

# Adelaidean

NEWS FROM THE UNIVERSITY OF ADELAIDE

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**inside this issue**



**5** Institute's early health focus



**7** The good oil: making a difference to premature babies



**11** Enjoyment the key to success for new Rhodes Scholar



**13** Group defies species loss



## PM's science prize shines light on research

### Physics

University of Adelaide physicist Professor Tanya Monro has been awarded a Prime Minister's Science Prize for 2008.

Professor Monro has created a new class of optical fibres with innovative potential applications in medical research, defence, industry and environmental science.

She has been awarded the Malcolm McIntosh Prize for Physical Scientist of the Year which recognises outstanding research of global importance by early-career scientists. This was one of five Prime Minister's Science Prizes awarded last month by Prime Minister Kevin Rudd and Minister

for Innovation, Industry, Science & Research Senator Kim Carr.

Professor Monro is Director of the Centre of Expertise in Photonics within the University of Adelaide's School of Chemistry and Physics and, at just 35, is already regarded as one of the world's leaders in optical fibre technology. Earlier this year she was awarded one of the 2008 Australian Research Council (ARC) Federation Fellowships.

This new class of optical fibres, containing air holes and made from soft glass, is broadening the role of optical fibres from communications to areas such as diagnostics – detecting trace quantities of chemicals or biomolecules – and a variety of medical and defence applications.

Above: This new class of optical fibres has a variety of medical and defence applications

Professor Monro said she was "absolutely thrilled" to receive what she regarded as the highest recognition possible by this stage in her career.

"It's recognition that the research I and my fabulous team are doing is of world-class quality and importance," she said.

"We are not just concentrating on a narrow area of science. What we are doing is bringing together a range of expertise to solve specific problems with great potential benefit for industry, health and the environment."

continued on page 4



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## From the Vice-Chancellor

The current financial crisis means that economics is at the forefront of the news – and our minds – on a daily basis. Economics (or perhaps I am just talking about money!) is extremely important in every aspect of our lives, and there's no exception for Australian universities, which must continue to find ways of doing more with less federal funding.

We all must pay great attention to the financial situation and respond accordingly, whether that be on a personal level or an institutional level. And although funding is extremely important to education, not everything can be measured in financial terms. Tertiary education is highly valuable and intrinsic to society, but it often defies the best efforts of accountants and economists to quantify, and perhaps that's not a bad thing.

Take, for example, the University of Adelaide's history and its enormous contribution to society over more than 130 years. While it might be possible for someone to attempt to estimate what the University of Adelaide has contributed back to society – to government, industry and the community – it would be impossible to know just how huge that contribution really has been.

Consider some of the early "firsts" that the University was responsible for: the first university in Australia to grant degrees in Science; the first Australian university to admit women to academic courses (in 1881, ahead of Oxford, which didn't do so until 1920, and Cambridge, which admitted women for the first time in 1948). These and many other major achievements have had an astonishing impact on society, not just within Adelaide or the State, but across the nation and even around the world.

Whenever I consider the University's history I also invariably think of the unique contributions of each of its individual campuses. This year, the University of Adelaide is celebrating 125 years of Roseworthy. Established in 1883, Roseworthy College (now the Roseworthy Campus of the University of Adelaide) was

Australia's first agricultural college. It is an excellent example in itself of an institution that has contributed greatly to industry, government and society over time.

Over the past 125 years, Roseworthy has developed an international reputation for excellence in research and teaching in dryland agriculture, natural resources management, winemaking and animal production. There have been no shortage of challenges over the years – as an agricultural college, Roseworthy has had to weather times of drought as well as the Great Depression, waxing and waning interest in agricultural studies, and changes to academic programs.

In its 125th year, Roseworthy is looking strong. The new Veterinary Science school has brought with it renewed interest in studies at Roseworthy, and the relevance of the campus to animal science education, research and innovation in this State is at an all-time high. Roseworthy has been and will remain an Australian and world leader in dryland agriculture and animal science. Through the new Vet School, Roseworthy will also become known as a leader in animal health, with a strong emphasis on the relationship between veterinary and human medicine.

The Roseworthy Campus, like the University itself, continues to prove that tertiary education is one of the greatest investments any society can make. Education is, if you like, a blue chip investment that always provides a return to society. Such investments are very hard to find.

I join with all my colleagues in the University in congratulating Roseworthy on 125 years of success.

**JAMES A. McWHA**  
Vice-Chancellor and President

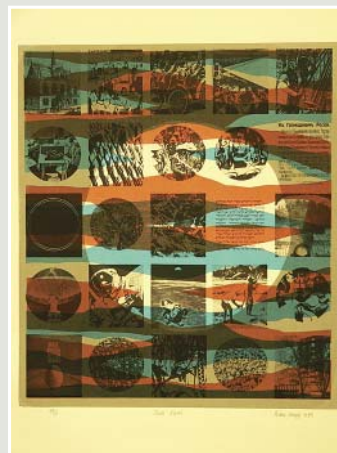
## Art & Heritage Collections

The University of Adelaide's Visual Art Collection includes seven works by the respected Adelaide artist Franz Kempf AM. The artist's long association with the University reaches back to 1970 when *The Contract* (1969, oil on canvas), a painting depicting an Old Testament scene, was purchased for the collection.

