Going green: is algae the answer to our fuel needs?
Look to the long term

A year is a very long time in higher education.

Over the past 12 months, the Federal Government has established two key reviews involving the higher ed sector – the Cutler Review into innovation and the Bradley Review into higher education.

The final reports of both reviews have been handed down and, as I write this column, the sector is expectantly awaiting the Government’s response.

The Cutler report, which I strongly endorse, recommends full funding of research so we would no longer need to dip into teaching funds to fill that gap. It would improve the quality of both teaching and research and remove a major distortion from the system. This is one of the most crucial recommendations of either report, and if acted upon it would assist in helping Australia to reclaim some of the ground.

The Bradley review, if adopted in full, has some potential to alter the character of the higher education sector, not least helping to free up and make it more responsive to student needs and to our own wishes. As far as I see it, the main features of the new system under the Bradley review are: national performance targets and a more performance-oriented sector; increased institutional funding from 2010; student centered/demand-driven funding; increased student financial support; and a national accreditation body, with universities needing to be accredited and the Commonwealth assuming regulatory power from the States.

Some of the more welcome proposals from the Bradley review include reintroducing meaningful indexation – to better cover increasing costs – and sorting out the mess that is student funding support.

The proposal that University funding be student-centred through the so-called “voucher” scheme sits well with the University of Adelaide because this University is in high demand from school leavers. Of course, students can already apply to any university, but the voucher system can only work effectively if quotas are removed. Quotas are determined from Canberra and control precisely how many Australian students we can admit to each area of study. Quotas have limited our ability to be responsive and flexible and have driven the demand for full fee places. Quotas should be removed or at least made much more flexible.

On the whole the Bradley report disappoints because it too often stops short of the logical end-point needed for a complete overhaul of the sector. If we are to grow the sector significantly then much more imaginative and wide ranging initiatives will be needed. Despite being a disappointment, many of the report’s proposals will be helpful and should be supported.

If a year is a very long time in higher education, it’s also a very long time in the global economy – since the Government established these reviews we have witnessed the emergence of a global financial crisis. The potential implications for Government funding are readily apparent; the full range of measures proposed in the Bradley review at this stage exceeds $6 billion annually for the sector.

How will the Government respond? It’s anybody’s guess at this stage, but whatever happens in the short term, the Government’s response to these reviews must look to the long term. The global crisis may well worsen before it gets better, but when recovery eventually arrives the role of higher education will be vital in helping to sustain it.
More than 16,000 students at the University of Adelaide will have improved email and other services thanks to a new arrangement with Google.

The University of Adelaide is the first university in the State to make the switch to Google Applications (known as Google Apps) for students. Adelaide joins thousands of universities around the world – with a combined total of more than two million active users – that are also using Google Apps.

All undergraduate, honours and postgraduate coursework students will be offered the opportunity to switch over from their University of Adelaide email account to a new account powered by Google (Gmail) – at no charge.

Students will also benefit from applications such as Google Calendar – enabling students to manage key university dates, class times and other events – and Google Talk instant messaging.

The University currently provides free email services to students, but there are a number of restrictions on the accounts, such as the size of the mailbox, because of the cost of providing such services.

The University of Adelaide’s Vice-Chancellor and President, Professor James McWha, said the new, non-financial arrangement with Google would give students exactly what they needed – a better email system with vastly improved mailbox size limits (up to 7GB of storage capacity), as well as other useful applications.

“The University has been actively working to find a solution to the increasing challenge of providing quick, efficient and greater capacity email services to students, which is something students at all universities desire. As our student population has grown in recent years, that challenge has increased,” Professor McWha said.

“We are confident that this new arrangement with Google will provide the best solution possible, offering students world-class email services and other online tools at no cost to them or to the University.

“We are very excited about the links with Google, which has an excellent reputation globally and is a world leader in the provision of online applications to the higher education sector.”

From early in the first semester this year, students will be given the option of switching over from their University of Adelaide email account to a Gmail-powered student email account. The account will have the look and feel of Gmail, but the students’ University email addresses will not change.

The move towards Google Apps is just one of a raft of improvements to student IT support, including increased quotas for printing and internet access, and increased personal digital storage space.

Story by David Ellis
Photo by Randy Larcombe
Adelaide researchers have made a world breakthrough in treating premature babies at risk of developmental disorders.

A six-year study led by Dr Maria Makrides from the Women’s and Children’s Health Research Institute and Professor Bob Gibson from the University of Adelaide has demonstrated that high doses of fatty acids administered to pre-term infants via their mother’s breast milk or infant formula can help their mental development.

The findings were published recently in the *Journal of the American Medical Association* (JAMA).

Researchers found that a major lipid in the brain – the omega-3 fatty acid known as Docosahexaenoic acid (DHA) – is not developed sufficiently in babies born before 33 weeks’ gestation, leading to possible impaired mental development.

To counter this, increased doses of DHA (1000mg per day) were administered to lactating mothers with pre-term infants, in the form of tuna oil capsules. If required, infants were given supplementary formula with matching DHA levels.

Of 657 premature babies tested in a trial involving five Australian hospitals, about 50% fewer infants on high-DHA diets had significantly delayed mental development compared with low DHA diets.

Premature girls in particular who were exposed to DHA-rich diets showed much better mental development than girls fed the low DHA diet.

Professor Gibson said his team was at a loss to explain why premature male babies – who are more susceptible to cognitive problems – did not respond to the same extent, with no obvious differences in mental development between the control group and those administered high doses of DHA.

“Boys may have a faster metabolic rate than girls and need higher doses of DHA to make a difference,” he said. “We need to do a lot more work in this area to find out why.”

Infants weighing less than 1250gm (about a third of a full-term baby’s weight) who were fed a high-DHA diet also scored better on the mental development scale, with a 40% reduction in the incidence of mild mental delay.

The project was primarily funded by the National Health and Medical Research Council, with the University of Adelaide and Women’s and Children’s Health Research Institute (WCHRI) now in the process of formalising a joint venture agreement in the area of food, nutrition and health.

