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Frogs could be saviours

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Looking for alternative energy

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Dancing to a different tune

State of Heritage
$1 million from SA Government

Elite performers
Adelaide’s star athletes
Research conducted at the University of Adelaide or in partnership with other institutions has a major impact. This Summer issue of Lumen highlights work in chemistry and global warming where researchers are seeking effective solutions to major problems.

At the age of 91, Professor Frank Fenner, whose memoirs were launched at the University of Adelaide this year, remains an active contributor to scientific research. His long career is an inspiration – as was the sadly short career of this issue’s “Adelaide Pioneer”, Professor Thorburn Brailsford Robertson, a 1905 graduate who established the discipline of biochemistry, and made a major contribution to the manufacture of insulin.

The University’s international graduates have long made a significant contribution to the world. This issue features an interview with the award-winning writer Professor Kirpal Singh, a PhD graduate of the 1970s who now teaches creative thinking at the Singapore Management University.

At the University of Adelaide, we believe that a quality education is marked by well-roundedness. We encourage students to explore all that our University has to offer beyond the world of the classroom. Our elite athlete program, for example, seeks to make it possible for high-achieving students also to be high-achieving athletes. In this issue, we tell the stories of student athletes in three diverse fields who have balanced the demands of their studies and the demands of their sport to winning effect.

The performing arts require a discipline as intense as sport, and we also celebrate two young graduates of the Elder Conservatorium— the twin cellists, Pei-Sian and Pei-J ee Ng— who are set to take the world by storm.

A deep conviction of the value of the performing arts has guided the philanthropy of Maureen Ritchie, who is an inspiring example of how the generosity of individuals can make a difference. This issue also records the generous support of the Government of South Australia for the Heritage campaign, as well as other examples of ways in which alumni and community support can help the University make an impact on people’s lives.

These and other stories celebrate our University, its graduates, and its contribution to the community. I hope you enjoy them.

PROFESSOR JAMES A. McWHA
Vice-Chancellor and President
The Lumen masthead is derived from the University of Adelaide motto “Sub Cruce Lumen”—the light (of learning) under the (Southern) Cross.

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Elite Performers
We feature some of the University’s star athletes.

Talented twins turn heads
The most exciting double cello act in Australia today.

Saviour frogs
How chemicals in frogs could help in the fight against cancer.

Entrepreneuring tourism
Diverse Travel Australia: unique product of Thebarton program.

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The search for alternative energy sources.

A college for all seasons
Celebrating Kathleen Lumley College.

Professor Frank Fenner
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Interview: Kirpal Singh
Dancing to a different tune.

Australian Plonky
Ian Hickinbotham on an unsung hero.

Adelaide Pioneers
Thorburn Brailsford Robertson and insulin manufacture.

State of Heritage
State Government gives $1 million to Heritage campaign.

Making a Difference
The impact of the Vice-Chancellor’s Scholarships Fund.
At just 18 and with her sights set on being placed in the top 10 in next year’s World Open Championships in Quebec and competing in the Beijing Olympics in 2008, Christie could be forgiven for not concentrating too hard on her academic studies and future career.

Not so. “My studies are going well, I’m loving the economics side,” she said. “I’m also studying Chinese, which is challenging.”

And after her degree? “I’d love to be a CEO,” she said. “And before that, I would like to get into motivational speaking and business consulting. I think the principles in sporting success cross over to business. Things like goal setting and motivation are important for both athletes and business people.”

Christie’s attitude to her studies and sport at school perhaps provides a key to her determination now. “A lot of my friends gave up sport in Year 12 to concentrate on their studies. But why? You just have to be more efficient.”

Her academic record vouches for Christie’s efficiency: she was Academic Dux of her school, Firbank Grammar School in Melbourne, and was awarded perfect scores in Biology and Maths with near perfect scores in English and Psychology.

Christie started trampolining when she was given a backyard trampoline at five. “My parents arranged for me to have lessons so that I would be safe,” she said. “But then I came home and started doing somersaults.”

At nine, in the youngest age group for trampolinists, Christie was winning State titles. She’s now Open National champion.

She recently won the synchronised trampolining and came third in the individual event at the Indo-Pacific competition in South Africa.

In Adelaide where the South Australian Sports Institute hosts the national trampoline program, Christie’s efficiency is being called on full time, with eight sessions of 2–3 hours on the trampoline and another three in the gym every week on top of her studies. She also has a part-time job in a fruit and vegetable shop and coaches at Tea Tree Gully Youth Club once a week.

“I’m looking for some sponsorship,” she says. “The part-time work is probably the hardest challenge. Basically I have no free time.”

Christie Jenkins is one of more than 40 young University of Adelaide students recognised as an elite athlete.
Taking the plunge

She gets claustrophobic taking off a jumper, but 25-year-old science graduate Andrea Gordon has no qualms about plunging the depths of the ocean and exploring long, submerged cave systems.

On most weekends the PhD candidate in Pharmacology can be found scuba diving in local Adelaide reefs or exploring the spectacular water-filled sinkholes and caves around Mt Gambier in South Australia. “It’s a totally different world down there and cave diving provides a great outlet for my PhD studies, which are very intense,” Andrea said.

Now in the final stages of her PhD, studying the effects of drug dependency on newborn babies, Andrea is conscious of the need for balance in her life. “I’m passionate about my studies but I’m also a great believer in extracurricular activities. The University of Adelaide has given me opportunities to excel in both.”

Penetration cave diving is one of the most challenging and potentially dangerous sports in the world. Comprehensive training is required, in which specialised scuba equipment is used to explore water-filled cave passages.

Andrea first took the plunge in 2001 when her partner gave her a Learn To Dive course for a birthday present. She joined the Adelaide University Scuba Diving Club, a decision which she acknowledges as being critical to her success in the sport.

In a relatively short time, Andrea has progressed through the four levels offered by the Cave Divers Association of Australia: cavern, sinkhole, cave and penetration.

At 25, she is the youngest woman in Australia to hold a deep cave penetration certificate. This allows her to dive in some of the most inaccessible and spectacular caves in the country, many with several kilometres of underwater passages.

In 2005, Andrea took her first trip out to Cocklebiddy Cave, located under the Nullarbor Plain. This is Australia’s longest underwater cave — and one of the world’s — offering 6.7 kilometres of scuba diving. Over the years many scuba divers have attempted to set world records for penetration in this cave.

The speleological wonders of the Nullarbor are extensive: pure white rocks, crystal clear water, vast limestone caverns, rockfalls and saline subterranean lakes that extend for several hundred metres.

“It’s hard to describe, but the word spectacular comes to mind,” Andrea said.

In 2006 Andrea also secured a $1000 Sports Scholarship, courtesy of the Adelaide University Sports Association (AUSA). This has funded a second cave diving expedition to the Nullarbor.

On the academic side, Andrea was due to complete her thesis in late 2006. She has spent the last few years studying withdrawal symptoms in babies born to drug-dependent mothers. “For the past 30 years methadone has been used during pregnancy to stop women from using heroin. A new drug — buprenorphine—is now being trialled as a treatment for heroin dependence during pregnancy,” Andrea said.

“Buprenorphine has not been approved for opioid-dependent pregnant women and I’m studying whether it has any harmful effects. A few trials have been done in the world, but mine is the first to compare buprenorphine to a controlled population.”

“About 120 drug-exposed infants are born in South Australia each year. The majority are opioid-related and many suffer terrible withdrawal symptoms such as vomiting and diarrhea. “If these symptoms are not picked up early, there is a great risk of these drug-dependent babies dying due to excessive fluid loss. Also, there is evidence that methadone-exposed infants often experience cognitive deficits later in life, including attention and learning problems.”

“There are some initial test results that suggest buprenorphine does help minimise drug withdrawal symptoms in babies, but a lot more research needs to be done,” Andrea said.
Now, both studying Medicine, they’ve joined forces to row for Australia, and earlier this year brought home the silver medal in the coxed fours in the Under 23 World Rowing Championships.

The two students—Ned is in second year and Nick in third year—are among the University’s more than 40 students recognised as elite athletes. Nicholas Andrew is also the proud recipient of the 2006 Elite Athlete (EASIS) Mutual Community scholarship.

The challenge of combining studies with top-level sport came home for Ned and Nick this April after being selected for the Australian rowing squad ahead of the Under 23 World Championships in July.

With exams looming and eight weeks of term still to go, they faced 35 hours a week intensive training in Sydney from April to mid-July.

With special permission from the Faculty of Health Sciences Executive Dean Professor Justin Beilby to be temporarily absent from the course, the two set off for Sydney and a tough regime of training and study.

“We got lecture notes and problem-based learning notes off the web and studied with our own books,” says Nick. “Friends sent me bundles of photocopied lecture notes as well,” adds Ned.

At the same time as their peers sat their exams in Adelaide, Ned and Nick did their exams under supervision at the NSW Institute of Sport. The Faculty was not disappointed, with both students modestly saying they “did well”.

One of the biggest training challenges was keeping up their weight. “The toughest time during the eight weeks was actually finding enough time to eat,” says Ned, with a laugh. “On big days, we were eating for more than two hours.” They couldn’t believe their luck when their trainer directed them to eat lots of ice cream.

With the Sydney stint and their exams behind them, the two flew to Europe for the World Championships. They spent 10 days at a superbly situated training camp at Lake Varese in northern Italy, arriving there to join the partying nation on the night of the soccer World Cup victory. Italian gelati soon made it into their diet.

