Adelaidean

NEWS FROM THE UNIVERSITY OF ADELAIDE

September 2008 | Volume 17 | Number 7



Staff rewarded for teaching excellence



Harvard scholar offers vision of peace in Middle East



Qantas signs agreement for engineering alliance



Irish magic and science combine in new portrait



Philosophy

A book that urges those better off to sacrifice some of their income for the benefit of those in need has earned a University of Adelaide philosopher the 2008 Eureka Prize for Ethics Research.

Garrett Cullity, Hughes Professor of Philosophy at the University of Adelaide, was awarded the \$10,000 prize for his book, *The Moral Demands of Affluence*.

In keeping with the message behind the book, Professor Cullity will donate his \$10,000 prize money to aid agencies.

Announced at an awards ceremony in Sydney last month,

the prize was part of the Australian Museum Eureka Prizes, regarded as the "Oscars of Australian science". Sponsored by the Australian Catholic University, the Eureka Prize for Ethics Research recognises excellence and originality in ethics that is directly applicable to our lives.

The Moral Demands of Affluence examines what has been called "the great moral challenge of our time" – whether and to what extent well-to-do individuals are obliged to help the vast numbers of poor people around the world. The book arrives at a novel conclusion that is both demanding and moderate.

In his book, Professor Cullity argues that a life well lived should be the goal of every human, rich and poor. He says that it is not morally wrong to live a life of rich personal fulfilment. Nevertheless, helping others is also part of being human, and those who have affluent lives should acknowledge this and find a way to help others within their own financial means.

In other words: "It's okay to have a life – and to help someone else to have one too".

"We shouldn't be apologetic about leading good lives of our own. Since the point of helping other people is to enable them to have a fulfilling life, it can't be wrong for you to have a fulfilling life of your own," Professor Cullity said.

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Adelaidean

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Editor:

David Ellis

Design and Layout:

Writers: Candy Gibson Robyn Mills

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Editorial/Advertising enquiries:

Tel: +61 8 8303 5414 Fax: +61 8 8303 4829 Email: adelaidean@adelaide.edu.au

Mailing address:

Adelaidean Marketing & Strategic Communications, University of Adelaide SA 5005 Australia

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From the Vice-Chancellor

The world has witnessed yet another Olympic Games, bringing together nations and people from across the globe. While these nations are competing at the highest level, they also share in a spirit of peace and a collective sense of humanity.

Geoffrey Blainey's famous "tyranny of distance" has been all but overthrown through advances in telecommunications, and it is now possible for the experience of the Olympics to be shared across most of the world. At the same time the Games themselves, while retaining many of the original sporting events, nevertheless continue to change and adapt to reflect a changing world.

In many ways, universities are like this. Australian universities are no longer competing at a local or even a national level – we are active on the international stage. We compete worldwide for students and for research funding. When you consider that there are more than 20,000 universities in the world, that is a great many "teams" to be competing against.

In spite of the enormous numbers, universities also have shared experiences – we collaborate at an institutional level, and many of our most valuable partnerships have been at the level of individual researchers and research teams. Could you imagine a relay team with the Australian and US swim teams actively working together to win the same medal? It makes sense for universities to join together to solve research problems, to create educational opportunities and to share cultures.

At the University of Adelaide, we have more than 160 official agreements in place with institutions outside Australia, in more than 30 countries. The number of those agreements increases every year, and they provide unique opportunities to explore mutual interests in education, research and scholarship, provide exchanges for students and staff, collaboration on research projects and sharing of academic materials, publications and information, course delivery (including short courses)

and joint awards, credit transfer for students, and many other benefits.

As our world becomes smaller through technology, and as competition increases, we need to adapt and change to keep pace. Universities that fail to do this are likely to be left behind in the race for students and resources.

While many of our linkages have been pitched at the Asia-Pacific region, the US and Europe/UK, one area of emerging growth in international collaboration is in Latin America.

At the suggestion of the Brazilian Ambassador, the University of Adelaide was pleased to organise and host a special seminar last month that enabled South Australia and Latin American countries to explore opportunities for closer ties. Opened by Premier Mike Rann, the seminar involved representatives from Chile, Argentina, Brazil, Mexico and Venezuela.

There are many opportunities for us to collaborate, including in the areas of mining and engineering; energy, environment and water management; and agriculture, food and wine. The seminar was a huge success, and we look forward to more opportunities like this.

While the Olympics may be over for another four years, our work to build international bridges continues. Beijing 2008 showed the world that, technologically at least, the playing field is all but level, and that is as much true for universities as it is for sport and many other transnational activities. By London 2012, the competition for students and resources will be even stronger than it is today – but we will also be stronger, in part due to the many "teams" of which we are a part.

JAMES A. McWHA Vice-Chancellor and President

Art & Heritage Collections

The Waite Arboretum is one of the University's treasures. Located on the Waite Campus, the Arboretum was established in 1928 on land given to the University of Adelaide by Peter Waite.

The Arboretum occupies 30 hectares and contains about 2200 specimens representing more than 800 species in 200 genera, including the *Dracaena Draco*, or Dragon's Blood Tree.

The Dragon's Blood Tree, named so for its dark red resinous sap, was chosen as the Arboretum's logo because its distinctive flat-topped appearance and regularly arranged swollen branches made it instantly recognisable.

The species comes from the Cape Verde and Canary Islands and a new subspecies has recently been discovered in Morocco. The tree may attain a great age. One specimen on Tenerife was famous for centuries and long believed to be the oldest tree in the world.

Anna Rivett, Art & Heritage Collections Officer



Cultural Conversation

Waite Arboretum: A Botanical Treasure with Dr Jennifer Gardner, Director of the Waite Arboretum.

Join Dr Gardner for a talk about the Arboretum and a tour of the gardens. 1.15pm-2.15pm Wednesday 17 September, Urrbrae House, Waite Campus.



Mysteries of the door a winner for filmmaker

Open Day

A young animator has emerged as this year's winner of the University of Adelaide's Festival of Short Films competition.

Held as part of Open Day in August, the free competition gives young filmmakers the chance to win prizes, as well as giving their work exposure to the public and industry representatives.

The winner was 19-year-old Alex Delderfield, whose four-minute short film, Seek, took direct inspiration from this year's theme, "Behind the Door".

Seek is a digital animation about a strange character who stumbles across a mysterious door in the middle of nowhere. He soon discovers that getting through the door is harder than it seems.

Alex, a first-year Mechanical Engineering student at the University of Adelaide, produced the short film under intense time pressure (less than 20 days) during his holidays. He used a free 3D animation program called Blender to create his film.

As the winner, Alex has received a Sony Handycam valued at \$1400, the use of an editing suite from digital media company Fat City valued at \$1000, and 12 months' free membership to the Media Resource Centre (MRC).

Second place went to 21-yearold Lauren Lovett for her film Let's Hold Hands, a music film clip which used stop motion to illustrate a relationship kept behind closed doors. Lauren is a Bachelor of Arts graduate and is currently studying Honours in English (Creative Writing) at the University of Adelaide. Her prize was an iPod classic.

Third prize was awarded to 10-year-old Scott Haycraft for his short film. Knock Knock, which features a man who becomes frustrated by constant interruptions at the door. Scott, a Year 5 student at Hahndorf Primary School, used a digital still camera to create the stop motion animation film. His prize was an iPod nano.

All of the finalists' films are streamed online at the AdelaideNow website: www.adelaidenow.com.au and the University of Adelaide website: www.adelaide.edu.au/ openday/festival



Above: Alex Delderfield A scene from Alex's award-winning animated film Seek



News in Brief

Inspirational prize

This portable MacBook Air computer could provide just the right inspiration for Bachelor of Arts graduate Geraldine Love (pictured above) to produce an award-winning novel.

Geraldine, who is now studying for her PhD in Creative Writing, is the lucky winner drawn from the pool of recent University of Adelaide graduates who filled out an Australian Graduate

The survey provides important information about students experience at university and where their studies are leading. All University of Adelaide graduates who completed the 2007 survey automatically went into the draw to win the MacBook, valued at \$4338.