Dr Makrides is the Deputy Director of the WCHRI and Professor of Nutrition at the University of Adelaide. Professor Gibson is a Professor of Functional Food Science in the School of Agriculture, Food and Wine.

Omega-3 breakthrough for premature babies

Story by Candy Gibson
Photo by iStock
Researchers from the School of Chemical Engineering are focusing their attention on using green algae as a potential source of biofuel.

The Adelaide research – led by Dr David Lewis and Dr Peter Ashman – is part of an innovative $1.89 million project funded by the Federal Government. Headed by Murdoch University in Western Australia, the project involves research partners in India and China.

The project hopes to identify a clean, affordable method of producing biodiesel from algae on an industrial scale, which is currently cost prohibitive.

In Adelaide, researchers have begun cultivating algae on a small scale in two-metre square tanks specially built by Chemical Engineering technical staff. Based on the roof of one of the University’s many North Terrace Campus buildings, the tanks are exposed to the sun and the elements, simulating the real conditions of a much larger scale operation.

“Our team’s main role is to determine the best methods possible for harvesting the algae and extracting the oil from it,” Dr Ashman said.

“In order to produce biofuel on an industrial scale, millions of cubic metres of algae would need to be cultivated in marine ponds covering about 50-100 square kilometres. That might sound incredibly big, but it’s actually small compared to the amount of canola you would need to produce the same amount of biodiesel – it would be about 5000 square kilometres of canola.

“These small-scale tanks in Adelaide are just the very beginning. We started with only 5ml of algae, and now each pond contains about 400 litres of algae. We’re extracting between 50-100 litres of microalgaeculture per day for our experiments.

“The next step up from this will be to apply what we’ve learned from these small-scale ponds to a larger, pilot-scale saline pond, which will be about 250 square metres,” he said.

“Another key aspect of this project is that it looks at so-called ‘second generation’ biofuels, which do not compete for resources with food crops. Our algae will grow on non-arable – even arid – land without any need for fresh water in cultivation. Canola needs lots of fresh water and good-quality farming land.”

The algae cultivated and harvested in Adelaide enables the researchers to test various methods of extracting oil. This involves breaking the algae cells open to release the natural oil they contain. The algal oil can then be converted into biodiesel.

“We can break the cells in the lab using a centrifuge, but a centrifuge is not going to work at a large, industrial level. We need a method that will be low on energy and low on cost,” Dr Lewis said.

“We’re looking to use organic solvents and other means to extract the oil – methods that could potentially be applied to an industrial setting.

“In addition to that work, our team is also conducting an economic and lifecycle assessment, because an important question that needs to be solved by this research is: what can we do with all the biomass?”

The Adelaide team, which includes three PhD students and one postdoctoral researcher, is excited by the challenge such a project offers.

“If we’re able to apply what we learn to a much bigger algae crop, it could potentially have great benefits for Australia and for the world over,” Dr Lewis said.

Story by David Ellis

Going green: is algae the answer?

Work to develop a clean, “green” fuel that could help solve the global energy crisis has taken on a new meaning at the University of Adelaide.

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Story by David Ellis

Above from left: (front) Dr Peter Ashman and Dr David Lewis with a sample of the algae being cultivated at the University of Adelaide; (rear) Chemical Engineering postgraduate students Sunjay Sathe and Stephan Pahl

Photo by David Ellis
Construction will begin this month on the State’s first School of Veterinary Science, at the University of Adelaide’s Roseworthy Campus.

The $37 million building project – funded by Commonwealth ($15m) and State ($5m) governments and the University ($17m) – will see the construction of a new 5000 square metre building that will house teaching laboratories, a clinical skills laboratory, an e-learning centre, a pathology teaching and diagnostic suite and a veterinary teaching hospital at the University’s Roseworthy Campus. The project also includes the refurbishment of existing lecture theatres, laboratories and offices.

With upgrades already underway, work to construct the new building will commence in March 2009 and is scheduled for completion in 2010.

The University has appointed Hansen Yuncken as the managing contractor and Hassell as the principal consultant.

“This building project is a significant part of the University’s development program, which will see more than $400 million being invested in state-of-the-art research and teaching facilities on the North Terrace, Waite and Roseworthy campuses by 2010,” said the University’s Vice-Chancellor and President, Professor James McWha.

“Adding veterinary science facilities to the Roseworthy Campus helps cement its place as a leader in science, research and innovation for the State’s animal health and agricultural industries.”

The new Vet School had its first intake of 47 students in 2008 for its three-year Pre-Veterinary undergraduate Science degree and has since received about 400 applications for places in 2009’s intake. To complete their training, graduates of this degree program will then study for a three-year postgraduate veterinary science degree. There will be 70 places a year for the postgraduate veterinary science degree starting in 2011.

Head of the School of Veterinary Science Professor Gail Anderson said veterinary students at the University of Adelaide would have a broad exposure to all aspects of veterinary science, including livestock production, equine health, aquaculture and biosecurity, companion and exotic species.

“South Australia offers alternative opportunities for veterinarians, including involvement in the vital and expanding aquaculture industry,” Professor Anderson said. “In particular, we hope this School will address the serious shortage of vets in South Australia.

“The new facilities will enable students to utilise teaching resources that are among the best of their kind anywhere in the world. Connection to the SABRENet network will facilitate video link learning with various regional partners, while world-class audio visual facilities in our labs and surgery suites will enable remote teaching for students. Our curriculum is integrated to allow early introduction of clinical material to the students so they see the relevance of their basic science training from year one on.”

Story by Olivia Jones

Above: Roseworthy Campus
Photo by Randy Larcombe
The global trade in frog legs for human consumption is threatening their extinction, according to a study by an international team including University of Adelaide researchers.

The researchers say the global pattern of harvesting and decline of wild populations of frogs appears to be following the same path set by overexploitation of the seas and subsequent "chain reaction" of fisheries collapses around the world.

The researchers have called for mandatory certification of frog harvests to improve monitoring and help the development of sustainable harvest strategies.