The Under 23 World Championship itself at Hazewinkel in Belgium was as exciting as the build-up promised. After finishing 3rd in their heat, they won the repechage the next day and then faced New Zealand, Romania, Italy, Great Britain and the US in the final.

The New Zealand team just pipped them at the post to take gold, but both teams beat the previous world record for the event. A month later, in England, the New Zealanders went on to come third in the Open World Championships.

“Although being beaten by the narrowest of margins, we were not too disappointed,” says Nick. “We had executed our race plan perfectly and had an excellent row. We felt that we had done the green and gold proud.”

Other University of Adelaide rowers also represented Australia in the World Championships, with graduate Amber Halliday taking silver in the Lightweight Women’s Double Scull (with Marguerite Houston).

Back in Adelaide, Nick and Ned have resumed their slightly less punishing, but still awesome, schedule: 10–12 training sessions a week starting at 5.30am, university or hospital all day; afternoon training; study; sometimes part-time work; and sleep.

And at just 19 and 20, their careers in both sports and medicine have a long way to go.

Story: Robyn Mills
Talented twins turn heads

The most exciting double cello act in Australian music today, Pei-Sian and Pei-Jee Ng, are turning heads for more reasons than one.

As soloists their talent is indisputable, but put the 22-year-old twin cellists on stage together and the impact is extraordinary.

Both graduates of the Elder Conservatorium, Pei-Sian and Pei-Jee have spent the past three years studying under Ralph Kirshbaum at the Royal Northern College of Music in Manchester.

Each was awarded scholarships in 2003 valued at a combined total of more than $120,000 for postgraduate study in the wake of their stunning success in South Australia and nationally.

Today, thanks to a recipe of hard work, talent and opportunity, the twins enjoy a global standing as cello soloists—and now as a duo.

In July 2006 they returned home to perform in Adelaide and Queensland at the première of Finnish composer Kalevi Aho’s concerto for two cellos and orchestra.

"Those concerts in Adelaide, our home town, were incredibly special," said Pei-Sian. "You could feel the warmth from the audience because many of them had followed our career since we were children. The vibe was fantastic and we ended up giving three encores on the last night."

The twins also spent time in Sydney collaborating with renowned composer, Elena Kats-Chernin, on new work for their first national tour in 2007, encompassing 17 cities and regional towns.

This coming year will also see the twins travel to Hong Kong to make their debut with the Hong Kong Philharmonic Orchestra in May, performing a new double cello concerto specifically written for them by acclaimed Adelaide composer Graeme Koehne.

"We’re always looking for modern compositions to play," Pei-Jee said. "There isn’t much repertoire work available for cello duet pieces, so we’re constantly on the lookout for new opportunities."

As international interest in the brothers grows, their value as a “package” increases. Yet that’s not the primary reason they perform together.

“Our lives are intertwined and it’s important that we live together and learn from each other,” Pei-Sian said.

Inevitably, shared experiences and musical instruction have resulted in very similar playing styles, although their long-term goal is to develop as soloists.

At the Elder Conservatorium they studied under Jānis Lūrs, Principal Cellist with the Adelaide Symphony Orchestra.

Since September 2003 they have been students of Ralph Kirshbaum, regarded as one of the best cello teachers in the world.

“He has been so inspiring for us and has really changed our whole approach to playing,” Pei-Sian said.

Introduced to the cello at the age of five, the twins took to the instrument immediately. “The sound and depth of the cello is extraordinary. It is a very intimate instrument with a range of vibrations,” Pei-Sian said.

Notwithstanding their natural talent, the twins stick to a disciplined routine of five hours practice a day—not unusual for professional musicians, they claim.

“It’s a very competitive world out there and we’ve had to work very hard to secure more scholarships since living in the UK,” Pei-Jee said.

Pei-Sian won the Elder School of Music’s most prestigious prize, the Elder Overseas Scholarship, in 2003. Established in 1883 by an endowment from Sir Thomas Elder, the scholarship has been held by such notable Adelaide musicians as Dr Miriam Hyde and baritone Grant Doyle. Pei-Sian also received another award linked to the Elder Overseas Scholarship, from the Victoria League for Commonwealth Friendship SA.

Pei-Jee was awarded one of the world’s most coveted scholarships, an International Postgraduate Scholarship from the Associated Board of the Royal Schools of Music.
New research is identifying chemicals in frogs that could lead to treatments for cancer and other health problems.
Frogs can be deadly. Take the Golden Dart Frog (Phyllobates terribilis) from South America, for example. One of these frogs is said to be able to produce enough poison to kill 10 humans or 20,000 mice.

But there are other types of deadly frogs. Thankfully, they’re not deadly to humans, but they are ferocious against cancer cells and bacteria.

Researchers in the University of Adelaide’s School of Chemistry and Physics have been studying the chemical properties of frogs for more than a decade. Professor John Bowie and colleagues, including Associate Professor Mike Tyler (Earth & Environmental Sciences) and Dr Ian Musgrave (Pharmacology), have been looking at “bioactive peptides” from frogs. Peptides are short molecules made out of amino acids that have the ability to interact with other cells and molecules.

Different peptides exist in many animals and insects, even in humans, helping with immune responses or, in the case of neuropeptides, the contraction and relaxation of muscles, among many other things.

Understanding what these peptides are, how and why they work and what they look like is essential to research efforts aimed at assisting the human race to fight a range of illnesses including cancer, heart disease and stroke.

Chemistry PhD student Tara Pukala has recently completed her research identifying the structure of particular peptides in frogs that could be used as anti-bacterial and anti-cancer agents. Supervised by Professor Bowie (Chemistry) and Dr Grant Booker (Biochemistry), Tara has spent the past few years detailing two main types of peptides from two groups of Australian frog species.

“Peptides and proteins are the basic building blocks and the machinery of the cells. They’re used as messenger molecules and structural molecules. The frog uses them as a defence, so the peptides will attack and destroy bacteria and other foreign cells,” Tara says.

“The way they do this is that they bind to the membrane of a cell and burst it open, degrading the cell. In the same way that they bind to bacterial cells they also bind to cancer cells and burst them open.

“They’re not always specific as to which bacteria or cancer cells they attack.”

Tests conducted at the Cancer Institute in Washington, United States, show that the peptides from Australian frogs being studied at Adelaide are active against 60 standard cancer cell lines.

“It’s quite broad. There could be the potential to develop these frog peptides as pharmaceuticals that will act as anti-bacterial or anti-cancer treatments, and that’s why being a part of this overall field of research is interesting,” Tara says.

The peptides she has studied come from two groups of frog species: Litoria (best known because of the Australian green tree frog), and Crinia. Litoria frogs produce the Caerin group of peptides, while Crinia frogs produce neuropeptides known as Riparins.

The Caerin peptides are those that attack the membranes of cancer cells and bacteria, while the Riparins are important for enhancing immune responses and in muscle control. Theoretically, it might be possible to use Riparins to control blood pressure or as a muscle relaxant.

The importance of Tara’s work is in the structure of the peptides and the way that relates to how they work. “The idea is that we can tell the difference between peptides by relating their structure to their activity,” she says. “If they are going to form, say, a helical structure, then they are more likely to be anti-bacterial; a small helical structure will indicate a ‘cancer breaker’. On the other hand, a peptide that has a more random form may have a completely different activity— it’s likely to be active against an enzyme than against bacteria.”

A single frog can have about 10 different peptides, which makes the research fairly time consuming.
“It takes about a month or so to work out the 10 peptides—that’s not such a big deal. But then to actually work out the three-dimensional structure of a single peptide is quite a bit of work, maybe six months at a time. It’s like a big jigsaw puzzle—you need to put it all together, to see how the atoms sit together in place. So that’s a bit of work.

“We use a lot of hi-tech equipment, partly because you’re looking at things on such a small scale. We also don’t have access to large amounts of material, so we need to use very sensitive instruments and techniques,” Tara says.

“We use techniques like mass spectrometry to give us ways of working out the sequence of the peptide, and nuclear magnetic resonance spectroscopy to determine their overall three-dimensional structure.”

With Tara’s research in Adelaide coming to an end, she’s now been awarded a postdoctoral position at Cambridge University working in mass spectrometry with Professor Carol Robinson.

While she’s obviously looking forward to the opportunity, Tara already has her sights set on returning to Australia.

“I think the opportunities for research here are as good as anywhere else, and this is my home, so I’d like to come back,” she says. “I see going overseas as a chance to get some experience and to challenge myself a bit, to get out of my comfort zone. But I’ll come back after a few years.”

Meanwhile, research into frog peptides and other related areas is ongoing at the University of Adelaide, with Professor Bowie and his colleagues continuing to win research funding and attracting national and international collaborators.

Story David Ellis

No frogs are harmed during this research, which is why many owners of frogs are happy for their pets to be participants. So that researchers can get enough peptides to work with, a mild electrical probe is run over the frog’s back. “It’s like touching a nine-volt battery to your tongue,” Tara says.

The electrical stimulus produces a response from the frog, which secretes peptides from its glands in an effort to protect itself.

What’s in a name?

There’s no doubt that Dr Mike Tyler, Visiting Research Fellow in the School of Earth and Environmental Sciences, has made a unique contribution to the study of frogs.

But what’s even more unique is the fact that his name has been permanently linked to a number of frogs in Australia and around the world. That’s because research colleagues have named frogs they’ve discovered after Dr Tyler.

Seven frogs in total bear Dr Tyler’s name. They are:

Litoria tyleri Australia
Litoria michaeltyleri New Guinea
Tylerana New Guinea
Tylerella Australia
Copiula tyleri New Guinea
Nyctimystes tyleri New Guinea
Uperoleia tyleri Australia

In addition to frogs, colleagues have also named a caddis fly, a fairy shrimp and a frog parasite after him.