Annual Florey Lecture: child health

Former Australian of the Year and champion of children's health Professor Fiona Stanley AC will give this year's annual Florey Lecture at the University of Adelaide.

Her lecture will discuss the power of linking different studies to deliver significant public health benefits.

Sponsored by the Florey Medical Research Foundation, this free public lecture will be given at 5.30pm on Thursday 18 September in the Florey Lecture Theatre, Medical School North, Frome Road

For more information contact the Florey Medical Research Foundation on (08) 8303 5211.

Lloyd Cox Memorial Lecture: reproduction

Professor Euan Wallace from Monash University will deliver this year's Lloyd Cox Memorial Lecture.

The lecture will explore aspects of inhibin and activin biology in fertility, pregnancy and birth and discuss the future applications of these peptides in reproductive medicine

This free public lecture will be held at 5.30pm on Thursday 2 October in the Queen Victoria Lecture Theatre, First Floor, Queen Victoria Building, Women's and Children's Hospital. RSVP by Monday 22 September to Virginia Furness: virginia.furness@ adelaide.edu.au or (08) 8303 4552.



From left:
Professor James McWha,
Professor Mark Tester,
Professor Geoff Fincher
and Premier Mike Rann at
the announcement of the
Plant Accelerator

Photo by Cobi Smith, Australian Centre for Plant Functional Genomics

Super greenhouse grows research

Plant Science

"The Waite is the pre-eminent plant science research site in Australia"

Adelaide will become home to a 'super greenhouse' that will place it at the cutting edge of international plant research and its rapid application to the agriculture and bio-plant industries.

The establishment of the \$26 million facility was announced recently by South Australian Premier Mike Rann and the Federal Minister for Innovation, Industry, Science & Research, Kim Carr.

To be known as the Plant Accelerator, the super greenhouse – the largest and most sophisticated public facility of its type in the world – is being built at the University of Adelaide's Waite Campus.

It's the national flagship of the new Australian Plant Phenomics Facility and is jointly funded by an alliance of the Commonwealth (\$11.35m), the SA Government (\$10 million) and the University of Adelaide (\$4.8m) under the National Collaborative Research Infrastructure Strategy (NCRIS).

Turning the first sod for the Plant Accelerator at the Waite site last month, Mr Rann said the centre would spearhead research to benefit agriculture and horticulture, particularly in the context of climate change and environmental degradation.

"This South Australian facility will play a leading international role in achieving more sustainable agriculture, enhancing biodiversity and improving the yield and quality of crops that can tolerate drought,

raised salinity levels and disease," he said

The Plant Accelerator will feature a series of 50 hi-tech glasshouses and laboratories that will house over 1km of conveyor systems that will deliver plants automatically to state-of-the art imaging, robotic and computing equipment.

This will allow continuous measurements of the physical attributes (the phenotype) of up to 160,000 plants a year.

The accelerator mode of this facility will come from its ability to more rapidly identify those varieties that will be successful, and therefore reduce the time to market.

"South Australia's research base will be provided with seamless and affordable access to its cuttingedge technologies, and our agribusiness industries – food, wine and agriculture – will be the first to benefit from the application of its fruitful research," Mr Rann said.

Federal Science & Research Minister Kim Carr said the Plant Accelerator was already attracting the attention of other countries keen to emulate Adelaide.

"Plant phenomics is a science that has the power to transform our lives," he said.

"This Accelerator is exciting interest among local and international companies looking to forge research partnerships. So a facility borne of collaboration looks set to generate even more collaboration and that's a great result."

Scientists based at the
Australian Centre for Plant
Functional Genomics at the
University of Adelaide's Waite
Campus developed the proposal
for the Plant Accelerator, which
was supported by the State
Government in its successful bid to
NCRIS to fund 11 SA projects.

The two leading proponents of the Plant Accelerator proposal were Professor Mark Tester, Federation Fellow with the School of Agriculture, Food and Wine, and Professor Geoff Fincher, Director of the Waite Campus.

Vice-Chancellor and President of the University of Adelaide Professor James McWha said the NCRIS funding was welcome support.

"The new facility will be world class in every respect and will help in national efforts to provide a competitive edge for Australia's \$27 billion annual agriculture export industry," he said.

"The Waite is the pre-eminent plant science research site in Australia, with a critical mass of 1200 researchers from at least eight organisations on one campus.

"The facility will further raise the national and international prominence of the Waite Campus as a centre for excellence in plant science, genomics and breeding research and will attract additional international scientists and postgraduate students."



New treatment for advanced prostate cancer

Cancer Research

"The ultimate test of this breakthrough is to see if it improves outcomes and quality of life for men"

Professor Wayne Tilley and Dr Lisa Butler in the Dame Roma Mitchell Cancer Research Laboratories

Photo by David Ellis

Researchers at the University of Adelaide have developed a novel approach to treating advanced prostate cancer that could be more effective with fewer side effects.

Professor Wayne Tilley and Dr Lisa Butler of the University's Dame Roma Mitchell Cancer Research Laboratories have discovered that by using existing prostate cancer drugs in combination with new drugs at lower doses, they can expect to generate better results for patients than current treatments.

Growth of prostate cancer is initially dependent on hormones called androgens, which traditionally have been suppressed to stop tumour growth. However, despite an initial response, resistance to hormone deprivation often occurs and the tumour starts to grow again, Professor Tilley said.

'Men undergoing hormone deprivation therapy can also experience significant side effects, including reduced libido, impotence, hot flushes, tiredness and sweating, gradual decrease in body hair, reduced bone and muscle strength and cognitive changes," he said.

Professor Tilley and Dr Butler have successfully killed prostate cancer cells in laboratory studies using low doses of a combination therapy of drugs including bicalutamide (an anti-androgen that opposes the action of androgen on the tumour), and the inhibitors 17AAG and vorinostat

These new drugs block key cancer survival pathways, but are not particularly effective in killing prostate cancer cells if given alone.

"We can now confirm that a very low level of bicalutamide is capable of inhibiting cancer cell proliferation by more than 10-fold when combined with either vorinostat or 17AAG, making our current treatments much more effective and causing fewer side effects," said Dr Lisa Butler.

All the drugs needed for combination therapy are already approved for use in clinical trials, so the new therapy can be readily tested in patients with advanced prostate cancer.

Professor Chris Sweeney, a world recognised medical oncologist and Director of Clinical Trials at the Royal Adelaide Hospital Cancer Centre, will lead a multidisciplinary team to test the new treatment.

"The ultimate test of this exciting laboratory breakthrough is to see if it improves outcomes and quality of life for men suffering from advanced prostate cancer," he said.

"The strong partnership between medical scientists and clinicians at the University of Adelaide and the Royal Adelaide Hospital means patients can benefit from advances in medical science much faster than in the past."

Professor Tilley is a founding member of the Freemasons Foundation Centre for Men's Health, which is working towards establishing a national prostate cancer research facility in Adelaide.

He presented his findings at the 4th Pacrim Breast and Prostate Cancer Meeting in Whistler, Canada last month, where he was awarded the meeting's highest honour - the Ron Ross Award for his contributions to prostate cancer research.

Story by Candy Gibson

UK nursing leader is new professor

Nursing

An international authority in nursing has been appointed Professor of Nursing and Head of the Discipline of Nursing at the University of Adelaide, in collaboration with the Royal Adelaide Hospital (RAH).

Professor Alison Kitson has had a distinguished academic and professional career as a nursing leader for more than 20 years in the UK. Until June 2007 she was the Executive Director Nursing at the Royal College of Nursing (RCN), the UK's largest professional nursing organisation.

Currently she is the Nursing Education Fund Visiting Fellow at the RAH where she is leading a project on improving care for older people. She will take up her appointment in January 2009.

"Alison Kitson is highly regarded in academic and professional nursing arenas internationally," said Professor Justin Beilby, Executive Dean of the University of Adelaide's Faculty of Health Sciences.

"An appointment of someone of this calibre as Professor of Nursing reflects the strength and quality of the undergraduate and postgraduate nursing programs at the University of Adelaide and the increasing importance of nursing within the University.'