University of Adelaide ecologist Associate Professor Corey Bradshaw said frog’s legs were not just a French delicacy.

"Frog’s legs are on the menu at school cafeterias in Europe, market stalls and dinner tables across Asia to high end restaurants throughout the world," said Associate Professor Bradshaw, from the University’s School of Earth and Environmental Sciences and also employed as a Senior Scientist by the South Australian Research and Development Institute (SARDI).

"Amphibians are already the most threatened animal group yet assessed because of disease, habitat loss and climate change – man’s massive appetite for their legs is not helping."

The annual global trade in frogs for human consumption has increased over the past 20 years with at least 200 million and maybe more than one billion frogs consumed every year. Only a fraction of the total trade is assessed in world trade figures.

Indonesia is the largest exporter of frogs by far and its domestic market is 2-7 times that.

"The frogs’ legs global market has shifted from seasonal harvest for local consumption to year-round international trade," said Associate Professor Bradshaw. "But harvesting seems to be following the same pattern for frogs as with marine fisheries – initial local collapses in Europe and North America followed by population declines in India and Bangladesh and now potentially in Indonesia."

"Absence of essential data to monitor and manage the wild harvest is a large concern."

The study team includes researchers from the Memorial University of Newfoundland in Canada, the National University of Singapore and Harvard University. A paper about the study has been published online in the journal Conservation Biology.

Story by Robyn Mills
Above: An edible frog species
Photo by Leo Bogert

Frogs to go: could man’s appetite take away species?

The South Australian Parliament Research Library Fellowship provides academics and other scholars with an opportunity to undertake research in Parliament House, Adelaide. The Fellowship may interest people undertaking research while on sabbatical, study or research leave.

The Research Library will provide access to its facilities, including its collections and databases, as well as the Parliament’s intranet services. It will also provide collegial support, the potential for research collaboration and the opportunity to contribute to the Library’s research paper series. Fellows will also have the opportunity to lead a forum on their research interests during their stay in Parliament.

Scholars from all disciplines are invited to apply. Selection will be guided by the likely interest to Members of Parliament of the applicant’s research topic. The Fellowship is non-salaried. Applications close 31 March 2009.

For more information please visit: www.parliament.sa.gov.au/Library/IAS/SAPRLFellowship2010.doc

For enquiries please contact:
Dr Coral Stanley
Parliamentary Librarian
Email: coral.stanley@parliament.sa.gov.au
Phone: (08) 8237 9405
$12.8 million for health research

The University of Adelaide has been awarded $12.8 million in Federal Government grants to lead two major research programs addressing some of the world’s most critical health problems.

Bacterial diseases expert Professor James Paton (pictured) has received $9.1 million for a five-year program to help combat pneumonia, meningitis and gastroenteritis and other infectious diseases, which account for more than 10 million deaths worldwide each year.

Immunologist Professor Angel Lopez has also been awarded $3.7 million to investigate a group of protein hormones and their receptors that are implicated in several forms of cancer.

The National Health and Medical Research Council (NHMRC) announced the 2010 Program Grants last month.

Professor Paton, who is Director of the new Research Centre for Infectious Diseases at the University of Adelaide, says the $9.1 million will be spent on ongoing collaborative research into new vaccines and treatments for bacterial infectious diseases.

His team includes Dr Adrienne Paton and Dr Renato Morona from the University of Adelaide, as well as researchers from the University of Queensland and University of Wollongong.

“This injection of funds reinforces the investment that the University of Adelaide is making in researching into infectious diseases, cementing the reputation of the Adelaide team as world leaders in this area,” Professor Paton said.

The funding adds further value to the $4 million NHMRC Australia Fellowship awarded to Professor Paton in 2007.

Professor Lopez, who is co-head of the Centre for Cancer Biology at SA Pathology, hopes to develop new drugs with fewer side effects for the treatment of cancers. His funds have been awarded to SA Pathology but administered through the University of Adelaide, where he is an affiliate professor.

University of Adelaide psychiatrist Professor Sandy McFarlane, an international expert on the impact of disasters and post-traumatic stress disorder, will also work on a $7.1 million program led by the University of NSW to enhance Australia’s capacity to reduce psychological problems after traumatic events.

Cancer researchers trial new treatments

Four University of Adelaide researchers have been awarded more than $338,000 by Cancer Council SA to help find causes and cures for cancer-related diseases.

The grants are part of a total Cancer Council funding pool of $2.9 million awarded to South Australian researchers for projects over the next two years.

Professor David Callen, Head of the Breast Cancer Genetics Group in the School of Medicine, will use his $101,500 grant to research new ways of selectively reverting cancer cells to a normal state.

“A protein called p53 is very important in the prevention of a variety of cancers, with about half of all tumours inactivating the function of this protein,” Professor Callen said. “We have discovered a novel protein that interacts with p53 and has the potential to restore its normal function in tumours.”

Professor Callen’s research will help develop novel therapeutics to reactivate mutant p53 in cancers.

Associate Professor Paul Reynolds has been awarded almost $90,000 to investigate specially designed viruses that can selectively kill cancer cells which cause mesothelioma, which is related to asbestos exposure.

“Mesothelioma is a devastating cancer that grows around the lungs, causing chest pain and death from suffocation. Even with the best treatment the average survival time is only 12-14 months after diagnosis.”

“Oesophageal cancer is the fastest rising cancer in the world, often linked to reflux, and these research funds will allow us to further investigate the association between these two conditions,” Professor Jamieson said.

Story by Candy Gibson
University of Adelaide research has confirmed that a graphic warning on cigarette packets accompanied by the Quitline number is helping Australia’s smokers to butt out.

Calls to the Quitline number doubled in the year after confronting images were introduced on cigarette packets in 2006, with around 30% of callers successfully quitting the habit within 12 months, according to a new study recently published by PhD candidate Caroline Miller.