Dr Tyler has responded in kind, naming several frogs he’s discovered after colleagues in Australia and across the globe.
One of the unique businesses to come out of the University of Adelaide’s graduate enterprise programs is Diverse Travel Australia, a small but thriving tourism provider specialising in Aboriginal and nature-based travel in Australia.

Graduate Diploma in Business Enterprise graduate, Caroline Densley, is still reaping the benefits of her time with the Thebarton Campus’s Business Initiatives for Graduates Program, now the Graduate Entrepreneurial Program.

Now a commercial tenant at the Thebarton-based Adelaide University Research Park, Caroline finds the continuing network of former students and the University’s Office of Industry Liaison provide a highly valued support base.

Caroline Densley’s passion for indigenous culture was sparked by 10 years travelling the globe that gave her an appreciation of the many cultural influences that make up our world.

Back in Australia and with her new qualifications and a fledgling specialist travel business set up with fellow graduate and then active business partner Kristi O’Brien, she set out to win the trust of Aboriginal people, travelling to remote areas and working closely with indigenous communities around Australia to acquire detailed knowledge and understanding.

Today, Diverse Travel benefits from the advice and guidance of Aboriginal cultural expert and part-owner of the business, Joc Schmiechen, a Senior Research Fellow in Indigenous Tourism at Charles Darwin University.

Diverse Travel Australia now provides and promotes Australian Aboriginal cultural tours to a largely international market. Wherever possible they use only Aboriginal-owned and operated companies and indigenous guides.

Indigenous tourism has its challenges. “The remote locations present their own difficulties, although we have so far never lost anyone,” says Caroline. “A lot of our success comes from the quality of our pre-departure information for our clients — comprehensive protocol and cultural outlines which cover things like taking photos, caring for the country, why someone may not look them in the eye. We try and give people the background and understanding they need to get the most out of the experience. It’s also about knowing how to manage these experiences.”

Diverse Travel’s client base is 95% international, mostly individual tourists from the US and Europe but also small special interest groups like the Swedish Wine Society which brings a group to South Australia every two years and a group of Shamans and healers recently out from the US to do a tour of the Pitjantjatjara lands, with a focus on spirituality and healing. Domestic indigenous travel is still very small but growing, and the company is now starting to break into the backpacker market.

Diverse Travel Australia’s work with Aboriginal tour operators over the years was recognised last year with Caroline’s appointment as South Australian representative of the Australian Government’s AusIndustry Business Ready Program for Indigenous Tourism. Through this program, Caroline is responsible for mentoring ten indigenous tourism businesses in South Australia.

“Through the mentoring involves helping them increase their skills and understanding of what it means to be in business and understanding the tourism industry, what the market wants and ensuring their product is market-ready. We also assist them in seeking loan support,” said Caroline. ■

Story Robyn Mills
By 2010, it is estimated the world will consume 98 million barrels of crude oil per day. That's a big thirst, by anyone's standards. And fuelled by demand from two of the largest growing economies, China and India, there is no sign of this appetite waning.

This poses problems on several fronts. Shortages result in escalating prices at the bowser. Total reliance on crude oil is risky, fostering an unhealthy dependence on one commodity. Dangerous levels of carbon dioxide being released into the earth's atmosphere every day are driving up global temperatures, creating environmental chaos. And that's not to mention the health problems directly attributed to fossil fuel burning.

The answer? According to environmental scientist Robert Thomas, from the South Australian Research Development Institute (SARDI), alternative energy sources must be found.

Biofuels provide part of this solution and SARDI, in conjunction with Australian Renewable Fuels (ARF), is leading the initiative in this area.

Biofuels provide part of this solution and SARDI, in conjunction with Australian Renewable Fuels (ARF), is leading the initiative in this area. Last July, Federal Environment Minister Ian Campbell announced the formation of the Australian Biofuels Institute (ABI) to develop technologies and knowledge for a new world-leading industry.

According to Mr Thomas, who is a major contributor to the concept proposal, South Australia is the front-runner to head the Institute and the University of Adelaide one of the key stakeholders.

“By having the peak body located here, it will earn South Australia a reputation as the key innovation State in biofuels. It will also ensure earlier enterprise development and earlier adoption of best practice in agronomy and new plant varieties. These provide distinct market leadership advantages for South Australia,” Mr Thomas said.

There are two main types of biofuels—biodiesel and bioethanol—which can be used for transportation. They are essentially alcohols and esters made from renewable resources—that is, vegetable oils and plant starches.

The ABI's initial focus will be on developing new feedstock sources for biodiesel manufacturers in Australia without compromising existing food production.

“Our vision is to substitute 10% of Australia’s mineral diesel with biodiesel. To do that, 5% could come from crops and 5% from micro-algae. The primary feedstocks currently used are animal fats. However, this is a limited resource and will only meet 2%-3% of Australia’s diesel requirements.”

Canola is the preferred crop in Europe and soy in the US, but local researchers are leaning towards mustard for biodiesel production because it provides multiple benefits for farmers. “We would prefer not to compete with existing food crop varieties because that could drive prices up and that’s not healthy for either industry,” Mr Thomas said.

“Mustard, on the other hand, has the potential to be an excellent break crop for wheat in low rainfall regions.”
It is more drought tolerant than canola but we need to breed for higher yielding varieties.”

Depressed commodity prices are forcing Australian farmers to diversify and the emerging biofuels market presents significant opportunities. SARDI’s own analysis suggests that South Australia has the potential to produce 150,000 tonnes of mustard in an average year from low rainfall cropping land.

“If we aim for 10% of SA’s current diesel being substituted, that equates to a turnover of around $135 million per annum in biodiesel production. That would require say two crushing plants and two production plants employing about 100 people. It translates to quite a significant new business which can’t be ignored.”

The environmental benefits are also impressive. Compared to mineral diesel, biodiesel produces around 70% less greenhouse gas emissions. Again, using the 10% target, South Australia could achieve an annual CO₂ greenhouse gas reduction of 360,000 tonnes.

These reductions translate to a healthier outcome for all. Fine particle emissions from petroleum-derived diesel are a serious pollutant in urban environments, causing respiratory illnesses and related health problems. Scientists claim that biodiesel reduces these emissions by up to 30%.

The benefits aside, Mr Thomas warns consumers of placing all their faith in biofuels as a way of reducing petrol prices. “That will never happen, but it’s imperative that we lessen our total reliance on crude oil. Australia imports most of its crude oil needs, making our fuel supplies very vulnerable.

“Biofuels improve a country’s fuel security position and strengthen its economy at the same time. Brazil, for example, sources 20%-40% of its fuel from bioethanol. They have been growing their biofuel economy for 20 years and also developed new regional enterprises. It just seems the smart way to go.”

To be successful, the ABI will need input from research providers and industry. This is where the University of Adelaide comes in. Collaborative links have already been developed between the two institutions, with some exciting developments already coming to fruition.

Final year students from the School of Mechanical Engineering designed and built a biodiesel motorbike in 2006, sponsored by diesel engine giant Yanmar, biofuels retail company Australian Farmers Fuel (SAFF) and the State Government.

The students initially developed a prototype, using a Yanmar L100AE and a Husaberg frame, which was substantially modified with the help of advanced engineering software.

Their supervisor, Dr Colin Kestell, said the students hoped to enter their Bio-bike in the Greenfleet (alternative fuel) class of the World Solar Car Challenge in 2007.

“The Bio-bike demonstrates that biodiesel can be used in smaller engines as a cheaper and more environmentally friendly alternative to petroleum,” Dr Kestell said. “It produces less soot than regular diesel and while it still emits carbon dioxide after combustion, it is absorbed and converted into oxygen through photosynthesis during the lifecycle of the fuel.”

In summary, the potential for a booming new industry is vast, according to Robert Thomas. “The beauty of biofuels is that you can get significant benefits from many quarters — economic, health and environmental. It’s a win-win situation for everybody.”

Robert Thomas is the Chief Scientist of SARDI Sustainable Systems. He has a Bachelor of Science in Geology and a Bachelor of Science (Honours) in Zoology from the University of Adelaide, and a Master of Philosophy in Applied Biology from Brunel University (London). Prior to working for SARDI, Robert was Chief Executive for the Department for Water Resources and Executive Director for the Environment Protection Agency.
Lively debates in the common room, port and late-night coffee, the British Hotel, and 5am wakeup calls from the gibbons at neighbouring Adelaide Zoo... Anyone who has lived at Kathleen Lumley College will be familiar with these memories. Next year, they will have the chance to recount them in person.

The 40th anniversary of Kathleen Lumley College, situated in a picturesque, tree-lined North Adelaide street, will be cause for celebration in October 2007. Since 1967, more than 2000 people from far-flung corners of the earth have hung their hat—albeit temporarily—in the postgraduate residential college.

Many of these former residents, from at least 50 different countries, now occupy senior positions in universities, research institutions and private enterprise. They include a Vice-Chancellor, a Member of the House of Lords, one of Australia’s highest ranking bankers, a global Internet expert as well as scientists, medical doctors and engineers of international repute.

Singaporean-based Margaret Tan, who lived at Kathleen Lumley College in the 1980s, has fond memories of her time in Adelaide.

"Although we worked very hard during the week, we also played hard on Friday nights—relaxing with a couple of beers at the British Hotel. I was fortunate to meet so many students from different cultures, from as far afield as South Africa, Uganda, Ireland and Croatia, and through them I learned to look at the world from different perspectives," she said.