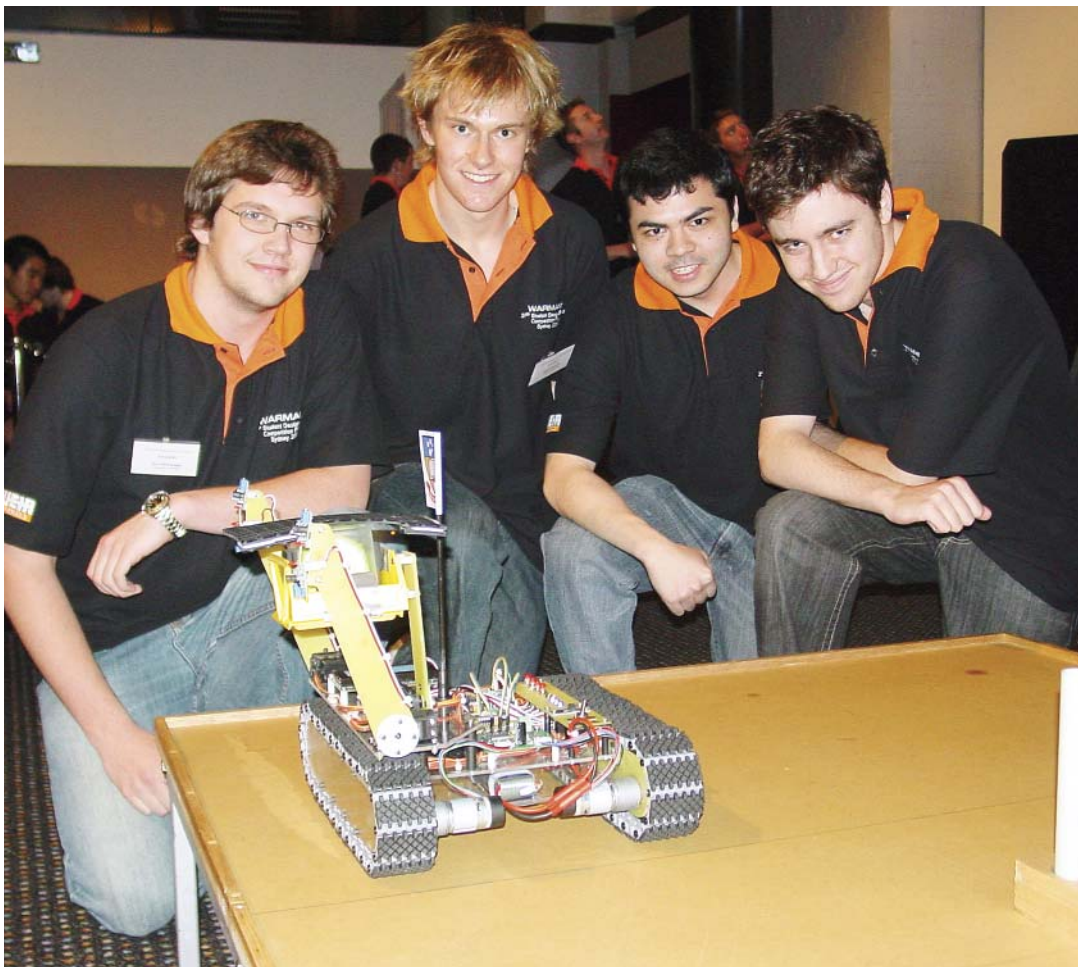
Now, almost 40 years later, Franz Kempf has generously donated 25 of his paintings and drawings to the Elder Conservatorium of Music to raise funds for the development of music in this State.

The works are for sale at a special exhibition, *Drawing for Music*, at Heysen Frames, 110 Finnis Street, North Adelaide, 11am- 4pm every day from 8–23 November. This is an excellent opportunity to acquire works by this noted artist and support South Australian music.

■ Mirna Heruc, Manager, Art & Heritage Collections



*Centi Anni* (1973, screen print) by Franz Kempf was commissioned as part of the University's centenary celebrations in 1974 and is part of a folio of prints by five different artists. Several folios, now collector's items, are still available for purchase from the Art & Heritage Collections office, Room 538, Wills Building, North Terrace Campus.



# Robot to the rescue as team wins prize

## Engineering

Above: 'ARTHUR' with the winning designers: (from left) Eric Parsonage (team captain), Bryn Crawford, Shane Fitzgerald and Tristan Goss

A team of University of Adelaide Mechanical Engineering students has won a national design and build competition with an all-terrain disaster-relief robotic vehicle named ARTHUR.

The second-year students were competing against 13 other finalist teams from universities across Australia, and teams from Malaysia and New Zealand.

The Warman Design-and-Build Competition is organised by Engineers Australia and sponsored by Weir Minerals Australia Ltd. The national finalists had already won their local competitions.

The winning University of Adelaide students were Tristan Goss, Eric Parsonage (team captain), Bryn Crawford and Shane Fitzgerald.

"ARTHUR (Autonomous, Ready-Tested Heuristic Using Robot) consistently outperformed other competing devices and decisively won the competition," said Dr Antoni Blazewicz, supervising lecturer in the School of Mechanical Engineering.

"It was a great result, reflecting the dedication and talent of these students and, more generally, shows the high level of technology and innovation that underpin the School's degree programs."

The annual competition centres around designs involving rescue of the threatened inhabitants of the planet "Gondwana".

This year students had to design an all-terrain autonomous device to help get relief packages to where they were needed.

The prototypes had to be able to navigate difficult terrains and deploy a relief load, with points awarded for speed, accuracy of delivery, and the number of sections of track crossed by the device.

ARTHUR used infrared sensing to determine its absolute position.

"The innovative nature of the design is in its mix of feedback and control systems," said Dr Blazewicz.

All mechanical components were designed and machined by members of the team.

■ Story by Robyn Mills

## News in Brief

### Adelaide student wins global moot court prize

University of Adelaide Law student Georgia Lloyd, 23, has been awarded second prize in a global moot court competition held in Washington DC, United States.

More than 1000 delegates from more than 100 countries attended the Advocates International Fifth Christian Lawyer Global Convocation at the Hyatt Regency on Capitol Hill last month.

The event focused on themes including justice and compassion, peace and reconciliation, religious freedom, and integrity in law.

Georgia and team-mate Inez Fainga'a from Brisbane competed against other teams of two from around the world.

The two finalist teams presented their argument in front of the Convocation audience, which consisted of judges, solicitors and prosecutors.

The Moot competition judges told Georgia that her oral presentation was the best of the whole competition.

Georgia, who will be in her final year of Law next year, is hoping to extend her interest in working with children by practicing in the Family Law Court.

She has worked part-time at the University of Adelaide for a number of years at Unibooks, and is involved in a wide range of community activities.

Below: Georgia Lloyd at Capitol Hill, Washington DC



# Bullying at work

## ■ Psychology

New research in the University of Adelaide's School of Psychology will examine what happens to managers who have been accused of workplace bullying by their staff.

PhD student Moira Jenkins, who is also a registered psychologist, is carrying out a study of managers accused of bullying their workers to see how they are affected by such accusations.

"Most organisations now have bullying and harassment policies and complaint processes aimed at dealing with inappropriate behaviours such as bullying and harassment. However, evidence suggests that some employees use these complaint procedures to complain about all sorts of workplace conflict, and behaviours that are not necessarily bullying," said Ms Jenkins.

"There are very few studies that have examined how complaints affect the people who have been accused of being a bully, especially managers who often have to keep managing the team while they are under investigation for workplace bullying."

Ms Jenkins is looking for managers who have had a complaint of workplace bullying made against them in the past year to hear their perspective on the accusations, the way the complaint was addressed, how the complaint affected their ability to carry out their job and the support they received. Study participants will be interviewed and asked to fill out a short survey.

Interviewee confidentiality is guaranteed and nothing will identify individuals or workplaces.

"I hope that the results of this study will help organisations better manage workplace conflicts before they become complaints of bullying," said Ms Jenkins. "Hopefully it will also give some guidance on how to best support managers who have allegations made against them."