Ms Miller, an affiliate lecturer with the University of Adelaide’s School of Population Health and Clinical Practice and a Cancer Council SA employee, said the combination of the graphic warnings and the Quitline number in 2006 triggered 164,850 calls – more than double those received by Quitline in either of the two preceding years.

“Graphic cigarette packet warnings and the accompanying Quitline number provide a chance for authorities to counter the glamorisation and promotion of tobacco via cigarette packets,” Ms Miller said.

“In Australia, most forms of tobacco promotion are banned, increasing the significance of the packet as a medium for marketing, so this is a great result for the anti-smoking lobby.”

Prior to 2006, neither confronting images nor the Quitline number were displayed prominently on cigarette packets, only a low-profile info line number.

Pictures of gangrenous limbs, mouth cancer and diseased lungs now grace 90% of the back of Australian cigarette packets, curbing the tobacco industry’s final mainstream marketing device, the packaging itself.

The study was funded by the Cancer Council of South Australia, where Ms Miller is employed as the General Manager of Cancer Control Programs.

Ms Miller conducted her research as part of a PhD with the University of Adelaide’s Discipline of Public Health. Her results are published on the British-based Tobacco Control website: www.tobaccocontrol.bmj.com

Previous research by Ms Miller has also found that subsidised nicotine replacement therapy (NRT) is successful in persuading low-income smokers to quit.

Ms Miller said the prohibitive cost of NRT disadvantaged low-income smokers, making it harder for them to quit.

“A Quitline trial which recruited 1000 low-income smokers with the incentive of heavily subsidised NRT recorded really pleasing results, with more than 73% of this group making a concerted effort to quit.

“Smoking rates in lower socio-economic groups continue to be a major concern to health authorities and we believe that by offering subsidised NRT we have a much greater chance of getting them to seek help and kick the habit,” she said.

Story by Candy Gibson

Art & Heritage Collections

The University of Adelaide’s Tate Museum is one of the biggest and best geology museums in Australia. Named after Professor Ralph Tate, foundation Elder Professor of Natural Sciences from 1875-1901, the Tate Museum can be found in the Mawson Laboratories on the University’s North Terrace Campus.

It contains a wide range of fascinating geological and historical artefacts, including: meteorites; fossils of Earth’s oldest known complex multicellular organisms; fluorescent minerals; geological and historical artefacts from Sir Douglas Mawson’s expeditions, including one of the original sledges used on an expedition to Antarctica.

Members of the public are encouraged to visit the Tate Museum during business hours (9.00am-5.00pm) Monday to Friday.

For more information contact Art & Heritage Collections on +61 8 8303 3086 or art.heritage@adelaide.edu.au
Honorary degrees

Two of South Australia’s most distinguished citizens have been awarded honorary doctorates by the University of Adelaide.

The Lieutenant Governor of South Australia, Mr Hieu Van Le, and the Chief Justice of the Supreme Court of South Australia, the Honourable John Doyle AC, were admitted to the degree of Doctor of the University (honoris causa) for their services to society.

Mr Le is the first person of Vietnamese background to be appointed to a vice-regal position anywhere in the world. The Lieutenant Governor and his wife Lan were among the first Vietnamese refugees to arrive in Darwin in 1977 in a small wooden boat.

The couple settled in Adelaide and within several years Mr Le had gained an economics and accounting degree from the University of Adelaide, following up with a Master of Business Administration (MBA) in 2001.

As well as his vice-regal position Mr Le is the Chairman of the South Australian Multicultural and Ethnic Affairs Commission – the first Australian of Asian background to hold the position – and a senior manager with the Australian Securities and Investments Commission (ASIC).

He received a 1996 Australia Day Medal for outstanding service to ASIC and was awarded the Centenary of Federation Medal for service to the advancement of multiculturalism.

Chief Justice Doyle, who graduated with a Bachelor of Laws from the University of Adelaide in 1966, has been Chief Justice since 1995 following his nine years as the Solicitor-General of South Australia.

The Rhodes Scholar is one of Australia’s most respected judges and was appointed a Queen’s Counsel at just 36 years of age.

During his period on the bench, Chief Justice Doyle has worked to improve the community’s understanding of the legal system. He has also taken a keen interest in legal education, tutoring and lecturing in various law subjects at the University of Adelaide over a 10-year period.

Chief Justice Doyle’s contribution to higher education continued when he served as Pro-Chancellor of Flinders University from 1988 to 2000.

Both men received their honorary doctorates in Bonython Hall during the December graduation ceremonies.

Story by Candy Gibson
When Tony Scoleri graduated with his PhD in computer vision, he was also celebrating a significant personal milestone following a near-fatal accident in March 2007.

Tony (pictured with his sister and fellow new PhD graduate Nancy Scoleri) was in the last months of his PhD from the Schools of Mathematical Sciences and Computer Science when he had an horrific bicycle accident. The passenger of a car opened his door in front of Tony, who received severe injuries to his neck and shoulder, and a perforated lung.

Not only did the accident put his PhD on hold, it halted a potential international sporting career as a triathlete. Tony had won state competitions in the triathlon, duathlon and aquathlon and, in 2007, was aiming to qualify for the world triathlon championship.

Tony was bed-ridden for two months and is slowly regaining the use of his right arm under intensive physiotherapy.

The first major goal he met was getting himself fit to start a position with the Defence Science and Technology Organisation (DSTO) as a research scientist just four months after the accident.

In November 2007, Tony resumed his PhD at the University of Adelaide and finished it in July 2008. This was the culmination of an outstanding academic record which has seen him become a member of the prestigious Golden Key International Honours Society for top students in their fields.

Tony and sister Nancy both graduated with their PhDs last December – Nancy’s PhD was in organometallic chemistry.

Story by Robyn Mills
A world-first discovery and years of dedication to the rural and medical communities have earned a University of Adelaide graduate the Distinguished Alumni Award.

Dr Robert Cooter AM, who graduated in 1952 with an MBBS, received the award at the University’s graduation ceremonies last December in recognition of more than 50 years of medical service, education and training.