Dr Tan obtained her Masters of Business Management while living at Kathleen Lumley College. She is now an Associate Professor in Mass Communications at Nanyang Technological University in Singapore. In 2006 Dr Tan also edited The Southern Light—Enlightening and Enriching, a book commemorating the achievements of the Singaporean alumni over the past 50 years (see page 26).

ANZ’s senior managing director, Bob Edgar, was another college resident from 1969–71 while studying for his Masters of Economics.

“It was a very dynamic community—there was always something going on in the upstairs lounge and discussions were intense, sometimes emotional and often rebellious,” Mr Edgar said.

“The Buttery (the honour system bar) had a ‘special’—flagons of Woodley’s port—that somehow seemed to empty remarkably quickly over the night.

“All in all, it was a very complete and tightly knit community. I don’t know anybody that left because they were unhappy with Lumley life,” he said.

Allan Bretag, who was one of the first residents of Kathleen Lumley College back in 1967, is now an Adjunct Professor in the School of Pharmacy &
Medical Sciences at the University of South Australia.

“It was in the pleasant architectural surrounds of the College back in 1969 that I courted my wife-to-be, Lesley Byers. She and I still love to come back for the Founders’ Dinners and sometimes we just like to drive past slowly, to feast our eyes and reminisce.”

Other former residents include Jane Lomax-Smith, the South Australian Minister for Education, Children’s Services and Tourism; eminent British sociologist, the late Lord (Michael) Young of Dartington; Professor Livingstone Luboobi, Vice-Chancellor of Makerere University; and Dr Deane Fergie, now Head of Anthropology at the University of Adelaide.

“I came here as a postgraduate from Canberra in 1978. I have great memories of sitting around the fireplace in the common room during winter, drinking port and solving the problems of the world,” Dr Fergie recalled. “We were all unreconstructed hippies who were drawn together in one place, developing really strong friendships with each other, some which have lasted a lifetime,” she said.

The prime movers in the founding of Kathleen Lumley College in 1967 were the then-Chancellor of the University of Adelaide, Sir Kenneth Wills, Vice-Chancellor Sir Henry Basten and the President of the PGSA, Colin Phillips. Sir Kenneth Wills approached his sister, Kathleen Lumley, seeking support for the venture. A generous benefaction from Kathleen Lumley, together with matching grants from both the State and Commonwealth Governments, and a gift of land from the University, ensured the College was given the green light.

College Master David Clements is an integral part of its fabric, clocking up 26 years in residence.

“The student body has changed substantially over that time,” Professor Clements said. “In the early years, the postgraduates were largely doing research degrees by thesis. Their workload was not as consistently intense as the postgrads today, who are predominantly international students, many of them studying course work.”

Kathleen Lumley College is a unique feature of the Australian university scene as a postgraduate residential college. It is 100% independently incorporated, with all its income being derived from student fees.

At full capacity the College can house 68 students in a mixture of 19th Century cottages and an accommodation block designed by Dickson & Platten, which is now on the Heritage Register. The architects won an award for the finest scholastic building erected in Australia in 1968.

The current student body consists of 64 residents from the following countries: Australia, Austria, Canada, China, Denmark, Egypt, England, Finland, Germany, Hong Kong, Indonesia, Iran, Italy, Japan, Malaysia, Singapore, Sri Lanka, Taiwan and Thailand.

A portrait of Kathleen Lumley hangs in the Reading Room, with her inscription: “May God endow everyone who will work in this college with health, wisdom and happiness.” The 80-year-old widow uttered these words when she flew out from England in February 1968 to lay the College’s foundation stone.

Today, almost 40 years on, the sentiment has not changed. “It was one of the best periods of my life,” said Dr Fergie.

Story Candy Gibson
Age shall not weary him

At 91 years of age, Professor Frank Fenner has earned the right to put his feet up and smell the roses. He still does the latter, but retirement is not a word that figures in his vocabulary.

Nature, nurture and chance. They’re three words that have characterised the life of one of Australia’s most celebrated scientists, and arguably all humans.

The genes you inherit, your upbringing, and pure luck all come into play to determine our life’s path, according to Professor Frank Fenner, one of the most highly decorated and awarded Australian scientists of the 20th century.

Credited worldwide for his role in eradicating smallpox and controlling Australia’s rabbit plague with the introduction of myxomatosis, Professor Fenner returned last August to his alma mater, the University of Adelaide, to launch his memoirs.

The book—Nature, Nurture and Chance: The Lives of Frank and Charles Fenner—provides an insight into a fascinating career and the events and people who shaped his life, including his late father, Charles, a distinguished scientist in his own right as well as a senior administrator in the South Australian Department of Education.
In launching the book, the SA Minister for Education Jane Lomax-Smith described it as “an inspiration for young people, aspiring scientists and those wanting to make a difference.”

“Many people think that scientists cannot write in an engaging, approachable manner, but I could not put this book down,” Ms Lomax-Smith said. “It’s a terrific read.”

And why wouldn’t it be? It documents a life studded with international achievements in combating pox viruses and a highly distinguished career as a microbiologist.

From 1949, when he was awarded the David Syme Research Prize for his work on mousepox, through to his pioneering work in virology and microbiology, Professor Fenner has picked up a glittering array of scientific honours.

These include the Mueller and Matthew Flinders Medals (1964 and 1967), the Britannica Australia Award for Medicine (1967), the Burnet Medal (1985), the Prime Minister’s Prize for Science (2002), and, internationally, the highly prestigious Japan Prize (1988), the Copley Medal of the Royal Society of London (1995) and the Albert Einstein World Award for Science (2000).

All this, for a researcher who never had time to study for a PhD.

At 91, Professor Fenner continues to make a daily contribution to science. He is a Visiting Fellow of the John Curtin School of Medical Research at the ANU in Canberra.

But it was at the University of Adelaide where this “doyen of virology” made a decision that changed his life irrevocably.

He initially enrolled in science, intending to follow his father, Charles, and major in geology. But these were the days before the minerals boom and jobs were scarce for geologists.

“My father advised me to go into medicine. He said it would open up so many opportunities for me—physician, pathologist, surgeon, anaesthetist, psychiatrist, even research worker. The possibilities were endless. So I accepted his advice.”

Professor Fenner graduated with an MBBS from the University of Adelaide in 1938 and was awarded the degree of MD in 1942 for his papers on the physical anthropology of the Australian Aborigines.

He served in the Royal Australian Army Medical Corps from 1940-46 and in 1945 was awarded an MBE for his work on malaria control in Papua New Guinea.

After the war, Professor Fenner worked with Macfarlane Burnet at the Walter and Eliza Hall Institute of Medical Research in Melbourne. “At the time, Burnet was the outstanding figure in infectious disease research in Australia,” Professor Fenner recalled.

“I still regard him as the most original thinker I have ever met in my career.”

Professor Fenner then seized an opportunity to work in New York for a year with Dr Rene Dubos at the Rockefeller Institute.

Returning to Australia in 1949, he was appointed Professor of Microbiology at the new John Curtin School of Medical Research at the ANU. This led to his becoming Director of the John Curtin School from 1967 – 73 and then Director of the Centre for Resource and Environmental Studies at the ANU before his “retirement” in 1979.

The defining moment of his life was on May 8, 1980, when he stood up in front of the World Health Assembly and declared that smallpox had been eradicated globally.

“It was an amazing day—one that stands out in my memory very clearly.”

But with characteristic modesty, he credits many of his achievements to team work, whether with other scientists, or the most enduring partnership of his life—his late wife, Bobbie.

“I think two things—besides nurture and nature—really contribute to a good life: the first is a happy marriage and the second is to pursue work that fulfills your expectations. I’ve been incredibly lucky in both respects,” he said.

Story Candy Gibson
Dancing to a different tune

Internationally renowned writer and award-winning poet, Kirpal Singh, is a Colombo Plan scholar who completed his PhD at the University of Adelaide in the late 1970s. Now based at the Singapore Management University, Associate Professor Singh teaches courses on creative thinking.
H e’s a leading innovator in the world of creative thinking, but Professor Kirpal Singh is poles apart from that other giant of lateral thinking, Edward de Bono.

The latter is an advocate of practical approaches to complex problems, looking at the end results of creativity and employing it as a skill to achieve the right outcomes.

Professor Singh dances to a different tune. His approach to creativity is almost mystical, recognising it as a gift, which lies in our subconscious and is tapped through meditation and stimulation.

The two were both keynote speakers at the recent American Creativity Association’s international conference in Texas. In 2005 Professor Singh became the first ever non-American to be appointed to the Association’s Board.

The author of 15 books and more than 40 journal articles, Professor Singh’s most recent publication is Thinking Hats & Coloured Turbans: Creativity Across Cultures.

On a recent trip to Singapore, Candy Gibson from the University of Adelaide posed the following questions to Professor Singh:

**Lumen:** How does one lecture in creative thinking. The concept is almost contradictory is it not?

**Kirpal Singh:** I don’t lecture. My creative thinking sessions are best described as experiences. I don’t give my students sermons, but rely on in-depth experiences to stimulate their imagination. My philosophy is simple: creative thinking is, so one either has to experience what it is, or could be. My role is primarily to stimulate and ignite the centres of the creativity fire.

**Lumen:** You are an internationally acclaimed writer and poet. Who have been your greatest influences and what is it about your background that led you down this creative path?

