Our world-class vision
to bring back the species

Environment

One of South Australia’s leading environmentalists will spearhead a world-class project to help revegetate the Mount Lofty Ranges, to stave off the effects of climate change and halt the loss of animal and plant species.

Associate Professor David Paton AM from the University of Adelaide will lead a multi-million-dollar program that aims to:

• help re-establish native vegetation to 30% of the Mt Lofty region – an unprecedented scale globally;
• prevent the loss of native flora and fauna;
• promote the return of some native species that have disappeared across the Ranges;
• provide major environmental outcomes that will benefit the State and local communities for generations to come.

Glenthorne, a 228ha property owned and operated by the University about 17km south of Adelaide, will play a pivotal role in delivering these outcomes.

Dr Paton, from the School of Earth & Environmental Sciences, is highly regarded for his research activities at Kangaroo Island and the Coorong, both of which are internationally recognised South Australian icons.

Under Dr Paton’s leadership, the University of Adelaide will embark on a major research, education and community engagement program centred on Glenthorne called the Woodland Recovery Initiative.

This initiative will:

• replenish approximately 100ha of Glenthorne with a native habitat that is as close to a pre-colonial state as possible;
• help scientists to better understand how the Mt Lofty Ranges can be revegetated with habitats that can support the region’s wildlife;
• help scientists to tackle the added challenges presented by climate change;
• build on and contribute to existing government and community plans and initiatives aimed at conserving the biodiversity of the Mt Lofty Ranges;
• provide opportunities for the community – such as school groups and residents – to engage in this important work.

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It’s not uncommon for people to assume that because we’re different in the way we operate, universities don’t engage with business and industry, and vice versa. In fact, nothing could be further from the truth. Universities and industry work more closely today than ever before, with mutual benefits for both.

The University of Adelaide has numerous links with business and industry on a wide range of fronts – many of them formal, some of them informal. These links are vital in being able to respond to the needs of business and industry – and therefore the community – in education and research.

At the University of Adelaide, these links take many forms, and include:

- the provision of scholarships;
- the funding of both basic and applied research that has the ability to improve the company’s knowledge about an important part of their operations;
- industry-linked education programs;
- partnership in research collaborations and centres;
- donation of materials, software etc. to support our teaching and research;
- membership of curriculum advisory groups;
- contributing towards teaching and research efforts;
- becoming adjunct or affiliate members of staff.

The examples are numerous and span our many Faculties and Schools, but I will highlight some examples. Our new Mining Engineering degree will play a major role in helping to provide graduates to the energy and resources sector, a fact that has been well recognised by the sector itself thanks to a large number of companies generously donating scholarships for students.

Our students in the Australian School of Petroleum are learning on industry-standard software thanks to a $1 million donation from a leading provider of software to the global oil and natural gas industry; while our students in the School of Agriculture, Food and Wine are learning how to become Australia’s next generation of award-winning winemakers thanks to grapes donated by local vineyards for their work.

On a day-to-day teaching level, schools such as Business, Law and Architecture employ staff who are still currently working in industry. These professionals share their knowledge with our students, and the students benefit from current practices in their fields.

Our links with high-ranking leaders in their fields helps to bolster the University’s ability to be inspired by and directly inform the latest developments in business and industry. For example, the Engineering Director for Google Australia and New Zealand, Alan Noble, is an Adjunct Professor to the University’s School of Computer Science.

A number of stories in this issue of the Adelaidean help to further highlight ongoing developments with industry at all levels. Whether it’s an additional $1.7 million for industry-linked research, the establishment of the new Institute for Mineral and Energy Resources, or industry support for students at Roseworthy entering into competition at this year’s Royal Adelaide Show, there is always something new happening at the University of Adelaide to enhance our links with industry.

Business and industry make a major contribution to the University of Adelaide, just as we make a major contribution to them – through our teaching, research and consultancy efforts, and through the quality of our graduates. Our University is ideally suited to make a lasting contribution to business and industry, and we welcome their support.
The University of Adelaide and its student union, the Adelaide University Union, have signed a 10-year funding agreement that will secure the long-term future of student services and activities at the University.

“The Adelaide University Union (AUU) has long been an intrinsic part of University life, adding significantly to the experience we offer students,” said University of Adelaide Vice-Chancellor and President Professor James McWha.

“The introduction of Voluntary Student Unionism meant considerable uncertainty for the future of student services in universities across Australia. The good working relationship between the University and the AUU meant we were able to ensure the continuation of services highly valued by students including student support and employment services, sports and clubs, student representation and activities and events on all campuses.

“This 10-year funding agreement will help secure the long-term future for the AUU and the services and activities that our students want.”

The new funding agreement allows for base funding of $1.2 million a year, to be reviewed annually, plus considerable additional support in facilities maintenance, special grants and in-kind support.

The Adelaide University Union over the years has provided material support to thousands of students through its counselling and employment services while also delivering high profile events such as the annual O’Ball and PROSH week which raises funds for charity. It has also nurtured the careers of many community leaders including the Deputy Prime Minister, Julia Gillard, president of the AUU in 1981-1982.

The affiliate body, Adelaide University Sports Association, has also nurtured many fledgling sporting careers.

AUU President Lavinia Emmett-Grey said the Union, through its affiliate bodies, provided the “community” aspect of student life.

“The University’s commitment to fund the AUU for the next 10 years ensures the continuance of our campus culture,” she said.

“One of the key factors that distinguishes the University of Adelaide from a degree factory is that its students and graduates have access to a vibrant, diverse student community, provided by the AUU since 1895.”

Story by Robyn Mills
A new $30 million fund has been established to help South Australian and other researchers develop commercial opportunities from their work.