Dr Cooter was a rural General Practitioner in Port Augusta from 1955 to 1972. One of his most significant accomplishments was the confirmation and discovery of the cause of a rare and fatal amoebic meningitis. This disease resulted in the deaths of 20 children and young adults in the towns of Port Augusta (15 victims), Port Pirie (three) and Kadina (two).

In 1966, Dr Cooter performed a lumbar puncture on a 10-year-old boy at Port Augusta; following review of the boy’s spinal fluid under a microscope, Dr Cooter and his partner Dr John Mickan identified a live amoeba for the first time. Based on their research of environmental and epidemiological factors, and case histories of victims, Dr Cooter and Dr Mickan strongly suspected that the source of the amoeba was in the River Murray pipeline water. This suspicion was later confirmed.

Dr Cooter has contributed countless hours to the training of future rural doctors. He was the inaugural Chairman of the Rural Health Committee of the South Australian branch of the Australian Medical Association (AMA). In 1976 he established a rural locum service, which was the forerunner to the current rural locum model for South Australia. Later he initiated Continuing Medical Education tours and conferences in rural areas with specialists in Emergency Medicine.

In the late 1970s he became Convener-Chairman of the Rural Health Elective Committee of the Royal Australian College of General Practice (RACGP). This committee conceived the first rural GP training program in Australia. The first program was established in South Australia and was later adopted by other States.

In the late 1980s Dr Cooter was appointed as the Convenor of the Royal Australian College of General Practitioners Task Force on Improving Aboriginal Health. As part of this role he visited 24 Aboriginal communities and wrote a paper recommending a range of strategies to help improve Aboriginal health.

Dr Cooter also gave 32 years of service to the Royal Flying Doctor Service (RFDS). He was a flying doctor in the Port Augusta general practice for 10 years, and later President of RFDS Central Operations (South Australia and Northern Territory).

In recognition of his commitment to the rural and medical community, Dr Cooter has been: admitted to the Roll of Fellows of the Australian Medical Association; awarded a Member of the Order of Australia (AM); awarded life membership of the Royal Flying Doctor Service; awarded the first life membership of the Rural Doctors Association of SA; and three international and several district awards for service to health presented by Lions Australia.

Dr Cooter has also contributed significantly to the University’s Alumni program over many years as an active committee member of the Florey Medical Alumni Network.

“The University of Adelaide Distinguished Alumni Awards recognise alumni who have given outstanding service to the University of Adelaide, to the community or have made an outstanding contribution in their chosen field,” said the Director of Development and Alumni, Robyn Brown.

“This award has been made to Dr Cooter in recognition of his outstanding and innovative vision for rural health, which has been important in laying the foundation for rural health training in general practice in South Australia, together with his continued contact and support of the University of Adelaide over many years.

“Dr Cooter is a worthy recipient of this prestigious award,” Ms Brown said.

Story by David Ellis

Above: Dr Robert Cooter and wife Marie (centre) with their five daughters (from left), Jane, Susan, Elizabeth, Robyn and Anne

Photo by Kim Harvey
The number of people cycling to work in Adelaide has increased by almost 50% in a five-year period, particularly among well-educated professionals, according to a University of Adelaide study.

Transport expert Dr Jennifer Bonham said the most recent Census statistics show that 41.9% more people (6498 in total) are cycling to work in Adelaide’s urban areas, with increasing numbers of women living near the city opting for the bicycle over other methods of transport.

Dr Bonham presented her findings at the Australian Cycling Conference at the University of Adelaide earlier this year.

The conference, scheduled on a rest day of the Tour Down Under, included cycling researchers and transport planners from Australia, the United Kingdom and New Zealand.

Key topics under discussion included community bike fleets, reducing the number of cycling accidents, strategies to encourage cycling as a preferred mode of transport, “pedalling hatred” and gender cycling trends.

Case studies were also presented on an Aboriginal bike fleet project in Sydney, a workplace cycle challenge in England which involved 38 organisations, and a study of Brisbane’s network of bike lanes.

Macquarie University PhD candidate Adrian Emilsen discussed motorists’ attitudes to cyclists, highlighting an incident in Sydney last May when a training group of 50 road cyclists were brought down in a collision with a car that was considered an unprovoked act of road rage.

Researchers from Monash University also presented their findings on behaviour patterns of commuter cyclists in Melbourne.

Dr Bonham said the resurgent interest in cycling for urban transport was putting pressure on planners and governments to improve bike networks and understand the factors that influence cyclists.

“Cycling has an important role to play in short to medium distance journeys in a carbon-constrained world and transport, health and census statistics show that cycling is on the increase in Australia,” Dr Bonham said.

The conference was supported by Unley and Adelaide City Councils, Office of Cycling and Walking, Bicycle Institute of South Australia, HUBTraffic and Transport and the University of Adelaide.

There’s growing interest in studying Chinese and Arabic language and culture as more westerners turn their attention to those parts of the world for business or travel, according to evidence at the University of Adelaide.

Professional & Continuing Education (PCE) at the University has seen a surge in people of all ages and skill levels studying Chinese (Mandarin), with student numbers on the rise by 280% over the past five years.

“There are two main reasons that my students give for learning Chinese with PCE: business and travel,” said Chinese teacher Jenny Jin.

“In general terms, the level of interaction between Australians and Chinese is growing in parallel to the growth in trade, business and educational links, and as China progresses to a more prominent place in world affairs. Australians are well aware of that growing relationship, and some are studying Chinese to improve employment prospects.”

Also, the number of people now living in Australia who have Chinese as their first language encourages other Australians to study Chinese... either for business reasons or simply to facilitate friendly association,” she said.

The Chinese language program at PCE has been running for a decade. What started with a single class is now taught at every level, from beginner to the more advanced. Using an interactive mode of teaching, the focus is on the practical use of Chinese, developing reading, speaking, writing and listening skills.

Another area of study that’s seen recent interest from the general public is Arabic. There are similar reasons for people wanting to study Arabic – for business and travel – but surprisingly, recent conflict has resulted in more people studying Arabic, according to teacher Hanan Dallah.