RAH Acting Chief Executive Associate Professor Leslye Long said: "We are delighted to have been able to work with the University of Adelaide to make this appointment. This position and the work that Professor Kitson will do will be very important for the future of nursing practice in this State. We look forward to working with Professor Kitson to ensure that nursing practice is evidence based and meets the needs of our patients and the wider community."

Professor Kitson trained as a nurse at the University of Ulster and began her professional career at the Ulster Hospital, Dundonald. She obtained her PhD at Ulster and continued with a mix of academic and professional roles.

In 1991 she was awarded a Fellowship of the RCN for her work on standards of care. Other honours include a Fellowship at Green College, University of Oxford, visiting and honorary professorships at various universities in Canada and the UK, and the prestigious Florence Nightingale Leadership Fellowship in 2004.

She has a long association with the RAH, first coming to Adelaide in 1999 as a Visiting Scholar.



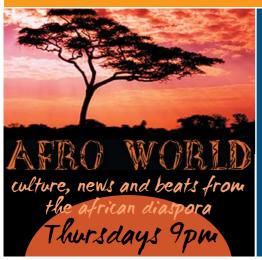
Professor Kitson's appointment was secured through a partnership between the University of Adelaide, RAH, the Central Northern Adelaide Health Service and the Joanna Briggs Institute. Her role will be to integrate excellence in clinical nursing practice with the highest standards of research and teaching in order to ensure the best quality of care for patients.

Professor Alison Kitson

Story by Robyn Mills



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Sexes divided over housework, abortion

Gender Studies

"Those in Western countries tend to see sharing housework and 'role reversal' as similar ideas"

Young people from 10 countries around the world have shared their views on housework and abortion issues in a new study from the University of Adelaide.

The research, conducted by Professor Chilla Bulbeck in the University's Discipline of Gender, Work and Social Inquiry, looked at the attitudes of young men and women to a number of gender equality issues.

Small surveys were conducted at high schools and universities in the United States, Canada, Australia, Korea, China, Japan, Vietnam, Thailand, India and Indonesia.

"Apart from Australia and Japan, my samples were small and confined to young, middle-class urbanites. Nevertheless, this study is unusual because it covers so many nations, and the comparisons offer some interesting food for thought," Professor Bulbeck said.

"Overall, the results show that young men and women are divided on the issues of sharing housework and a woman's right to have an abortion. It should come as no surprise that young women

are more in favour of domestic democracy than the young men, while also being more supportive of a woman's right to have an abortion," she said.

"It is interesting to note that those in Western countries tend to see sharing housework and 'role reversal' as similar ideas, whereas most of those from Asian countries who are also supportive of sharing housework were quite opposed to role reversal. While this might indicate to some people that greater equality exists in the Western countries, another interpretation is that it demonstrates the greater commitment to the fathers' breadwinning role in the Asian countries."

Professor Bulbeck said the young men surveyed were more likely to want to have their say on abortion than they were on sharing housework

"While performing housework and childcare was seen as nothing short of emasculation for many of the young men in my study, this does not prevent them from claiming their rights in relation to abortion decisions," she said.

"The Chinese people surveyed were the most accepting of a woman's right to have an abortion, with both males and females seeing this as her decision. In some cases, the Chinese responses asserted that both parents had responsibilities in relation to the child, but it was the woman's right alone to choose an abortion.

Professor Bulbeck's research, part of a study funded by the Australian Research Council (ARC), will be published in a forthcoming book: Sex. Love and Feminism in the Asia Pacific: A cross-cultural study of young people's attitudes, due out in October by academic publisher Routledge.

The results of the study were shared recently in a free public lecture as part of the Distinguished Social Sciences Public Lecture Series.

For more information about the series, visit: www.hss.adelaide.edu. au/socialsciences/



Award-winning staff: standing (from left) Professor Hemanta Sarma, Associate Professor Tom Burton, Associate Professor Simon Pyke, Mr Edward Palmer, Associate Professor David Walker and Associate Professor Peter Devitt; seated (from left) Dr Katrina Falkner and Dr Karin Barovich

Staff rewarded for teaching excellence

Teaching & Learning

"There is no doubt that the quality of staff makes a huge difference to the level of education students receive"

Eight staff from the University of Adelaide have been recognised as among the best educators in Australia, receiving national awards for excellence in teaching and learning.

The staff have won the Australian Learning and Teaching Council Citations, worth \$10,000, for outstanding contributions to the quality of student learning.

The citations, awarded by the Australian Learning and Teaching Council (ALTC) (formerly known as the Carrick Institute), were presented at a celebration last month at the University's National Wine Centre, Adelaide.

University of Adelaide staff awarded a citation in 2008 were:

Dr Karin Barovich (School of Earth and Environmental Sciences (Geology & Geophysics))

For outstanding contribution to the personal and academic development of first-year students in Geology, leading to successful transition from high school to university.

Associate Professor Tom Burton (School of Humanities (English))

For successfully stimulating deep learning by bringing to the study of English both rigour and a boundless enthusiasm that challenge and inspire students to achieve.

Dr Katrina Falkner (School of Computer Science)

For enhancing learning and contributing to the successful

transition of first-year Computer Science students through cooperative learning activities.

Associate Professor Peter Devitt (School of Medicine); and

Mr Edward Palmer (Centre for Learning and Professional Development)

Team award: For the development of innovative and comprehensive blended learning resources to provide medical students stimulating opportunities to develop their problem-solving and diagnostic skills.

Associate Professor Simon Pyke (School of Chemistry & Physics (Chemistry))

For enabling successful learning in the discipline of organic chemistry by providing a supportive, student-centred learning environment that fosters self-confidence and independent learning.

Professor Hemanta Sarma (Australian School of Petroleum)

For initiating students into the profession of Petroleum Engineering while interacting with them to secure their welfare as individuals and success as scholars.

Associate Professor David Walker (School of Civil, Environmental & Mining Engineering)

For providing a supportive learning environment while improving learning outcomes through the implementation of a successful self-paced learning strategy for engineering modelling and analysis.

"The awards given to our staff are national recognition of the quality of their work, placing them among the finest educators Australia has to offer," said the University's Vice-Chancellor and President, Professor James McWha.

"They are to be congratulated not just for winning these awards, but for their unique and ongoing contributions to the quality of teaching and learning at our University.

"There is no doubt that the quality of staff makes a huge difference to the level of education students receive. The quality of staff and the educational experience at the University of Adelaide are major reasons why graduates of our University go on to excel in all fields of endeavour," Professor McWha said.

This is the third year in a row that a staff member from the Discipline of English at the University of Adelaide has received one of these \$10,000 learning and teaching citations

Over the past two years, three staff members from the School of Civil, Environmental & Mining Engineering have won these citations.

For more information about learning and teaching at the University of Adelaide, visit: www.adelaide.edu.au/learning/



Radar experts making waves

- Engineering
- "South Australia is home to a national concentration of defence industries"

Two radar domes, part of the UK's National Air Traffic network

Photo by iStock

More than 200 radar experts from around the world will attend an international conference hosted by the University of Adelaide this month, advancing South Australia's reputation as a world leader in radar and defence research.

Professor Bevan Bates from the University's School of Electrical and Electronic Engineering will chair Radar 2008 from September 2-5, welcoming participants from over 20 different countries including from the United States, United Kingdom, China, France and Australia.

'This conference returns to Adelaide on a five year cycle and represents a major international gathering of radar systems experts. This year the theme of maritime surveillance reflects the importance of radar in maintaining the security of our island continent," Professor Bates said.

British airborne radar specialist Professor John Roulston will give the opening address on Wednesday 3 September at the Adelaide Hilton, providing a UK perspective of the post-war development of fighter radar in Europe.

Professor Roulston will discuss the wartime history of radar as well as the advances in technology in successive years and predictions for radar use in the future.

He is recognised as an international expert and a pioneer of the European thrust into airborne active array radars and has been

made an Officer of the British Empire for his services to defence.

The Governor of South Australia, His Excellency Rear Admiral Kevin Scarce, will officially open the conference, highlighting the importance of defence to South Australia's economic base.

