, 2008

Publications

Villemagne VL, Pike KE, Darby D, Maruff P, Savage G, Ng S, Ackermann U, Cowie TF, Currie J, Chan SG, Jones G, Tochon-Danguy H, O'Keefe G, Masters CL, Rowe CC. 'Abeta deposits in older non-demented individuals with cognitive decline are indicative of preclinical Alzheimer's disease', *Neuropsychologia*. 2008;46:1688-1697.

Fripp J, Bourgeat P, Acosta O, Raniga P, Modat M, Pike KE, Jones G, O'Keefe G, Masters CL, Ames D, Ellis KA, Maruff P, Currie J, Villemagne VL, Rowe CC, Salvado O, Ourselin S. 'Appearance modeling of 11C PiB PET images: characterising amyloid deposition in Alzheimer's disease, mild cognitive impairment and healthy aging', *Neuroimage*. 2008;43:430-4