

NEWS FROM THE UNIV





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Thanks Adelaide, you've done us proud

The University of Adelaide has been formally thanked by both the Prime Ministers of Australia and New Zealand for hosting 170 Christchurch university students since the devastating earthquake earlier this year.

At a private meeting in Parliament House, Canberra, on 20 June, the University's Vice-Chancellor and President, Professor James McWha, was congratulated by Prime Minister Julia Gillard and New Zealand Prime Minister John Key for the University's generosity in hosting the students for a semester, free of charge.

Christchurch is a sister city of Adelaide and when the earthquake struck on 22 February, the University of Adelaide extended an offer of help to the University of Canterbury, whose campus was damaged.

A total of 170 first and second-year Arts, Science, Commerce and Marketing students have embraced the opportunity to study for four months at the University of Adelaide, living in subsidised student accommodation and in home-stay arrangements.

Prime Minister Gillard congratulated the University and Adelaide residents for their selfless generosity in Christchurch's hour of need.

"The friendships formed between the students are testament to the strong bond between Australia and New Zealand. This is a great illustration of the genuine and enduring connection between our countries that is fostered by our ANZAC heritage but

is shared across the Tasman in so many ways," Prime Minister Gillard said.

New Zealand Prime Minister John Key made an historic first address to Australia's Federal Parliament on 20 June, saying that Australia had shown his country "a degree of loyalty and support that only family can".

Three New Zealand students studying at Adelaide – Philip Hughes, Nathaniel Weaver and Emma Livingstone – accompanied the Vice-Chancellor to Canberra and met with both Prime Minister Gillard and Prime Minister Key.

Senator Chris Evans (Federal Minister for Tertiary Education, Skills, Jobs and Workplace Relations) and Senator Penny Wong (Federal Finance and Deregulation Minister) visited the University's North Terrace Campus in May for a barbecue with the New Zealand students and University staff.

The students will be formally farewelled at a lunch hosted by the University of Adelaide before returning to Christchurch on Saturday 2 July.

Above: Senator Chris Evans, Professor James McWha, Philip Hughes, New Zealand Prime Minister John Key, Nathaniel Weaver, Emma Livingstone and Australian Prime Minister Julia Gillard.

Photo courtesy of the Prime Minister's Office, Canberra.

GP Super Clinic opens in Adelaide's north

Residents north of Adelaide will have access to more doctors, nurses and allied health professionals, thanks to a new \$7.5 million Playford North Super Clinic built by Adelaide Unicare.

The University of Adelaide-owned general practice service was officially opened last month by the Federal Minister for Health and Ageing, Nicola Roxon.

Professor Justin Beilby, the Executive Dean of the Faculty of Health Sciences, said the University was pleased to partner with the South Australian Government to deliver the new clinic.

"This is a much-needed facility for the northern suburbs community," Professor Beilby said.

"Bringing GP and allied health services together in this way will greatly improve the level of care and support available to those living in and around Playford, including the new housing development areas.

"Linking the University's broad-ranging health science teaching programs with day-to-day clinical services will ensure that the next generation of health professionals will benefit from valuable, relevant experience.

"It's a great outcome for our students, our doctors and most importantly, the local community," he said.

Minister Roxon and local Federal Member for Wakefield Nick Champion declared last month's opening of the Playford North GP Super Clinic a win for the local community.

"This GP Super Clinic will deliver more doctors, more nurses, more allied health professionals and better access to health services for locals," Minister Roxon said.

"GP Super Clinics are making a difference right around the country and today marks the 11th GP Super Clinic official opening with 31 now either open, providing early services or under construction.

"The Gillard Government wants to make it easier for all Australians to see and contact a doctor and GP Super Clinics around the country are making this happen."

Mr Champion said the new GP Super Clinic would provide better health care for families living in the 'Playford Alive' urban renewal area through early services.

"The Playford North GP Super Clinic will provide a new level of integrated, multidisciplinary, team-based, patient-centred healthcare all under one roof," Mr Champion said.