People interested in taking part in the study should contact Moira Jenkins by phoning 0412 733 453 or emailing [moira.jenkins@adelaide.edu.au](mailto:moira.jenkins@adelaide.edu.au)



Prime Minister's Science Prize winner Professor Tanya Monro with the Minister for Innovation, Industry, Science & Research, Senator Kim Carr

## PM's science prize shines light on research

Continued from page 1

Professor Monro's work has received support from both State and Federal governments, as well as the Defence Science & Technology Organisation (DSTO).

She is a member of the South Australian Premier's Science & Research Council, a founding steering member of the Royal Institution of Australia, and member of the 2008 community consultation panel for the Defence White Paper.

In 2007, Professor Monro was awarded the Women in Physics Lecture by the Australian Institute of Physics and, in 2006, a Bright Spark Award for Australia's Top 10 Scientific Minds under 45 by *Cosmos* magazine.

She obtained her PhD in physics from the University of Sydney, for

which she was awarded the Bragg Gold Medal for the best physics thesis in Australia in 1998, and was also awarded an Eleanor Sophia Wood Travelling Fellowship.

In 2000, she received a Royal Society University Research Fellowship at the Optoelectronics Research Centre at the University of Southampton in the UK. She came to the University of Adelaide in early 2005 as the inaugural Chair of Photonics.

There was more good news for Professor Monro last month, winning an extra \$1.1 million in funding from the ARC for two further research projects. (See ARC and NHMRC funding stories on pages 8 and 9)

■ Story by Robyn Mills

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# Institute's early health focus

## ■ Health Sciences

“By working closely together with Adelaide’s public hospitals, we will be delivering rapid clinical outcomes right to the hospitals where patients are being seen”

A new research institute that will tackle big issues around prevention of illness for individuals and their children, and find new treatments for serious diseases, will be established at the University of Adelaide.

Focusing on reproductive health, stem cell research and health across generations, this is the first of several large research institutes to be established by the University of Adelaide over the coming year. The new research institutes will build on the University’s research strengths in line with State and national research priorities and reinforce its position as a research leader.

Named after renowned obstetrician Professor Jeffrey Robinson CBE, Emeritus Professor at the University of Adelaide, the Robinson Institute will encompass the University’s Research Centre for Reproductive Health, the Centre for Stem Cell Research and the Centre for Early Origins of Health and Disease in a collaborative venture with the Adelaide hospitals Lyell McEwin, Women’s and Children’s, Royal Adelaide and Queen Elizabeth, and the Hanson Institute at the IMVS.

The Robinson Institute will be led by University of Adelaide reproductive medicine expert Professor Robert Norman and involve more than 200 research staff and students with expertise ranging from epidemiology through to molecular biology and genetics.

Professor Norman said the Institute would be unique in the range of people brought together in the one

organisation, from those working on basic science to people involved in public health and patient services.

“There are very few similar concentrations of experts of such diversity in one institute anywhere in the world,” said Professor Norman.

“Bringing together these diverse disciplines will lead to strong clinical and commercial outcomes in human and animal health, and this offers an extraordinary opportunity for new ideas to be brought to practical use more rapidly.”

Examples include new treatments for infertility, stem cell production and novel interventions in diseases of pregnancy and cancer.

Professor Norman said the Robinson Institute would study the social context for reproductive health, develop effective strategies, and translate research into health practice and policy. Members would also promote commercialisation of treatments, and provide high level training of students and researchers in reproductive and regenerative medicine.

“The Institute will also promote the role of stem cell research in the University where 18 internationally competitive groups undertake research on areas such as the isolation of adult and cord blood stem cells, clinical applications and improved patient care,” he said.

“By working closely together with Adelaide’s public hospitals, we will be delivering rapid clinical outcomes right to the hospitals where patients are being seen.”

The Robinson Institute will build on the University’s international reputation in reproductive health stemming from world-leading research over the past 50 years, which has increased understanding of human and animal reproduction and produced new infertility treatments and genetic diagnosis of embryos.

Deputy Vice-Chancellor (Research) Professor Mike Brooks said the Robinson Institute was part of the University’s research strategy to build concentrations of research strength in several broad areas.

“The University of Adelaide is making a substantial increased investment in research to further raise our research outcomes, strengthen our research reputation internationally and increase the impact we make on the local and wider communities,” said Professor Brooks.

“The Robinson Institute will enhance our already strong reputation in reproduction and increase our ability to produce real health outcomes, to grow our funding base and to attract leading researchers and top students from around the world.”

Emeritus Professor Jeffrey Robinson led the development of the University’s outstanding reputation for research in fetal-maternal health and reproductive medicine and biology over 20 years from 1986 to 2006. In 2006 he was awarded a Commander of the British Empire (CBE) for his services to maternal and fetal health.

■ Story by Robyn Mills



One student compared Adelaide with Copenhagen and Lisbon (pictured) which are cities of similar size to Adelaide

Photo by Ricardo Gurgel

# Landscape students pave way for innovative designs

## Architecture

“The course required students to research, debate and present their design and policy solutions for sustaining city growth without jeopardising the environment”

Climate change and crippling petrol prices are presenting new challenges for the next generation of landscape architects.

Students from the School of Architecture, Landscape Architecture and Urban Design are rising to that challenge thanks to the guidance of one of Australia’s most environmentally conscious landscape and architectural firms.

Sydney-based McGregor & Partners recently delivered an intensive two-week course to the University’s landscape architecture students, forcing them to look at the repercussions of climate change and escalating fuel costs on a global and local scale.

Students took part in an in-house research unit, the Biocity Studio, tackling different environmental crisis scenarios in Adelaide and providing design and policy solutions.

Landscape Architecture Program Coordinator Tanya Court said the cross disciplinary studio produced a number of innovative projects, including scenarios to prevent waste and encourage recycling, new policies to prevent biodiversity loss and initiatives to stop further sprawl for metropolitan Adelaide.

Student Tim Clark proposed a standardised recycling scheme across all Adelaide councils, funded by levies imposed on manufacturers and retailers, and a labelling system for all products.

“The manufacturing sector has to change its processes if we are to minimise waste and maximise the use of recycled products,” Tim said. “My proposal endorsed a system where 100% of Australian products are recycled.”

Chinese student Yingya Su tackled the issue of biodiversity loss due to climate change.

“A wide range of crisis scenarios is associated with biodiversity loss. The first to be affected in Adelaide would be tourism, followed by agriculture – two areas that are critical to the State’s economic health,” she said.

Yingya Su’s solution was to integrate the protection of biodiversity and the ecosystem into urban planning and development policies.

“We need to create linkages between areas of biological significance, teach biodiversity in schools, university and in the community as well as encourage practical solutions, such as planting

native trees and establishing community nurseries.”

Saudi Arabian student Nawaf Alhajaj flagged a scenario where petrol prices hit \$8 a litre by 2018, placing intense financial pressure on residents and commuters.