The Trans Tasman Commercialisation Fund is a joint initiative of South Australia’s three universities – the University of Adelaide, the University of South Australia and Flinders University – together with Monash University in Victoria and the University of Auckland in New Zealand.

WA-based industry superannuation fund Westscheme is investing $30 million over five years in the Fund. The State Governments of South Australia and Victoria will each contribute $1.25 million and the New Zealand Government will contribute $NZ 1 million.

University of Adelaide Vice-Chancellor and President Professor James McWha said the university collaboration and the support of Westscheme and the South Australian, Victorian and New Zealand governments was a major development for university researchers.

South Australia’s Minister for Science and Information Economy Paul Caica said the State Government was determined to see the practical application of valuable scientific research to industry.

“We are confident that this Fund will capture ideas from researchers and develop them into new businesses and products and we expect to see increased commercialisation of research, spin-out companies and economic growth on both sides of the Tasman, including commercial returns for South Australia,” Minister Caica said.

Professor McWha said a great deal of promising university research lacked the funding needed to take a potentially valuable idea through the critical first stages of commercial and technical evaluation, ready for commercial investment.

“The Trans Tasman Commercialisation Fund will address this gap in supporting early stage research through to commercial outcomes, delivering solutions to real world problems,” he said.

UniSA Vice-Chancellor Professor Peter Høj said the collaboration would help researchers and industry to make the strides needed to turn ideas into commercial outcomes.

“Behind the headlines of innovation and discoveries there are thousands of hours of research and very often vital capital investment.

We believe this commercialisation fund will help significant breakthroughs in SA,” Professor Høj said.

Flinders University Vice-Chancellor Professor Michael Barber said the Trans Tasman Commercialisation Fund was “a welcome and timely injection of funds that will boost the research and commercialisation efforts of Flinders and its partner universities”.

The Trans Tasman Commercialisation Fund provides a new and dedicated source of ‘pre-seed’ capital for member universities to support early stage technology commercialisation projects. It also paves the way for venture capital firms and other fund providers to co-invest in promising technologies.

The collaborative venture involves the five universities and their commercial development arms – Adelaide Research & Innovation Pty Ltd (University of Adelaide), ITEK Pty Ltd (University of South Australia), Flinders Partners Pty Ltd (Flinders University), Monash University Industry Engagement & Commercialisation and Auckland UniServices Limited (University of Auckland).

Story by Robyn Mills
A University of Adelaide researcher will lead an Australian project to help address the world’s biggest nutritional deficiency – lack of iron.

Dr Alex Johnson has been awarded nearly $300,000 to work with the Bill Gates-funded HarvestPlus Challenge Program to increase iron content in rice and other cereal grains.

More than two billion people – or 30% of the world’s population – suffer from iron deficiency, which can cause anaemia, poor mental development, fertility problems and a depressed immune system.

Dr Johnson, who is based at the Australian Centre for Plant Functional Genomics at the Waite Campus, and colleagues will work on increasing iron content in cereal foods by improving the delivery of iron from the leaf to the seed.

“If this can be achieved, the benefits to developing countries in particular will be enormous,” Dr Johnson said.

Rice and wheat, the two most widely consumed cereals in developing countries, transport only a small fraction of iron to the developing grain – 5% for rice and 20% for wheat. Furthermore, the small amount of iron that is retained accumulates almost exclusively in the outer layers, which are removed during the milling process so that grain can be stored for long periods.

“In the western world we can get around this problem by adding various compounds to flour to make it rich in iron. But iron fortification of flour is only economical for developed countries. Poor nations can’t afford this so we have to find a sustainable way of increasing iron in the milled seed.”

Higher iron content could also lower the production costs of many Australian farmers by reducing or eliminating the need for iron fortification of wheat flour.

Dr Johnson has been awarded $85,000 by the Australian Research Council for the two-year project and an additional $200,000 by HarvestPlus.
The University of Adelaide’s Professor Alexander (Sandy) McFarlane has been recognised by the prestigious Royal Australian and New Zealand College of Psychiatrists for his outstanding mental health research. Professor McFarlane was awarded the College’s Organon Senior Research Award for the most significant contribution to psychiatric research over the past five years in Australia and New Zealand.

“This very gratifying award is not just an acknowledgement of my work but of my research team,” said Professor McFarlane.

He was responsible for highlighting the impacts on people affected by the 1983 Ash Wednesday bushfire disaster, pioneering ongoing longitudinal studies, and, since then, has been involved in researching and advising on many disasters around the world.

He is one of the most cited researchers in traumatic stress, with more than 250 articles in refereed journals and book chapters, and is the co-editor of three books.

Will you be our young investigator of the year?

One of South Australia’s most prestigious prizes for early career scientists – the Young Investigator Award – is back for 2008, and applications are now being accepted.

The award highlights outstanding new science in the field of women’s and children’s health, and also the researchers’ ability to communicate and ‘sell’ that science to the public.

The prizes for the Young Investigator Award are among the biggest of their kind anywhere in Australia. The winner receives the $10,000 The Hon. Carolyn Pickles Award, and for the first time this year both of the runners up will receive $3000 each.

“It’s clear from previous awards that there is a lot of talent in South Australia among our early career researchers,” said Dr Andrea Averis, Chairperson of the YIA 2008 organising committee and Director, Research Administration for the Children, Youth and Women’s Health Service.

Excellent, world-class science is being conducted by Honours, Masters and PhD students every day. This award helps to recognise the quality of their science and also their ability to demonstrate to the community why that science is important,” she said.

University of Adelaide Obstetrics & Gynaecology PhD student Cadence Minge (pictured above) was last year’s winner of the Young Investigator Award.