“I feel that many students are fascinated by the Arab world and its history. Indeed, recent conflicts in the area have increased their level of interest. Some have indicated that there is a sense of complex romanticism associated with the language and its culture,” she said.

PCE offers a range of European and Asian language evening courses from beginners to the more advanced.

Courses are open to all adult learners. For more information call +61 8 8303 4777 or visit: www.adelaide.edu.au/pce
Young water experts win major awards

Five University of Adelaide students researching more efficient use of water in Australia have been judged the best in their field.

The students from the School of Civil, Environmental & Mining Engineering have taken out separate awards for a range of water-related projects, including better distribution systems, water quality and wetlands, and urban supply issues.

The award winners are:

• Matt Gibbs, who won the SA Branch of the Australian Water Association Postgraduate Award for his thesis on using mathematical tools to improve water distribution systems in Australia;

• Abby Goodman, who took out the Best Student Presentation Award at the Australian Society of Limnology Conference for a wetlands project in the Upper South East of South Australia;

• Liam Harnett, Jason Nicholson and Rebecca Tennant, final-year undergraduate students who have been awarded the SA Branch of the Australian Water Association’s Hodgson Medal for their research focused on reducing costs and optimising urban water supply systems to meet environmental outcomes.

Matt’s work was applied to a water distribution system in Sydney, leading to reduced greenhouse gas emissions, a lower risk of disinfectant by-products and up to a 30% reduction in operating costs.

Abby is investigating how water management changes in the Upper South East, including construction of deep drains, is affecting the health of 200 wetlands in the region. Her research is helping the Department of Water, Land and Biodiversity Conservation to develop better management guidelines for the wetlands.

The Hodgson Medal – won by Liam, Jason and Rebecca – honours the pioneering South Australian environmental engineer Harry Hodgson, who died in 1992 after a distinguished career in the water industry. In their research, the students demonstrated the feasibility of grey water reuse schemes at an urban cluster scale with the reclaimed water being used for toilet flushing and garden watering.

Professor Graeme Dandy, Leader of the Water Research Cluster at the University of Adelaide, congratulated the students for their contribution to water research. “Australia faces a critical shortfall in water management expertise,” he said. “These students will be tomorrow’s leaders in managing our critically important water resources.”

Vice-Chancellor and President Professor James McWha said the students’ work had delivered real benefits to Australia. “The University of Adelaide appreciates the willingness of the State Government and our industry partners to provide opportunities for our students to help solve important problems,” he said.

Story by Candy Gibson

Above from left: Matt Gibbs, Jason Nicolson, Liam Harnett, Rebecca Tennant and Abby Goodman

Photo by Roy Van Der Vegt, courtesy of Messenger Community Newspapers
Water, climate change key focus of new institute

The University of Adelaide has established a new research institute to tackle some of the most serious environmental challenges facing Australia and the world.

Headed by one of the country’s leading water policy experts, Professor Mike Young, the Environment Institute brings together expertise in water, climate change, economics, marine research, energy technology, natural resource management and ancient DNA.

Professor Young, who last year won the South Australian of the Year Environment Award, is leading a highly skilled group of researchers in helping to find solutions to a whole raft of pressing environmental and resource management issues.

Just last month Professor Young played a key role in persuading Senator Nick Xenophon to stand his ground and push for a better deal for the Murray Darling from the economic stimulus package. His intervention helped Senator Xenophon secure almost $1 billion for the river system, including additional exit packages for irrigators.

“Australia faces diabolical policy problems in relation to climate change and water resources,” Professor Young said. “The two are inextricably linked.”

“While climate change is the issue of greatest national importance, it is arguable that water is the issue of most interest to South Australia. The River Murray – our greatest ecological icon – is under terminal stress and we need to find alternative water sources. We should expect the adverse effects of climate change to first be expressed in water.

“Research is needed to help us reduce our carbon footprint, restore and improve our native habitats and restructure our agricultural systems.

“Many of these issues have been dealt with in isolation in the past but this is no longer an option. All are linked and must be dealt with in a holistic and co-ordinated way.”

The new Environment Institute brings together the leading environmental scientists in South Australia and includes Federation Fellow Professor Alan Cooper and Professor Barry Brook, who was recently named one of the top 10 young scientists in Australia.

Professor Young said the institute members would contribute to solving our most difficult environmental problems.

“For example, the energy efficiency research team headed by Professor Gus Nathan aims to help industry save one billion tonnes of CO2 emissions over the next five years.

“Associate Professor David Paton, South Australia’s leading conservationist and previous winner of the SA Great Award for the Environment, is also working on a ground-breaking model for protecting South Australia’s native habitats through an exciting new proposal for Glenthorne Farm.”

The University of Adelaide’s Vice-Chancellor and President, Professor James McWha, said all of the researchers in the Environment Institute had an outstanding track record and were internationally recognised in their field.

“Collectively, they have been growing their research at a phenomenal rate over the past five years and they will play a critical role in building the State’s reputation as a global leader in environmental research.”

Story by Candy Gibson

Above: Professor Mike Young, Executive Director of the University of Adelaide’s new Environment Institute

Photo by Jennie Groom

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War crimes prosecutor speaks on human rights

Esteemed international war crimes prosecutor and human rights campaigner Justice Richard Goldstone will this month deliver the annual John Bray Oration.

The South African judge is best known for helping his country make the transition to democratic government after the collapse of apartheid in the mid 1990s. He served as a justice of the Constitutional Court of South Africa, which was entrusted with the task of interpreting the new South African Constitution.

Prior to this, Justice Goldstone served as chairperson of the South African Commission of Inquiry regarding Public Violence and Intimidation, which became known as the Goldstone Commission.

He was also Chief Prosecutor of the United Nations International Criminal Tribunals for the former Yugoslavia and for Rwanda.

Justice Goldstone’s experiences will be outlined in his oration, titled “Revenge or Forgiveness: Truth and Reconciliation in the Aftermath of Human Rights Violations”.

The oration is convened by the University of Adelaide John Bray Law Network and the Equal Opportunities Commission, with a grant from the Law Foundation of South Australia.

The Secretary of the John Bray Law Network, Astrid Macleod, said Justice Goldstone was “eminently qualified” to speak on the topic of justice.

“He was recently named the 2008 recipient of the prestigious MacArthur Award for International Justice, an award which provides funding in support of non-profit organisations working on international justice issues,” Ms Macleod said.

In bestowing the award, the President of the MacArthur Foundation, Jonathan Fanton, paid tribute to Justice Goldstone’s role in the war crimes tribunals.

“He gave the tribunals moral authority and legal credibility. It is, in large part, a testament to the quality of his work that the international community accepted the Rome Statute and established the International Criminal Court with confidence. His unquestioned competence and integrity won the faith of the world,” Mr Fanton said.

Justice Gladstone said in a recent interview that he was optimistic about the state of human rights in South Africa, but he regretted the “terrible human catastrophe” experienced by millions of people in neighbouring Zimbabwe.

“South Africa has a truly remarkable bill of rights, an independent judiciary and a Parliament and Executive that have consistently carried out orders of the courts. I am less optimistic about human rights on our continent. There are obviously some shining lights such as Ghana and Botswana, but generally speaking there are not many African countries where the human rights of the citizens are adequately respected,” he said.

The John Bray Law Network is named for Dr John Bray (1912-1995) who was Chief Justice of South Australia from 1967 until 1978. Dr Bray was respected throughout the common-law world as a learned reformer and jurist and was notable for his classical scholarship, poetry and wit.

The John Bray Oration will be held in Elder Hall, North Terrace Campus, at 6pm on Wednesday 11 March.

The oration is a free public lecture, but bookings are essential.

To reserve your place, call Gaynor Tyerman in the Development and Alumni office on +61 8 8303 6356 or email: gaynor.tyerman@adelaide.edu.au

Story by Candy Gibson

Left: Justice Richard Goldstone
Supporters honoured for making a difference

The University of Adelaide has held an event in honour of its most generous supporters and benefactors from the last year.

“BBQ in Bonython” saw over 500 alumni, friends, industry partners and other supporters of the University gather in historic Bonython Hall for an evening of food and entertainment.

Vice-Chancellor and President Professor James McWha said the University held the annual thank you event to acknowledge and show its appreciation for the significant support given by alumni, friends and industry.

“Over this past year, the generosity of our alumni, industry partners and friends has been substantial,” Professor McWha said.

“Each of our donors has made a difference. Whatever their contribution – time or money, scholarship or bequest – it is an investment in the future success of the University of Adelaide, its people and the communities we serve.”

Professor McWha said supporters played a key role in the University’s future endeavours.

“The University of Adelaide is in a very strong position to take the necessary steps to become recognised around the world as a great research university. Our success will depend on the partnerships we develop with industry, government and the community. And it will be strengthened by the generosity of our friends and benefactors.”

As well as formal recognition, guests enjoyed food and drink from event sponsors Haigh’s Chocolates and Coopers Brewery, and were entertained by performers including Centre for Aboriginal Studies in Music (CASM) lecturer Eddie Peters and students, and one-man band Dan Burt.

To view photos from the event, visit: www.alumni.adelaide.edu.au/events_gallery

Story by Lana Guineay

Above: Vice-Chancellor and President Professor James McWha giving the thank you event address

Photo by John Hemmings
Australia Day celebrations saw more than 30 University of Adelaide staff and former students honoured for their service to a range of fields.

Two current staff members – Susan Aldenhoven and Dorothy Missingham – both received the Member of the Order of Australia (AM).

Sue Aldenhoven, who is a Lecturer in the University’s School of Dentistry, received the honour for “service to dental hygiene as a clinician and educator and through executive roles with professional organisations at state, national and international levels”.

Dorothy Missingham, a Lecturer with the School of Chemical Engineering, received her honour for “service to international humanitarian aid through contributions to refugee resettlement and migrant assistance programs in South-East Asia and Australia, and to the community”.

Former Chair of the University’s Alumni Association the Hon. Greg Crafter (LLB 1978) also was counted among the Australia Day honours list. He received the Officer in the Order of Australia (AO) for “service to the Parliament of South Australia, to education policy in the areas of curriculum development and improved opportunities for teachers, and to the community through social welfare and youth organisations”.

Meanwhile, the recently retired Head of Percussion at the Elder Conservatorium, Jim Bailey, was named Citizen of the Year in the City of Adelaide 2009 Australia Day Awards.

The award – presented at Adelaide Town Hall by Lord Mayor Michael Harbison – was given in recognition of Bailey’s role in music education and his personal and professional music achievements.

Bailey has performed with the Hong Kong Philharmonic, the Durban (South Africa) Symphony Orchestra, the Australian Youth Orchestra, at numerous festivals including a fundraising concert for the relief of AIDS in children in South Africa, and he also builds, tunes and restores musical instruments – such as the original marimba used by composer Percy Grainger.

“Highly regarded as an exceptional lecturer, many of Bailey’s students have won local and national awards and international recognition,” Lord Mayor Harbison said.

“He has made a significant contribution to the University of Adelaide’s Elder Conservatorium and thanks to his efforts they have among the finest percussion departments.

“He is held in high esteem in Adelaide, interstate and internationally, and is a quiet achiever with high integrity and enormous talent,” he said.

To see a full list of Australia Day Honours awarded to University of Adelaide staff and former students, visit the Adelaidean website: www.adelaide.edu.au/adelaidean

Story by David Ellis

Above: Citizen of the Year Jim Bailey (centre) with Adelaide Lord Mayor Michael Harbison and former Young Australian of the Year for SA Dr Matthew Hutchinson

Photo courtesy of Adelaide City Council
Lunchtimes return to Elder Hall

Adelaide’s most popular daytime concert series returns to the University of Adelaide’s historic Elder Hall this month.