“My solution was to concentrate residential developments in the city centre, increasing the population density with high rise buildings and creating CBD accommodation for 300,000 residents by 2020.

“I compared Adelaide with Copenhagen and Lisbon – cities of similar population – and found that they managed to house their residents in a far more compact way without compromising their architectural style.”

Ms Court said the course required students to research, debate and present their design and policy solutions for sustaining city growth without jeopardising the environment.

McGregor & Partners, who work with a number of architectural students across all Australian universities, will publish the most outstanding projects in a book based on the Biocity Studio findings.

■ Story by Candy Gibson

# The good oil: making a difference to premature babies



## Health Sciences

“Babies born prematurely today have a greater chance of survival because of advances in medical care, but they have an increased risk of medical and developmental problems”

Above:  
Dr Lisa Smithers with  
omega-3 oil supplements

Photo by David Ellis

A researcher who has shown that the visual development of premature babies can be improved by ensuring their diets are rich in omega-3 oil has won this year’s Young Investigator Award.

Dr Lisa Smithers won the \$10,000 the Hon. Carolyn Pickles prize and was named the South Australian Young Investigator for the Year at a ceremony at the Adelaide Convention Centre last month.

Dr Smithers, who conducted her PhD research at the University of Adelaide and is now a Medical Scientist and Postdoctoral research fellow at the Women’s and Children’s Health Research Institute and Flinders Medical Centre, took out the award based on her ability to communicate her science to a panel of media judges.

Dr Smithers conducted a clinical trial involving 143 babies born more than two months premature.

As part of the clinical trial, tuna oil capsules containing DHA, an omega-3 oil, were ingested by breastfeeding mothers and DHA was also added to milk formula for those women not breastfeeding.

Throughout pregnancy DHA usually accumulates in the growing baby’s brain and visual system. DHA

is normally present in breast milk and formula, but these supply lower amounts than provided to a growing baby during a full-term pregnancy.

The clinical trial raised the DHA levels in the milk to four times higher than what would normally be present, to an amount similar to that supplied during pregnancy. The DHA-enriched milk was provided to the premature babies until their full-term date.

No differences in vision were found at two months of age, but by four months, babies who were fed higher DHA could see a finer pattern than those fed the usual amount of DHA.

The research findings have the potential to help improve the health outcomes of babies born prematurely, who have a life-long, increased risk of poorer development.

“Babies born prematurely today have a greater chance of survival because of advances in medical care, but they have an increased risk of medical and developmental problems,” Dr Smithers said.

“As humans, we learn so much about our environment through our vision, so there is a realistic potential for this to improve other

important areas of the babies’ development.”

As part of her research Dr Smithers also devised a visual testing procedure for babies based on international methods.

This involved monitoring brain waves through sensors as the babies responded to patterns displayed on a TV monitor. The patterns were reduced in size until there was no response, indicating that the baby could no longer see the pattern.

Babies were tested at two and four months of age because a baby’s visual system is in rapid development following birth.

The Young Investigator Award, now in its ninth year, is a highly successful event rewarding excellence in South Australia’s young researchers in both science and their ability to communicate and “sell” that science.

The award is an initiative of the Children, Youth and Women’s Health Service, in conjunction with the University of Adelaide, the University of South Australia and Flinders University, together with the Women’s and Children’s Health Research Institute and the Women’s and Children’s Hospital Foundation.

# \$34 million impact on research

University of Adelaide researchers and affiliates have been awarded more than \$34.6 million for new research projects that aim to make a major difference to people's lives.

The recent funding announcements from the Australian Research Council (ARC) and National Health and Medical Research Council (NHMRC) will support more than 80 new research projects at the University of Adelaide starting next year.

"This is an outstanding result for the University of Adelaide and its research affiliates, and for the State," said the University's Vice-Chancellor and President, Professor James McWha.

He said the funding announcements – which represented 65% of the combined funding announced for the

State – were further proof that the University of Adelaide was a "powerhouse of research in the State".

"The University of Adelaide continues to attract the lion's share of the State's research funding, building on our long track record of excellence in research," Professor McWha said.

"With each new grant awarded, the University is able to make an even greater impact on the community through the development of new knowledge and understanding in areas that affect our daily lives."

[www.adelaide.edu.au/research](http://www.adelaide.edu.au/research)

## National Health and Medical Research Council (NHMRC)

More than \$22 million in federal funding has been awarded to the University of Adelaide for new research that aims to improve our understanding and treatment of major health problems in the community.

University of Adelaide staff and affiliates have been awarded funding for 46 new research projects starting next year. These include research into cancer, obesity, transplants, wound healing, genetic disease, reproduction, diabetes, oral health, asthma, stroke, drugs, heart disease, and early child development.

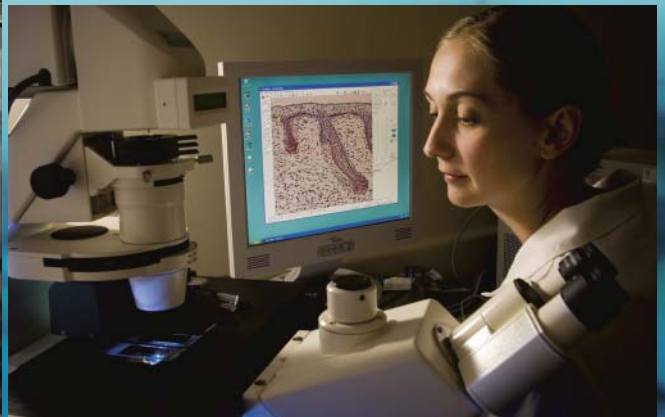
Professor McWha said the latest NHMRC funding "will launch dozens of new research projects that have the potential to make the greatest impact on our lives – by helping to save and prolong lives, and improve the quality of life".

"The funding feeds directly into key areas of science and health science for which the University of Adelaide and our research partners are world renowned. These include the impact of fetal development on child and adult health, reproductive health, cardiology, pharmacology and genetic disease, to name just a few."

The new research funding announced included:

- \$1.67 million to a team led by Professor Caroline Crowther (Obstetrics & Gynaecology/Women's and Children's Hospital) to determine which type of antenatal steroid given prior to preterm birth is better for optimising child health at two years of age;
- \$1 million to a team led by Associate Professor Robert Fritridge (Surgery/Queen Elizabeth Hospital) to evaluate a decision-making model for endovascular aneurysm repair (EVAR);
- \$267,000 to a team led by Dr Peter Coyle (Molecular & Biomedical Science/IMVS) to study the impact of alcohol exposure on zinc deficiency in the fetus, which is a major cause of cognitive problems in children;
- \$714,000 to a team led by Associate Professor Christine Feinle-Bisset (Medicine/Royal Adelaide Hospital) to investigate lauric acid, a potential nutrient-based appetite suppressant;
- \$704,428 to a team led by Professor Konrad Jamrozik (Population Health & Clinical Practice) to study the incidence and outcome of stroke in rural South Australia.

