Contributions

Contributions to Research & Innovation News (Research news, achievements and events) are always welcome.

For inclusions in the next issue, (due for publication in late July), please e-mail details to lhawes@uow.edu.au or vwallace@uow.edu.au by the 9th of July.
NHMRC-China Exchange: Understanding the role of neuregulin-1 genetic polymorphisms in patients with schizophrenia

Chief Investigators: Mei Han (Postdoc), XF Huang (Supervisor), Xiangyang Zhang (Supervisor)

Schizophrenia is a severe psychiatric disorder and it is believed to have both genetic and brain developmental components in its aetiology. Due to the large variations in symptoms and treatment efficacy, research is required to determine better treatment strategies. This project will investigate the associations between neuregulin-1 (Nrg1) genetic variants and patients with schizophrenia including (a) their symptoms, (b) treatment efficacy and (c) treatment side-effects. This project not only can help us understand the etiology of schizophrenia, but also will help us developing key therapeutic targets for the treatment of schizophrenia.
NHMRC-China Exchange: Evaluation of functional protein molecules in treating obesity

Chief Investigators: Yinghua Yu (Postdoc), XF Huang (Supervisor) and Dou Li (Supervisor).

In this project, dietary intervention where clear links between study design and health claims may be established. Furthermore, this project will define the peripheral and central pathway of whey protein in body weight management in overweight and obese subjects. Furthermore, the cellular and molecular mechanism will be explored in an appropriate diet-induced obese mouse models. The aim of this project is to establish an evidence base of the functional properties of whey protein diet as they relate to body weight management. Obesity is already a health problem in Australia and China and is predicted to become worse in the next 10 year if no appropriate treatment and prevention method is available. This project may help in combating this worldwide health issue.

ARC Super Science Fellowships Awarded to UOW

Congratulations to Prof Gordon G Wallace, Dr Simon E Moulton, A/Prof Robert M Kapsa, Prof David L Officer and Prof Hua Kun Liu for their project entitled “Three dimensional polymer structures for bionic applications”. This team was awarded $556,800 for two Super Science Fellowships commencing in 2010; a fantastic result given that only 16 fellowships were approved in the Future Industries discipline area in 2010 nationally.

Congratulations also to Prof Colin Woodroffe who is a co-Chief Investigator on a successful collaborative application with the University of Queensland, entitled “Treading water in a changing climate: The vulnerability of Australia’s tropical islands to sea level rise”.

New IRT grants support healthy ageing research

The Illawarra Retirement Trust (IRT) has launched a new grants program through its recently formed Research Foundation. “The IRT Research Foundation is a new initiative of IRT, to progress projects which assist a greater understanding of the ageing process and the care and wellbeing of senior Australians and beyond,” says IRT Chief Executive Nieves Murray.

The inaugural round of grants, announced during Seniors’ Week and worth a total of $120,000, included three projects coordinated and co-funded by the Illawarra Health and Medical Research Institute (IHMRI):

- **Dr Justin Yerbury** and **Dr Heath Ecroyd** (School of Biological Sciences) - research on molecular chaperones as agents of the ageing process, with the ultimate goal of developing therapeutic drugs to combat ageing and age-related disorders and disease.

- **Dr Francesca Fernandez Enright** (School of Health Sciences) - research into the prevention and early diagnosis of Alzheimer’s disease, using gene expression profiling in a case-control population in the Illawarra.

- **Professor Sandra Jones** (Centre for Health Initiatives) - research on different approaches to encourage healthy behaviours that improve an individual’s wellbeing and lifestyle.

### UPCOMING FUNDING OPPORTUNITIES

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Funding Opportunity</th>
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<tr>
<td>14 July, 2010</td>
<td>NHMRC Development Grants</td>
</tr>
<tr>
<td>28 July, 2010</td>
<td>2011 URC Small Grant Scheme (opens 18 June)</td>
</tr>
<tr>
<td>13 September, 2010</td>
<td>Ian Potter Foundation deadline for Round 3 General Grants in Arts and Education</td>
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<tr>
<td>15 September, 2010</td>
<td>Australian Institute of Nuclear Science and Engineering (AINSE) Awards</td>
</tr>
<tr>
<td>1 October, 2010</td>
<td>NHMRC Centres of Research Excellence</td>
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<tr>
<td>25 October, 2010</td>
<td>Round 2 - URC Research Partnerships Scheme deadline</td>
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<tr>
<td>29 October, 2010</td>
<td>Academy of Social Sciences Workshop program deadline</td>
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### EXTERNAL GRANT SCHEMES

#### NHMRC Development Grants

This Scheme provides funding support to individual researchers, and research teams, to undertake research at the early proof-of-principle or pre-seed stage. It supports the commercial development of a product, process, procedure or service that if applied, would result in improved health care, disease prevention or provide health cost savings.

Applications must demonstrate a basic understanding of the process and steps required to move from research to outcomes that can be commercialised, including:

- the process and steps to a market, the nature of the market;
- the milestones and risks of the venture; and
- an understanding of possible means of handling intellectual property connected with the project.

Further information about this scheme is available at [http://www.nhmrc.gov.au/grants/apply/development/index.htm](http://www.nhmrc.gov.au/grants/apply/development/index.htm), or contact Sharon Clarke on ext 5815 or email clarke@uow.edu.au.

#### NHMRC Centres of Research Excellence (CRE)

The CRE Scheme seeks applications from teams of researchers to pursue innovative, high quality collaborative research activities in the following priority areas:

- **Clinical Research**
- **Research into Asbestos Related Diseases**
- **Population Health Research**
- **Electromagnetic Energy Research**
- **Health Services Research**

The CRE will build capacity, support research that will lead to improved community health outcomes, and ensure effective translation of research outcomes primarily into practice.

Funding will be awarded for a period of five years and is expected to commence in 2010.