**KS:** The story begins when I was about five years of age. I was living with my paternal grandmother in a small place called Batu Gajah in Malaysia. One day we young ones found ourselves all lined up to receive a great man, known as the district officer. He was a young, brash Englishman. I was singled out by fate to receive the end of his long cane on my nose. Using the cane to tickle my nose he said in an extraordinary upper class accent that only the British can pull off, “And what about you, my boy? How are you?” I made up my mind to master the English language so that one day the British would invite me to read my works to them, write about them and publish them. Over the years I am glad that all of this has happened!

The primary influences for my creative spur were my grandmother (who cradled me in her arms and told me about the moon and the stars), my uncle Bill, a few wonderful teachers... and William Blake, the ultimate genius of the creative mind.

**Lumen:** Can you give me your reflections of the time you spent at the University of Adelaide?

**KS:** I arrived at the end of March, 1976. My PhD was on Aldous Huxley and my supervisor was the late Professor John Colmer, with whose family I developed very warm, longlasting bonds.

I was not too much of a library user, but I plunged head on into experiencing the Aussie lifestyle and played tennis every Sunday at the house of Winnie and Rene Levy in North Adelaide. Here I had the privilege of meeting some very distinguished members of the Adelaide cultural and intellectual scene, including Anne Levy, who later became Minister for the Arts in the Bannon Government.

I did my share of research, but because I was handling a theme about Aldous Huxley’s work, which had not been much mined, I had to do more of my own writing than reading other people’s work. Huxley, to me, remains a prodigious mind, an often-misunderstood genius of the 20th century. He was a larger-than-life figure who influenced millions through his books, from the high priests of art and culture, to the drug users in the streets of San Francisco and Sydney. Years later when I met his wife, Laura, I realised just how tremendous my PhD thesis topic was in shaping my intellectual sensibility.

**Lumen:** I understand you were a part-time lecturer at the University of Adelaide between 1976 and 1978. Were you completing your PhD at the time and which area did you lecture in?

**KS:** Yes. I was slightly older than most PhD scholars. I had already been lecturing at the University of Singapore’s English department when I was awarded the Colombo Plan scholarship to pursue my PhD in Adelaide. I did part-time lecturing at the University of Adelaide as well as Flinders University and the South Australian Institute of Technology (now UniSA).

I lectured mainly on Indian literature, South East Asian literature and cross-cultural perspectives on English literature.

**Lumen:** Your philosophy seems to be focused on changing mindsets. Do you see this as an international problem? Can you name some of the world’s most creative leaders and examples of how creative thinking has changed the course of history?

**KS:** Yes. The challenge for globalisation is to think of creative ways to change mindsets so as to avoid repeats of 9/11 and other blunders arising out of ignorance, neglect and poor education.

Among the world’s most creative leaders I would place the founders of the great faiths—Christ, Prophet Mohammed, Buddha, Guru Nanak. To this group I would add people like Plato, Da Vinci, Pascal, Picasso, Tagore and Einstein.

In more recent times I would nominate someone like Nelson Mandela, whose creative approaches to intensely serious and complex political problems have resulted in radical transformations of attitudes.

**Lumen:** Your upcoming book “Leadership Across Cultures: Do We Ever Learn?” has a title that suggests we don’t. Can you expand?

**KS:** The second half of the title is to challenge readers to engage with me. If one takes the recent visit to the US by the Chinese President and the exchanges with President Bush, one immediately sees just how tense the contexts are, precisely of what I’d call the “sensitive cross-cultural arena”.

My book is an exploration of leadership as it manifests itself across the diverse cultures of the world. I expect to finish the book at the end of this year.
Dr Arthur Ray Beckwith
an unsung hero

Ray Beckwith, aged 94, who lives quietly at Nuriootpa in his beloved Barossa Valley, should be ranked with Pasteur because of his contribution to oenology.

True, Pasteur really discovered micro-organisms and how yeasts are responsible for the phenomenon of fermentation, thereby dispelling the spontaneous generation concept, but Beckwith proved that for a wine to keep, its pH value, often described as the measure of active acidity, is critical.

Oenologists well know Pasteur’s pronouncement that when bacteria are present in a wine, “Le mal existait”, but they might equally quote Beckwith’s equivalent in the Australian vernacular, “the penny dropped”.

It was while sitting on a train that “the penny dropped” for Beckwith. He deduced that the pH of a wine determined whether or not certain bacteria, initially always derived from the skins of the grapes, became active.

To complicate matters, a consequence of the wonderful secondary malo-lactic fermentation—whereby bacteria convert harsh malic acid to soft-tasting lactic acid—is a rise in the pH of the wine, making it attractive for nastier bacterial activity.

In 1952, I monitored the pH of the inaugural Coonawarra Estate 1952 dry reds and as it progressively rose due to that secondary fermentation, I added tartaric acid and brought it down again.

This pioneering (perhaps for the first time in the world) was only possible because the pH meter that Beckwith introduced was also fitted with the new reliable glass electrode.

Undoubtedly because current wine consumers never see diseased wine, it is difficult to accept that 40% of the world’s wine was diseased 70 years ago—the period when Beckwith made his historic research pronouncement when a cadet at Roseworthy Agricultural College.

Actually, that act was the real reason for the establishment of the first Australian oenology course, though the industry may still refute the assertion. When the first lecturers asked wineries for examples of diseased wines, not one conceded they had any, so the staff had to make their own ‘diseased’ wines in order to study the afflictions!

This extraordinary saga was because Beckwith’s discovery saved his employer, Penfolds, that 40% which was such an enormous financial contribution, the company kept the secret for obvious commercial reasons.

Unfortunately, we have no other word in English for ‘disease’ in wine, while the worst form is only vinegar, which we enjoy as a food, but not as a beverage. During Beckwith’s apprenticeship, wines were described as tasting like sickly boiled lollies, or extremely bitter (a repulsive affliction due to the development of acrolein: I encountered it in 1954).

Sadly, Beckwith has had to live to 94 before enjoying proper recognition, starting with a Doctor of the University honoris causa from the University of Adelaide, quickly followed by Honorary Life Member of the American Society for Enology and Viticulture, and recently the coveted ‘Maurice O’Shea Award’ at a prestigious wine industry function in Sydney.

Incidentally, a corollary of this harnessing of some of the bacteria present during winemaking is the heretical assertion—Pasteur was wrong! —Ian Hickinbotham RDŒ OAM

“Pasteur was wrong!”

Ian Hickinbotham RDŒ OAM

“AP”
When John Crosby was doing his Diploma of Agriculture at Roseworthy—from 1968 to 1970—it was an all-male course and students had to live in.

“There were some obvious disadvantages in this environment,” said Mr Crosby, “but one of the great advantages was the very strong camaraderie that existed.”

The Crosby family originally farmed at Kadina and all four Crosby boys attended Roseworthy—their attendance spread over 11 years.

“As well as giving you the background science into how things work, the Roseworthy diploma showed us the means of finding out information and assessing the accuracy of information. It gave me the confidence to have a go,” said Mr Crosby.

Although the family moved their farming operation to Moree in New South Wales and Mr Crosby was away from South Australia for 25 years, Roseworthy was the source of lifelong friends with whom he always finds it easy to “pick up where we left off”.

In NSW, a move into agri-politics in his early 30s led to a position as Senior Vice-President with the National Farmers Federation. From there he became Chairman and Chief Executive of the Meat Authority in NSW and then Business Development Manager with Elders.

In more recent times, back in South Australia, he’s refocused on his farming enterprise (JR Crosby and MJ Fisher at Lucindale is the state’s largest maize producer) and has established several agricultural trade, management and consultancy businesses under his AgGroup umbrella.

As Patron of the new Roseworthy Campus and Student Fund, Mr Crosby will be helping the management committee promote the fund to potential supporters and raise its profile.

“I was very flattered that the Committee thought I could help and very pleased to do so,” he said.

The new public fund was launched earlier this year at a special gathering of graduates, friends of Roseworthy and representatives from the agricultural industry.

An initiative of the Roseworthy Old Collegians Association (ROCA), the Fund aims to: support and encourage students through scholarships, prizes and other financial assistance; enhance facilities for education and research; encourage study and research through study awards; and develop outreach activities to help transfer knowledge to the wider community.

University of Adelaide Vice-Chancellor Professor James McWha said: “The name ‘Roseworthy’ has long been synonymous with excellence in education and development of new technology in agricultural and natural resources industries.

“The Roseworthy Campus and Student Fund will help ensure Roseworthy keeps producing future generations of leaders and innovators.”

The Fund will be championed and managed by a high-profile committee of co-patrons under the chairmanship of The Hon. Dr Bruce Eastick AM.

To find out more about the Fund, or to make a contribution, please contact the Development and Alumni Office of the University of Adelaide on (08) 8303 4994.

Story Robyn Mills
The University of Adelaide would be a very different place if it weren’t for bequests. Imagine the North Terrace campus without Elder Hall, or the University without its Waite campus—these are just two examples of facilities provided by gifts by will.

“Bequests have had a profound impact on the development of the University and one that is still very much apparent today,” says the University’s Bequest Officer, Jon Russack.

“As you stroll around the campus grounds, you realize that you are looking at the legacy of philanthropic vision. This vision for a University came not from governments but from many private individuals who donated the funds to fulfill their dreams for the future.”

Among these private individuals are some of the University’s most famous names—for instance, Elder and Waite.

In 1897, Sir Thomas Elder bequeathed the sum of £65,000 for Medicine, Music and the University in general. These funds were, in part, used to establish Elder Hall, a landmark building on the North Terrace campus and home of music at the University. Over a century after his gift, Elder’s name and impact live on, celebrated every day in the continued use of one of Australia’s finest concert halls.