The Award is an initiative of the Children, Youth and Women’s Health Service and the Faculty of Health Sciences at the University of Adelaide. The University of South Australia and Flinders University are also partners in the Award together with the Women’s and Children’s Health Research Institute and the Women’s and Children’s Hospital Foundation.

Entries close on 18 July. Researchers working in the field of women’s and children’s health are urged to apply.

For more information and eligibility, visit the website: www.cywhs.sa.gov.au/yia/

Award for researcher at front line of mental health
Budding young filmmakers keen to put their creative talents to good use are encouraged to enter the University of Adelaide’s second annual short film festival, with more than $2000 worth of prizes up for grabs.

This year’s theme, “Behind the Door…”, is wide open to interpretation and is sure to produce some innovative and imaginative entries from young Australians.

The free competition is being held as part of the Festival of Short Films at the University of Adelaide’s Open Day on Sunday 17 August.

Entries are now open.

Participants must be aged under 25 years and produce a short movie of five minutes or less that adheres to the theme “Behind the Door…”

The short films could take any form, including animation, and must be suitable for a general public audience.

The winner will receive the use of an editing suite from digital media company Fat City, valued at $1000, and free membership to the Media Resource Centre (MRC), plus much more. There will also be prizes for the second and third-place finalists.

All finalists will have their stories streamed online at the AdelaideNow website (www.adelaidenow.com.au), giving their short films instant exposure to members of the public and industry.

The judging panel includes leaders in the field of filmmaking, television, advertising, digital and print media.

The University of Adelaide’s Head of Media, Associate Professor Mary Griffiths, said the sophisticated media technology available to young people today would hopefully encourage them to tell a story in their own creative style.

“Schools and households now have access to the latest media software that makes it much easier to put together a film with just some basic knowledge,” she said.

Dr Griffiths said South Australia’s reputation for producing outstanding filmmakers – spanning the whole artistic realm from acting, to directing, producing, editing, animating and screenwriting – provided no better inspiration for the State’s creative youth.

“Competitions of this sort have the potential to unearth the next generation of great filmmakers from our State,” she said.

Last year’s winner of the Festival of Short Films competition, Media Studies PhD student Sukhmani Khorana

Entries close on Friday 25 July. There is no cost to enter.

For more information and entry forms, please visit: www.adelaide.edu.au/openday

Story by David Ellis
$1.7 million for industry-linked research

The University of Adelaide has been awarded more than $600,000 by the Australian Research Council (ARC) to collaborate with industry on a range of engineering, agricultural and community projects.

An additional $1.1 million has been pledged by the University’s industry partners in the latest round of Linkage Project funding to commence this month.

The money will fund industry-linked research projects at the University of Adelaide over the next four years.

“Research with industry is one of the areas in which the University of Adelaide can make a significant impact,” said Pro Vice-Chancellor (Research Strategy) Professor Mike Brooks.

“We are delighted that we can contribute to areas as diverse as nutrition, construction, environmental challenges and public services. It demonstrates the breadth of research and expertise for which the University of Adelaide is renowned.”

Details of the projects are:

- $153,762 to develop reinforced, ultra-high performance concrete to strengthen buildings and mitigate loss of life, injuries and economic disruption in the event of a building collapse.
- VSL Australia is collaborating with the University on this four-year project;
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- VSL Australia is collaborating with the University on this four-year project;
- $76,880 to help manage coastal lagoons, including the Murray mouth, to prevent water quality degradation and improve river flows. This is a joint project with the Murray Darling Basin Commission;
- $300,000 to investigate more effective ways to allocate public funds for government services. This is a collaborative project between the University of Adelaide and the South Australian Government to evaluate the long-term costs and benefits of community-based initiatives.
- $85,000 to increase iron content in wheat and other cereal grains for human nutritional benefits. The University will work with the HarvestPlus Challenge Program to achieve this goal and thereby address iron deficiency health-related problems worldwide, while also raising profitability for Australian farmers;
- $153,762 to develop reinforced, ultra-high performance concrete to strengthen buildings and mitigate loss of life, injuries and economic disruption in the event of a building collapse.
- VSL Australia is collaborating with the University on this four-year project;
- $76,880 to help manage coastal lagoons, including the Murray mouth, to prevent water quality degradation and improve river flows. This is a joint project with the Murray Darling Basin Commission;
- $300,000 to investigate more effective ways to allocate public funds for government services. This is a collaborative project between the University of Adelaide and the South Australian Government to evaluate the long-term costs and benefits of community-based initiatives.

Agriculture

“This is a great opportunity for Roseworthy students to build relationships with producers in the beef industry as well as learning many valuable skills”

A group of ambitious students from the University of Adelaide’s Roseworthy Campus have their sights set on first prize at this year’s Royal Adelaide Show.

The students are entering their own steers into the led steer competition for the 2008 Show, putting their personal experience and their university studies into practice.

The group of 15 students – who are mostly studying Agriculture, as well as Animal Science and Veterinary Science – is actively involved with feeding, halter training and grooming animals into elite show steers.

The steers are judged as live animals in the show ring and judged shortly after as a carcass, and are ranked on a points system.

“This is a great opportunity for Roseworthy students to build relationships with producers in the beef industry as well as learning many valuable skills,” said Jake Phillips, second-year Bachelor of Agriculture student and Coordinator of this year’s group of steers.

“This year we have had five animals donated to us for competition from different regions of South Australia, and Compass Farm Feeds is donating the feed ration,” he said.

“The level of support from industry has been fantastic, and this would not have been possible without the sponsorship of animals and feed. It shows that rural businesses are encouraging the rural youth – they are not only interested in supporting what we do, they also stand to gain from our hands-on knowledge once we graduate.”