"Successive State governments have recognised this and fostered initiatives to grow our defence industry, including the development of radar," Rear Admiral Scarce said.

"South Australia is home to a national concentration of defence industries covering a broad spectrum, from naval ship and submarine design and construction, to research and development of advanced defence systems."

Other speakers include:

- Professor Simon Watts, Vice President and Deputy Scientific Director Thales UK Aerospace Division: "Sea Clutter: recent advances in research and future challenges"
- Dr Carl E. Baum, The University of New Mexico, USA: "Identification of Buried Unexploded Ordnance"
- Dr Stuart Anderson, DSTO, Australia: "Radar investigations of ocean surface geometry and dynamics'
- · Professor Dennis Longstaff, University of Queensland: "New technologies and new techniques: radar developments in Australia"

■ Story by Candy Gibson



Professor Garrett Cullity

How much are you willing to give?

continued from page 1

"Having said that, the conclusion I argue for is a more demanding one than most of us manage to live up to. It looks at the difference between what really makes a life better and the sorts of luxuries we might spend money and time on.

"Can we seriously put our hands on our hearts and say: 'My life has been made better for having spent this money on myself? There's a point at which it becomes pretty difficult to defend spending resources on yourself, rather than making a monetary sacrifice - such as to an aid agency - that won't leave you any worse off in the long term but will help other people very significantly," he said.

Professor Cullity, who donates approximately 5% of his income to aid agencies, said: "The serious question we've got to ask ourselves is: 'How much worse off would I really be if I reached in my pocket and helped other people?' For most of us, the answer is: 'Not significantly, if at all'."

Professor Cullity said it was an honour to win the Eureka prize, but he was not going to keep the cash.

"I am going to give the money away. It would be the height of hypocrisy to write a book on this topic and then to pocket a healthy cheque and spend all of that on myself.

'The award is designed to help draw attention to issues of significant ethical importance, and I'm pleased that it will give people an opportunity to discuss and debate this particular issue more broadly."

The Moral Demands of Affluence is published by Oxford University Press.



Rainwater tank risk for toddlers

An increase in household rainwater tanks due to the severe drought and accompanying water restrictions across Australia is creating a new hazard for parents of young children.

University of Adelaide paediatric forensic pathologist Professor Roger Byard said rainwater tanks posed a serious drowning risk for toddlers, with at least three fatalities being recorded in recent years.

"In each case, the children fell through the access cover of the rainwater tank and drowned within minutes," Professor Byard said.

In a paper published recently in the Journal of Forensic and Legal Medicine, Professor Byard called for more stringent controls to ensure secure child-proof access points are installed in rainwater tanks

"Young children are insatiably curious and enjoy exploring their environment. Their lack of appreciation of any danger, compounded by their inability to swim and their failure to call out for help can be a recipe for disaster.

"As rainwater tanks are now becoming more common in Australia, the risk of accidents involving children will inevitably increase. It is crucial that we highlight the potential dangers for young children and ensure the tanks are properly secured."

Professor Byard said ladders and other access points – including trees, shrubs, timber and trellises – should not be left next to rainwater tanks, and secure childproof lids need to be installed.

The forensic pathologist's recommendations follow a case study of the drowning of two-year-old twin children in the Adelaide Hills in 2006 and a three-year-old boy in Queensland.

Professor Byard works in the Discipline of Pathology at the University of Adelaide.

His paper, Rainwater Tank Drowning, can be viewed at www.sciencedirect.com

■ Story by Candy Gibson



New imaging technology for tumour diagnosis

"This technology means we can distinguish between tumours without the need for antibodies"

Above: Dr Peter Hoffmann

Photo by Robyn Mills

Cancer Research

University of Adelaide researchers are developing a new imaging technology showing promise as an improved diagnostic tool for cancer tumours.

The project to develop 'imaging mass spectrometry' is one of several cancer research projects at the University's \$3 million Adelaide Proteomics Centre.

The Adelaide Proteomics
Centre is a joint venture of the
University's School of Molecular
and Biomedical Science and
the Hanson Institute, and was
opened in 2006 with a \$1.5 million
grant from the Australian Cancer
Research Foundation (ACRF). Other
funding came from the University,
the Hanson Institute, the Australian
Research Council, the CSIRO and
the State Government through
BioInnovation SA.

Imaging mass spectrometry is being used to classify tissue sections from tumour biopsies with the results presented as a colour image showing tumour type and its distribution within the surrounding tissue.

Current tumour diagnosis from biopsies uses stained tissue sections and immunohistochemistry. These techniques take 1-2 days and require specific antibodies to distinguish between tumour types.

"There still aren't antibodies identified for all tumour types," said Dr Peter Hoffmann, Director of the Adelaide Proteomics Centre. "This technology means we can distinguish between tumours without the need for antibodies and it also should be much faster, 1-3 hours rather than days."

The researchers, including PhD student Johan Gustafsson, have been developing the technology using mouse models with multiple sclerosis, and it also has been tested on human ovarian cancer.

"We're now testing different mouse tissues to improve the technology," said Dr Hoffmann. "To be used as a diagnostic tool, we need to ensure we have reproducible results."

Proteomics involves the identification and quantification of proteins and analysis of their interactions, activities and functions.

Adelaide Proteomics Centre has the most advanced instrumentation of its kind in Australia. It provides proteomic services for researchers nationally and overseas, and for the biotechnology industry.

Other research includes looking for biomarkers for gastric and ovarian cancers, and investigating the signal pathways leading to protein modification in cells which causes cancer.

Story by Robyn Mills



Who wants answers on climate change?

Environment

"The fact that some people are asking these questions means that we, as scientists, have a responsibility to explain the science behind climate change"

A new series of free public seminars at the University of Adelaide is giving climate change sceptics – and other members of the community – exactly what they want: scientific answers on climate change.

The new Climate Change Q & A seminar series is being run by the University's Research Institute for Climate Change and Sustainability (RIsCCS).

"Each of the six seminars raises a different commonly asked question about climate change," said the Director of RISCCS at the University of Adelaide, Professor Barry Brook.

"The fact that some people are asking these questions means that we, as scientists, have a responsibility to explain the science behind climate change.

"Members of the public will also get to ask questions at the end of each seminar," he said.

The series began last month with the all-important question: "Is the Earth really warming?"

This month, the series deals with two more important questions:

"What future climate change scenarios are possible?" (Friday 5 September) and "Are the impacts of climate change being overstated?" (Friday 19 September).

The 5 September seminar features guest speaker Dr Peter Hayman, Principal Scientist in Climate Applications at the South Australian Research and Development Institute (SARDI). It deals with the computer models scientists use to understand the effects of greenhouse gases on the Earth. Those models have come under attack for being unreliable, and are said to exaggerate the effects of CO2 or neglect the robustness and history of the Earth's climate. This seminar takes a close look at the models - how they work, what they can tell us and why it's important we take them seriously.

The 19 September seminar tackles the arguments suggesting that global warming isn't going to have catastrophic impacts. The featured speaker is Dr Corey Bradshaw, Research Director of Marine Impacts for RIsCCS. He will take the audience through "pseudo

science" approaches regarding the effects of global warming on severe weather, sea level rise, or the loss of glaciers. He will also look at those who might find global climate changes favourable or who are better positioned to adapt, and discuss what the impact of 2°, 3° or even 6°C of global warming really means for people, plants and animals.

Further seminars in the series are: "Will it cost the earth to avoid climate change?" and "Greenhouse denial versus good science: The 'pretend debate'".

The free public series is held from 5.30pm-7.00pm on alternate Fridays during second semester 2008. Each seminar is held in Lecture Theatre 102, Napier Building, North Terrace Campus, University of Adelaide.

For complete details about the seminar series, visit: www. adelaide.edu.au/climatechange/ Also visit: http://bravenewclimate.com

Graduations 2008



Brendan wins more honours

Brendan Lim has been awarded the 2008 Honours Alumni University Medal. Brendan (pictured left) graduated with First Class Honours in Music and First Class Honours in Law in 2007, and also has a degree in Mathematical and Computer Sciences from the University of Adelaide

He graduated top of his class in Law, has worked as Associate to Justice Anthony Besanko in the Federal Court in Adelaide, and has taught part-time at the University of Adelaide Law School.