Peter Waite bequeathed most of his substantial lands and properties, at Urrbrae, Claremont and Netherby, together with Urrbrae House and ancillary buildings, as well as a trust fund of £60,000 to the University in 1922. The University used these gifts to establish the internationally renowned Waite campus, which today encompasses the largest agricultural research complex in the Southern Hemisphere.

“We can learn a lot from people like Sir Thomas Elder and Peter Waite,” says Jon. “If we can combine their spirit of generosity with today’s vision of a world-leading university in research and teaching excellence for the following generations, we have the power to make an amazing impact for the future.”

A new brochure is available which emphasizes the importance of bequests in the University’s development, both in the past and for our future, and provides a guide for anyone thinking of making a bequest. Ways of making bequests are flexible—gifts can be designated for the benefit of the University in general, directed to a specific area, the capital can be held in perpetuity and invested in the University of Adelaide Composite Fund with the income used for the designated purpose.

Bequests don’t need to be as large as Elder’s or Waite’s in order to make a real difference. Every bequest, no matter what its size, leaves a lasting legacy that will impact on the lives of generations of students at the University of Adelaide.

To obtain a copy of the bequest brochure, or for more information, please contact Jon Russack, Development and Alumni:
Phone: (08) 8303 3234
Email: jonathan.russack@adelaide.edu.au

Story Lana Guineay
Thorburn Brailsford Robertson

Pioneer of insulin manufacture in Australia

Professor Thorburn Brailsford Robertson contributed greatly to Australian society, science and industry during his short life. Born at Edinburgh in 1884, Robertson was brought to South Australia in 1892 because his father was working for a mining company at Callington. He studied for a Bachelor of Science degree at the University of Adelaide from 1902 under Professor (Sir) Edward Stirling, with an interest in physiology. Having graduated at Adelaide in 1905, Robertson became assistant lecturer in physiology at the University of California, Berkeley. He earned a PhD from Berkeley in 1907 and then a Doctor of Science from Adelaide in 1908, at just 24 years of age. He became a full Professor at Berkeley in 1917 and the following year was appointed Professor of Biochemistry at the University of Toronto. In 1919 he moved back to the University of Adelaide to become the first occupant of what was then called the Chair of Biochemistry and General Physiology, following Stirling’s retirement. By this time, Robertson was not only Stirling’s successor in physiology but also his son-in-law, having married Jane Stirling in 1910.

Robertson had a great passion for biochemistry—indeed, he is considered the first professor in Australia to embrace the field, establishing the discipline of Biochemistry in the University of Adelaide’s Medical School. In 1920 he co-founded the Medical Sciences Club of South Australia with Professors (Sir) John Cleland and Frederick Wood Jones. Robertson was a driving force behind the establishment of the Darling Building in 1922, which housed the disciplines of Physiology, Biochemistry and Histology.

Robertson made a vital contribution to the manufacture of insulin, used by diabetics. Within one year of the published discovery of insulin by researchers at Toronto University, Robertson had applied for and obtained a licence from Toronto’s Insulin Committee to prepare insulin. As a result, insulin was manufactured for the first time in Australian history in 1923, in the University of Adelaide’s Darling Building. Robertson was successful in devising a way of producing insulin more cheaply, quickly, and in greater volume than anywhere else in the world. A pioneer of the physical chemistry of proteins, Robertson devoted much of his research to the problem of growth. His work into animals’ growth resulted in a major contribution to agricultural science and industry in Australia. In 1927 he was approached by the Commonwealth Council for Scientific and Industrial Research to head a division of animal nutrition based at the University of Adelaide. He was Director of the Waite Agricultural Research Institute working hard on his research when he caught influenza, then pneumonia. After several days in hospital, he died in January 1930.

By the time of his death at age 45, Robertson had published 170 papers, textbooks, and even children’s storybooks. A stained-glass window designed by Edith Lungley, which overlooks the rear stairway of the University’s Mitchell Building, remains as a permanent memorial to this remarkable scientist and author.

(The above is derived from a number of sources, including The University of Adelaide 1874–1974 by W. G. K. Duncan and Roger Ashley Leonard, the entry for Robertson in the Australian Dictionary of Biography written by G. E. Rogers, and an obituary published in the journal Biochem in 1930.)
Recognising Excellence

Each year the Alumni Association recognises the significant achievements and contributions of its alumni and friends through a variety of awards and grants.

Distinguished Alumni Award

The Alumni Association formally recognises its outstanding alumni by bestowing up to three Distinguished Alumni Awards annually.

The recipients of the 2006 Distinguished Alumni Awards were:

**The Honourable Greg Crafter** for his sustained and distinguished service to higher education and the South Australian Parliament, as well as his continued contact with, and support of, the University of Adelaide over many years both as a member of Council and Chair of the Alumni Association.

**Mr Sim See Kee** for his sustained and distinguished service to the Alumni Association in Malaysia and Singapore as well as his leadership in commercial and industrial activities and contributions to the community over many years.

**The Honours Alumni University Medal**

The Honours Alumni University Medal for 2006 was awarded to Adam Palmer. This award acknowledges outstanding academic excellence and only one medal is granted each year to the most outstanding student in that graduating year.

Adam was awarded a First Class Honours degree in December 2005 in the Discipline of Biochemistry and subsequently received the School’s Honours Prize in Biochemistry. An outstanding feature of his undergraduate degree is that he achieved High Distinctions in all courses undertaken while at the same time having achieved three majors at level 3, namely Physics, Chemistry and Biochemistry.

He received numerous prizes and scholarships during his undergraduate degree including The K Morton Scholarship in Biochemistry III, The Rennie Scholarship, David Murray Scholarship in Science and the Brian and Heather Forster Prize in Biochemistry. As an undergraduate student, Adam has achieved a remarkable outcome in contributing to a published article in a major international journal and is in the process of preparing his honours research results for publication.

**Mutual Community Postgraduate Travel Grants and the AUGU/RC Heddle Award**

These grants support the research undertaken by doctoral candidates. Recipients are provided with funding to travel to a conference or research institution essential to the advancement of their research.

The first round recipients of the 2006 Mutual Community Postgraduate Travel Grants were Dr Archana Pradhan (Dental School) and Ms Emily Kilpatrick (Elder Conservatorium of Music). The second round recipients were Ms Megan Garvey (Chemistry) and Ms Monika Erkelens (Psychiatry). Ms Gretel Png (Electrical and Electronic Engineering) is the 2006 AUGU/RC Heddle Award recipient.

**Australian Universities International Alumni Convention (AUIAC) Travel Grants 2006**

Four grants were awarded in 2006 to assist the following graduates to attend the AUIAC held in Brisbane from September 13-15; Mr Rodger Chan (Sarawak, Malaysia), Mr Lee Chee Meng (Kuala Lumpur, Malaysia), Mr David Goh (Singapore), and Dr Piyakul Oparkcharoen (Thailand).

These grants have been made possible through the generosity of The Right Honourable Chief Minister of Sarawak.

**Story Kim McBride**

### Distinguished Alumni Award – call for nominations

The Distinguished Alumni Awards recognise outstanding service to the University of Adelaide and/or the Alumni Association, and outstanding service to the community or outstanding contribution in their chosen fields.

The Alumni Association is now accepting nominations for the 2007 awards. The rules for this award and information on the nomination process are available on our website at: www.adelaide.edu.au/alumni or by contacting +61 8 8303 5800.

If you know of an individual who you feel is deserving of such an award please forward your nomination in writing to:

Secretary, Alumni Association Development and Alumni
University of Adelaide SA 5005
AUSTRALIA

Submissions must be lodged, in writing, no later than 31 MAY 2007.
Right: The University of Adelaide welcomed back its international graduates from 17-19 September. University Staff, Chapter Representatives and International Alumni are seen here enjoying the Homecoming Luncheon.

Below: Dr Donald Dowie, Dr Peter Brummitt and Mr Allan Guster reminisce during a tour of the Tate Geology Museum, Earth and Environmental Sciences Building.

Bottom: International Open Day was held during September in Malaysia and Singapore. Pictured here are (from left) The Honourable John Von Doussa QC, His Excellency The Honourable Sim Cheok Lim and Professor John Taplin.

Below: The Australian Universities International Alumni Convention (AUAC) was held in Brisbane during September. The event celebrated the achievements and input of international graduates. Director of Development and Alumni Robyn Brown is pictured here with Piyakul and Wuttitorn Oparkharoen at the Convention.
There is much to delight the tourist and the local alike on Adelaide’s North Terrace. The 1.6km stretch of land houses the most extensive and unique array of civic, artistic, recreation and historic institutions in Adelaide, earning it a reputation as the city’s vibrant cultural heart and visitor showpiece.

But there is more to North Terrace than elegant sandstone buildings and a bevy of cultural attractions—the district is also a thriving centre of education. Nestled among some of the State’s pre-eminent institutions, including the State Library, the South Australian Museum and the Art Gallery of South Australia, the University of Adelaide’s North Terrace campus buzzes with university life.

Its heritage-listed buildings are in daily use for teaching, research, administration and community purposes, forming a unique environment where the city and the University come together.

South Australian Premier Mike Rann says that it is this combination of “town and gown” that saw the State Government contribute one million dollars to the University’s Heritage Foundation earlier this year. “The University remains an integral part of one of the finest collections of civic, cultural and educational institutions to be found on the one stretch of land,” Mr Rann said.

“We made this contribution because we recognise the value of the University’s wonderful, historic structures—not only to the University and its students and staff, but also to the State and the people of South Australia.”

