

lumen

WINTER 2005

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LIFE IMPACT THE UNIVERSITY OF ADELAIDE



It is a great pleasure to introduce the first issue of Lumen for 2005.

This award-winning magazine has always provided a wonderful showcase for the achievements, innovation and impact of our students, staff and graduates, and the current issue is no exception.

The cover story highlights the research on T-rays that Associate Professor Derek Abbott and his team in the School of Electrical & Electronic Engineering are undertaking. T-rays offer many opportunities for breakthrough developments in fields such as medical science and security, and Adelaide's work is at the forefront.

Another feature explores some of the diverse work at the Adelaide University Research Park (Thebarton Campus), where the Thebarton Business & Research Alliance involves a network of 80 innovative commercial and applied research enterprises.

As the University's renowned Medical School celebrates its 120th year and welcomes a new Executive Dean, it is instructive to look back to its origins and growth, and the many changes and challenges that will shape its future.

Adelaide was the first university in Australia to establish a Conservatorium of Music and today, the Elder School of Music continues to produce outstanding musicians and music educators. Two articles in this issue celebrate the work of electronic music innovator Tristram Cary, still actively composing at age 80, and the burgeoning career of five young Adelaide music graduates who make up the popular jazz quintet, etypejazz.

Also in this issue, the new Chair of the Alumni Association, Michael Llewellyn-Smith, offers an illuminating interview on his early life, career and future role with the University, and we are introduced to a dedicated team of volunteers who are doing important work in the University Archives helping to keep the University's history and heritage alive.

The University is grateful for the continued goodwill and support of its alumni, and welcomes the opportunity to keep you informed about its many activities and achievements through Lumen. I hope you enjoy this issue.

PROFESSOR JAMES A. McWHA

Vice-Chancellor and President

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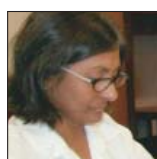
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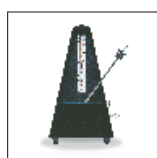
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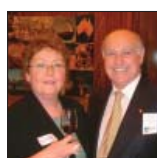
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The Lumen masthead is derived from the University of Adelaide motto "Sub Cruce Lumen" – the light (of learning) under the (Southern) Cross.

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The whole picture:

T-rays excite the

Mysterious envelopes containing anthrax, concealed weapons, secure communications, the CIA...

These could all be ingredients in the latest Tom Clancy spy thriller. Instead, each of these is connected to new research at the University of Adelaide that could potentially lead to major improvements in security worldwide.

The research is aimed at better understanding the properties and uses of T-rays.

While most people have heard of X-rays, T-rays are relatively unknown to the public. Like X-rays, T-rays are a form of radiation—the ‘T’ in T-rays comes from ‘terahertz’, which is the frequency of the radiation. X-rays, microwaves and infrared, all various forms of radiation, are found at different frequencies.

Unlike X-rays, T-rays are safe to the human body and offer many opportunities for developments in medical science and security, among other fields.

Research into T-rays at Bell Laboratories in the United States sparked the interest of Associate Professor Derek Abbott in the University of Adelaide’s School of Electrical & Electronic Engineering. He was the first in Australia to start looking seriously into T-rays.

“I first got inspired to look into T-rays around 1995 or 96, and then I started seriously studying them in 1997,” he said. “In 97 I started applying for grants to get a program going, and eventually I won the first large ARC (Australian Research Council) grant in Australia on T-rays in 1999.”

That initial success was followed in 2004, when Dr Sam Mickan and Dr Abbott won two major grants from the ARC—a Discovery grant of \$800,000 for fundamental research into T-rays, and an infrastructural grant worth \$1.35 million to establish the world’s first laser-based T-ray user facility, headed by Dr Mickan.

In a relatively short space of time, the potential of T-ray research and the expertise in this field at Adelaide had been recognised by the ARC.



imagination



Photograph Drew Lenman

Why T-rays?

Unlike X-rays, T-rays are not invasive—they can only penetrate the human body by a couple of centimetres at most. Because T-rays do not damage biological tissue, it is possible for them to be used in many different ways—such as detecting skin cancer and other tumours that are close to the surface of the skin, or examining samples of DNA to search for evidence of genetic disease.