He has also received a General Sir John Monash Award, which will enable him to study Law at Yale University in the United States.

In his time as a student with at the University of Adelaide's Law School, Brendan has been awarded the following prizes:

- 2005 Dean's Certificates (highest achiever in a course) for Jessup Moot, Remedies, Australian Constitutional Law and Equity. Prizes: The Howard Zelling Prize for Constitutional Law; the John Keeler and John Bray Law Chapter Alumni Prize for Equity; The Stow Prize.
- 2006 Dean's Certificates for Administrative Laws; Comparative Law; Litigation Practice. Prizes: The Stow Prizes; The Justin Skipper Prize; The Howard Zelling Prize for Administrative Law; The Fisher Jeffries Prize for Litigation Practice
- 2007 Dean's Certificate for Jurisprudence. Prizes: The Title of Stow Scholar; The Stow Prizes; the MF and PJ Manetta Prize; The David Murray Scholarship in Law; The John Bray Law Chapter Alumni Prize; The Law Society of SA Centenary Prize; The Angas Parsons Prize; the Thomas Playford Prize and Medal.





First PhD in music performance

The University of Adelaide's Elder Conservatorium of Music in 2005 was the first Australian institution to offer a PhD specialising in music performance. Jazz musician Chris Martin is the program's first graduate.

Dr Martin (pictured left), who lectures part-time at the Elder Conservatorium, completed his Bachelor of Music (Honours) in 2002.

His three-year PhD project involved studying and applying techniques from classical music to jazz improvisation, and included the recording of four CDs with a mix of original composition and re-interpretations of other composers.

Elder Conservatorium Director Professor David Lockett said Dr Martin's PhD was "the latest in a series of impressive practical and intellectual achievements".

Nisarg Hasmukhlal Patel graduated with a Master of Computer Science. He is flanked by parents Varsha and Hasmukh Patel.



Photos by Candy Gibson, Robyn Mills and David Ellis

Suhaili Mohd Suid graduated with a Bachelor of Engineering (Chemical)

Sreeja Rajesh was awarded her PhD in Electronic Engineering at one of the August graduation ceremonies. She is pictured with daughter Riya, 7, and Professor Derek Abbott, one of her supervisors.





Harvard scholar offers vision of peace in Middle East

Public Lecture

Harvard scholar Dr Sara Roy, the daughter of holocaust survivors, will deliver the annual Edward Said Memorial Lecture at the University of Adelaide on Saturday 11 October.

The lecture, now in its fourth year, honours the memory of one of the most famous Palestinian intellectuals in the world until his death in 2003.

Dr Roy is a political economist and senior research scholar at the Centre of Middle Eastern Studies at Harvard University. She has worked in the Gaza Strip and West Bank since 1985, conducting research on the Palestinian-Israeli conflict and on US foreign aid to the region.

Her latest book, *Failing Peace*, published in 2007, draws on more than 2000 interviews and extensive first-hand experience to chronicle the impact of Israeli occupation over a generation.

Hailed by literary critics as a "must-read" of the Israeli/Palestine conflict, the book provides a powerful account of the reality of life in the West Bank and Gaza Strip.

Dr Roy devotes a large section of her book to her Jewish upbringing, arguing that her background does not exclude her from questioning the social laws that govern Jews.

The late Edward Said described Dr Roy as "humanely committed (to achieving peace) in ways that are unmatched by any other non-Palestinian scholar".

"The special thing about Sara Roy's writing is its combination of very high quality research – in this no-one matches her – with an equally high level of personal integrity and commitment," Said wrote.

Dr Roy's current research examines the social and economic sectors of the Palestinian Islamic movement and the critical changes that have occurred in the past decade.

She has authored more than 100 publications dealing with the Israeli/Palestinian conflict and is a

well-known media commentator on the subject, writing for a host of international journals.

In addition to her academic work, Dr Roy has served as a consultant to international and human rights organisations, the United States Government, private voluntary organisations and business groups working in the Middle East.

Dr Roy will speak about her vision of a solution to the conflict when she delivers the Edward Said Memorial Lecture at Elder Hall at 5pm on 11 October.

The previous lectures – delivered by Middle East correspondent Robert Fisk, the late Professor Tanya Reinhart, and Palestinian-British author and academic Dr Ghada Karmi – have been sold out.

Tickets \$10 if pre-purchased online at www.friendsofpalestine.org.au or from Digimob Australia at 246 Pulteney Street, Adelaide, and \$15 at the door.

■ Story by Candy Gibson



Above: Dr Sara Roy

Top:
A Jewish man looks
towards the wailing wall
and the mosque of Al-aqsa
Photo by iStock



"Given that cereals account for about 70% of the world's food supply, it's imperative that continued improvements are made on today's varieties"

Jason wins national award for wheat gene research

Plant Science

Above: Dr Jason Able

Photo courtesy of the Molecular Plant Breeding CRC University of Adelaide plant scientist Dr Jason Able has been recognised nationally for his research aimed at increasing genetic diversity in wheat to produce new and improved varieties.

Dr Able has been awarded this year's Peter Goldacre Award by the Australian Society of Plant Scientists, recognising important research by early career researchers (within 10 years of their PhD).

"Given that cereals account for about 70% of the world's food supply, it's imperative that continued improvements are made on today's varieties to be able to feed tomorrow's population," said Dr Able, who is part of the Molecular Plant Breeding Co-operative Research Centre. "But the outcomes are limited by the narrow gene pool available to traditional plant breeding programs.

"We hope our research will lead to the development of specialised wheat seed collections that incorporate new genetic diversity and that, in the future, will support gene discovery, genomics and breeding programs for new higherperforming varieties."

Dr Able's research focuses on understanding the molecular mechanisms that control chromosome pairing and recombination during meiosis in wheat. Meiosis is part of the reproductive process at the cellular level, which is nature's mechanism for controlling genetic diversity within sexually reproducing organisms.

"We want to be able to shift genes of interest from wild relatives of wheat into more user friendly varieties that crop breeders could use in their traditional plant breeding programs," Dr Able said

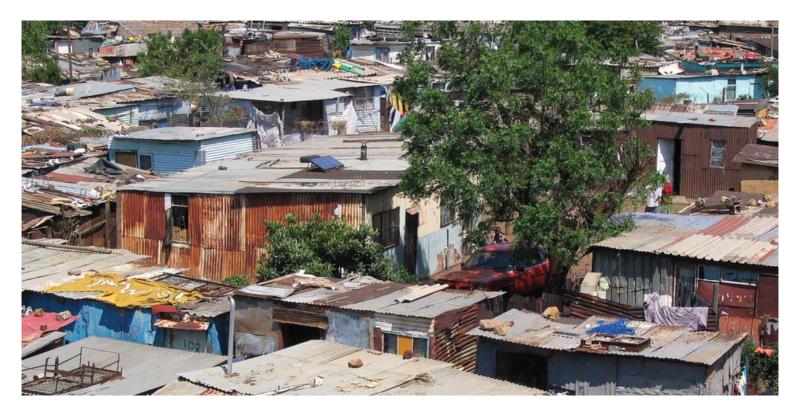
"In normal breeding, a cross between these distant relatives and wheat that is grown by farmers would never produce fertile hybrids. However, through understanding what genes and proteins are important during meiosis, we will be able to overcome these barriers and take advantage of this untapped genetic potential."

Dr Able was awarded his PhD in 2001 from the University of Queensland and has since won several research and innovation awards.

He joined the University of Adelaide's School of Agriculture, Food and Wine in 2002 and has attracted more than \$1 million in research grants. He now leads a team of research students and a postdoctoral fellow at the Waite Campus. Recently he has established national and international collaborations with the University of Delhi and the John Innes Centre in the UK.

As the Peter Goldacre Award winner, Dr Able will be presented with the medal and give the Goldacre Lecture on his research at the ComBio 2008 conference in Canberra, September 21-25. A paper from this research will be subsequently published in the journal Functional Plant Biology.