"Patients will have access to a comprehensive range of health services including mental health, physiotherapy, pharmaceutical medication reviews, diabetic services, exercise therapy, healthcare plans and assessments, wellness clinics, radiology, pathology and Royal District Nursing Services. These will expand to provide podiatry and programs that cater for Aboriginal and Torres Strait Islander Peoples into the future.

"The clinic will have a role in training the future health workforce as it will focus on training and education for undergraduate and postgraduate students from both the University of Adelaide and University of South Australia across a range of health disciplines including medicine, nursing, psychology and allied health," he said.

The clinic is currently bulk billing for a variety of services and is operating from 8.00am-6.00pm Monday to Friday and 9.00am-1.00pm Saturday mornings, with an opportunity to expand.

The Federal Government has also provided Adelaide Unicare with up to

Climbing the career ladder with postgraduate study

Gaining a postgraduate qualification can lead to major personal and professional benefits.

This month, the University of Adelaide will hold a Postgraduate Information

Genuine commitment to sustainability

The University of Adelaide has become the first university in South Australia to be awarded a Sustainability Licence from the Environment Protection Authority (EPA).

The licence recognises the University's genuine commitment to reducing its impact on the environment. It combines the standard EPA licence with a voluntary sustainability agreement outlining the University's public commitment to reducing its environmental impact.

EPA Deputy Presiding Member Stephen Hains said the EPA's Sustainability Licence was only presented to businesses that went above and beyond standard EPA licence conditions and demonstrated a genuine commitment to reducing their environmental footprint. The licence is only the fourth to be granted to an organisation by the South Australian EPA.

"The launch of Innova21 – Australia's first 6 Star Green Star Design in the education sector – is a practical demonstration that the University is a truly deserving recipient of the Sustainability Licence," Mr Hains said.

"The University has a proactive culture of complying with environmental protection requirements as well as demonstrated leadership in sustainability. The EPA is pleased to recognise this leadership and the model that it offers to all EPA licensees to take a proactive role in meeting their environmental standards."

The University's Vice-President (Services & Resources), Mr Paul Duldig, said:

"The University of Adelaide is already a widely recognised leader in environmental research and education, and we believe it's important to demonstrate leadership in sustainability issues at an operational level.

"With 25,000 students, more than 3000 staff, four campuses and wide-ranging research and education activities, the University is a major organisation in this State with a significant environmental footprint. Understanding and managing that footprint, and finding more sustainable ways of doing so, are extremely important to us," he said.

As part of its commitment to sustainability, the University has:

- established an 'Ecoversity' initiative to tackle environmental sustainability right across the University
 - worked with SA Water to reduce water consumption
 - accomplished waste reduction and improved recycling with the assistance of Zero Waste SA
 - established an 'Ecoleader' program and student internships programs, addressing water, waste and energy management
-

\$4.3 million boost to industry-linked research

The funding – awarded by the Australian Research Council (ARC) – will go towards 11 new research projects in the fields of animal and human health and wellbeing, energy production, agriculture, computer science, environment, and laser-based sensing systems.

The University of Adelaide received 69% of the research funds awarded in the State in the latest round of the ARC Linkage Projects funding.

“These new projects enable us to match our world-class research skills with the needs of industry and society, and to work in collaboration to deliver real and meaningful outcomes,” said the Vice-Chancellor and President, Professor James McWha.

“While this research has direct benefits for industry, government and the community, it also greatly benefits our students because the latest innovations in research also inform our teaching,” he said.

The 11 new projects that have received funding are:

\$750,110 awarded to a team led by Dr Brent Kaiser (Waite Research Institute/ School of Agriculture, Food and Wine) in partnership with Dupont Pioneer *Transport systems that underpin nitrogen-*

Unlocking the mysteries of the universe

Australia's and the University of Adelaide's involvement in one of the world's most exciting scientific endeavours has been officially launched in Melbourne.

The new Australian Research Council (ARC) Centre of Excellence for Particle Physics at the Tera-Scale is a national collaboration involving four Australian universities, including the University of Adelaide, and a number of overseas institutions. It was launched last month at the University of Melbourne by Innovation Minister Senator the Hon. Kim Carr.