Further information about this scheme is available at [http://www.nhmrc.gov.au/grants/apply/cre/index.htm](http://www.nhmrc.gov.au/grants/apply/cre/index.htm), or contact Sharon Clarke on ext 5815 or email clarke@uow.edu.au
Ian Potter Foundation

The Ian Potter Foundation is one of Australia’s leading private philanthropic organisations. The Foundation has a track record of funding projects that improve the Australian community’s ability to respond creatively to social, environmental, science and health issues, and that develop our capacity as a nation through the arts and education.

The Foundation funds Small Grants (up to $20,000) and General Grants (over $20,000) in the fields of Arts, Education and Community Wellbeing (three rounds per year in February, June and October), Environment & Conservation, and Science (1 June) and Medical Research and Health (February) There are also separate schemes for Travel and Conference grants (13 September) and Community Wellbeing International Travel grants. Application forms and guidelines can be downloaded from http://foundation.ianpotter.org.au/how_to_apply.html or contact Elizabeth Phillips, ext. 4522 or email eliza@uow.edu.au.

AINSE Awards

AINSE provides funds to assist researchers from member universities to gain access to ANSTO and other AINSE facilities. Awards are awarded for one year commencing in January. Further information about this scheme is available at http://www.ains.edu.au/ainse/for_academic_researchers/ainse_awards.html, or contact Sharon Clarke on ext 5815 or email clarke@uow.edu.au.

Academy of the Social Sciences Workshop Program

The Academy of Science’s Workshop program aims to identify issues of national concern in the social sciences, and to focus specialist attention on them through workshops and roundtables. A related aim is to position the Program at the cutting edge of social science research in this country. Through the workshops Program, the Academy is now a major facilitator of collective intellectual work in the social sciences in Australia. The Academy is currently calling for proposals for workshops to be conducted between July 2011 and June 2012. Applications close on Friday, 29 October, 2010. Application form and guidelines can be downloaded from: http://www.assa.edu.au/programs/workshop/call_for_proposals.php.

Questions regarding the workshops should be addressed to Ms Sarah Tynan, Project Manager (Workshops, Public Forums); email: tynan.assa@anu.edu.au; tel: 02 6249 1788 or contact Elizabeth Phillips on ext. 4522 or by email: eliza@uow.edu.au.

INTERNAL GRANT SCHEMES

URC Research Partnerships Scheme

Funding is available from the URC Research Partnerships Scheme to support projects for the establishment of cooperative projects in either new research directions with existing collaborating partner organisations, or involving a research-related link with a new partner organisation(s). Partner organisations can include both industry and public sector organisations engaged in research. It is expected that the project will result in significant research outcomes, such as publications, external research grant applications, improved research relationships and further research activity with the Partner Organisation.

There will be two rounds in 2010: Round 1 closing on 24 May and Round 2 closing on 25 October. Application forms and guidelines may be downloaded from: https://intranet.uow.edu.au/raid/rso/urc-research-partnership/UOW021755.html

For further information, please contact Elizabeth Phillips on ext. 4522 or by email: eliza@uow.edu.au.

URC Small Grants Scheme

Funding is available from the URC Small Grants Scheme to support excellent researchers in the development of strategic research projects that will increase their potential for gaining external funding and to encourage early career researchers to develop their research profiles. Projects are expected to lead to practical outcomes and applications of social and economic value and publications and outputs that enhance the track record of the investigator. The Application form and guidelines will be available from 18 June at: https://intranet.uow.edu.au/raid/rso/internalfunding/UOW045662.html

For further information, please contact Danielle Annese on ext 5874; email: annese@uow.edu.au.

RESEARCH ETHICS

Agenda Deadlines and Meeting Dates 2010 for your diary

<table>
<thead>
<tr>
<th>Committee Name</th>
<th>Dates</th>
<th>Deadlines</th>
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<tr>
<td>Human Research Ethics Committee (HREC) - Health and Medical</td>
<td>Upcoming meeting 6 July (agenda deadline June 16th)</td>
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<tr>
<td>Human Research Ethics Committee (HREC) - Humanities, Social Science &amp; Behavioural</td>
<td>Upcoming meeting July 22nd (agenda deadline July 7th)</td>
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<tr>
<td>Animal Ethics Committee</td>
<td>Upcoming meeting 23rd September (agenda deadline 2nd September)</td>
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<tr>
<td>Gene Technology Review Committee</td>
<td>Next meeting September 2nd (agenda deadline August 19th)</td>
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Laura Hawes recently joined the promotions unit of the Research Services Office of RaID. Laura has extensive experience in public relations, media and marketing, particularly in Government and not-for-profit environments. Laura will be on campus Mondays – Wednesdays and can be contacted on 4221 4126 or lhawes@uow.edu.au.
RESEARCH SHOWCASE SERIES 2010
This URC lecture series will provide an opportunity to showcase some of the leading research conducted by the UOW’s, and introduce the researchers involved to the general campus and community.

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
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| Wednesday 11th August | A/Prof. Peter Gibson  
Application of Agency and other Theories to Collaborative Supply Chain Relationships |
| Wednesday 8th September | Prof. Xu-Feng Huang and Prof. Bob Moses                               |
| Wednesday 20th October | Prof. Lesley Head – UOW’s Australian Laureate Fellow                    |

ALL PRESENTATIONS WILL BE HELD AT LUNCHTIME (12.30-1.30PM)
BUILDING 20, LECTURE THEATRE 2
Sandwiches will also be available for those attending.
Audio recordings available onccd site. Schedule may be updated – for more information visit: www.uow.edu.au/research/news/showcase/

RESEARCH STUDENT CENTRE
www.uow.edu.au/research/rsc/

HDR STUDENTS SPRING ENROLMENTS/VARIATIONS
Spring Enrolments for new HDR students will begin shortly. Once enrolled students must ensure that all their enrolment details are correct, for example - full time/part time or correct coursework subjects. Thesis only subjects are THES 924 (full time) or THES 912 (part time). Ongoing HDR students are also asked to check their Spring enrolments. Any variations to enrolments, including leaves of absence must be sent to the Research Student Centre as soon as possible. No enrolment changes or variations can be made after the census date of 31st August 2010. Any changes to enrolment subjects or leave requests require the approval of the Principal Supervisor or Head of Postgraduate Studies. Any enquiries or requests can also be made directly to the Research Student Centre, June Toussis (HDR Enrolment Officer) Building 20, Ground Floor on 42215453 or junet@uow.edu.au.