Story by Robyn Mills



Soweto: from self-worth to business sense

Entrepreneurship

The University of Adelaide has recently completed a five-year project to mentor potential entrepreneurs among some of the poorest, most underprivileged residents of South Africa.

More than 400 indigenous people from Soweto and surrounding areas took part in the program monitored by the Entrepreneurship, Commercialisation & Innovation Centre under the leadership of Professor Noel Lindsay.

A South African training organisation also partnered with the University to deliver the program to long-term unemployed people from poor socio-economic backgrounds, who held either a technical qualification or diploma.

The program was funded from a \$2.2 million South African Government grant specifically targeted at this group.

Professor Lindsay said of the 400 people who took part, more than 100 are now running their own business, or in the process of establishing one.

"Dozens of others have secured work. At the very least, the mentoring program has helped boost their self-esteem and improved their quality of life," he said.

"Without exception, when we started the program back in 2004,

their self-esteem was in the gutter. Some of them had been unemployed for up to 20 years and their self-confidence was rock bottom.

"There is no social security in South Africa so the unemployed survive by stealing, starving or begging," he explained.

As part of the training, a team of psychologists, business consultants and mentors was employed to work with the indigenous South Africans, delivering lectures, basic marketing instruction and motivational talks.

"The very first thing we had to do was get people to believe in themselves and develop a sense of self-worth," Professor Lindsay said. "You have to remember that apartheid was not abolished in South Africa until 1991 and prior to this black people had limited access to mainstream universities. They had been denied basic human rights for a long time."

An initial "Western" approach to the training was quickly abolished and replaced with a program more suited to the indigenous culture. This included developing board games along the lines of Monopoly, which taught the fundamentals of business in an entertaining way.

The game required participants to make choices between investing money in a bank or university education, as opposed to drugs or selling arms, which incurred severe penalties.

"We even incorporated a deadly HIV/AIDS card into the game to try to educate people about the consequences of unsafe sex and injecting drug use on their health and wellbeing."

Professor Lindsay and his colleagues have been tracking the participants' progress over the past five years to measure whether the entrepreneurial program has made a significant difference to their lives.

"The program has been relatively successful in terms of people feeling more empowered and motivated to either seek work or start their own business."

Some of the success stories include two brothers who are providing catering services to 90% of Soweto's 270 bed and breakfasts; the establishment of several internet cafés and taverns; and a female lawyer who has opened her own practice.

"We are not talking millionaires here, but in relative terms the program has achieved its primary goal – to give indigenous South Africans a real sense of purpose and self-worth," Professor Lindsay said.

Two University of Adelaide PhD students also worked on this project, Anton Jordaan and Wendy Lindsay.

Story by Candy Gibson

"The very first thing we had to do was get people to believe in themselves and develop a sense of self-worth"

Above: A township outside of Soweto



Engineering

The University of Adelaide and Qantas Airways have signed a Memorandum of Understanding that aims to provide benefits to both organisations through collaboration on engineering teaching and research.

The many potential benefits of the agreement include:

- the opportunity for Qantas to provide industry-specific curriculum advice to the University's Faculty of Engineering, Computer & Mathematical Sciences;
- guest lectures from Qantas, providing students in the University's engineering programs direct exposure to state-of-the-art aviation industry practice; and
- the undertaking of joint research projects.

"Our agreement with Qantas means that the University of Adelaide is engaging with one of the world's most successful airlines, to the mutual advantage of our students, staff, and the company," said the Vice-Chancellor and President, Professor James McWha.

"This alliance will further strengthen our degree programs

in Avionics & Electronic Systems Engineering, Aerospace Engineering and other related degrees. It will provide even greater opportunities for students to receive a quality industry-relevant education in their chosen areas of study, as well as strengthening the industry relevance of our research programs.

"We are extremely pleased to have the support of Qantas through this collaborative arrangement, and we look forward to working with them," Professor McWha said.

Qantas Engineering Group General Manager Technical Services David Kelly said: "As part of our commitment to the industry, Qantas Engineering is launching a range of initiatives with tertiary institutions to ensure we maximise the professional capabilities of both groups. The University of Adelaide is a key institution to ensure the success of this program.

"By establishing a closer working relationship with the University of Adelaide, we will be able to deliver mutually beneficial outcomes," Mr Kelly said.

"This agreement is an outstanding example of universities and industry working together to identify and achieve common goals," said Professor Peter



Dowd, Executive Dean of the Faculty of Engineering, Computer & Mathematical Sciences.

"The level of industry involvement in the teaching and research programs in our Faculty is at an all-time high. This means we are able to conduct research that has a genuine impact on industry; and, we can educate young engineers who understand today's industry requirements, but who are also prepared for the challenges of tomorrow."

■ Story by David Ellis

Above from left: Vice-Chancellor and President Professor James McWha and Qantas Engineering Group General Manager Technical Services David Kelly

Photo by David Ellis

Main photo courtesy of Qantas



Library has appeal to donors

Fundraisina

More than 580 donors have already given to the 2008 Barr Smith Library Appeal since its launch in April, raising more than \$85,000 to support the University of Adelaide's Barr Smith Library.

Now in its seventh year, the Appeal has provided a vital source of funds for the Library and its diverse collection of more than two million items.

This support plays a critical role in ensuring that the University's iconic library continues to provide up-todate and relevant information for the University's students and staff as well as the general public, who are welcome to join.

"I'm proud to see that many members of the public, including many students who previously studied at the University, appreciate the critical role that libraries have

for both students and the wider society," said University Librarian Mr Ray Choate.

Mr Choate said funds from the 2008 Appeal will contribute to currency of the collections in new areas of knowledge and research, and the broader collection which is so important in a liberal education.

"Donations are an increasingly important source of support for the Barr Smith Library. The annual appeal enables us to keep up with the breadth and depth of collections expected to provide students with first-class education."

For more information about the Barr Smith Library Appeal, or to make a donation, please contact Helen Paul, Development and Alumni at helen.paul@adelaide.edu. au, phone (08) 8303 4275 or visit: www.alumni.adelaide.edu.au



After 35 years, Lanes has a new name -Lane Print & Post - to better reflect exactly what it is we do.

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Development & Alumni Events

Sir Joseph Verco **Dental Chapter**

Event: Filling the Shelves Appeal Quiz Night – a fun and exciting evening of puzzles, prizes, pinot and pizza!!

Date: Friday 31 October

Time: 7.00pm for a 7.30pm start Venue: Reading Room, Barr Smith

Library, North Terrace Campus Cost: \$35, \$25 concession

Bookings: For groups of 10 and individual tickets please contact Norma or Lorraine on 8303 6069

The Friends of the University of Adelaide Library

Event: "Women's Liberation and Dame Roma Mitchell" by Professor

Susan Magarey

Date: Thursday 11 September

Time: 6.00pm for 6.30pm

Venue: Ira Raymond Room, Barr Smith Library, North Terrace Campus

Cost: free - gold coin donation invited **RSVP:** by Tuesday 9 September to robina.weir@adelaide.edu.au or phone (08) 8303 4064

Event: "Rock Star: the story of Reg Sprigg" by Kristin Weidenbach Date: Thursday 18 September

Time: 1.05pm

Venue: Ira Raymond Room, Barr Smith Library, North Terrace Campus

Cost: free

RSVP: by Tuesday 16 September to robina.weir@adelaide.edu.au or phone (08) 8303 4064.

John Bray Law Chapter

Event: Chief Justice's Shield Quiz Night with quiz master Peter Goers

Date: Saturday 1 November **Time:** 7.00pm to 11.00pm

Venue: Great Hall, The Freemasons, 254 North Terrace, Adelaide

Cost: \$250 per table of 10 or \$25 per person (BYO wine and supper)

Bookings: Registration form and details available from 8205 0588 or 8303 6356

Roseworthy Campus 125th

To celebrate 125 years of Australia's first agricultural college and showcase Roseworthy's future, the University of Adelaide is holding a number of events for graduates, staff and the general public.