The State Government’s gift is the largest individual contribution to the University of Adelaide Heritage Foundation since its establishment in 2005. The Foundation was established to promote the University’s invaluable heritage and raise all-important funds for its ongoing maintenance.

As part of this vision, the Foundation established a perpetual trust. The Foundation is seeking to raise $20 million in its first five years, of which only the income from the principal will be expended, enabling gifts to continue in perpetuity. The State Government’s contribution will be deposited in this trust, helping the University to restore, renovate and maintain its heritage for future generations.

“We are also well aware of the burden of maintaining heritage items,” Mr Rann said.
Heritage Priorities

The University has been preparing Conservation Management Plans for all of its heritage-listed buildings, which have highlighted the priorities for conservation and maintenance. Over the next twelve months, work on heritage buildings will be focused on the early North Terrace structures, which constitute the core of the University's heritage precinct. The main project will be the careful conservation and repair of the external stonework of 106-year-old Elder Hall, which, in the words of the consultant who analysed the condition of this stone, is in a “seriously deteriorating” condition. Conservation work will continue on Bonython Hall, including minor repairs to the North Terrace towers and the overall cleaning of the building, to bring the whole of the exterior to the same excellent condition as the recently conserved north elevation and turrets. This work will complete the major conservation works to this key structure. The Mitchell Building has last year undergone refurbishment, upgrade and restoration works to internal building elements at an approximate cost of $1.2 million. Further conservation of building elements, upgrade work on the Edgeloe and Basten Rooms, and adaptation of spaces will be a priority over 2007.

“So the University’s move to establish a $20 million trust to generate funds to support the ongoing maintenance task is to be congratulated.”

Premier Mike Rann

“I would like to discuss how I can support the Heritage Foundation in another way.
Payment
Enclosed is my cheque payable to: The University of Adelaide Heritage Foundation
or please debit my Visa Mastercard
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Yes, I would like to support the Heritage Foundation

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® I would like you to contact me about making a bequest to the Heritage Foundation
® I would like to discuss how I can support the Heritage Foundation in another way
Payment
® Enclosed is my cheque payable to: The University of Adelaide Heritage Foundation
or please debit my Visa Mastercard
Card Number ____________ ____________ ____________ ____________
Card holder name ____________ Expiry date ____________
Postcode ____________

Name ____________
Address ____________
Telephone (wk) ____________
(ah) ____________
Email ____________

Signature ____________

Please complete the reply slip and return it to:
Heritage Foundation
Development and Alumni
The University of Adelaide
South Australia 5005 Australia
Phone +61 8 8303 4275
® Please do not acknowledge my gift publicly
Over the past 60 years, many high profile Singaporean identities have studied at the University of Adelaide. A book commemorating their achievements was launched in Singapore in April 2006.

The Southern Light—Enlightening and Enriching records the collective accomplishments of the Singaporean alumni from the University of Adelaide since 1946.

It includes excerpts from Singapore’s first elected president, the late Mr Ong Teng Cheong, the former Deputy Prime Minister, Dr Tony Tan Keng Yam and the Second Minister for Finance and Foreign Affairs, Mr Raymond Lim Siang Keat MP, Minister for Transport and Second Minister for Foreign Affairs.

Launched by the Chancellor, the Honourable John von Doussa QC, the commemorative book is the first publication of its kind produced by an Australian university alumni chapter.

Congratulating the University on the book, the Australian High Commissioner to Singapore, Mr Miles Kupa, said: “The commemorative book contains the personal reflections of a number of prominent Singaporeans who studied at the University of Adelaide. I am heartened to acknowledge that a number of people featured in the book now hold senior positions in Singapore’s public and private sectors and have made significant contributions to Singapore.”

These include the late Mr Ong Teng Cheong, who graduated with a Bachelor Degree in Architecture from the University of Adelaide in 1962. He was the first elected President of the Republic of Singapore, serving his term from 1993–1999.

When Mr Ong Teng Cheong was Minister for Transport he developed the Singapore Mass Rapid Transport System together with the late Mr Lim Leong Geok, another University of Adelaide alumnus who graduated in engineering.

During the course of the MRT project, the team members comprised mainly University of Adelaide engineering graduates. Their contribution to Singapore’s transport system is outlined in a chapter in the book.

More than 50 graduates have contributed articles to the commemorative book, among them Dr Tony Tan Keng Yam, Mr Raymond Lim Siang Keat, Mr S. Iswaran (Minister of State, Ministry of Trade and Industry), Mrs Lim Siok Peng (Private Secretary to former President Mr Ong Teng Cheong) and Dr Cheong Choong Kong (Overseas Chinese Banking Corporation Chairman).

Story Candy Gibson

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- Graduating with a postgraduate qualification from a Go8 University
- The opportunity to travel as part of your research and access to associated travel grants
- Access to excellent research facilities
- Collaborate with some of Australia’s most renowned academics
- Hundreds of scholarships available to support your research

To find out more contact the Adelaide Graduate Centre on 8303 5882 or visit www.adelaide.edu.au/graduatecentre
Making a difference to students’ lives

Each year, the Vice-Chancellor’s Scholarships Fund gives two talented and deserving students the financial support to realise their potential through studying at university. This year’s recipients, Glenn Smith and Vanessa Hughes, exemplify the talent and dedication of students who benefit from the Fund.

Glenn, who is studying for a double degree in Finance and Law, says that the Scholarship has helped to relieve the financial burden of moving and studying away from home, allowing him to focus on his studies.

“Especially in my situation where my parents live in the country and I must support myself away from home, the Scholarship has made the transition to university much easier and I am grateful for that,” says Glenn. “I would like to say a huge thank you and say how grateful I am to have been a recipient. I just hope people who give to the Scholarships Fund understand the difference they make!”

Vanessa Hughes equally values the Scholarship. Vanessa’s passion for medicine saw her travel from Alice Springs to Adelaide; a move she says was prompted by the University of Adelaide’s scholastic excellence and commitment to research.

Vanessa says the Scholarship has greatly eased the difficulties of moving interstate, funding her flights back home during the holidays and allowing her to reside at St. Ann’s College, “a home away from home”, during the semester. The funds have also helped her purchase medical textbooks.

“It is an honour to receive such a prestigious award and I truly hope that future students can benefit from the Scholarships Fund just as I have,” says Vanessa.

Many gifted students are faced with financial barriers to university study, from rising course fees to the cost of living. The Vice-Chancellor’s Scholarships Fund is a vital source of support for financially disadvantaged students, and is entirely funded by gifts from alumni and friends of the University.

If you wish to donate to the Fund, or would like more information, contact Helen Paul, Development and Alumni:
Phone: +61 8 8303 4275
Email: helen.paul@adelaide.edu.au
Website: www.adelaide.edu.au/alumni/giving

Story Lana Guineay

Alumni and Friends Survey results
Thank you to those alumni and friends who participated in our recent on-line survey, which was available on the Development and Alumni website from June through to the end of August 2006. The survey response was not large enough to provide solid trend data. However, we did receive some valuable feedback from those who participated. Congratulations to the four winners of the University of Adelaide USB flash drives.
**Current Students**

**Felix Kerry**
Associate Diploma in Aboriginal Studies in Music student:
Felix has been awarded the 2006 South Australian NAIDOC Artist of the Year. The award recognises Felix’s work with Aboriginal communities in the performing arts field, including a musical composition for the award-winning Crossing Paths dance spectacular at the 2006 Fringe Festival.

**Amy Ellks**
Bachelor of Music in Performance student and flautist:
Amy has won a full scholarship to a month-long summer school with the National Symphony Orchestra (NSO) in the United States. Amy is the only Australian to be selected for the Kennedy Center’s NSO Summer Music Institute out of 70 young musicians from around the world.

**1990s**

**Natalie Williams**
[B Sc 1998, B Sc (Hons) 1999] has been accepted into the Doctor of Music course at Indiana University in Bloomington, USA. Natalie has been awarded a School of Music Graduate Fellowship, only one of four awarded by the school. The Fellowship includes full tuition, a stipend and medical benefits as well as a three-year teaching post at the University as an Associate Instructor in Composition. Natalie has also recently been awarded the APRA PDA Award in the Classical Category.

**Dr Amanda Able**
[B App Sc 1993, B App Sc (Hons) 1994, PhD 1998 —University of Southern Queensland, staff member] has been named South Australia’s 2006 Tall Poppy of the Year. Since 2001, Dr Able has helped secure almost $2 million funding for plant-related research at the University of Adelaide. In addition to her research excellence, Dr Able is passionate about educating the next generation of scientists. She was awarded the Executive Dean’s Excellence in Teaching Award in 2005 and is heavily involved in promoting plant breeding and plant biotechnology to school students.

**Dr Bradley Ferguson**
[B E (Elec) (Hons) 1998, Ph D (Electronic) 2005] was awarded a 2006 Tall Poppy Award. A senior engineer with Tenix Defence, Dr Ferguson continues to be involved with T-ray research in the School of Electrical and Electronic Engineering at the University.

**2000s**

**Dr Melanie McDowall**
[B Sc 2000, B Sc (Hons) 2000, Ph D (Med) 2005, staff member] was a recipient of the 2006 Young Tall Poppy Science Awards.
Dr McDowall, a researcher within the Discipline of Agricultural and Animal Science, is well known for her work to improve wool traits in Merino sheep by treating pregnant ewes with nutritional supplements. She is also a project leader within the Sheep Genomics program, which aims to improve wool, meat, parasite and reproductive efficiencies of sheep by gene discovery and non-genetic manipulations.