Research - Shaping Your Future Honours Event
Are you currently undertaking an Honours degree? Are you curious about where to go from here? Could a research degree be the next step for you? The ‘2010 Research - Shaping Your Future Honours’ Lunch will be held on 29 June 2010 giving students the opportunity to: find out about the ground breaking research you can be involved in within your faculty, get faculty specific information, and hear from current higher degree research students about their experiences while undertaking a higher degree research degree.

For more details please contact Mari Dwarte, HDR Events Officer in the Research Student Centre on (02) 4221 5454, or email mdwarte@uow.edu.au

Higher Degree Research (HDR) Student Orientation and Enrolment Day
The Spring Session HDR Student Orientation and Enrolment Day for HDR students will be held on Monday, 19th July 2010. New HDR students and those who did not attend the Autumn Orientation should also attend the Spring session one. If you have any questions about the orientation or your enrolment please contact Mari Dwarte, HDR Events Officer in the Research Student Centre on (02) 4221 5454, mdwarte@uow.edu.au.

The Three Minute Thesis Competition
will be held on 2 September 2010. It will be an exercise in developing academic and research communication skills in our Higher Degree Research Students (PhD and Masters Research). The HDR students will have three minutes to present a compelling oration on their thesis topic and its significance in language appropriate to an intelligent but non-specialist audience. It will not be an exercise in trivialising research, but should engage the audience without reducing research to entertainment value alone. The UOW winner will receive $1,000 and the opportunity to compete in the National/trans-Tasman competition to be held in Queensland on 21 September 2010.

Presenter registrations close on 30th June, 2010.
Spectator registrations close on 9th August, 2010
For further information and how to register please go to http://www.uow.edu.au/research/rsc/news/UOW074626.html
Contact person Mari Dwarte - mdwarte@uow.edu.au.
TENDER NEWS

It has been a busy start to 2010 for tenders with 12 submissions resulting in 4 wins, 3 losses and 5 still to be decided. Compared to 2009 with a total of 19 submissions for 10 wins and 9 losses, 2010 is shaping up to be the best year for tendering in terms of both the number submitted and the value - currently at close to $12M.

If you need any information on tendering opportunities, potential Industry partners or the process of tendering please contact Brett Weeden on x3913 or bweedenuow.edu.au

COMMERCIAL RESEARCH PROJECT UPDATE

Project Title: Sustainability of the use of synchronous technologies to address literacy needs for remote indigenous communities

Project Team: Dr Stuart Woodcock and Ms Michelle Eady

The abovementioned commercial research project is being conducted by researchers from the Faculty of Education and is funded by the not-for-profit Canadian organisation, Sioux Hudson Literacy Council. This capacity building project aims to support the literacy levels of Indigenous adults in remote and isolated communities. The research team will examine how the unique needs of Indigenous learners can be incorporated into an on-line learning community, and attempt to address the apparent inequality in access to learning and in learning outcomes currently experienced by remote indigenous communities.

It is hoped that this study will make a significant contribution to the theoretical framework which supports the use of synchronous technologies for literacy development and communication, particularly for remote indigenous communities. If you are interested in research into Indigenous issues, you may like to join the recently formed C.I.R.C.L.E Indigenous Research Network. Please contact Debbie Langton (dlangton@uow.edu.au) to be added to the C.I.R.C.L.E email list.

Charging GST on International Commercial Research Contracts

GST is a tax of 10% imposed under A New Tax System (Goods and Services Tax) Act 1999 (Cth) ("the Act") that is added into the price for most goods, services and other items sold or consumed in Australia including most imported goods. Organisations registered for GST include the 10% GST in the price of supplies to their customers and claim credits for the GST they pay on the goods and services they purchase. Generally speaking, goods and services exported from

COMMERCIAL RESEARCH UNIT

www.uow.edu.au/research/commercial

A MESSAGE FROM DR TROY COYLE, DIRECTOR OF COMMERCIAL RESEARCH:

2010 is shaping up to be a significant year for commercial research activity at UOW. The full year financial target for contract value has been met and we are currently at 110% of target already - building upon the university’s significant increase in commercial research activity in 2009. Over the last three years, UOW has managed to grow its commercial research activity via increases in average contract value and the achievement of at least one contract exceeding $5 million value per annum. This is due to the research reputation of UOW’s academics, the increase in tendering capability, relevance of our research and ease of engagement.

This year, we can see that the Faculty of Commerce is starting to engage in commercial research activity more and that several projects (e.g. the one profiled in this newsletter involving Michelle Eady) have significant community impacts. It is important to remember that although the term “commercial research” is used to describe research activities funded by third parties, that indeed many of these projects are undertaken for government and not-for-profits with outcomes that benefit the community more broadly.

Commercial research is important to UOW because it has the following benefits: 1) traditional research outputs (publications, student projects, patents); 2) increases total research income and supports fully costed research; 3) builds research capacity through direct funding for research; and 4) develops linkages with key partners and the broader community.