"These and many other research projects aim to play a major role in helping the community to realise a better future, and we are pleased to be able to make such a significant contribution to society through our research," Professor McWha says.



## Australian Research Council (ARC)

The University of Adelaide has been awarded almost \$12 million for 37 new research projects in the latest round of funding from the Australian Research Council (ARC).

To begin at the University of Adelaide from next year, the projects include groundbreaking research in the areas of climate change, communications, genetics, reproduction, obesity, agriculture, history and mental illness.

In addition to the public funding announced by the Federal Government, 12 of the University's new research projects will attract almost \$10 million in additional cash and in-kind support from industry, government and other research partners.

Professor McWha said the new projects announced "cover the breadth and depth of research expertise at the University – such as the impacts of climate change and how to prevent it, to improving business decision-making thanks to the use of technology".

"These projects are geared at better understanding our world and helping to provide for a better future.

"I'm especially pleased with our results in attracting funding for new research linked to industry and other partners," he said.

**Among the winning research projects (Discovery Projects and Linkage Projects) announced for the University of Adelaide were:**

- \$810,000 to a team led by Dr Hugh Harris (Chemistry) to better understand how selenium is stored and used in the body, so that the beneficial effects of selenium can be harnessed more effectively;
- \$641,000 to a team led by Professor Graeme Hugo (Geographical & Environmental Sciences) to study the potential impact the Baby Boomer generation's health and workforce participation will have on the nation's productivity and prosperity;
- \$521,000 to a team led by Professor Barry Brook (Earth & Environmental Sciences) to develop an innovative new modelling system to determine the extent to which climate change will amplify other major man-made threats to biodiversity;
- \$405,000 to a team led by Dr Bernd Fischer (Electrical & Electronic Engineering) to develop a new T-ray imaging system that will have major benefits for medical science.

# New centre speaks right language on defence talk



## Defence

“Our aim is to establish a centre of such expertise and repute that it will become indispensable to the Australian Defence sector”

The University of Adelaide and the University of South Australia have joined forces to establish a new defence research and education centre that aims to combat one of the greatest challenges facing the defence industry globally.

Under the leadership of its Chief Executive Officer, defence industry executive Mr Lloyd Groves, the new Defence Systems Innovation Centre (DSIC) will focus on the major challenge of systems integration for defence.

Systems integration means getting electronic systems to “talk” to each other. Because defence involves so many different electronic systems, this is a huge task for defence and related industries in Australia and worldwide.

DSIC brings together university, industry and government stakeholders from across Australia. The centre has been established with seed funding of \$1.2 million over three years from the two universities.

“Drawing on each university’s expertise in systems engineering, modelling and simulation, DSIC will be a centre of excellence in systems integration – with a focus on providing real outcomes for the Australian defence community,” said

the Vice Chancellor and President of the University of South Australia, Professor Peter Høj.

“This initiative has the potential to develop a highly qualified pool of expertise in systems integration for the benefit of Australia’s defence community, addressing the nationwide skills shortage in this increasingly important area.”

Professor James McWha, Vice-Chancellor and President of the University of Adelaide, said: “This new centre will bring a scale of problem-solving capability to key issues in defence the likes of which have never been seen before in Australia.

“Our aim is to establish a centre of such expertise and repute that

it will become indispensable to the Australian Defence sector.”

The centre’s primary role will be to provide leading-edge advanced engineering and research expertise, advice, and services of direct relevance to the defence community. This will be achieved through collaborative projects, contract-based studies and consultancies, education programs for undergraduate and postgraduate students, and research programs.

The centre has already attracted significant interest from industry.

DSIC activities will be hosted by the two universities until early to mid 2009, when DSIC expects to move into a secure facility at Endeavour House, Mawson Lakes.



## Research Tuesdays – sharing great research with the community

FREE PUBLIC LECTURE

The ‘Commercialisation of Intimacy’. Are Women still left holding the Baby?  
Tuesday 11 November at 5.30pm, Professor Ann Brooks

Changing patterns of caring and intimacy traditionally seen as the domain of the family are being increasingly commercialised as single parents and couples transfer emotional labour demands from the home to professional agencies. Do these changes mark a democratisation of gender relations in relation to caring obligations? Do they mean improved career opportunities for women and men? This lecture presents a range of cases from Australia, the US and Asia and looks at the impact on women’s and men’s careers.

### Venue and Time:

Tuesday 11 November at 5.30pm

Lecture Theatre 102, Napier Building, North Terrace Campus. Duration approximately one hour. Admission free.

### Bookings essential:

Email: [research.tuesdays@adelaide.edu.au](mailto:research.tuesdays@adelaide.edu.au)

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“It’s an absolute honour to be selected for this scholarship, and that’s just reinforced by the quality of the candidates”

# Enjoyment the key to success for new Rhodes Scholar

## ■ Scholarships

University of Adelaide graduate Benedict Coxon has been named South Australia’s Rhodes Scholar for 2009.

Benedict, 22, of Rose Park, graduated with an Honours Degree of Bachelor of Laws (First Class) in August this year and plans to use his Rhodes Scholarship to study for a D.Phil (PhD) in Laws at the University of Oxford.

Currently working as an Associate to Federal Court Justice The Hon. Anthony Besanko, Benedict is the 102nd Rhodes Scholar in the University of Adelaide’s history.

The former Marryatville High School student has interests in music, languages, writing and sport. At the University of Adelaide he was involved in a wide range of activities including strong representation at a number of moot competitions, as an arts writer and editor with the student magazine *On Dit*, and as a member of the Elder Conservatorium Chorale, the Adelaide Symphony Chorus and the Adelaide Chamber Singers.

He twice received the Dean’s certificate for the highest marks awarded during his Law studies at the University.

Benedict said being named the 2009 Rhodes Scholar made him feel “a little bit of shock mixed in with a bit of pride and a lot of excitement”.

“It’s an absolute honour to be selected for this scholarship, and that’s just reinforced by the quality of the candidates. The field is made up of people of a very high calibre,” he said.

“I haven’t had that many chances to get overseas until now. The extent of my overseas travel is a brief stint to England when I was about four years old, so that’ll be very exciting to spend quite a significant amount of time overseas. The experience of being at Oxford itself, college life... that will be something unique. I’m looking forward to it.”

Benedict said studying at the University of Adelaide gave him “so many opportunities”.