**Leonard Seabrooke**
[BA 1995, BA (Hons) 1996] has written The Social Sources of Financial Power, published by Cornell University Press. This is a major contribution to the study of the social and governmental institutions dealing with the majority of citizens as the true sources for a state’s financial legitimacy, and has already garnered considerable praise by scholars in the field.
The University of Adelaide alumni community would like to know what’s new with you!
If you would like to share your milestones (births, marriages, awards, promotions etc) with your fellow alumni, please send your name, degree, graduation year, and a short update of 50 words or less to:
Development and Alumni office
Level 1, 230 North Terrace
The University of Adelaide
SA 5005, Australia
Email: alumni@adelaide.edu.au
Fax: +61 8 8303 5808

Submissions are always welcome from students, graduates, and current and former staff, so please remember us when you have some life news to share. Photographs are also welcome.

1980s

Don Henderson
[BA 1981, Dip Ed 1983] has written a novel titled Half the Battle, which was released by Scholastic on 1st May. The novel, which was officially launched by ex-AFL footballer Matthew Primus, was inspired by 23 years of high school teaching in such places as Mildura, Kadina, Tarcoola, Whyalla and (currently) Seaton.

David Letch
[BA (Hons)(Geography) 1986] received the Annual CoastCare Award in 2006. His tireless commitment to protecting South Australia’s coast has led to a number of initiatives, including the relocation of a controversial aquaculture proposal which could have had adverse impacts on the Australian Sea Lions in Sceale Bay, the declaration of the Nicolas Baudin Island Conservation Park of Cape Blanche, and the preparation of a management plan from Venus Bay to Streaky Bay through an Enviro Grant, plus coastal access works in the area.

Raymond Lim
[B Ec 1982, B Ec (Hons) 1983] has been appointed as the Minister for Transport in the Singapore Cabinet, and is also the Second Minister for Foreign Affairs.

Subramaniam Iswaran
[B Ec 1985, B Ec (Hons) 1986] will be appointed as Minister of State in the Ministry of Trade and Industry in the Singapore Cabinet.

1970s

Professor Robert Burford
[B Sc 1970, B Sc (Hons) 1971, PhD 1977] has recently been appointed as Head of School of Chemical Sciences and Engineering at the University of New South Wales. He has been Associate Dean, Research, in the Faculty of Engineering and has been actively involved with the CRC for Polymers, being currently one of four program leaders.

Professor Bob Hill
[B Sc 1976, B Sc (Hons) 1977, Ph D 1981, D Sc 1997, staff member] has been appointed Executive Dean of the Faculty of Sciences at the University of Adelaide.

1960s

Ian Barwick
[B Arch 1966] currently runs a solo practice in Adelaide. His work has included Unley Oval, the Whyalla Foreshore, the Little Para River Study, and the Wills Court at the University of Adelaide’s North Terrace Campus. Ian has lived and worked in Sydney, London and the United States. He holds a Master’s degree in Landscape Architecture from the University of Texas at Arlington, and has taught Landscape Architecture and Urban Design at the University of Adelaide. Ian played rugby for the University and Old Collegians. He has two daughters; Jane, 36 and Ann, 31.

Dr David Paton
[B Sc 1974, B Sc (Hons) 1975, staff member] has won a Premier’s Science Excellence Award, recognising his research for having an impact on the public good.

Professor Bob Hill
[B Sc 1976, B Sc (Hons) 1977, Ph D 1981, D Sc 1997, staff member] has been appointed Executive Dean of the Faculty of Sciences at the University of Adelaide.

Dr David Smith AM
[B Ag Sc 1951, M Ag Sc 1961, PhD G Dip Ed, 1966, University of Melbourne] was awarded the Australian Medal of Agriculture by The Australian Institute of Agriculture Science and Technology in 2003. As a distinguished alumnus, he was also awarded a Centenary Medal in 2006 from the University of Melbourne to commemorate 100 years of the Faculty of Agriculture.
Friday the 13th of October proved an auspicious day for graduates returning to their alma mater for Golden Jubilee celebrations.

The Adelaide “56ers” made their way from as far afield as the US, the UK, Singapore and New Zealand, as well as across Australia, to attend the event. The 97 graduates were welcomed back with a day of festivities, featuring a luncheon, guided tours, and opportunities to reconnect with the people and places that made their time at university unique.

Majestic Bonython Hall once again played host to the graduating class, holding a Commemoration Ceremony in which the suitably robed alumni relived the thrill of graduation. Professor James McWha, Vice-Chancellor of the University of Adelaide, welcomed the returning graduates, using the occasion to thank the alumni for the ongoing distinction they have brought to the University, and to highlight the many changes that the University has undergone in the last five decades. Mrs Elizabeth Silsbury OAM (BA 1956) provided the Golden Jubilee address.

As a memento of the once-in-a-lifetime event, attendees received a Commemoration Booklet, featuring the biographies, photos and reminiscences of their fellow 1956 alumni.

The day marked the 21st consecutive Golden Jubilee Commemoration, which has proven one of the most successful reunions held by the University of Adelaide. Every year, the University holds a range of reunions across its faculties and schools. These memorable events are an exceptional opportunity for graduates to relive university days, revisit old memories, renew old friendships, and to celebrate and rediscover their University of Adelaide.

Story Lana Guineay

Visit the reunions website: www.adelaide.edu.au/alumni/reunions/

Golden moments at Jubilee

2007 Reunions
Golden Jubilee Commemoration Ceremony and Luncheon for Graduates of 1957
October (date to be confirmed)
Contact: Darien O’Reilly
Phone: +61 8 8303 3317
Email: darien.oreilly@adelaide.edu.au

News from Lincoln College
The 2nd Annual Lincoln College Alumni City Dinner was held in the Bradman Room at the Adelaide Oval on Saturday 3rd June this year. Guest Speaker was Karen Abraham, a partner with Sherm Delamore & Associates in Malaysia. Lincoln College Alumni are encouraged to mark their diaries for the 3rd Annual Alumni City Dinner to be held once again in the Bradman Room on Saturday 2nd June 2007.

The newly formed Alumni Association has many events planned for 2007:
- Back to Lincoln BBQ in February
- AGM in March
- Annual City Dinner on Saturday 2nd June
- Annual Breakfast prior to the Test Cricket match at Adelaide Oval in Nov/December.

Further details of these events will be available on the website www.adelaide.edu.au/lincoln
Graduation Bear comes complete with a hood to match your degree

Lapel Pin

University Tie

Executive Style Silver Key Ring featuring embossed logo

Pocket Business Card Holder Matt silver lid provides a striking contrast with shiny case and embossed logo

Business Card Holder Black leather with embossed logo

Pen Metallic silver including velvet pouch

Drink Bottle Aluminium featuring embossed logo

Mug Tapered Available in Navy Blue

Coffee Plunger & Mug Set Glass plunger and silver mugs with embossed logo

OTHER ITEMS ALSO AVAILABLE—SEE REVERSE
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Please tick:  
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- [ ] UofA Staff  
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### PAYMENT

Please find attached cheque/money order for $AUD  

Please debit my  
- [ ] Visa Card  
- [ ] MasterCard for $AUD

Credit Card No.  
Expiry Date  

Name on Card  
Signature  
Date  

### FOR INFORMATION ON ORDERING, AND GENERAL ENQUIRIES FOR MERCHANDISE

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Telephone: +61 8 8303 5800 | Facsimile: +61 8 8303 5808 | Email: alumni@adelaide.edu.au | Website: www.adelaide.edu.au/alumni/merchandise

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| Unisex T-shirt  
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| Summer Rugby Top  
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- XL (please tick)  
| $40.00 | $36.35 |      |           |
| University Tie – navy with gold stripes and embossed lion (silk) | $35.00 | $31.80 |      |           |
| Limited Edition Print – Bonython Hall (unframed) | $95.00 | $86.35 |      |           |

*Prices include GST as applies in Australia

**ADD POSTAGE AND HANDLING COSTS**

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Prices are subject to change

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TOTAL  

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Prices are subject to change
Maureen Ritchie’s love of the performing arts, and of the Australian people, has seen her support performers and cultural institutions on a scale few have matched. Maureen supports some of the major names in SA arts, including Vitalstatistix, Womadelaide Foundation, and Brink Theatre among many others.

“arive at CASM was not such a big step,” says Maureen. “I was familiar with the inspiration, hope and talent that CASM produces. I know some students who have been to CASM but was captivated when I saw David Page in his Cabaret Festival performance of Page 8: he reminded me what sort of impact CASM can have on individuals.”

Maureen’s gift to the University of Adelaide’s Centre for Aboriginal Studies in Music (CASM) provides a huge boost to the Centre, and particularly its outreach program, which holds special appeal for Maureen.

“My interest is in supporting unknown voices, seed projects that are Australian and particularly South Australian. For instance, CASM will go to remote communities to hold music workshops for a week at a time. My imagination runs wild when I think of all the talent that exists there, and my heart fills with joy when I hear how much these projects are loved by the people in the communities.”

Maureen’s generosity is based on her firm belief in the importance of the arts and the desire to make a real difference. “I believe that the arts are an expansion of its people. What we have in Australia is unique, diverse and dynamic. Supporting the arts allows me to connect with and influence our society’s cultural development.

“What I hope to do is assist people to fulfil their dreams, thereby fostering and nurturing our artistic and cultural landscape. In a world dominated by short-term capital gain, these investments are one of the last frontiers that create personal relationships. I love doing it as much as I love Australia and its people!”

For more information about giving to the University of Adelaide, contact:
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