The led steer activity at Roseworthy Campus is a fully student-organised program, “making it a very rewarding experience for all involved”, Jake said.

“This gives the students opportunities to liaise with industry, learn animal husbandry, practise the theory from our course and develop our skills as maturing agriculturalists,” he said.

“Roseworthy Campus is a very exciting place to live and study. As students, we know that we are at the cutting edge in Australia of experiments and industry trials. Our work on the led steers is a great supplement to that study. It is a credit to the students that they are willing to put in out-of-hours work and are determined to have a good result at this year’s Royal Show.”

Led steers from Roseworthy will be entered into the Gawler and Adelaide shows this year.

Industry steers students towards show competition

Story by David Ellis
The University of Adelaide is playing a key role in an agricultural project to improve crop production in the middle of a war zone – northern Iraq.

Agronomy Chair Professor David Coventry is leading the University’s participation in an Australian Centre for International Centre Research (ACIAR) project to revolutionise traditional cropping methods in Iraq. In the first project of its type in the war-torn country, researchers from three Australian organisations are helping Iraqi farmers to reduce their costs and substantially increase crop yields by eradicating cultivation and introducing zero tillage in its place.

The University of Adelaide, the University of Western Australia and the Western Australian Department of Agriculture are collaborating on the project with the Ministry of Agriculture in Iraq and the International Centre for Agricultural Research in Dryland Areas (ICARDA), based in neighbouring Syria.

“This has been a success story from day one,” Professor Coventry said. “We have helped introduce new varieties of wheat, barley and pulses into Iraq as well as persuaded them to stop cultivating their fields and instead switch to zero tillage.”

Zero tillage is a method of sowing the crop now used by most Australian dryland farmers and is designed to protect the top soil that is at risk of erosion when land is extensively cultivated.

“This method uses far less fuel and with more effective water use and improved soil quality, farmers achieve better productivity and higher profits,” Professor Coventry said.

Iraqi farmers have been crippled with a 10-fold increase in fuel and a 500% increase in fertiliser in recent years. Those who have been involved in the demonstration sites have wholeheartedly embraced the new methods.

In the past decade, poor farming practices, lack of quality seed and periodic droughts in Iraq have led to soil degradation and nutrient depletion, with cereal production dropping sharply and farmers struggling to make ends meet.

The first stage of the collaborative project, which began in 2004, involved Iraqi farmers in demonstration trials, facilitated by that country’s Ministry of Agriculture.

The Australian researchers wanted to supervise on-the-spot field visits to Iraq but with security an ongoing issue, the decision was taken to deliver the project “remotely”, involving liaising with ICARDA in Syria.

Stage two involves an extension of the zero tillage trials and the genetic improvement of existing seeds, with much wider participation of farmers at every level.

The Iraqi project leader, Dr Abdul Sattar al Jassim from the University of Mosul, recently spent five weeks in South Australia learning about local cropping practices.

Dr Sattar also spent time at the Waite, North Terrace and Roseworthy campuses, liaising with key staff and securing answers for some of the problems they have encountered with the new technology.

“It is very important to use Australia’s experience in cropping techniques because our climates are so similar,” he said.

“By involving the Iraqi farmers in actual demonstration trials, we have been able to iron out any deficiencies with machinery and refine the practices to suit our agricultural industry.”

Up to six Iraqi students at Masters and PhD level are expected to travel to Adelaide and Perth this year to take part in studies associated with the ACIAR project. The University is also expected to enrol up to 25 agricultural students from Iraq in a separate AusAID-funded scholarship program, announced recently by the Federal Government.

“...because our climates are so similar...”

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From left: Dr Abdul Sattar al Jassim and Professor David Coventry

Photo by Candy Gibson

Iraqi farmers benefit from research

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Story by Candy Gibson
A vision you can see “from space”

“Species extinction is predicted to be severe in the Mt Lofty Ranges, with 50% of woodland bird species facing regional extinction because there is not enough native vegetation to support their populations,” Dr Paton said.

“Ten species are already extinct in the Mt Lofty Ranges and a further 60 species continue to decline in numbers despite the cessation of vegetation clearance in the 1980s. Climate change will exacerbate these losses,” he said.

“This will be a terrible loss for all South Australians, but it is avoidable, if suitable and resilient habitats are re-established. Our work is not just about revegetation but about reconstructing complex habitats to secure the region’s biodiversity.

“The work at Glenthorne will extend across the Mt Lofty Ranges, effectively making the Ranges part of a regional multi-species recovery program the likes of which the world has never seen.

“We want this to be something South Australians can be proud of. One hundred years from now, we want the results of our work to be visible from space,” Dr Paton said.
About Glenthorne

Glenthorne was originally purchased under a Deed of Agreement with the State of South Australia in 2001 using State Government funding. Over the years the University has considered a number of options for the property. It is currently used as a small-scale commercial and research farm.

As part of the Woodland Recovery Initiative, the University aims to:

- reclaim the farmland at Glenthorne and reconstruct a suitable habitat that encourages the return of native species;
- renovate buildings at Glenthorne to be used as the base for research, teaching and community involvement, and protect historically significant buildings;
- develop educational programs that involve local schools in the environmental works, so that young South Australians are engaged in the project and see it as important to the future of their community;
- employ about 30 people – including scientists, technicians, teachers and managers – to deliver the research, educational, community engagement, monitoring and on-ground works to deliver the vision.

“There is much to be done,” Dr Paton said. “We not only need to work out how to return native vegetation to the Mt Lofty Ranges, we also need to work out what native vegetation will thrive there in a world affected by climate change. This means our work at Glenthorne will be extremely vital to the bigger picture of what we’re doing.”