“At the University I was able to get involved in musical activities, I was able to get involved in student media, student politics through the Law Students’ Society – there are

just so many opportunities and such a variety in terms of what’s on offer. There’s something for everyone and it’s really not that hard to find an extra-curricular activity that you’re interested in.”

He said his key to managing all of his activities successfully was a simple one: “I think it’s just a question of making sure that you enjoy each thing that you do. It doesn’t matter how busy you are, you’ll never mind because you’ll always be doing something that you enjoy.”

Nine Rhodes Scholars are chosen in Australia each year – one for each State, plus three for Australia at large.

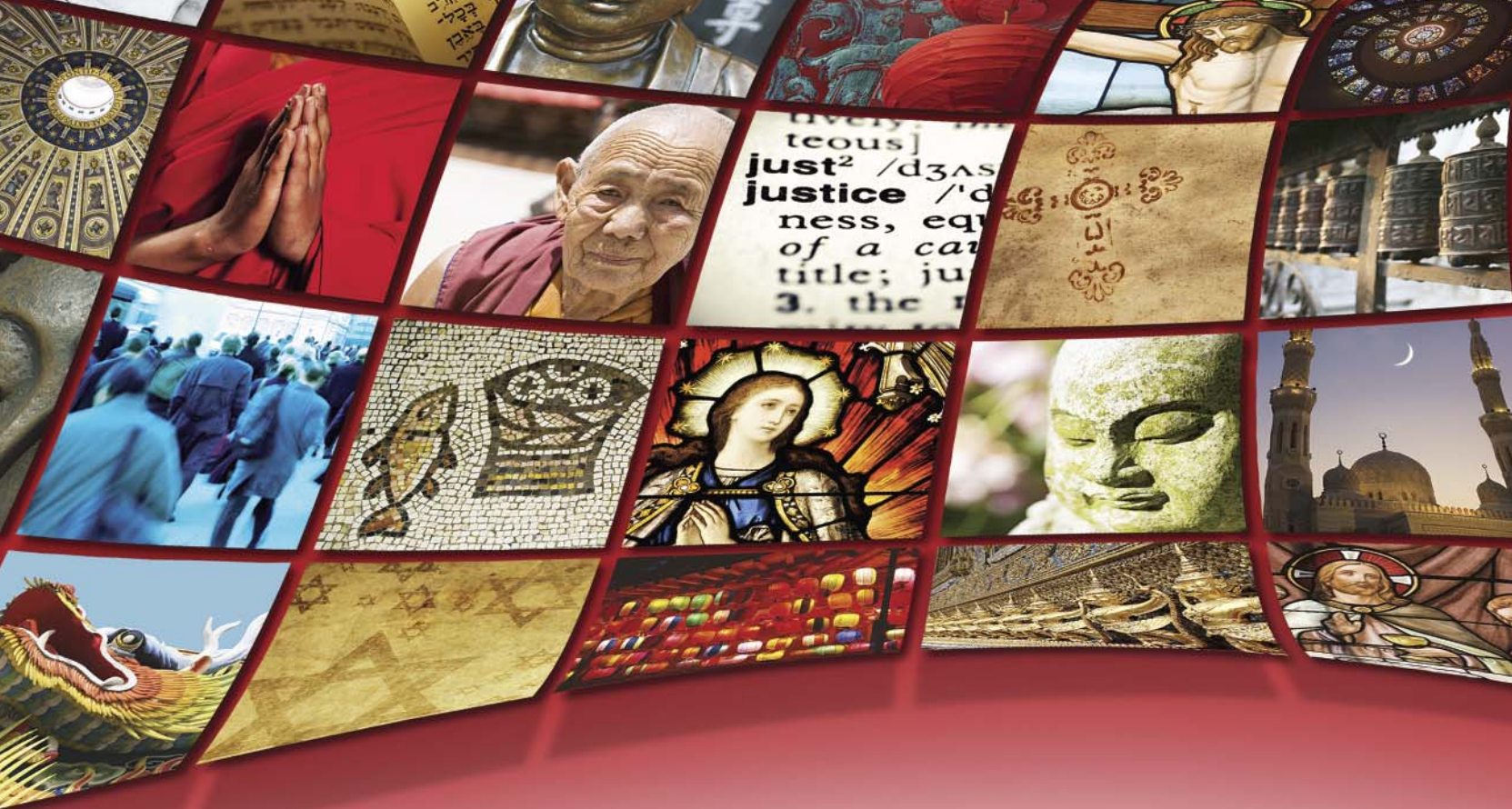
The selection of the Rhodes Scholar for South Australia is made by a committee chaired by the Governor of South Australia, His Excellency Rear Admiral Kevin Scarce AC CSC RANR, and comprising former Rhodes Scholars and community leaders.

The Scholars are chosen based on their academic achievements, as well as community work, leadership and sporting activities.

Above:  
University of Adelaide Law graduate Benedict Coxon at Government House shortly after his announcement as South Australian Rhodes Scholar for 2009

Photo by David Ellis

■ Story by David Ellis



# Law, society, religion join in research trinity

## ■ Law

What role does religion play in terrorism and how can the law respond? Should religion play a role in legal issues around abortion or euthanasia? Should Australian law recognise religious law?

These are some of the issues to be tackled by a unique new research unit to be launched at the University of Adelaide this month.

Established within the University's Faculty of the Professions, the Research Unit for the Study of Society, Law and Religion will study the place and role of religion and law in contemporary society.

Director Dr Paul Babie said that while issues surrounding religion and law were increasingly significant for modern society, research within Australia to date had been fragmented.

"These issues are of clear importance to modern Australia and we need to study them in a focused and sustained way," said Dr Babie. "Individual and collective values shape the development of law in any society, and religion has been and continues to be one of the fundamental drivers of those values.

"If we understand the influences behind those values, and the way those interact with the social environment, then we can understand how law adapts and changes over time, and how we might want it, or not want it, to develop.

"On the other hand, if we fail to understand the relationship between religion, values and law, then we fail to understand a significant dimension of Australian social life."

The unit will bring together scholars working on these issues within a range of disciplines and perspectives from across Australia and it will forge links with researchers internationally.

### The main areas of research include:

- the role of religion in current social and moral challenges such as climate change;
- the protection of human rights including freedom of religion and privacy;
- religious fundamentalism and terrorism;

- the role of religion in education;
- moral and ethical dimensions surrounding abortion and euthanasia;
- citizenship and migration.

The unit will be launched at the National Wine Centre on Thursday 13 November by Dr Michael Spence, the Vice-Chancellor and Principal of the University of Sydney and an international expert on intellectual property theory. He will deliver a lecture entitled "Law and Religion in Australia".

This will be followed by a one-day workshop at the University on Friday 14 November on "The Relationship between Law and Religion in Contemporary Society".