The new Centre of Excellence is associated with the Large Hadron Collider (LHC) – the world's largest and highest-energy particle accelerator.

The LHC has been built at CERN, the European centre for Particle Physics near Geneva, Switzerland. Using the LHC, scientists are attempting to reproduce and understand the origins of the Big Bang, which is believed to have resulted in the creation of the universe as we know it. High-energy particle beams – containing subatomic particles called protons – are collided in the detector.

"As scientists, we're hoping these collisions will create new particles that may completely change our understanding of particle physics and the known laws of the universe," said physicist Professor Anthony Thomas.

Professor Thomas is an Australian Laureate Fellow at the University of Adelaide. He is Director of the University's Research Centre for Complex Systems and

the Structure of Matter (CSSM) and is also Associate Director of the new Centre of Excellence for Particle Physics at the Tera-scale (CoEPP).

For the first time in Australian research history, the centre is coordinating tera-scale high-energy physics research right across Australia.

"This joint effort will contribute to and directly benefit from the work being conducted at the LHC," Professor Thomas said.

The ARC has granted more than \$25 million to the new centre, with a further \$8 million in support coming from partner institutions.

As a partner, the University of Adelaide's School of Chemistry & Physics stands to receive up to \$6 million of this funding and will join the international ATLAS collaboration, which built and is operating one of the two major experiments at the LHC.

"The LHC represents such a significant step forward in physics research, it's difficult to overstate its importance," said Professor Thomas.

"If we are able to make particles that haven't existed since the Big Bang, this could radically alter our understanding of how the universe works.

"It's a wonderfully challenging and exciting time, not just for scientists but also

for humankind. As scientists, we know a lot about the universe, but we also know enough to realise just how much we still need to learn; there's so much more that we don't know.

"Though our involvement with the new Centre of Excellence, and our work in the Research Centre for Complex Systems and the Structure of Matter, the University of Adelaide is playing a key role in this big leap forward in science," he said.

Senator Carr said the Federal Government's support for the centre was helping Australian scientists to link with the world's best research equipment.

He said the LHC "has the unprecedented energy needed to probe big questions like the origins of mass, the secrets of the big bang and dark matter and the search for new dimensions in space".

"Having access to this equipment is vital for the centre's researchers," Senator Carr said.

For more information on studying Physics at the University of Adelaide go to: ua.edu.au/programs/2011

Story by David Ellis

Above: Working in the cavern of the ATLAS detector, part of the Large Hadron Collider at CERN (the European Organization for Nuclear Research)

Photo by ATLAS Experiment © 2011 CERN



Mt Gambier music school makes history

The Elder Conservatorium of Music has signed an historic agreement with a Mt Gambier school to help fast track its jazz students into a music degree.

Tenison Woods College has become the first school in Australia to achieve university accreditation for its music students who are keen to proceed to tertiary study.

The University of Adelaide will give Tenison Woods' Year 13 Generations in Jazz Academy students automatic entry and credit towards the Elder Conservatorium's Diploma of Music (Jazz).

It will also provide students with the opportunity to be auditioned in Mt Gambier by university staff for the Bachelor of Music (Jazz Performance) degree.

In signing the pathway agreement, Elder Conservatorium Director Carl Crossin said the diploma could also be a stepping stone for some students to enter the degree course in their second year subject to a high level of achievement in the Diploma.