Date: Saturday 18 October

Events: 11.00am - 12noon: St Peter's

Cathedral Service

3.00pm - 5.00pm: Commemoration Ceremony, Bonython Hall

7.30pm -11.00pm: 125th Celebration Dinner, The Pavilion, Adelaide Oval

Date: Sunday 2 November

Event: Roseworthy Campus 125th Open Day, an event for the whole family. For more information, visit: www.adelaide.edu.au/roseworthy125/

HRT may offer improved quality of life for older women



Obstetrics & Gynaecology

Post-menopausal women on hormone replacement therapy (HRT) gain significant improvements in quality of life, according to one of the world's longest and largest trials of HRT involving the University of Adelaide.

The latest study by the WISDOM research team (Women's International Study of long Duration Oestrogen after Menopause) involved 2130 post-menopausal women in the UK, Australia and New Zealand, and assessed the impact of combined oestrogen and progestogen hormone therapy on the women's quality of life. The average age of women in this study was 13 years after menopause and most participants did not have menopausal symptoms.

"Our results show that hot flushes, night sweats, sleeplessness and joint pains were less common in women on HRT in this age group. Sexuality was also improved," said Professor Alastair MacLennan, leader of the Australian arm of WISDOM and head of Obstetrics & Gynaecology at the University of Adelaide.

"Overall, quality of life measures improved. Even when women did not have hot flushes and were well past menopause, there was a small but measurable improvement in quality of life and a noted improvement in sleep, sexuality and joint pains. HRT users also had more breast tenderness and discharge compared to those on a placebo," he said.

Professor MacLennan said studies such as those conducted by WISDOM "enable the risks of HRT to be reduced and its benefits maximised when the treatment is individualised to each woman".

"Early start-up side effects can usually be alleviated by adjusting the treatment," he said.

"For most women with significant menopause symptoms the benefits of HRT outweigh the risks.

"The latest analyses of the main long-term randomised control trial of HRT (The Women's Health Initiative) show that breast cancer is not increased by oestrogen-only HRT and is only increased in women using combined oestrogen and progestogen HRT after seven years

of use. This increased risk is less than 0.1% per year of use.

"If a woman feels that HRT is needed for quality of life, then doctors can find the safest regimen for her. She can try going off HRT every 4-5 years, and can then make an informed choice about whether she takes and continues HRT."

Dr Beverley Lawton, Head of WISDOM New Zealand, said: "These new data should be added to the risk/benefit equation for HRT. The quality of life benefits of HRT may be greater in women with more severe symptoms near menopause. New research suggests that HRT taken from near menopause avoids the cardiovascular risks seen when HRT is initiated many years after menopause."

The WISDOM research is independent of the pharmaceutical industry and has been funded by UK, Australian and New Zealand government research bodies.

The results of the study have been published on the *British Medical Journal* website: www.bmj.com

Going native is hard to swallow

Australian native foods are a hit with tourists, but locals are far less enthused about eating kangaroo, emu and crocodile meat, according to a report from a University of Adelaide gastronomy graduate.

Jessica Ramsden, who recently graduated with a Le Cordon Bleu Masters of Arts in Gastronomy, says there's a difference between experiencing something unique (once) and putting it on the weekly shopping list.

"Although native flavours are starting to appear in chutneys, sauces and spice blends, you won't find crocodile meat in the cold cabinet or lemon myrtle on the spice rack, let alone fresh Warrigal greens or Kakadu plums alongside the salad mix and Packham pears," Jessica said.

This is partly as a result of the industry's small scale, but also reflects the lack of 'cultural infrastructure' that makes Thai or French cuisine, for example, so popular – with oodles of exotic tourism destinations, local restaurants, cookbooks and ready supplies of ingredients to try at home.

"Food preferences are also the result of habit," Jessica said. "Research shows that we gravitate to flavours that taste the most familiar. With such conservative palates, Australians are not going to embrace challenging new native flavours."

But this could all change in coming years, with recent research from CSIRO showing the health benefits of native foods, and more environmentally aware consumers choosing foods that are more sustainable to produce and make a positive difference to communities.

Jessica said native foods "tick all the boxes of these emerging consumer trends".

"Native foods are tapping into an emerging groundswell of more adventurous eating in Australia and in the future, saltbush lamb, lemon myrtle pasta and wattle seed ice-cream might become as 'Aussie' as meat pies, lamingtons and Vegemite," she said.

Based in Melbourne, Jessica is part of an international cohort of students who have completed the Le Cordon Bleu Master of Arts in Gastronomy from the University of Adelaide this year. It is the only program of its kind in the world that can be completed entirely online.



Terrorism threat prompts new building designs

CivilEngineering

"With the rising threat of terrorism, protecting structures in Australia and abroad against explosive blasts has become a major concern"

Above: Dr Chengqing Wu

Photo by Candy Gibson

The University of Adelaide has been awarded more than \$220,000 to help design buildings that can withstand a terrorist attack from explosive devices.

Dr Chengqing Wu and Professor Deric Oehlers from the University's School of Civil, Environmental and Mining Engineering will lead a national project to safeguard highrisk public buildings against terrorist attack by developing construction guidelines for new, ultra-strong concrete.

The University will partner with the Defence Science and Technology Organisation (DSTO), international company VSL Australia and the State University of New York at Buffalo on the three-year project.

Blast testing at Woomera of the ultra-high performance concrete Ductal has already confirmed it can reduce the effects of blast-induced shocks and explosive munitions. Design guidelines will now be developed to accommodate this new material to help protect buildings against explosive blast loads.

Dr Wu says the ultra-high performance concrete can absorb far more energy than conventional concrete, making it an ideal material for buildings at risk, including embassies, police stations and government buildings.

"With the rising threat of terrorism, protecting structures

in Australia and abroad against explosive blasts has become a major concern over the past decade," Dr Wu said.

"This collaborative project will strengthen our defence and national infrastructure engineering capabilities and help to safeguard Australia against terrorist attacks in a cost-effective manner."

VSL Australia has led an international technical team in developing the ultra-high performance concrete, and a pilot project in 2007 involving the University and DSTO confirmed its tolerance to extreme blast loads.

DSTO is contributing specialist expertise and staff who will be directly involved in the blast testing and data acquisition.

The University is also working on new technology to help protect existing structures from explosive blast effects by reinforcing buildings with stabilised aluminium foam to absorb the blast energy.

The Australian Research Council has awarded more than \$153,000 to the University for the project, with VSL Australia and DSTO contributing in-kind materials and test support.

New building guidelines are expected to be in use for the ultrahigh performance concrete by the end of 2010.

Story by Candy Gibson

Virtual world is the safest for miners

Computer Science

Mining in South Australia is set to become a whole lot safer, thanks to the world of virtual reality and video games.

A \$430,000 collaborative project involving the University of Adelaide will use simulators to train prospective miners in one of the world's most hazardous environments.

Associate Professor Anton van den Hengel. Director of the University's Australian Centre for Visual Technologies, is partnering with the University of NSW, as well as TAFE SA and the South Australian mining industry to induct staff at BHP Billiton's Olympic Dam mining site.

The simulators – reflecting genuine hazards - will specifically concentrate on training miners working at heights, where ladders, scaffolds and elevated work platforms are extensively used.

Dr van den Hengel said the project would allow BHP Billiton to train people in a safe and cost-effective manner.

"Virtual reality simulation and computer gaming are powerful tools for conditioning human behaviour," he said. "Both technologies enable users to experience a range of situations that would otherwise be impossible, or prohibitively

dangerous or expensive." Since 2003, there have been more than 80 fatalities in the mining and construction industry in Australia, involving people working at height.

"With mining activity in South Australia expected to escalate in coming years, it is crucial we make the environment safer for workers and protect the industry from massive OH&S penalties. The interactive nature of the simulations immerses trainees in real-life situations in the mining environment, without endangering themselves or others, and without impeding the operations," Dr van den Hengel said.

He said the research project offered an opportunity to develop a virtual reality simulator model for the South Australian mining and construction industry.

"If we can refine this cuttingedge technology it will help attract workers to the minerals industry, equip them with the right skills and encourage them to take further training when the need arises."