A key emphasis for CRU this year is to reignite the cross-disciplinary research networks. The CIRCLE (Collaborations of Indigenous Reconnections, Community, Law/Lore and Education) network has been reinvigorated, with Mr Jade Kennedy (Commerce), Ms Michelle Eady (Education) and Mr Alessandro Pelizzon (Law) jointly convening this network.

Another key strategic direction for CRU this year is to provide more assistance to researchers in order to identify appropriate research partners. If you are a UOW researcher requiring assistance to identify suitable commercial research partners, please contact us.
Australia are GST free as international clients are not registered for GST. Sections 38-185 of the Act contain provisions that relate specifically to charging GST on exported goods and services. In summary, exported goods are GST-free if they are exported from Australia either before, or within, 60 days of the first of the following two events:

(a) the supplier receives any payment for the goods; or
(b) the supplier issues an invoice for the goods.

In the case of goods paid for by installments the payment referred to in (a) is any part of the final installment and the invoice referred to is the invoice for the final installment.

The definition of a good is ‘any tangible personal property’. A supply of ‘things’ other than goods includes anything that can be supplied or imported. As such the items covered by sections 38-185 are very broad and would include things commonly supplied by UOW under commercial research contracts (e.g. equipment and reports). To ensure an international supply is GST free it is important that possession and enjoyment of the goods is outside Australia and that an invoice is raised within 60 days of sending the goods to the client. The Commercial Research Unit is aware of the provisions of the Act and ensures the terms of international commercial research contracts comply with the Act. If you require any further information in relation to costing projects for overseas clients, please contact Debbie Langton (dlangton@uow.edu.au).

$1M BOOST WILL ACCELERATE DISEASE PLATFORM COMMERCIALISATION

A consortium that includes the UOW has received a $1 million funding boost to further develop an ultrasensitive diagnostics platform capable of detecting diseases at an early stage. The National and International Research Alliances Program (NIRAP) funding was announced at the world’s largest biotechnology convention, BIO2010, held recently in Chicago. Led by James Cook University, the funding will allow disease specialists in Australia, Washington and Singapore in developing early detection technology for life-threatening diseases such as Dengue, malaria, melioidosis and Parkinson’s disease. UOW’s team leader, Professor Nick Dixon (School of Chemistry), said the technology was based on a novel variant of a binding interaction that occurs when certain bacteria replicate.

“We have modified this molecular trap and shown how we can use it to improve the detection of biomarkers – molecules which are found in the body from the very early stages of disease development.”

“Biomarkers are often present in very low concentrations, making their detection challenging given that many existing diagnostic technologies available to perform the task are not very sensitive,” he said.

The research project will bring together world class leaders in Parkinson’s disease (Dr Zhang - University of Washington), malaria (Dr Maier - LaTrobe University), Dengue (Dr Vasudevan - Duke-NUS Graduate Medical School in Singapore), melioidosis (Dr Ketheesan – James Cook University), peripheral arterial disease (Professor Golledge – James Cook University), immunoassay development (Dr Schaeffer – James Cook University) and biological chemistry (Professor Dixon - UOW) with a common focus on disease diagnosis.

LIBRARY NEWS
www.library.uow.edu.au

On Wednesday 19 May UOW launched a new ProQuest funding opportunities database, Community of Science (COS). The launch was well attended by UOW researchers and administrative staff, with an introductory presentation and demonstration of the system by ProQuest representative Matt McCoy.

Access to COS Funding Opportunities and Alerts is now available to all UOW staff via the following web site: http://www.uow.edu.au/research/ro/UOW077796.html.

COS provides easy access to a vast array of funding opportunities from all disciplines and allows users to customise their profile to receive alerts about schemes and funding agencies that are of interest to them. Early Career Researchers are particularly encouraged to register. Additional information about COS will be posted in future newsletters so watch this space! Queries should be directed to Julie Matarczyc, RSO (juliema@uow.edu.au).
NEW RESEARCH STAFF

**Garry Bowditch** has recently been appointed as Director of the SMART Infrastructure Facility. The SMART Infrastructure Facility, which is under construction at UOW, will be a world-class research and training centre designed to address Australia’s future infrastructure needs.

Mr. Bowditch grew up in Wollongong and is a UOW graduate having completed a commerce degree in 1985. He then worked for the Commonwealth Public Service and rose to the level of Director in Commonwealth Treasury. Mr. Bowditch joined the Department of Foreign Affairs and Trade in 1994 as Director, International Economics and Finance. He made the move into industry in 2000 with senior executive roles at TAB Ltd and Tennix Solutions. In 2005 he was appointed Founding Director of Infrastructure Partnerships Australia, a role that provided him a special opportunity to work with industry and government, particularly in regard to building public/private partnerships across a range of infrastructure areas.

Mr. Bowditch is an appointed member of the Australia Pacific Economic Cooperation Committee to advise on regional trade and investment initiatives in APEC. He also works closely with APEC on initiatives to strengthen local capital markets to meet Asia’s long-term infrastructure needs. Mr. Bowditch established vmax Consulting in 2008, a boutique consultancy firm specialising in international public/private/partnerships, particularly in the Asian market.

**Stephen Beirne** joined the Intelligent Polymer Research Institute (IPRI) at the start of May this year, as a research fellow to work on the development of the groups fabrication and rapid prototyping facilities for the new Process & Devices Building. He has a degree in Mechatronic Engineering in 2003 from Dublin City University, Ireland. In 2008, he received his PhD as a member of the Adaptive Sensors Group (ASG), Dublin City University, under the supervision of Prof. Dermot Diamond and Dr. Brian Corcoran. His research there included development of a low-cost colorimetric wireless chemical sensor network and development of autonomous field-deployable greenhouse gas analyser and reporting systems.

**Visiting Research Fellow Tracey Clarke** is researching spectroscopy and photophysics of solar cells with the Intelligent Polymer Research Institute (IPRI). She was awarded her PhD at University of Otago, New Zealand and then spent three years at Imperial College, London. She has been here since the beginning of May this year.