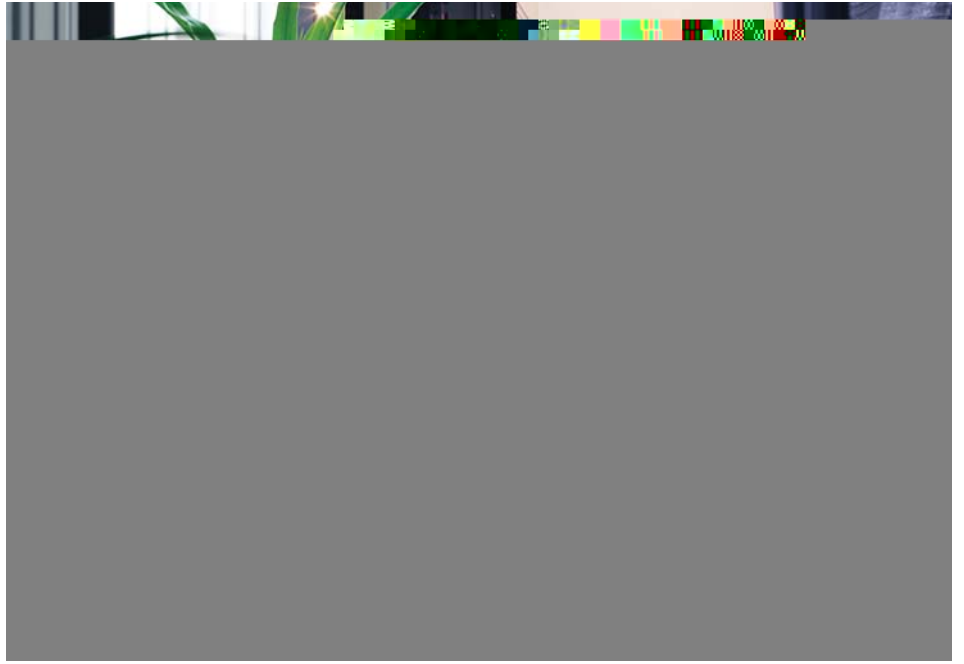
Mr Crossin said the Conservatorium's Jazz staff would work closely with the Mt Gambier students to help them gain the Diploma of Music by the end of the year.

This work will include participation in specialist ensembles and various aspects of jazz theory and performances.

The Generations in Jazz Academy program was formed at Tenison Woods College in 2010.

Above: Generations in Jazz Academy students with musical director Graeme Lyall

Photos by Nethanel Sutton



Major boost for crop yields

University of Adelaide computer scientists are developing image-based technology which promises a major boost to the breeding of improved cereal varieties for the harsher environmental conditions expected under climate change.

Led by Professor Anton van den Hengel, Director of the Australian Centre for Visual Technologies (ACVT), the computer scientists are joining with plant physiologists and an industry partner to develop technology that will be able to accurately estimate plant yield of potential new cereal varieties well before grain production.

They will use multiple images of plants as they grow to construct computerised 3-D models that will match the plants' changing "shape" with its biological properties and, ultimately, predict yield.

"We are using image analysis to understand the shape of plants so that we can automatically and rapidly measure plant structural properties and how they change over time," said Professor van den Hengel.

"We want to be able to predict yield based on a collection of measurable plant attributes early in the plant's lifespan, rather than having to wait for the plant to mature and then measuring the yield."

Professor van den Hengel said this image-based approach would enable detailed, accurate and rapid estimation of large numbers of plants' potential yields under various growing conditions, for example high salinity or drought.

"This novel image analysis technology promises to transform crop breeding and, as a result, the agricultural industry," he said.

"By expediting the development of plant varieties capable of delivering increased yield under harsh environmental conditions

this project will help improve Australia's agricultural efficiency and competitiveness. It will help Australian agriculture prepare for the impact of climate change and the need to produce more food for a growing population."

The image-based analysis will be incorporated into the Plant Accelerator at the University's Waite Campus. Opened last year, the Plant Accelerator houses more than 1km of conveyor systems that deliver plants automatically to the imaging and other stations.

The project, 'Improving yield through image-based structural analysis of cereals', has been funded under the latest round of Australian Research Council Linkage Projects.

Other chief investigators for the project are Professor Mark Tester, Professor of Plant Physiology in the School of Agriculture, Food and Wine and Director of the Plant Accelerator, and Dr Anthony Dick, Deputy Director of the ACVT. The ACVT is a University of Adelaide research centre housed within the School of Computer Science.

The project involves industry partner LemnaTec, which provided some of the equipment used in the Plant Accelerator. They will help commercialise the technology.