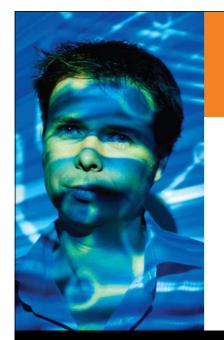
Dr van den Hengel will work alongside Dr Philip Stothard from the University of NSW to develop the simulation training, which is expected to be in use by March 2009

Both universities have extensive experience in virtual reality, which has already proven its worth as an induction and training tool in other industries, but this will be the first time it has been applied to mining in South Australia.

Mining companies Skills DMC and the Resources and Engineering Skills Alliance are also involved in the project.

"The interactive nature of the simulations immerses trainees in reallife situations in the mining environment, without endangering themselves or others"

Story by Candy Gibson



Research Tuesdays sharing great research with the community

Some ideas about the next generation of image manipulation tools

Tuesday 9 September at 5.30pm, Associate Professor Anton van den Hengel

The massive uptake of digital cameras and advances in the science of image analysis are delivering new tools for digital content creation into the hands of the average user. The tools range from intelligent image and video editing programs to modelling packages for 3D virtual environments such as Google Earth, Grand Theft Auto and Second Life. Digital content creation technologies are becoming more powerful and more accessible than ever.

Venue and Time:

Tuesday 9 September at 5.30pm

Lecture Theatre G04, Napier Building, North Terrace Campus. Duration approximately one hour. Admission free.

Bookings essential:

Email:

research.tuesdays@adelaide.edu.au

(08) 8303 3692



Life Impact | The University of Adelaide



Irish magic and science combine in new portrait

Art & Heritage

Above: Artist Anna Platten and Vice-Chancellor and President Professor James McWha with the new portrait

Photo by Mick Bradley

The latest portrait in the University of Adelaide's series of official Vice-Chancellor portraits has been unveiled, revealing a touch of Irish magic and the Vice-Chancellor's horticultural roots.

Painted by well-known Adelaide artist Anna Platten, the painting of Professor James McWha is the most recent of the official portraits of the Vice-Chancellors commissioned since the early 1950s.

Ms Platten also painted the portrait of the University's Vice-Chancellor from 1997-2001, Professor Mary O'Kane. This portrait marked a change from the traditional style of the earlier portraits, introducing Ms Platten's brand of theatrical narrative and use of props to the official portrait series

"Anna Platten is renowned for her portraiture and the insight with which she interprets her subject and the way she portrays them as part of a broader story," said Mirna Heruc, Manager of the University of Adelaide's Art and Heritage Collections.

The portrait of Professor McWha has him standing under the Moreton Bay Fig at the front of the University along North Terrace, holding an apple in one hand – a reference to his involvement in the program which bred the Pacific Rose apple – and with his Vice-Chancellor's robe draped over one shoulder in an allusion to a magician's cape. In the background is a less formally dressed Vice-Chancellor with familiar sun-hat.

Ms Platten said she tried to express the impressions the Vice-Chancellor made on her as a person, as well as in his role as Vice-Chancellor.

"He comes across as someone with a sense of humour, an uncomplicated kind of human being with a warm, engaging personality. That sat well with his role in opening up the University along North Terrace, the University engaging with the community," Ms Platten said.

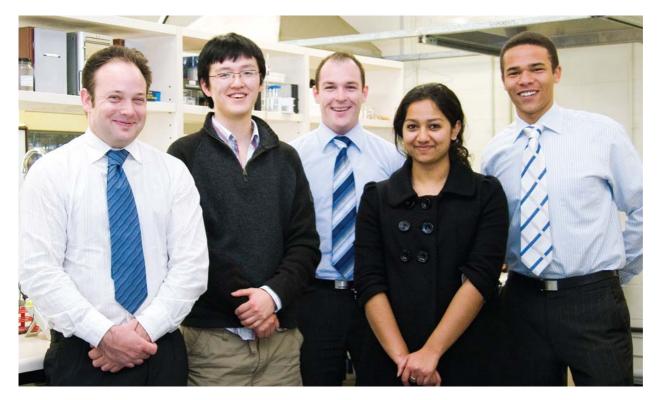
"Then there's his scientific background and the apple. There's something slightly magical about that, along with the fact of him being Irish and with twinkly eyes. There's a connection there with the magic of university life, so I positioned the Vice-Chancellor robe across one shoulder like a magician's cape."

Anna Platten spoke about her experiences in painting portraits and the expectations around commissioned portraits at the unveiling event, this year's Art and Heritage Collections' Cultural Oration.

The Cultural Oration, 'Painting a Portrait', in collaboration with the Graduate Program in Art History, was part of this year's South Australian Living Artist (SALA) Festival.

The new portrait will join others on the walls of the University's Mitchell Building.

Story by Robyn Mills



From left: University of Adelaide students involved with Somnium Innovations, a company established through the Graduate Entrepreneurial Program: Greg Edeson, Han Lu, Jamie Miller, Sindhu Shastry and Ty Yengi

Photo by Chris Tonkin

Graduates have recipe for business success

Entrepreneurship

Start with a business idea, throw in some entrepreneurial flair, add specialised expertise blended with industry and government support, and you have a recipe for success.

That's the concept behind the highly successful Graduate Entrepreneurial Program (GEP) located at Thebarton Research Park, one of the University's four Adelaide campuses.

Over the years the GEP has nurtured some outstanding entrepreneurs, including tourism operator Drew Kluska (Outback Encounter), internet web provider Anoosh Manzoori (Smartyhost) and Chinese language and cultural consultant Leonie McKeon.

This year the University has fine-tuned the program, bringing its management under the auspices of the Entrepreneurship Commercialisation and Innovation Centre (ECIC).

Some curriculum changes will also take effect from 2009, with a Graduate Certificate replacing the previous Masters program.

GEP students will have the option of undertaking a Graduate Certificate in either Innovation and Entrepreneurship, or Science and Technology Commercialisation.

"These changes will allow participants to develop the skills not only to succeed in their current venture, but also to apply frameworks to ensure they have the skills to become serial innovators and entrepreneurs," said Megan Llewellyn, GEP Program Manager.

One of the emerging success stories for 2009 is a young company that is developing a mineral processing and water treatment technology for mining industry waste.

Jamie Miller, Greg Edeson and Ty Yengi from Somnium Innovations have been working within the GEP's business incubator at Thebarton, liaising with mentors, industry experts and University of Adelaide students to develop the technology.

"The program has given me an opportunity to go after what I want to do and at the same time facilitate industry and university linkages," Jamie said.

"The business incubator has taught us to first identify that a market exists for a service or product. Through that process we can then mobilise the required resources and capital."

Somnium Innovations has attracted seed funding from Mount Isa Water to develop a water treatment and waste recovery technology for metal-contaminated waters The principal stakeholder is the mining industry, although the technology could potentially be applied to other industries that deal with mineral waste, Jamie said.

Three chemistry students, as well as three final-year Chemical, Mechanical and Petroleum Engineering students, are working on the technology with Somnium Innovations.

The company has already lodged a provisional patent and should have a prototype ready by April 2009, with a pilot product planned for rollout in 2010.

Somnium is now seeking to attract the right strategic partners and potential investors with established networks in the mining industry.

"The core competency of this business is really in the development of the technology," Ty said. "This is where the University has been so valuable, fostering a collaborative environment and a cluster of knowledge. Without it, businesses like ours would not happen."

The Graduate Entrepreneurial Program has provided the team with subsidised office accommodation, one-on-one mentoring from experienced business people and a qualification through ECIC.

Since 1993 the GEP has been instrumental in the launch of 60 innovative businesses.

For more information, visit: www.ecic.adelaide.edu.au/gep/

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OPENDAY 08 LIVING LIFE IMPACT THE UNIVERSITY OF ADELAIDE

As many as 12,000 people packed the University of Adelaide's North Terrace Campus on Open Day, Sunday 17 August.

Open Day had something for everyone, including tours of the University's historic and state-of-theart buildings and facilities, a short film festival, live music performances, and public talks, including a