For further information on the launch and workshop contact Dr Paul Babie on (08) 8303 5521 or paul.babie@adelaide.edu.au

■ Story by Robyn Mills

The highly successful Climate Change Q & A free public seminar series at the University of Adelaide might have finished for 2008, but the series lives on thanks an equally successful website.

A blog established to support the seminar series – <http://bravenewclimate.com> – will continue to discuss the science behind global warming.

“With more than 75 posts and 1500 comments since its launch in August, the blog has added an interesting dimension to our Climate Change Q & A seminar series,” said Professor Brook, host of the Q & A series and Director of the University’s Research Institute for Climate Change and Sustainability.

“It makes the seminars more accessible to people who were unable to attend for one reason or another. Readers can download the seminar audio recordings and slide presentations, subscribe to RSS feeds, read posts, access additional resources, and most importantly engage in online discussions about the seminar topics and the related issues that we discuss on the blog.”

The series wrapped up last month, with the last two seminars getting to the heart of key issues in the climate change debate. The first of these was “Will it cost the earth to avoid climate change?”

Professor Brook said: “There is a very real fear in the community that by mitigating carbon emissions we will ruin the economy.

“A raft of wait-and-see stalling techniques have arisen out of fear that taking decisive action now to reduce emissions will throw us into an economic depression or back to the Stone Age. Meanwhile, viable solutions to fossil fuel supplies remain under-developed.”

The final topic for the series was “Greenhouse denial versus good science: The ‘pretend debate’”. The guest speaker, Michael Lardelli, also reflected on society’s neglect of the peak oil problem.

“Perfect agreement is hard to achieve, particularly on subjects as complex and expansive as climate change. However, the vast majority of scientists do agree that human activity is causing global climate change, that peak oil is real, and that the consequences will be negative and far reaching and that urgent action must be taken,” Professor Brook said.

**For more information and to continue the discussion, visit:**  
<http://bravenewclimate.com>



## Group defies species loss

### Environment

Experts from the public and private sectors, research and business have banded together to help conserve and manage our local wildlife in the face of climate change.

To be headed by Professor Andy Lowe, Professor in Plant Conservation Biology at the University of Adelaide, the new Equinox Group will work together on a range of flagship programs to retain South Australian biodiversity and develop better ways of protecting it.

Membership of the group spans many key public and private organisations currently involved in shaping sustainable landscapes.

“Climate change is likely to lead to increased temperatures and drier conditions which will create pressures on both natural and production systems in South Australia,” said Professor Lowe.

“It is therefore important to build knowledge about the climate dependency of native and introduced species and how they are likely to respond to variations in climate.

“Species extinction is expected to be particularly severe in the Mt Lofty Ranges. Half of the woodland bird species are facing regional extinction due to the loss of their native habitat. Ten species are already extinct and a further 60 species continue to decline.

“Our generation has a unique opportunity to take action to arrest

further biodiversity loss. However this requires landscape restoration on a scale and complexity that is beyond any individual government or corporation. It requires vision and commitment at a community level.”

#### The Equinox Group will:

- pool together and better utilise available resources and expertise in biodiversity landscape-scale restoration;
- attract the large amounts of investment needed to enable landscape restoration on a meaningful scale;
- enhance coordination of stakeholders in business, government and research;
- promote greater awareness and broader community participation.

The group will be supported by the University of Adelaide’s Research Institute for Climate Change & Sustainability (RISCCS).

Professor Lowe, who holds a joint position as Professor of Plant Conservation Biology within the University’s School of Earth and Environmental Sciences and Head of Science, State Herbarium and Biological Survey, Department for Environment and Heritage, has extensive expertise in restoration genetics, rapid adaptations in plants and gene flow dynamics in rural and urban landscapes.

■ Story by Robyn Mills

“Species extinction is expected to be particularly severe in the Mt Lofty Ranges. Half of the woodland bird species are facing regional extinction due to the loss of their native habitat”

Above:  
The Restless Flycatcher is one of many species under threat of extinction in the Mt Lofty Ranges

Photo by Lynn Pedler

# Unsung heroes honoured

## Alumni

Five unsung heroes of South Australian agriculture have been honoured by the University of Adelaide for their humanitarian efforts in some of the world's poorest countries.

The ROCA Humanitarian Award recipients are all graduates of the former Roseworthy Agricultural College (now Roseworthy Campus), which is celebrating its 125th birthday this month.

They are:

- The Reverend Brian Polkinghorne from Yorke Peninsula, who has spent the past 25 years working on agricultural, environmental and educational projects in Tanzania;
- Mr David Lewis, whose work with the Christian Blind Mission is helping disadvantaged people in a range of countries including Sierra Leone, Niger and Indonesia;
- Mr Paul Symonds, who has devoted 30 years to delivering humanitarian projects in Sudan, Ghana, the Philippines, Cameroon, Tanzania, East Africa, Papua New Guinea, Uganda and India;
- Mr Richard Turnbull, who has spent the past 30 years working on health projects in Ethiopia, Thailand, Indonesia, Kenya, Sumatra, Aceh, East Timor and the Solomon Islands;
- Mr Anthony Petch, who has been involved in humanitarian and innovative malaria project work in East Timor.

A selection panel from the Roseworthy Old Collegians Association (ROCA) took into



account the contribution of graduates to such fields as medicine, disease prevention, advancement of international food and agriculture, missionary work, social and cultural contributions and the environment.

ROCA President Locky McLaren said the recipients could be regarded as the "unsung heroes of South Australian agriculture", applying their Roseworthy education away from their home patch.

"Since its inception in 1883, Roseworthy has equipped many thousands of people with the necessary skills to embark on careers in agriculture, oenology, animal science and natural resources management.

"Among the ranks of past graduates are a number of people who have applied the skills acquired in South Australia for the benefit of humanity. These people are self-sacrificing, acting in a modest and selfless way to pass on the benefit of their knowledge to disadvantaged communities in the poorest areas of the world," Mr McLaren said.

Left to right (back): Dean Polkinghorne on behalf of The Reverend Brian Polkinghorne, Vice-Chancellor and President Professor James McWha, Paul Symonds. (Front): Anthony Petch, Richard Turnbull, Locky McLaren (ROCA President) and David Lewis.