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Story by David Ellis
Identifying species’ ecological fates

A new ecological study led by a University of Adelaide researcher should help identify species prone to extinction under environmental change, and species that are likely to become a pest.

The study, the first of its kind, has been published online in the British Ecological Society’s prestigious *Journal of Ecology*.

“This study provides good evidence that we can take any group of species and predict how individual species will respond to changes in the environment through events such as climate change or habitat loss,” said lead author Associate Professor Corey Bradshaw, from the School of Earth and Environmental Sciences.

The researchers analysed life-history and ecological traits in more than 8900 species of the legume, or Fabaceae, plant family and found a correlation between evolved species’ traits and a particular susceptibility to a species becoming threatened or invasive.

“The urgency and scale of the global biodiversity crisis means we need good generalised predictors of a species’ likelihood of going extinct or becoming invasive in non-native areas,” said Associate Professor Bradshaw.

“Previous studies have been limited by studying one or other of these ‘fates’ in isolation.

“Developing evidence-based rules of thumb for categorising poorly studied species according to their susceptibility will aid decision makers in choosing best ways to allocate finite conservation resources.”

Associate Professor Bradshaw, who is also employed by the South Australian Research and Development Institute (SARDI) as a senior scientist, said lists of ‘species to watch’ – both threatened and potentially invasive – should be expanded based on ranking of ‘susceptibility traits’.

“Our results are particularly valuable where there is sustained habitat loss or fragmentation, especially given the predictions that climate change will simultaneously promote the expansion of invasive alien species and greater extinction rates in others,” he said.

— Story by Robyn Mills
What now for refugee policy?

Has the plight of refugees changed since the Rudd Government came to power? Dr Don McMaster, a Visiting Research Fellow in the School of History and Politics, has been active in advocating justice for refugees. He explains the developments in immigration and refugee policy under the new leadership.

Since the election of the Rudd Labor Government in November 2007, there have been some positive developments in refugee and immigration policy. The Nauru detention facility has closed and the so-called ‘Pacific Solution’ appears to be finished.

Immigration Minister Senator Chris Evans has stated that the Rudd Government remains committed to ending Temporary Protection Visas (TPVs), although he was forced to admit that some new TPVs might be issued while the new system is put in place, and that those currently on TPVs are still being treated in line with policies put in place by the previous government.

When questioned about the possibility of establishing a system of complementary protection that would provide a separate visa category for those who require protection but do not fit the criteria for refugee status, Senator Evans stated that he is addressing this possibility, and is “favourably disposed” to looking at how such an agenda might be advanced.

In January 2008, the Human Rights and Equal Opportunity Commission’s (HREOC) report into mainland detention recommended the repeal of mandatory detention. However, in response to the HREOC report, Senator Evans stressed that mandatory detention is here to stay, continuing the previous government’s contravention of international law, which states that detention is only permissible “where necessary to verify the detainee’s identity, to determine the elements on which the claim to refugee status or asylum is based, to deal with people who have destroyed their documents to mislead the authorities, or to protect national security or public order”.

The Minister stated that the islands excised from the migration zone under the Howard government’s so-called ‘Pacific Solution’ would remain excised, meaning that people who arrive on those islands without a visa will continue to be prohibited from making certain applications under the Migration Act, particularly for a protection visa, unless the Minister exercises a non-compellable, non-delegable power to allow that application to occur.

The Australian refugee determination system is an administrative system that includes a high emphasis on ministerial discretion. Successive Immigration Ministers have used their powers of discretion in varying ways, often to the detriment of the determination process. As the newly elected Minister in 2007, Senator Evans questioned the powers given to the Minister, which no other government minister has, and flagged changes to this ministerial discretionary power: “One of the first things that struck me when I took on this role was what extraordinary powers I had as minister… The number of appeals to the minister has increased to the point that it has now become part of the process, rather than being a check on the system. Yet ministerial intervention offers no guarantee of fairness.”

Senator Evans went on to say that while the tribunal and judicial officers have guidelines to base their decisions upon, which in turn are open for review, the exercise of ministerial discretion has no such guidelines, no knowledge of the factors that influence the minister’s decision in individual cases, and more importantly, there is no avenue of appeal from a bad decision, and no way to prevent an abuse of power. This leaves asylum seekers and refugees in a vulnerable position and at the mercy of a minister’s whim, with no consistency in decision-making when different ministers have different personalities and different ways of thinking.

The Senator has stated that he supports independent, transparent and appealable decision making in the resolution of immigration matters – a positive move that could help what has become a highly political and arduous process for refugee determination. These are welcome signs by the Rudd Government.

Asylum seekers and refugee determination are contentious areas in most countries and Australia has not been alone in working out how to deal with these issues. However, Australia has implemented stronger and draconian refugee policies compared to other liberal democracies.

While it is refreshing to hear a softening of voice and genuine concern for asylum seekers and refugees emanating from the Rudd Government, it is early days and words do have to transfer into actions. To appease the increased public dissatisfaction about the treatment of asylum seekers, especially since 2001, the Rudd Government will need to keep to its word on providing a fair and humane refugee policy.

This is based on Dr McMaster’s recent talk at the University of Oxford.
A University of Adelaide study has revealed that effects of the drug ecstasy are compounded when taken in warm environments.

Preclinical research undertaken by Pharmacology PhD student Emily Jaehne shows that ecstasy deaths, which are invariably related to elevated body temperature, may be related to drug users’ failure to recognise their body is abnormally hot.

“The fact that these drugs are often taken in warm nightclubs and at rave parties increases the risk of long-term changes in brain function, or even death,” Ms Jaehne said.

The 25-year-old student has spent the past three years investigating how ecstasy can increase body temperature, and to understand how drug users respond when this happens.

“Our bodies usually maintain a constant temperature of 37 degrees Celsius, but in some cases ecstasy can elevate this by up to five degrees, leading to severe brain damage.”

Ecstasy is one of the most popular illicit drugs in Australia, according to the Australian Institute of Health and Welfare, with almost 24% of the population aged between 20-29 years admitting to using it in their lifetime. Statistics also show that Australia has one of the highest per capita uses of ecstasy in the world.

“Ecstasy is more readily available here than in the US and Europe and more widely used than heroin or cocaine in Australia. It is crucial, therefore, that we make people more aware of the dangers associated with this drug,” Ms Jaehne said.

“When ecstasy users are taking the drug in nightclubs they tend to blame the surroundings for their elevated body temperature and just ignore the warning signs. That can be fatal.”

Ms Jaehne was recently awarded a $2500 Mutual Community Postgraduate Travel Grant to present her findings at an international drug conference in Puerto Rico in June.

She is due to submit her thesis within the next 12 months under the supervision of Dr Rod Irvine from the Discipline of Pharmacology.
Locally produced radio play *Songs in the Blood* is a winner in the prestigious New York Festivals Radio Broadcasting Awards, achieving a Silver Medal in the category of Radio Feature/Human Relations.

The New York Festivals is one of the two most prestigious international awards for broadcasting. The award was announced at a ceremony in New York last month.

One of only five Australian radio productions to achieve finalist status at the Festival, *Songs in the Blood* was produced by the University of Adelaide’s community radio station, Radio Adelaide 101.5fm, in partnership with Women’s Health Statewide.

The radio play dramatises the true stories of a group of HIV positive and affected women, including mothers, sisters, partners and daughters of HIV positive people. *Songs in the Blood* tells the stories of these women through a series of monologues, overlaid with the menacing sounds of *The Song of the Virus* and the melancholy of the *Song of the Woman*, produced by local musicians Heather Frahn, Stephan Richter and Ingrid Wangel.

From stories written by the women, Adelaide writer Elizabeth Mansutti created 14 monologues, which meld with the two musical threads to create a personal and at times very powerful collective portrait of human resilience in the face of adversity.

“Women who live with HIV/AIDS are a minority and often forgotten. Winning this award truly honours these courageous women who wrote and shared their stories, many for the first time,” said Pam Price, Project Coordinator at Women’s Health Statewide.

*Songs in the Blood* producer and director Logan Bold said: “I’m really thrilled this project has been saluted internationally, as so many people poured so much of themselves into this play. This is essentially a community theatre piece, and the community of HIV positive and affected women whose words create the core of this play need to be celebrated. With this award, they are.”

*Songs in the Blood* was an initiative of Women’s Health Statewide, a community service of the Children, Youth & Women’s Health Service. It was funded by the Government of South Australia through Arts SA and produced at the North Terrace studios of Radio Adelaide. It was initially broadcast as part of AIDS Awareness Week 2007.

To find out more and listen to the play, visit: [www.radio.adelaide.edu.au/songsintheblood/](http://www.radio.adelaide.edu.au/songsintheblood/)
Dry statistics to help predict drought

A Statistics PhD student at the University of Adelaide could prove a godsend for Australia’s farming sector, helping rural communities to better plan for future droughts.

Geraldine Wong is using advanced mathematical models to more accurately predict when, where, and for how long, droughts are expected to occur in Australia.

The information will assist the rural sector in determining the viability of different crops and drought mitigation measures in the presence of varying climatic conditions.

Ms Wong, a 25-year-old postdoctoral student in the School of Mathematical Sciences, is analysing Australia’s global climatic indices such as the Southern Oscillation Index (SOI) in conjunction with rainfall statistics to accurately predict future droughts in the short and long term.

“The drought in the past two years has cost Australia billions of dollars. This is a big issue for farmers and the nation. If we can forecast in advance the probability of occurrence and the severity of a drought, this will give the rural sector supporting information to help decide on investments such as crops or water allocations,” she said.

The mathematical models being used by Ms Wong, known as copulas, are similar to those employed by the financial sector to predict stock market movements.

“Not many hydrologists have used this statistical method until recently, but it can show us the relationship between the severity, intensity and duration of a drought with relative accuracy,” she said.

“The drought in the past two years has cost Australia billions of dollars. This is a big issue for farmers and the nation. If we can forecast in advance the probability of occurrence and the severity of a drought, this will give the rural sector supporting information to help decide on investments such as crops or water allocations,” she said.

If we can improve the prediction of droughts, this will help mitigate their impact, since farmers can plant more drought-tolerant crops or alter their irrigation needs. Water resource managers can also plan contingency arrangements to secure water supply in cities and country towns,” she said.

Ms Wong will present her research findings at a Hydro Predict Conference in Prague this September, assisted by a $2500 Mutual Community Postgraduate Travel Grant.

She is in the final year of her postgraduate degree under the supervision of Dr Andrew Metcalfe from the School of Mathematical Sciences and Associate Professor Martin Lambert from the School of Civil and Environmental Engineering.

Story by Candy Gibson

Some pathways toward a more sustainable energy future

Research Tuesdays – sharing great research with the community
Tuesday 8 July at 5.30pm, Professor Graham (Gus) Nathan

There is growing consensus about the need to reduce carbon dioxide emissions, but there are many perspectives as to which technology options to pursue towards this goal. The lecture will assess some of the challenges and opportunities emerging as we seek to manage the transition to a more sustainable future.