For more than 15 years, audiences have been delighted by Lunchtimes at ELDERHALL. Held every Friday at 1.10pm during semester, this renowned concert series continues to attract some big names – and big crowds.

The 2009 season will be no exception, said Elder Hall Manager Claire Oremland. “These concerts provide an excellent training ground for students from the Elder Conservatorium of Music, enabling them to share the billing with their teachers and an array of distinguished visitors,” Ms Oremland said.

“With such a wonderful mix of chamber music, orchestral concerts, jazz and recitals, there’s something for everyone at these concerts. The program for 2009 will continue the high standard set in previous years. “Visiting artists from Australia and overseas, plus the talented staff and students from the Elder Conservatorium, will ensure a series packed with memorable moments.”

Pianist Kristian Chong opens the 2009 season on Friday 6 March with a powerful solo recital that includes Rachmaninoff’s much-loved Variations on a Theme of Corelli. Already well known to Adelaide audiences, Kristian has established himself as one of Australia’s leading young musicians. He has performed with most of the leading orchestras in Australia, toured with the Australian String Quartet, performed recitals nationally and internationally, and while completing postgraduate studies in London was awarded the Royal Academy of Music’s highest performing accolade.

Other attractions in the first semester of the 2009 series include: the internationally acclaimed Australian String Quartet (3 April); visiting Canadian artist Jean-Eric Soucy (viola) joined by violinist Niki Vasilakis and pianist Lucinda Collins in Mozart’s G minor Piano Quartet (17 April); and Australia’s pre-eminent baroque violinist, Lucinda Moon, with harpsichord player Linda Kent (22 May).

Above: Pianist Kristian Chong
Photo by Kate Owen

Lunchtimes at ELDERHALL

Elder Hall, North Terrace Campus, University of Adelaide

1.10pm every Friday from 6 March to 26 June

Tickets $7, available at the door from 12.30pm on the day of concert. Special subscription passes are also available – for more information contact the Concert Office on +61 8 8303 5925.

For a free brochure and further details call +61 8 8303 5925, or visit the website: www.elderhall.adelaide.edu.au

Radio Adelaide

Hear it 5.30pm weekdays and repeated 6am Tues – Fri the following day

the wire

independent current affairs on community radio around Australia

produced in association with 2SER & 4EB
Research Tuesdays sharing great research with the community

The wrecks are talking: Why road crashes happen and what can be done about it

There are many different factors that contribute to a vehicle accident and its impact on victims. What are those factors, and how can we learn from them? For more than 30 years, the University of Adelaide’s Centre for Automotive Safety Research (CASR) has conducted extensive investigations into crashes on South Australian roads. Through expert analysis of human factors, conditions, vehicles involved, forensics and medical data, consistent causes are emerging and preventative measures are being identified.

CASP Director Professor Mary Lydon will reveal exactly what is being done to improve road safety.

When: 5.30-6.30pm Tuesday 10 March
Where: Room G04, Napier Building, North Terrace Campus
Admission free, RSVP essential
Email: research.tuesdays@adelaide.edu.au
Phone: +61 8 8303 3692
For more information: www.adelaide.edu.au/researchtuesday/

Fridays Uncorked ’09
Offering a vibrant Friday night venue to the Adelaide business community to wind down their week, taste fine wines from selected regions, enjoy a selection from the cocktail menu, and relax at this unique Adelaide icon.

Lunchtimes at ELDERHALL
Adelaide’s most popular daytime concert series continues in 2009. Special subscription passes are available – for more information contact the Concert Office on +61 8 8303 5925.

For full program details visit: www.elderhall.adelaide.edu.au
When: 1.10pm every Friday from 6 March
Where: Elder Hall, North Terrace Campus
Cost: tickets $7, available at the door from 12.30pm on the day of each concert

The John Bray Oration 2009
“Revenge or Forgiveness: Truth and Reconciliation in the Aftermath of Human Rights Violations” by Justice Richard Goldstone, former member of the Constitutional Court of South Africa, Chief Prosecutor of the UN International Criminal Tribunals for the former Yugoslavia and Rwanda.

When: 5.30pm for 6.00pm Wednesday 11 March
Where: Elder Hall, North Terrace Campus
Cost: Banknote or gold coin donation to assist the John Bray Law Chapter’s activities
RSVP: Contact Gaynor Tyerman at the Development and Alumni Office: +61 8 8303 6356 or email gaynor.tyerman@adelaide.edu.au

Distinguished Social Sciences Public Lecture Series
Professor Anna Yeatman (Director, Whitlam Institute for Citizenship and Public Policy, University of Western Sydney) will deliver the latest free public lecture in this series coordinated by Professor Ann Brooks and Professor Graeme Hugo.

www.hss.adelaide.edu.au/socialsciences
When: 6.00pm-8.00pm Wednesday 18 March
Where: Lecture Theatre 102, Napier Building, North Terrace Campus
Cost: Free and open to all

Climate Futures
Climate Futures is a 12-part public seminar series that addresses the impacts of climate change and explores leading edge developments to enable society to live with anticipated future changes.

The lectures – given by a range of experts in their fields – are suitable for anyone with an interest in the challenges posed by climate change for a sustainable society.

www.adelaide.edu.au/climatechange
When: 6.00pm 4, 11, 18 and 25 March
Where: Horace Lamb Lecture Theatre, North Terrace Campus
Cost: Free – all welcome. For more information email: environment@adelaide.edu.au

Giveaway – Two Fists One Heart movie passes
Adelaide has 10 double passes to the new Australian feature film Two Fists One Heart to give away to lucky readers, thanks to Buena Vista International.

Two Fists One Heart is inspired by former champion boxer Rai Fazio’s real-life story. Starring Dani Harmer (Underbelly) and Jessica Marais (Packed To The Rafters), the film will be released in Australian cinemas on Thursday 19 March.

The double passes are valid for weekend preview screenings from Friday 13 to Sunday 15 March. To win one of these double passes, be among the first 10 callers to the Adelaidean: +61 8 8303 5414.

www.2fists1heartmovie.com