Story by Robyn Mills

Above: State-of-the-art imaging facilities at the Plant Accelerator

Photo by LemnaTec GmbH

Turning points in South Australia's history

Some of the country's most high-profile historians will feature in a public lecture series starting at the University of Adelaide later this month to mark the 175th anniversary of European settlement in South Australia.

Run by the School of History and Politics, the public lecture series begins on 27 July and will be held on consecutive Wednesdays at 6.00pm in the Napier Lecture Theatre G04.

The guest speakers, their topics, and lecture dates are:

- **Bill Gammage AM:** *The Adelaide district in 1836*, Wednesday 27 July.

(Adjunct Professor at the Humanities Research Centre, Australian National University)

The talk argues that Aborigines purposefully distributed the Adelaide district's dominant plants into patterns, to make plants and animals abundant, convenient and predictable. The talk then sketches how the arrival of Europeans impacted on this way of life.

- **Professor Henry Reynolds** – *Between Van Diemen's Land and New Zealand*, Wednesday 3 August.

(Senior Research Fellow at the University of Tasmania)

This talk will examine early British policy towards the Aborigines in South Australia and the impact of two quite different developments: the experience of European settlement in Tasmania and also New Zealand.

- **Emeritus Professor Jill Roe AO** – *Making the most of it: Life on the rural frontier in 20th century South Australia*, Wednesday 10 August

(Emeritus Professor of History, Macquarie University)

This lecture will chart the main shifts in rural settlement across the State during the 20th century, addressing the decline of small country towns and the new coastal dynamics such as fishing and tourism.

- **Professor Mark Peel** – *A place to grow: Making a future in post war South Australia*, Wednesday 17 August

(Professor of History, University of Liverpool)

This lecture examines South Australia through migrants' eyes, using family stories to show how the State's post war development relied heavily on British and European migrants.

- **Professor Susan Magarey AM** – *Sex and citizenship: From ballot boxes to bedrooms*, Wednesday 24 August

(Adjunct Professor of History, University of Adelaide)

This lecture will examine two major events in South Australia: granting women the right to vote in the late 19th and early 20th centuries; and prohibiting discrimination

on the grounds of sex in the second half of the 20th century.

- **Neal Blewett AC** – *The impact of the "Dunstan Decade"*, Wednesday 31 August

(former Federal Labor politician, academic and diplomat)

This lecture will examine Don Dunstan's role in the transformation of the ALP during his era, epitomised by the advancement of minorities, egalitarian welfare policies, and cultural and social awareness.

The series is being co-ordinated by Associate Professor Paul Sendziuk and Associate Professor Robert Foster in the School of History and Politics. The latter will also deliver a paper with colleague Amanda Nettelbeck at the State History Conference on 5 August.

Admission to the lecture series is free but bookings are essential and can be made

Researchers have discovered how a species of air-breathing spider can spend its whole life under water, only venturing to the surface occasionally to replenish its air supply.



Advances in DNA 'fingerprinting' and other genetic techniques led by Adelaide researchers are making it harder for illegal loggers to get away with destroying protected rainforests.

DNA fingerprinting for timber products has grown in international recognition due to research led by the University of Adelaide that traces individual logs or wood products back to the forests where they came from.

Professor Andrew Lowe, Director of the University's Australian Centre for Evolutionary Biology and Biodiversity, and Dr Hugh Cross, Molecular Biologist at the State Herbarium of South Australia, have been working with Singapore company Double Helix Tracking Technologies (DoubleHelix), a leader in applied genetics for forest trade and conservation.

In a new paper published in the journal of the International Association of Wood Anatomists, Professor Lowe and Dr Cross said DNA science had made a number of key advances in the fight against illegal loggers.

"Molecular marker methods have been applied to freshly cut wood for a number of years, and it's now also possible to extract and use genetic material from wood products and old samples of wood," Professor Lowe said.

"We can use 'DNA barcoding' to identify species, 'DNA fingerprinting' to identify and track individual logs or wood products, and we can also verify the region the wood was sourced from.

"The advancement of genetics technologies means that large-scale screening of wood DNA can be done cheaply, routinely, quickly and with a statistical certainty that can be used in a court of law. Importantly, these methods can be applied at a customs entry point to the country – certification documents can be falsified, but DNA cannot."