After stints with several Australian and international universities, **Professor Vera Mackie** has recently joined the Faculty of Arts to undertake research for her Australian Research Council (ARC) Future Fellowship project.

Vera’s first academic interest was in linguistics and that led to jobs teaching Japanese language at universities. Her interests gradually shifted to gender studies, leading to a PhD and her first book on Creating Socialist Women in Japan. Vera’s second book was a history of Feminism in Modern Japan from the nineteenth century to the present.

Vera’s new project is a development of her interests in feminism, transnational political activism and globalisation. The project focuses on human rights in selected countries in the Asia-Pacific region from 1975 to the present. She will be working on Japan, Australia and the Philippines, and will have some postgraduates working on other countries in the region.

**Radical Sydney by Terry Irving and Rowan Cahill**

Radical Sydney, a new book by A/Prof. Terry Irving and Rowan Cahill, was launched at the UniShop at midday on Tuesday 15 June by Arthur Rorris, Secretary of the South Coast Labour Council. Terry Irving is a Visiting Professorial Fellow and Rowan Cahill is a tutor/PhD candidate in the School of History and Politics, here in the Faculty of Arts. The authors met at Sydney University during the 1960s and have variously worked on historical projects since.

Published by UNSW Press, Radical Sydney is a series of snapshots of people, episodes, and places capturing aspects of Sydney’s dissident past. The authors restore political clamour and disturbance to the history of the city and enable the voices of Aboriginal fighters, convict poets, feminist journalists, democratic agitators, bohemian dreamers and revolutionaries to be heard. The text is profusely illustrated.

http://radicalsydney.blogspot.com/

German publishing company, Lambert Academic Publisher has recently published a thesis by **Dr Khairul Chowdhury**, from the UOW School of English Literatures, Philosophy and Languages. The title of the thesis is Empowering and disempowering Indigene: Staging Australian Aboriginal experience. The book is now available in many online book shops, including those below:

The American Amazon
The UK Amazon
The German Libri

**Adam J Munn**, from the UOW School of Biological Sciences, recently had an article published in Natur Wissenschaften – The Science of Nature. The article looks at the extreme weather events forecasted to take place in the future, and the effects they will have on food supplies for many animals. Numerous small mammals and birds combat food shortages using torpor, a controlled reduction in metabolic rate and body temperature that helps lower their daily energy requirements. Data suggests that simple food restriction may not be sufficient for evaluating the efficacy of torpor as a strategy for managing unpredictable climates.
The University of Wollongong’s annual Trailblazer innovation competition was developed to reward innovative ideas and early-stage research that have the potential to benefit the community, industry or business as well as generate a financial return. This year is our sixth Trailblazer competition.

Winners for 2010 have now been announced.

Congratulations to Katarina Mikac and April Ash.

For details of Runners Up and Highly Commended please go to: http://www.uow.edu.au/research/trailblazer

In April, the Centre for Human and Social Capital Research (CHSCR) hosted a weeklong visit by Professor Joshua Angrist (MIT), a world leading economist and econometrician. During his visit, Prof Angrist presented the Annual Economic & Social Policy public lecture, titled ‘Accountability and Flexibility in Public Schools’.

He was also the keynote speaker at the ‘Frontiers in Human Capital Research’ workshop (featured in our last issue). Prof Angrist also provided valuable advice to members of the School of Economics on their own research, particularly for Peter Siminski & Simon Ville, whose ARC-funded research on the causal effects of Vietnam Era conscription is closely related to Prof Angrist’s seminal works in this field. For further information on both events, the resulting media interest and more information about the CHSCR, see: http://www.uow.edu.au/ecommerce/econ/chscr/index.html

UOW Researchers and CSIRO Combat Longwall Dust

Production from longwall mining in Australia has increased remarkably over the last several years. This increased productivity has meant that more dust is being produced and controlling inhalable dust continues to present the greatest ongoing challenge for coal mine operators. A recent report by the director of mine safety operations branch of Industry & Investment NSW (Rob Regan) has found that there is an increasing level of dust being ingested by coal miners in New South Wales, potentially leading to long-term health problems. Studies by NIOSH in the USA have shown that prolonged exposure to excessive levels of airborne respirable coal dust can lead to coal workers’ pneumoconiosis (CWP), progressive massive fibrosis (PMF), and chronic obstructive pulmonary disease (COPD). These diseases are irreversible and can be debilitating, progressive, and potentially fatal.

With the support of the Australian coal industry’s research program (ACARP), University researchers are teaming up with the CSIRO and Sydney based company Tecpro Australia to develop a new dust suppression system to combat respirable dusts on Australian longwall mines. Led by Dr Ting Ren, (Faculty of Engineering), the team is developing a new venturi system based on ultra-fine water mist technology which will have the combined benefits of the ultra fine droplets produced by the ultrasonic atomiser and the advantages of a venturi. This system will be developed as a stand-alone unit and can be easily attached to the longwall supports with minimum interaction with other longwall equipment.

It is expected the results from this project will lead to significant reduction of dust contamination from the advancement of MG chocks and BSL. This will greatly improve the working conditions and reduce occupational health and safety hazards on the face. This project will in particular benefit medium to thick seam longwalls on which dust control appears to be more problematic.

PhD Student Wins Coveted Geomechanics Award

Ali Ghandeharioon, a PhD student in civil engineering, has been awarded the coveted 2010 NSW Research Students’ Award of the Australian Geomechanics Society (AGS). The award is under the auspices of the young professional program promoted by the Institution of Engineers, Australia. The official announcement will be made soon at a meeting of the AGS.

Ali’s PhD thesis is focused on soft soil stabilisation techniques with particular reference to the experimental and computer-based simulation of mandrel-driven prefabricated vertical drains (PVDs). His research is conducted under the supervision of Professor Buddhima Indraratna and Dr Cholachat Rujikiatkamjorn as part of a project sponsored by the Cooperative Research Centre (CRC) for Railway Innovation. Ali’s studies investigated the role of stresses in soil and pore water pressures generated upon the mandrel penetration during the process of drain installation.

The Centre for Digital Ecosystems, a research centre located within the School of Information Systems and Technology, Faculty of Informatics recently collaborated with the Australian Museum in developing the Virtual Museum of the Pacific (see http://epoc.cs.uow.edu.au/vmp) - a social media and semantic Web application that allows the exploration of Pacific objects from the Australian Museum’s collection. Based on the success of the Virtual Museum of the Pacific, the Centre for Digital Ecosystems have turned towards the University of Wollongong’s Art Collection and developed the Art Collection Ecosystem (http://epoc.cs.uow.edu.au/ace), which was highly commended at the launch of the Digital Natives art exhibition held in the Library last October. They have since moved further and developed CollectionWeb, an open-source software framework that allows enthusiasts and curators to create organically structured collections of content (photos, art, coins, etc.) which incorporate social media and social tagging capabilities.
Congratulations to **Prof. Roger Lewis**, from the Faculty of Engineering, who has recently been appointed to the “Materials - Properties and Engineering Specialist Committee” of the Australian Institute of Nuclear Science and Engineering.

**Simon Sadler**, a Dietitian with the Albion St Clinic and part time PhD student, has been awarded an Endeavour Research Fellowship to continue his work on nutrition education in Thailand, the basis of his thesis.

**Sze Yen Tan** has been offered a post doctoral position in the prestigious food and nutrition laboratory of Professor Rick Mattes at Purdue University in the USA.

**Melinda Waterman**, a PhD student from Biological Sciences, has been awarded an AINSE Postgraduate Research Award to commence on 1st July 2010. This will partly fund radiocarbon dating of Antarctic moss species for the Araceae family. Typhonium eliosorum, the Illawarra Stink Lily, is a rare species and one of a few native thermogenic species. We are planning to sequence the protein that is involved in thermogenesis in this native and a South American species. Sequencing the protein can reveal information about the regulation of the protein and shed light on how these amazing plants heat.”

The lab she will be visiting in Muroka Japan, led by Professor Kikukatsu Ito, has produced a large amount of research in the field of thermogenic plants and the skills that I will gain working in a molecular biology lab will be invaluable. Nicole is currently employed at UTS in Sydney in the Plant Functional Biology and Climate Change Cluster.

**Liza Smith** a third year undergraduate who was awarded a summer scholarship from the American Society of Plant Biologists and is going to their annual meeting in Canada in July to present her findings.

Congratulations to **Karen Walton** who won the coveted Woodhill prize for outstanding PhD research in Dietetics. The award was announced at the Dietitians Association of Australia NSW Branch AGM on Friday 26 February. Karen was also the recipient of a prestigious OCTAL award for teaching.

Members of The Smart Foods Clinical Team have had abstracts accepted at the National DAA conference which was held in Melbourne at the end of May. The abstracts were developed from the NHMRC SMART clinical trial: **Beck Thorne**, **Kiefer Zhang**, **Elizabeth Neale** (and Liz’s major project student **Amanda**), **Deb Nolan**, **Jane O’Shea**, **Brent Venning**, **Anne McMahon**.

**Yasmine Probst** had her work accepted on grains for a poster presentation and Karen Walton presented a plenary on foodservice and aged care. **Linda Tapsell** was the keynote speaker on Functional Foods, so a big presence this year.

**Linda Tapsell** has also been appointed to the Expert Working Group (EWG) on Australia & Food Security in a Changing World of the Prime Minister’s Science, Engineering and Innovation Council. The appointment has come through the Chief Scientist, Professor Penny Sackett. The terms of reference have been provided in confidence and the work is to be completed by October this year. The expertise she is providing to the group is in nutrition and functional foods. Her current NHMRC appointment on another Working Group overseeing the development of the Australian Dietary Guidelines has been extended and is consistent with the EWG area. Both appointments are clearly relevant to the Strategic Research Initiative in Smart Foods and Public Health.

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**Tim Wray**, a student with the Centre for Digital Ecosystems, recently presented the CollectionWeb concept at the 4th IEEE International Conference on Digital Ecosystems and Technologies (DEST2010) which was held in April at Dubai. He co-authored the paper with Prof. Peter Eklund and Peter Goodall and it was titled ‘Virtual Museums and Web-based Digital Ecosystems’. Their work has received wonderful support within the digital ecosystems community and was given the best paper award for that conference.

Furthermore, the successful collaboration between the University of Wollongong and the Australian Museum in developing the Virtual Museum of the Pacifics has lead to the appointment of **Professor Amanda Lawson** to the Australian Museum Trust.

**Nicole Grant**, a recently completed PhD student from UOW, has been awarded an Endeavour Research Fellowship to work in Japan for up to 6 months ($19,857). The research in Japan will complement her PhD studies on thermogenic plants (plants that produce heat).

“Recently, we have identified some native Australian thermogenic species, from the Araceae family. Typhonium eliosorum, the Illawarra Stink Lily, is a rare species and one of a few native thermogenic species. We are planning to sequence the protein that is involved in thermogenesis in this native and a South American species. Sequencing the protein can reveal information about the regulation of the protein and shed light on how these amazing plants heat.”

Have you been travelling around Australia or internationally lately as part of your research? Send us your Travel Tale and snaps for the next ‘Travel Tale’ section – and inspire others to travel as part of their research!!!

**Please send items to vwallace@uow.edu.au or lhawes@uow.edu.au**
Dr Adam Lucas from the Science and Technology Studies Program gave a seminar presentation on renewable energy at NSW Parliament on Tuesday 18 May. The seminar, which was jointly presented with Matthew Wright, Executive Director of Beyond Zero Emissions in Melbourne, discussed the current state of renewable energy capacity in the European Union, China and the United States, current and future projected costs of different renewable energy technologies, baseload solar thermal technology and the huge potential for generating jobs from the renewable energy sector in New South Wales. As NSW Parliamentarians are not renowned for their support for renewable energy technology, this seminar was intended to help inform them of the potential to generate significant economic returns to NSW’s economy in a carbon-constrained world.

CAPSTRANS Symposium: Space, Place and Emotion in Modern Japan

Life on the vibrant streets of modern Japan was the theme of a symposium hosted by CAPSTRANS and the Faculty of Arts at the University of Wollongong on Friday 9 April.

International speakers from Oita University in Japan and the University of Oregon in the US joined speakers from UoW, the University of Western Australia and the University of Melbourne to give different perspectives on Space, Place and Emotion in Modern Japan. Visitors from Adelaide, Canberra and Sydney joined locals to hear the Symposium.

The speakers, who had also participated in the Third International Conference on ‘Emotional Geographies’ at the University of South Australia, were able to draw on recent work in cultural studies, history and cultural geography in order to consider emotional ties to particular places.

Vera Mackie and Peter Eckersall presented papers on the street demonstrations and performances that were a feature of 1960s and 1970s alternative cultures. Romit Dasgupta and Alisa Freedman focused on the meanings of the streets for the homeless and the unemployed in contemporary Japan. Katsuhiko Suganuma discussed official and unofficial attitudes to ‘Nichôme’, Tokyo’s gay district and the site of flourishing queer subcultures. Rowena Ward presented a paper from her current research project on Japanese people who ‘returned’ to Japan from the former colonies at the end of the Second World War, and the complex emotions attached to the notion of ‘home’ for such people.

Interdisciplinary Educational Research Institute

Congratulations to IERI PhD students Fiona McLean (left photo) and Jennifer Pendleton (right photo) who were recently being awarded APA scholarships. Their thesis titles are:

Fiona McLean: Bringing it to the teachers: Meeting the needs of teachers in isolated schools of students with Oppositional Defiant Disorder and Jennifer Pendleton: Non-word Repetition Testing Performance and the Exposure Necessary for Successful Word Learning in Children with Word Learning Difficulties

Heather Buchan (PhD student) was recently awarded a $700 scholarship to attend WinterFest, a series of short courses held by the ARC Research Network Human Communication Science (HCSNet) to be held in Bowral in June.

Dr Lisa Kervin was awarded the Elva Knight Grant from the International Research Association for her project entitled “Children’s reading comprehension of online advertising”. This project has been designed to extend upon a novel aspect that emerged from the current ARC Lisa has with Professor Sandra Jones from the Centre for Health Initiatives.
THE PRIME MINISTER’S AUSTRALIA ASIA AWARDS 2011

A unique opportunity to establish your international career in Asia

The Prime Minister’s Australia Asia Awards are a unique opportunity to undertake international study and research related to an Australian degree, as well as gain international work experience through an internship, building professional networks in Asia.

Twenty awards are available for research students to undertake study, research and an internship in Asia.

Postgraduate Award Benefits

Up to AUD$63,500 towards travel and establishment allowances, tuition and internship contributions, and travel insurance

Below are comments about the benefits of these Awards from successful Prime Minister’s Award Holders from the 2010 round:

“The opportunity to immerse myself in the culture of my host country and university to a greater extent than would ever be possible without the support of this Award – even if the same amount of funding were available”

“An incredible chance to further my study in an absolute unique way, but most importantly as a gateway to many more incredible opportunities in the future”

“The opportunity to be part of a dynamic group of inspiring individuals as well as the personal growth of study and work abroad”

“Building a broad international network and sharing knowledge with people from around the world”

Applications for Australian students close on 10th June 2010. For further information and application forms go to: http://www.uow.edu.au/research/rsc/prospective/UOW076552.html

or contact mdwarte@uow.edu.au or phone the Research Student Centre on Ext 5454.

ENDEAVOUR AWARDS 2011

The Endeavour Awards is the Australian Government’s internationally competitive, merit-based scholarship program providing opportunities for citizens of the Asia-Pacific, Middle East, Europe and Americas to undertake study, research and professional development in Australia. Awards are also available for Australians to undertake study, research and professional development abroad.

The Endeavour Awards aim to:

• Develop on-going educational, research and professional linkages between individuals, organisations and countries;

• Provide opportunities for high achieving individuals from Australia and overseas to increase their skills and enhance their global awareness;

• Contribute to Australia’s position as a high quality education and training provider, and a leader in research and innovation; and

• Increase the productivity of Australians through an international study, research or professional development experience.

Applications close on 31 July 2010. For further information and how to apply, please go to: http://www.endeavour.deewr.gov.au/ or contact Mari Dwarte at mdwarte@uow.edu.au or phone the Research Student Centre on Ext 5454.

NEWS from iCampus

Visiting Research Fellow from Japan’s Basic Research Lab
Hiroshi Nakashima

Hiroshi is a Visiting Research Fellow from Japan’s Nippon Telegraph & Telephone Corporation (NTT) which is similar to Telstra in Australia. He is part of NTT’s Basic Research Lab team. NTT has several Research & Development centres investigating various fields of science and technology, from IT services and optical devices to basic research such as quantum physics, nanotechnology and biotechnology.

Hiroshi will be building a collaborative project with NTT and IPRI in the area of bio active interface, working on created novel nano/micro patterned structures for control of cellular adhesion or communications using dip pen nanolithography (DPN). Since DPN technique realises cheap, massive and controlled patterning of a variety of biomolecules onto many different substrates, the developed biointerfaces will lead to fundamental techniques for unique nano/micro-size bio devices.

Read more about NTT Basic Research Lab

Project team aims to develop world’s first successful biodegradable stent

A research team, led by the University of Wollongong, has embarked on a three-year project to develop the world’s first successful biodegradable stent which will bring significant improvements in vascular therapeutic treatments.

The advanced stent structure project is complementary to the fundamental research activities currently under way in the ARC funded Centre of Excellence for Electromaterials Science (ACES) – providing a potential outcome of global significance.

Clinical trials using the biodegradable stents could be undertaken within four to five years.

Metal stents are now used in a range of medical procedures including stents placed in coronary arteries to help keep arteries open allowing normal blood flow.

The ACES/Intelligent Polymer Research Institute team, led by Professor Gordon Wallace, has received $470,000 as an Australian Research Council (ARC) Linkage Project to develop a polymer-
A Senior Research Fellow with Boston Scientific Europe, Dr Jan Weber, was in Wollongong last week (late May) to help formally start the project. He has had an industrial career of more than 20 years in the medical device industry, specialising in technology scouting and development within the cardio vascular area. The research will result in the development of a generic technology potentially applicable in a range of implantable and self-powered bionic devices with Boston Scientific well placed to commercialise any opportunities arising for stents and other vascular implants.

**Attention UOW Researchers:**
The University is updating our database of experts. We want our researchers and academics to be quoted in news outlets around the world! Our current database is used regularly by journalists and media to identify people to give comment on media issues, and can be found at: [http://www.skills.itc.com.au/index.asp](http://www.skills.itc.com.au/index.asp)

The media seeks comments about a huge range of topics so if you have expertise or specific knowledge in a particular area, please visit: [http://media.uow.edu.au/expertise/index.html](http://media.uow.edu.au/expertise/index.html) and fill in the form.

**WORKSHOPS & CONFERENCES**

**16TH INTERNATIONAL CONFERENCE ON SOLID STATE DOSIMETRY**
19th - 24th September 2010
Sofitel Sydney Wentworth 61 - 101 Phillip Street, Sydney NSW Australia

This conference is intended to provide a forum for the presentation and discussion of the latest research on radiation dosimetry based on solid state processes and methods. Presentations will cover basic physics, methodological issues, and the application of these techniques in a wide range of areas. The conference objective is to use the achievements of material science and technology for solving the environmental and health protection problems, for creation of new devices needed in medical applications, environmental, space and aviation monitoring and luminescence dating. A special focus of SSD 16 will be innovative medical dosimetry and its clinical applications. Satellite mini-Micro-Nano Dosimetry (MMD 2010) A one day workshop will be a feature of SSD 16. For more information and to register please visit [http://www.uow.edu.au/conferences/SSD16/index.html](http://www.uow.edu.au/conferences/SSD16/index.html)

**CENTRE FOR HUMAN AND SOCIAL CAPITAL RESEARCH WELLBEING CONFERENCE**
7th July 2010
The Centre for Human and Social Capital Research at the UOW is hosting a conference on Wellbeing on the 7th July, featuring a range of presenters, at the UOW Building 38.G01.

Participants are asked to [RSVP by Thursday, 24 June 2010](mailto:RSVP by Thursday, 24 June 2010) to: Patricia Hamlet. E: phamlet@uow.edu.au | Ph: (02) 4221 3666.

### Anneka Liddle

Anneka Liddle joined the Intelligent Polymer Research Institute (IPRI) in the role of Communications Officer mid-April. She has had 10 years in Marketing and Communications for companies such as Kimberly-Clark Australia and Hewlett-Packard Financial Services. Most recently she was Marketing Manager for Skydive the Beach Sydney, based in Wollongong.

**SYDNEY BUSINESS SCHOOL HIGHER DEGREE RESEARCH STUDENT CONFERENCE 2010**
Following the success of last year’s HDR Student Conference, Sydney Business School is again hosting the Sydney Business School Higher Degree Research Student Conference from 30 September to 2 October 2010.

The conference will showcase research on a broad range of topics including Supply Chain, Organisational Behaviour, Marketing, Public Service and Education. Highlights of the conference include the interactive discussions between students, a panel of academics and the audience, and the informal networking during breaks.

The conference also brings together leading researchers to present research in their area of expertise and to share their experience of the research journey. Workshops sessions will be held on topics requested by students such as “What are examiners looking for?”. Students and staff from across UOW are welcome to attend any of the sessions, which will be held at the new Sydney Business School building at the Innovation Campus, Wollongong. The Sydney Business School research team looks forward to welcoming you to the Conference. For a full program, visit our website [www.uow.edu.au/sbs](http://www.uow.edu.au/sbs) and follow the link to the SBS HDR Student Conference 2010. For further information, please contact Asslam@uow.edu.au or telephone 02 4221 1292.
Did you know that Professional & Organisational Development Services (PODS) offers a wide range of professional development courses for researchers?

Upcoming programs remaining for 2010

• Creating the 7 Secrets of Successful HDR Students (for Supervisors)
• Developing Your Research Grant Writing Skills
• Research Grant Management Workshops
• Finance Management
• Where To Publish
• Reporting Outcomes
• Networking and Initiating Research Partnerships
• Managing Partnerships
• The Craft of HDR Supervision (formally The Supervising Higher Degree Research Students Series)
• Research Information Systems Training
• The Balanced Researcher
• Tips for tendering

Organising a conference or workshop? Why not provide your delegates with copies of the University’s “Profiling our Research Partners”. This publication is a snapshot of many of our national and international research collaborations and showcases some of the very interesting projects. We have many copies available – just e-mail us (vwallace@uow.edu.au) with your request.

To ensure inclusion of your research news, event or service in the next issue of RaID (due for publication late July), please e-mail details to lhawes@uow.edu.au or vwallace@uow.edu.au by 9th July 2010.