Photo by John Hemmings

## Development & Alumni Events

### Friends of the University of Adelaide Library and the Book Collectors Society of SA

**Event:** Dr Clem Macintyre talking on The Library of 10 Downing Street

**Date:** Thursday 20 November 2008

**Time:** 6 for 6.30pm

**Cost:** Admission is free. Gold coin donation invited

**Venue:** Ira Raymond Exhibition Room, Barr Smith Library, North Terrace Campus, University of Adelaide

**RSVP:** Bookings by Tuesday 18 November to [robina.weir@adelaide.edu.au](mailto:robina.weir@adelaide.edu.au) or phone (08) 8303 4064

### Florey Medical Network

**Event:** Medical Vignerons Dinner

**Date:** Friday 21 November 2008

**Time:** 6:30 for 7pm

**Venue:** The Eclipse Room - L4 Union Building, North Terrace Campus, University of Adelaide

**Cost:** \$70, students \$50

**RSVP:** Gaynor Tyerman, phone: (08) 8303 6356, fax: (08) 8303 5808 or [gaynor.tyerman@adelaide.edu.au](mailto:gaynor.tyerman@adelaide.edu.au)

### Entrepreneur and Commercialisation (ECIC) Network

**Event:** End of Year Alumni Reunion

**Date:** Monday 24 November

**Time:** 5.30pm - 7.00pm

**Venue:** University Staff Club, North Terrace Campus, University of Adelaide

**Cost:** Free

**RSVP:** [ecic@adelaide.edu.au](mailto:ecic@adelaide.edu.au)

## Development & Alumni News

### Vice-Chancellor's Scholarships Appeal

Launched last month, the Vice-Chancellor's Scholarships Appeal raises funds to support four students each year at the University of Adelaide.

The appeal asks alumni and the wider community to help ease the financial pressures faced by undergraduate students, particularly those who move from rural or remote areas in order to begin their studies.

The Vice-Chancellor's Scholarships are entirely funded by the public, so every donation makes a difference.

For more information about the Vice-Chancellor's Scholarships Fund Appeal, please phone (08) 8303 4275 or email: [development@adelaide.edu.au](mailto:development@adelaide.edu.au)

## Alumni

MEMBERSHIP

Adelaide alumni have access to a range of exclusive benefits, services and discounts – and each month we bring you the pick of the bunch for a featured special.

### Special Offer of the Month: Just Spectacles

With a huge selection of spectacle frames, sunglasses and accessories, Just Spectacles can help you find the most stylish way to take care of your eyes – and your wallet.

Just Spectacles is happy to offer University of Adelaide alumni 15% off all frames from their Hyde Park SA store. As well as being Mutual Community member's first providers, Just Spectacles have more than 20 years' experience in optometry and eye care, and a huge range with all the top brands, including Gucci, Dior, DKNY and much more.

To access this offer, and check out the full Alumni Privileges Package, logon to: [www.alumni.adelaide.edu.au/adelaideonlion](http://www.alumni.adelaide.edu.au/adelaideonlion)





# Wine technology, innovation the taste of things to come

## ■ Wine

“To maintain our competitive advantage, the Australian wine industry must remain at the forefront of technological innovation”

Wine industry representatives and researchers gathered recently to discuss ways of ensuring the industry’s continued competitiveness in the face of climate change, water constraints and global market developments.

Held by the University of Adelaide’s Australian Wine 2030 Research Network, the Wine 2030 Conference considered the challenges of the future and the technologies needed to transform the wine industry to ensure its continued viability.

“To maintain our competitive advantage, the Australian wine industry must remain at the forefront of technological innovation,” said Wine 2030 leader Professor Christopher Findlay, who is Head of the University’s School of Economics.

“As well as investing in incremental improvements in technology and management, the industry must also investigate the potential of technology to transform the way it operates in order to fundamentally change the economics of wine production and sale.”

Professor Findlay said the conference, held at the University’s

National Wine Centre, generated “a lot of excitement”.

“For example, researchers who had not previously worked on wine have realised the relevance of their work for the wine industry, with some startling potential applications, for instance, from research into visualisation and photonics,” he said. “Likewise we’ve discovered previously unrecognised complementary research, where various technologies are fitting together to make something even bigger.”

Professor Findlay said the conference also revealed greater scope for more micro-level management in processes from the vineyard through to wine distribution, which would help the industry respond to challenges it faces. And developments in new media were creating new opportunities in marketing and consumer interaction.

Identified “big agenda” areas where the University of Adelaide can make a significant contribution include genomics, the use of yeasts in winemaking, economics and global market analysis and bio-informatics.

The University of Adelaide established its Australian Wine 2030 research network last year with \$1.25 million funding over five years to tackle the key challenges facing the industry to 2030, including climate change, changes in water policy, and shifts in supply and demand.

The Australian Wine 2030 network draws together different expertise from across the University in science, economics modelling and business analysis.

The network is a coalition of research groups pursuing a linked series of research projects alongside a series of education innovations.

“The University of Adelaide is a world leader in wine research and education. With this initiative we will be able to build capacity and draw on new strengths to more effectively respond to industry needs that will become more acute over the next years,” said Professor Findlay.

Further information can be found at: [www.adelaide.edu.au/wine2030](http://www.adelaide.edu.au/wine2030)

■ Story by Robyn Mills

# Mozart favourite brings evenings to finale



## Music

In 2006 for Mozart's 250th anniversary, ABC Classic FM asked Australia's music lovers: "What is the one moment of Mozart's music you can't live without?"

More than 10,000 votes later, the Adagio from his Clarinet Concerto was voted as that special moment.

Now this timeless work can be heard on Saturday 29 November in the final concert of the highly successful ELDERHALL evenings season for 2008.

The performance will feature a rising star, clarinet soloist and University of Adelaide student Catherine Vaughan.

Catherine is completing her Bachelor of Music (Performance) degree at the Elder Conservatorium of Music, where she is studying with lecturer in clarinet Peter Handsworth, and is also a member of the Australian Youth Orchestra.

She will be performing with the Elder Conservatorium Symphony Orchestra conducted by Keith Crellin in the final concert for 2008, *Finale*.

Other works being performed include Beethoven's powerful *Egmont* Overture. Goethe, who had written the play *Egmont*, declared that Beethoven had expressed his intentions with "a remarkable genius."

Sibelius's Second Symphony will close the concert.

"A work that shows the composer's love for his homeland, Finland, Sibelius's Second Symphony is full of stark beauty, melancholy and deep passions. It will bring an extraordinary year of music making to a great 'Finale!'" said Elder Hall Concert Manager Claire Oremland.

"And in an exciting note, a big welcome is extended to Barossa Valley Estate who are new sponsors for the 2009 season of ELDERHALL evenings. Their 'musical' wines 'E Minor' and 'E Bass' will be a wonderful match with next year's concerts," she said.

### ELDERHALL evenings: *Finale*

6.30pm Saturday 1 November  
Elder Hall, North Terrace  
Campus, University of Adelaide  
Tickets: \$25 (adult); \$20 (concession); \$14 (student)

For more information and bookings, phone: (08) 8303 5925  
ELDERHALL evenings is generously supported by ETSA Utilities and the Helpmann Academy

Left:  
Clarinet soloist and University of Adelaide music student Catherine Vaughan

Photo by Claire Oremland



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