An estimated 10% of wood imported into Australia consists of illegally traded timber, which has been cut down outside designated logging areas or outside agreed environmental controls. Australian companies have been the first in the world to purchase timber products that use DNA fingerprinting, as part of proof of legal origin starting back in 2007 – European and American importers are now following suit.

Jonathan Geach, a Director of DoubleHelix, said: "As the technology is now proven scientifically and commercially, we're looking at a large-scale application in the Congo Basin, as well as working with governments in Europe and America to tighten the grip on illegal timber trade.

"Having Professor Lowe as a leading researcher from the University of Adelaide and as an active member of our team has been tremendously important in driving the role of DNA tracing in timber internationally."

Professor Lowe said a number of improvements in genetic marker methods still needed to be made, such as for old or degraded wood samples. "Nevertheless, the advances in the use of DNA to identify wood are exciting," he said.

This research is closely aligned with another major project, to develop a 'DNA barcode' for every tree and grass species on earth. "The Barcode of Life projects



Honours for alumni

Former senator Natasha Stott Despoja is one of 14 outstanding University of Adelaide alumni recognised in the 2011 Queen's Birthday Honours list.

Announced last month, the list contains a diverse group of notable alumni including 1991 Bachelor of Arts graduate Ms Stott Despoja, who was made a Member in the Order of Australia (AM) for service to the Parliament of Australia, particularly as a Senator for South Australia, through leadership roles with the Australian Democrats, to education, and as a role model for women.

"It's a great honour to be among such a wonderful group of Australians. I am very proud to have my policy and legislative work – especially in the area of education – acknowledged in this way," Ms Stott Despoja said.

While studying at the University of Adelaide, Ms Stott Despoja was President of the Students' Association. In 1995, at the age of 26, she became the youngest woman to enter Federal Parliament, as a Senator for South Australia. From 2001-2002 she was Leader of the Australian Democrats. She announced in October 2006 that she would not recontest the 2007 Federal election.

Ms Stott Despoja sits on the Alumni Advisory Committee, providing strategic advice to the University Council. She is a current PhD student in the School of History and Politics and co-teaches a course on the practice of Australian politics.

She also funds an annual scholarship to support a financially disadvantaged, full-time, female Bachelor of Arts student of academic merit who would not otherwise be able to attend university.

According to Ms Stott Despoja, strong female leaders and role models in society are "imperative".

"Symbolism is important – women and girls need to be able to see the possibilities available to them, especially in areas and occupations where numbers are still lacking, including in leadership positions," she said.

"To be described as a role model for women is a great compliment and has been an important part of my work.

"I hope that, in some small way, I have encouraged women (and young people) to get more involved in the political process, including running for parliament."

For a full list of University of Adelaide alumni to receive Queen's Birthday Honours, please visit: alumni.adelaide.edu.au/queensbdy_honours

Story by Connie Dutton

Above: Former Senator Natasha Stott Despoja
Photo by Brett Hartwig, courtesy of *The Australian*

Alumni

PRIVILEGES

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: Willis – Travel Insurance

Planning to escape the daily grind and head for an interstate holiday or overseas?

Need affordable travel insurance?

The University of Adelaide has generously extended its corporate travel policy with Willis to also cover graduates and current students and staff and their families for their private travel.

Take the hassle out of travel insurance!

For more information about the offers and the full alumni privileges, please log on to: alumni.adelaide.edu.au/privileges





Health Deelme Adelaide hemaceeing

Micronutrients in Pregnancy: It's the little things that count, featuring the following speakers:

Dr Denise Furness – *Folate in pregnancy: friend or foe?*

Dr Jo Zhou – *Iron in pregnancy: more is not necessarily better!*

Professor Tony Perkins – *Selenium in pregnancy: does it matter?*

Professor Claire Roberts – *Vitamin D in pregnancy: too much and too little.*

ua.edu.au/hda/events

When: 5.00pm to 7.30pm Thursday 14 July

Where: Eclipse Room, Level 4, Union House,
North Terrace Campus

Cost:

