

NHMRC Success in Medicine

Congratulations to all Medicine staff who had success with NHMRC grants, there were 48 Project Grants awarded to UNSW, who received more than \$46 million in grants from the National Health and Medical Research Council (NHMRC). The round delivered more than \$673 million to medical researchers around the country.

One of the largest Project Grants – \$1.5 million – went to a team led by Associate Professor Elizabeth Comino, from the Centre for Primary Health Care and Equity for their ongoing work in The Gudaga Study, which investigates the health, development, early education, family environment and service context of Aboriginal children in Sydney's south-west.

Other successful projects include:

- \$971,000 to Professor Nicholas Buckley and a team from the Prince of Wales Clinical School, to investigate the effects of pesticides and snakebite venom on the brain.
- \$841,000 to a team in the School of Women's and Children's Health led by Associate Professor Elizabeth Sullivan investigating rheumatic heart disease in pregnancy;
- \$420,000 to Professor John De Wit, from the National HIV Social Research Centre, to determine when and why people who are HIV positive start antiretroviral treatment (ART). The study will examine the potential public health impact of promoting ART and potentially contribute to better use of treatments and HIV prevention;
- \$328,000 to Professor Cyndi Shannon Weickert, in the School of Psychiatry, for a study into how sex hormones influence the onset of schizophrenia in young men. The research could support the development of gender and age-specific prevention and treatment.

In the same funding round, Dr Kim Delbaere, from the School of Public Health and Community Medicine, received \$559,000 through the Australian-European Collaborative Research Scheme to develop technologies that will monitor and prevent falls among the frail.

Living to 150 - 'Science-Fact'

Drugs to help people live to 150 could be available within a decade, but the social and economic consequences of prolonged life will change Australia forever, experts have told a capacity audience at the 2011 Medicine Dean's Lecture. The annual lecture was delivered by Oxford University's Baroness Susan Greenfield, Harvard University's Professor David Sinclair, and UNSW Scientia Professor Henry Brodaty on the possibility of happy and healthy ageing.

The event, which drew around 1000 people to the John Clancy Auditorium, was hosted by Alzheimer's Australia's Ms Ita Buttrose and facilitated by the Dean of UNSW Medicine, Professor Peter Smith. Professor Sinclair considers ageing a condition treatable with future drug therapy. Professor Greenfield said people living healthy lives to age 150 could mean people entering second careers after 65. An older workforce would also be more knowledge-based with less emphasis on mobility and physical strength.

UNSW's Dean of Medicine, Professor Smith, used the event to welcome Professor Sinclair to UNSW Medicine in his position as Conjoint Professor in the School of Medical Sciences. While at UNSW, Professor Sinclair will establish the Laboratory for Ageing Research at UNSW to be situated in the new Lowy Cancer Research Centre.



David Sinclair, Peter Smith, Susan Greenfield, Ita Buttrose and Henry Brodaty

Faculty Student wins UNSW 3 Minute Thesis Competition

Jenny Liu, a PhD student in the Prince of Wales Clinical School, is the winner of the 2011 UNSW 3 Minute Thesis Competition, held on Thursday 1st September. In a 3 Minute Thesis presentation, research students explain their project to an intelligent lay audience in less than three minutes, with a single PowerPoint slide. Jenny, along with the other two winners of the Faculty of Medicine Competition, Siong Meng Lim, and John Ng, represented the Faculty at the UNSW Competition, hosted by the Graduate Research School.

Jenny's presentation on "Low folate, DNA and Bowel Cancer" was judged to be the best among the 24 UNSW finalists. Her presentation is on UNSW TV at <http://tv.unsw.edu.au/video/2011-three-minute-thesis-winner-jenny-liu>. Not only did she win a prize of \$3,000, she was the one UNSW student to be sent to Perth to give a presentation at the Australia/New Zealand Competition. At this event, held at the University of Western Australia on 29th September, although Jenny did not win a prize, she spoke very well, and represented UNSW with distinction.

A/Prof William Sewell

Director of Graduate Students



Jenny Liu (right) receives her award from Professor Laura Poole-Warren, the Dean of Graduate Research

Schizophrenia dulls brain's reward centre

The brain's reward centre, responsible for much of our learning and motivation, does not fire correctly in schizophrenia, according to UNSW research conducted at the Schizophrenia Research Laboratory.

The findings, published in *Molecular Psychiatry*, suggests new therapies which target this small region deep inside the brain, could help improve the daily lives of people with schizophrenia by increasing motivation and help achieve new goals.

Lead author and designer of the study Dr Richard Morris says we have known the ventral striatum is a critical site for learning about rewards and other incentives, and damage here has also been implicated in Schizophrenia. However we don't know whether this damage affects reward learning and motivation in schizophrenia.

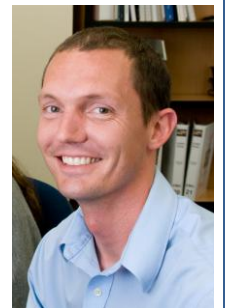
The study involved training volunteers to play a card game in which certain cards led to a reward (expected reward), in this instance an image of \$50 bills.

16 healthy adults and 16 people with schizophrenia who were receiving second-generation medication volunteered for this training.

They were then placed in a magnetic resonance imaging (MRI) scanner and asked to play the same game. However after a period of time the cards that led to a reward were changed (unexpected reward).

Morris and his colleagues found in healthy adults the ventral striatum lights up with surprise when an unexpected reward appeared. However in people with schizophrenia some regions of the ventral striatum lit up all the time, regardless of whether the reward was expected or unexpected. Richard commented:

"This new information helps us understand why people with schizophrenia have difficulty making choices and completing goals. They often don't feel the same anticipation of rewards the rest of us enjoy."



Dr Phil Dinning Wins ANSTO Eureka Prize

Congratulations to Dr Phil Dinning, Clinical School St George Hospital, who was awarded the 2011 ANSTO Eureka Prize in the category of Innovative use of technology.

Translational Cancer Research Centre Grants

Translational Cancer Research Centre grants were awarded to:

Prof Robyn Ward, Clinical School, Prince of Wales Hospital : South-Eastern Translational Cancer Research Centre \$6.5M over 5 years

Prof Glenn Marshall , School of Women's & Children's Health: Sydney Catalyst: The Translational Cancer Research Centre for Kids \$6.5M over 5 years

ARC Future Fellowships

The next round of ARC Future Fellowship applications are open and will close on 30 November, 2011. The Funding Rules and Agreement have been released on the ARC website (http://www.arc.gov.au/ncgp/futurefel/future_default.htm). Please contact your Head of School or A/Prof Laurent Rivory in the Research Strategy Office, tel: 9385 6545 if you have any queries regarding application.

Major Grant Round Announcements

- Week commencing 17 October: most NHMRC Schemes including NHMRC Project Grants and Fellowships for 2012
- 1 November: ARC Discovery (DP12), Linkage (LP12) and LIEF (LE12).
- 16 November: ARC Discovery Early Career Researcher (DECRA) and Future Fellowships (FT12).

ERA 2012 Submissions

The ARC has released the Excellence in Research for Australia (ERA) 2012 Submission Guidelines, Discipline Matrix and Technology Pack. These documents provide a detailed guide to the rules and processes for ERA 2012 submission, as well as technical documentation related to the submission process. All key documents are available for downloading from the ARC webpage: http://www.arc.gov.au/era/era_2012/key_documents_2012.htm

TEN OF THE BEST RESEARCH PROJECTS 2011 - Prof Samuel Breit

The role of the TGF- β superfamily cytokine MIC-1, in the pathogenesis of cancer cachexia: Professor Warwick Anderson AM, CEO of NHMRC, recently announced that the research project submitted by Professor Samuel Breit, from St Vincent's Centre for Applied Medical Research, St Vincent's Hospital, has been selected to feature in *Ten of the Best Research Projects 2011* book. Professor Breit will be interviewed by NHMRC's Communications Manager, Ms Carolyn Norrie, for a podcast that will be available on the NHMRC website. The official book launch event, will take place in Canberra, most likely in late October/early November. After the launch the book will be available on the NHMRC website.



Depression prevention better than cure

Eight out of ten Australians would radically change their behaviour if tests showed they had a genetic susceptibility to depression, a national study has found. The study, conducted by Dr Alex Wilde and other researchers at the University of New South Wales (UNSW) and published online in the *Journal of Affective Disorders*, is the first population-wide analysis of Australian attitudes towards genetic testing for risk of mental illness.



There was overwhelming support for the use of genetic tests to help people take steps to prevent depression before it occurs, especially among those who believe they or their children have a higher than average risk, a randomised phone survey of 1,046 adults found.

The preventive strategies that received support included helping children to be resilient to stress (92%), modifying their own stress (84%), starting therapies (80%) and reducing excessive drug and alcohol use (74%). The widespread interest in prevention strategies was based on the understanding that while there may be a genetic predisposition to mental illness, environmental factors also played a major role. The findings suggest there would be widespread community support for genetic screening as a valuable clinical tool for early intervention in high-risk groups.

Dr Wilde said people could try to change unhealthy aspects of their lives without information about their genetic risk, but the findings suggest that having genetic test results at hand may act as a powerful motivator for change. In general, Australians are very interested in knowing their genetic susceptibility to mental illness.

A linked study by the same research team, published this month in the UK-based journal *Psychological Medicine*, showed there was significant national interest in genetic testing for depression risk, despite concerns about the reliability of such tests and that the results could potentially increase social stigma and discrimination.

Other study authors were Professor Philip Mitchell from UNSW's School of Psychiatry, Associate Professor Bettina Meiser, from the Prince of Wales Clinical School, and Professor Peter Schofield, from Neuroscience Research Australia. Funding for this study was provided by the Australian National Health and Medical Research Council.

Wilde et al 2011 *Journal of Affective Disorders* <http://www.sciencedirect.com/science/article/pii/S0165032711003545>
Wilde et al 2011 *Psychological Medicine*

<http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8319938&fulltextType=RA&fileId=S0033291710002394>

Grants Management Office (GMO)

NHMRC Announcements and Upcoming Major Funding Rounds

We congratulate our colleagues who were successful in gaining NHMRC funding in the October announcements. We are pleased to see you rewarded for your efforts and look forward to being of support to you throughout the life of your grant.

For our colleagues who were unsuccessful in this round we share your disappointment and hope to be of assistance to you again soon. GMO Director, Janice Besch has said this week "one of the hardest things about our role is seeing the large number of applicants who have spent an enormous amount of time and energy putting together quality applications, only to receive news their application has been unsuccessful". We are working to now support you in your next funding application efforts and urge you to start preparing for the next round of grant schemes.

Starting early can make a difference to the competitiveness of a grant application. Janice and the GMO team are

working closely with the Research Strategy Office (RSO) over the next few months “to provide early and solid support to all those who are putting in applications for the first time or reviewing earlier efforts”. Information sessions; presentations to schools, centres or institutes; and meetings will be held in November and December and will carry through to 2012.

Information sessions will be listed on the Training pages of the Research@UNSW Gateway <https://research.unsw.edu.au/units/training-and-development>. To find out more about accessing support please contact your [Medicine Team Grants Officer](#) or email mygrants.gmo@unsw.edu.au

GE Cancer Commitment - \$100m healthymagination challenge (close 20 November)

GE has announced a \$100m global open innovation challenge to find, fund and bring to market promising ideas that improve breast cancer diagnostics and treatment. For more details see <http://www.healthymagination.com/>

Important Dates:

ARC Announcements

- LIEF, Linkage Projects, Discovery Indigenous and Discovery Projects: 1 November
- DECRA and Future Fellowships: 14 November

NHMRC/ARC Grant Reporting Deadlines

- NHRMC End of Year Financial Reporting for Final Year Grants: due 31 December 2012
- NHRMC End of Year Financial Reporting for Continuing Grants: due 31 March 2012
- NHMRC Progress Reports: due 31 March 2012
- ARC End of Year Financial Reporting: due 31 March 2012
- ARC Progress Reports due: 31 January 2012

Paper of the Month

Nelson PK, Mathers BM, Cowie B, Hagan H, Des Jarlais D, Horyniak D and Degenhardt L (2011) Global epidemiology of hepatitis B and hepatitis C in people who inject drugs: results of systematic reviews. *The Lancet*, 378(9791)571-583.

Paul Nelson, Psychologist, Research Officer & PhD candidate

Global Burden of Disease Study | Illicit Drugs and Mental Disorders Group
National Drug and Alcohol Research Centre

Dr Mei-Sing Ong, Australian Institute of Health Innovation: For the first time in probably twenty years, the best student paper at the American Medical Informatics Association's (AMIA) annual symposium went to someone outside North America. Our very own Mei-Sing Ong won the prize for a research paper from her PhD work on clinical alerts and signal detection theory. After two rounds of screening and shortlisting from over 50 papers, the top 8 research papers were presented in front of a panel, in a session that is always popular at the Symposium. The prize is always hotly contested, and usually goes to PhD candidates from the health informatics juggernauts like Harvard, Stanford, or Vanderbilt. With a polished performance, and a research paper that has immediate and widespread use in all clinical settings, Mei-Sing upset the normal world order. Some of her predecessors who have won this award are now amongst notable researchers in our field.

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