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

Bookings essential:
Email: research.tuesdays@adelaide.edu.au
Phone: (08) 8303 3692

Further Information:
Visit the University of Adelaide’s Research website: www.adelaide.edu.au/research

Statistics

Inset:
Statistics PhD student
Geraldine Wong

Photo by Candy Gibson

FREE PUBLIC LECTURE

The University of Adelaide

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MBA student Christopher Ainsworth is hoping his Fulbright Scholarship to the United States will open up new opportunities for Australia in emergency services education.

Thanks to a Fulbright Professional Scholarship, Mr Ainsworth has left for the US to conduct 10 months of research into emergency operations and the use of training for full-time and volunteer emergency management.

He will be based at the Offices of Emergency Management in Austin and Dallas, Texas.

“The lessons learned from my time in the US will be integrated into an Advanced Diploma of Public Safety – Emergency Management, enhancing the program and incorporating ‘emerging world practice’ standards,” said Mr Ainsworth, who is Executive Officer of the Risk and Emergency Management Education Centre (raemec) and a Country Fire Service (CFS) volunteer.

“On my return to Australia, I’m also hoping to develop an applied undergraduate degree program in Emergency Management, which represents a major opportunity for Australian universities both for domestic and international students.

“There’s a real opportunity to develop an undergraduate pathway for professionals in Emergency Management because the skills and knowledge required in emergency operations are both broad and specialised. For example, managers in this field require skills in human resources, finance, volunteer and emergency management. These are not the kinds of skills you can obtain from any one degree program currently available in Australia today,” he said.

Mr Ainsworth is currently completing an MBA with the University of Adelaide’s Business School, and has completed two Advanced Diplomas in Public Safety, Emergency Management and Community Safety with Swinburne University of Technology and a Diploma of e-Learning at the University of Technology Sydney.

In 2001, he was named an Australian National Training Authority – Flexible Learning Leader, and in 2002 he was awarded a South Australian Emergency Services Levi Grant to pilot and implement his Flexible Learning Leaders Research.

As a volunteer with the South Australian CFS, Mr Ainsworth has influenced the introduction of the Advanced Diploma of Public Safety – Firefighting Management into the suite of leadership programs in 2008, two years ahead of its scheduled introduction.

His scholarship is the Vocational Education and Training (VET) Fulbright Scholarship, which is sponsored by the Department of Education, Employment and Workplace Relations.

Applications are now open for Fulbright Scholarships for 2009. For more information, visit: www.fulbright.com.au

Story by David Ellis
Politics put aside to celebrate uni ties

A federal political alumni network – believed to be the first established by an Australian university – has been launched by the University of Adelaide at Parliament House in Canberra.

Some of the country’s most senior politicians put aside party differences to celebrate their alma mater at the event in May.

Deputy Prime Minister the Hon. Julia Gillard MP and her Liberal Opposition counterpart the Hon. Julie Bishop MP were among a group of Australia’s most influential people to become founding members of the University of Adelaide’s Federal Parliamentary Alumni Network.

Instigated by arts graduate Senator Natasha Stott Despoja, the network will provide an opportunity for federal Members of Parliament and key parliamentary staff to re-engage with fellow University of Adelaide graduates on a semi-regular basis.

Ms Stott Despoja, whose term as a Senator for South Australia ended last month, is a Visiting Research Fellow at the University of Adelaide in the School of History & Politics. She is a former president of the University’s Students’ Association and was Leader of the Australian Democrats in 2001-2002.

Her fellow alumni include: Senator Penny Wong, Minister for Climate Change and Water; Australian Ambassador to the United Nations the Hon. Robert Hill; Australian Ambassador to Italy Ms Amanda Vanstone; Senator Nick Xenophon; and more than 20 current parliamentarians representing all political parties.

“We hope this alumni network will allow Members of Parliament and associated staff who are graduates of this University to build closer links, regardless of their political affiliations,” said the Vice-Chancellor and President of the University of Adelaide, Professor James McWha, who officially launched the network at Parliament House.

“At present, many of them are unaware they share a common alma mater and their only contact with each other is a brief acknowledgement in the great corridors of Parliament House.”

The network will aim to meet twice a year in Canberra, with the Vice-Chancellor and senior University of Adelaide staff in attendance.

Earlier in the day, the Vice-Chancellor hosted a lunch for more than 100 alumni at the National Museum of Australia. Distinguished alumni who attended the lunch included the Secretary of the Department of Climate Change, Mr Martin Parkinson, and celebrated scientist and smallpox pioneer Professor Frank Fenner.
Queen’s Birthday Honours 2008

Among the graduates and staff to receive Honours were:

**Officer in the Order of Australia (AO)**

**Professor Christopher John Burrell AO** (MBBS 1966)
- for service to medicine as a specialist in infectious diseases, particularly in the field of virology, as an administrator and educator, and as the community of South Australia through the establishment of the Commonwealth Department of Veterans’ Affairs.
- for service to the University of Adelaide alumni to receive honours were three staff members: Professor Chris Burrell (Molecular & Biomedical Science), Keith Crellin (Elder Conservatorium of Music), and Associate Professor David Paton (Earth & Environmental Sciences).
- Professor Burrell received the Officer in the Order of Australia (AO) for his invaluable contributions to both science and the arts.

**Member of the Order of Australia (AM) in the General Division**

**Mr Donald John Alexander AM** (BEd+LLB 1962)
- for service to engineering, particularly the water supply sector in South Australia.

**Associate Professor Robert Neville Atkinson AM** (MBBS 1999)
- for service to medicine as an orthopaedic surgeon and to a range of national and international professional associations.

**Mr Ian Ross Bidmeade AM** (BSc 1951)
- for service to engineering, particularly the water supply sector in South Australia.

**Professor Louis Charles Birch AM** (MSc 1941, DSc 1948)
- for service to science, particularly in the field of biology as an academic and researcher, and through contributions to the understanding of the relationship of science to religion.

**Dr Timothy James Cooper AM** (MBBS 1980, MBA 1998)
- for service to the brewing industry, particularly through the implementation of environmentally sustainable production and manufacturing practices, to professional organisations, and to the community.

**Mrs Janice Maxine Davis AM** (BA(Jur 1992)
- for service to the Legislative Council of the Parliament of South Australia through administrative and support roles.

**Ms Carol Frances Gaston AM** (Dip Env St 1982)
- for service to the community, particularly through the health services planning and management sector in South Australia, to nursing education, and to humanitarian work in Australia and overseas.

**Mr Michael Sidney Hill Smith AM** (AdS Dip Wine Mkt 1978)
- for service to the development of the Australian wine industry, particularly as a judge, educator and mentor, to professional organisations, and as a winemaker.

**Professor John Ralph McKellar AM** (B Sc 1956, B Sc(Hons) 1957)
- for service to people with dementia, particularly Alzheimer’s disease, and their carers through organisations that provide education, support services and funding for research.

**Associate Professor David Cleland Paton AM** (BSc 1974, BSc(Hons) 1975)
- for service to conservation and the environment through research into the ecology and behaviour of Australian birds, to the management and restoration of the natural environment, and to education.

**Mrs Penelope Ann Paton AM** (BSc 1974, BSc(Hons) 1975)
- for service to conservation and the environment through research projects.

**Public Service Medal (PSM)**

**Dr David Anthony Cunliffe PSM** (MBBS 1984)
- for service to the community, particularly through the delivery of mental health services and programs, and contributions to professional organisations.

- for service to volleyball as an administrator and educator, and to the community.

**Mr Keith Crellin OAM** (University of Adelaide Staff Members)
- for service to classical music and musicians through artistic leadership, as an educator and mentor, and as a musician.

**Mr Donovan John Ditter OAM** (R D Oren 1950)
- for service to the Australian wine industry, particularly as Chief Winemaker at Penfolds Wines.

**Dr Kenneth Ray Fielke OAM** (MBBS 1994)
- for service to the communities of rural and remote South Australia through the delivery of mental health services and programs, and contributions to professional organisations.

**Mrs Diana Jean Harris OAM** (Dip Mus 1960, B Mus(Hons) 1974)
- for service to education in the field of music.

**Mr David Stanley Lawry OAM** (B Ag Sc 1972)
- for service to agriculture and the environment, particularly through research and support for sustainable plantings in the urban landscape, and to the community through the Avenues of Honour project.

**Mrs Avis Jean Miller OAM** (BSc 1956, Dip Sci Ed 1958)
- for service to education, particularly as a supporter of information technology studies and through roles with professional associations, and to the community of Port Elliot.

**Mr Ian Baker Wall OAM** (BE 1955)
- for service to business, particularly through the design and manufacture of electronic communication equipment, and to the community through philanthropic activities.

**Ambulance Service Medal (ASM)**

**Mr Laideley Bruce Francis ASM** (MBA (12)2003)
- for achievement in the South Australian Ambulance Service.

**Medal of the Order of Australia (OAM)**

**Mr Mrs Janice Maxine Davis AM** (BA(Jur 1992)
- for service to the Legislative Council of the Parliament of South Australia through administrative and support roles.

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Adelaide’s favourite daytime concert series – ELDERHALL lunchtimes – returns in August, packed as ever with a veritable feast of musical delights.

Australian Baroque Brass from Sydney open the series, playing on original Baroque instruments. From the world of Jazz, trumpeter extraordinaire Ray Vega from New York will perform with Jazz School staff from the Elder Conservatorium of Music. Distinguished visiting artist in residence, violinist Gunars Larsens from the Conservatoire de Lausanne in Switzerland, will also feature in the series.

At the end of August the renowned Australian String Quartet will provide a special treat when they perform Schubert’s beloved Rosamunde string quartet.

The Elder Conservatorium’s ensembles will have their chance to shine with repertoire such as Elgar’s Enigma Variations, Sousa’s Marches and Bach’s Concerto for Three Violins.

Adelaide audiences will also have the chance to witness the outstanding artistry of fellow Adelaidian Lucinda Moon, Concertmaster of the Australian Brandenburg Orchestra, as she joins two of its members in a performance of 17th Century music.

Other highlights include rarely heard chamber music of Duke Ellington, the Adelaide Chamber Singers, an all Bach organ recital, and the welcome return of pianist Clemens Leske.

The concert season will finish with four of the Elder Conservatorium’s most talented undergraduates performing in the Beta Sigma Phi Awards Competition Concert.

“Where else, except ELDERHALL lunchtimes, can you find such a rich and varied program of music that ranges across all eras and styles and that is so accessible?” said Elder Hall Concert Manager Claire Oremland.

ELDERHALL lunchtimes are held every Friday in Elder Hall from 1.10–2.00pm, from 1 August until 14 November. Admission is still only $6, available at the door from 12:30pm.

If you would like to attend all of these wonderful concerts, why not purchase a Gold Pass for just $75 and save over 20%.

For more information contact the Concert Office on (08) 8303 5925.

For full program details visit: www.music.adelaide.edu.au/events

Gold Pass giveaway

University of Adelaide alumni have the opportunity to win one of two free Gold Passes, valued at $75 each, giving the winner free entry to all Friday lunch hour concerts throughout the second semester.

To be eligible for the free Gold Pass, you must be a registered alumnus.

You can register online at www.adelaide.edu.au/alumni/register or call the Development and Alumni office on (08) 8303 5800.

For your chance to win, email your name and postal address to alumni@adelaide.edu.au before Wednesday 30 July.