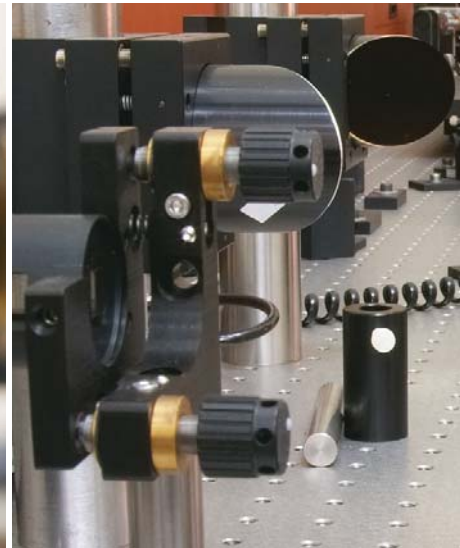
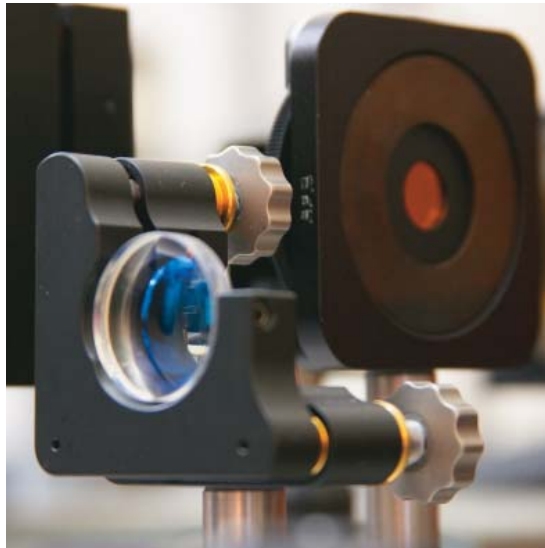
T-rays can identify different molecules, but they don't offer much detail at the individual atomic bond level. This is a good thing, according to Dr Abbott.

"The beautiful thing about T-rays is that they give you information about the character of the whole molecule.

"In a sense it's less detail, not more. If you're driving along in your car, you don't want to look through a magnifying glass, you'll see too much detail, all the little bits and pebbles on the road. You don't need to see at that level of detail because you'll crash the car; you actually want to take a step back and look at the whole picture. That's what T-rays are doing for us at the molecular level."

There are limitations: T-rays are blocked by metal, for example. And, because they can't penetrate the human body by more than a couple of centimetres, they will never replace the more harmful X-rays for security scans at airports, or medical imaging for diagnosis of broken bones.

"On the other hand, T-rays are much better than X-rays for imaging surface soft tissue, so you can see T-rays as complementing X-rays rather than replacing them," Dr Abbott said.



Security Applications

T-rays are useful for identifying biological and chemical material, which may make them invaluable for countering biological and chemical terrorism.

"One of the important security applications for T-rays will be their ability to look inside packages to test for chemicals without having to open the package—the classic example being the 'anthrax envelope'," said Dr Abbott.

Referring to the packages received by prominent individuals and organisations across the US following the terrorist attacks of September 11, 2001, the 'anthrax envelope' sparked widespread fear right around the world, including Australia.

In a test, one of Dr Abbott's PhD students, Brad Ferguson, used T-rays to detect bacterial spores inside a sealed envelope. He set about investigating whether T-rays would detect the difference between the spores and other powders, such as salt, baking soda, flour, sugar, and Chinese five spice.

"The T-ray image showed that you can clearly distinguish between all the different powders in the envelope," Dr Abbott said.

"Brad Ferguson's work, in being able to differentiate between the bacterial spores and other material, is a very important step forward."

Dr Abbott said T-rays would likely become valuable to security in many ways.

Because T-rays can detect different gases with great sensitivity, they could be used for monitoring a building or even an aeroplane cockpit for harmful emissions. This has application not just in terrorism prevention, but also in monitoring for accidental gas emissions.

T-rays could also be used at secure checkpoints, such as border crossings and airports, to scan people for concealed weapons.

"The low terahertz frequency range is where you can look through clothes and see what people are hiding," Dr Abbott said.

"The ethical aspect of looking under people's clothes isn't an issue, because



Photographs Voon Siong Wong

you're not able to see anything apart from an outline of the person's body shape and an outline of the weapon.

"Even as the technique improves and the image gets more distinct, you can easily do some signal processing on it to 'fuzz out the naughty bits'."

Another key security application of T-rays is the possibility of using them for communications.

"It would only be used for short distances because it can't travel through the atmosphere for very long distances, but that's okay because you could use it as part of a wireless communications network in a building," Dr Abbott said.

"It would be a lot harder to eavesdrop on from outside the building than traditional frequencies that are used at the moment, because the signal wouldn't travel through the walls that well. So for secure wireless local area networks, that would be something of interest—and, of course, terahertz frequencies will give you greatly increased bandwidth."

Cloak and Dagger



Dr Abbott had suspected for many years that T-rays would become important to security across a range of fields, but even he was surprised when he was actively approached by someone from the CIA (Central Intelligence Agency) in the United States.

"I was in Santa Fe at the time and I was approached by a guy from the CIA there. He asked me if it was possible to photocopy a book without opening it, using T-rays.

"I said to him, 'Look, if you gave me \$30 million, in principle I think we could do it.' But it was going to take a lot of money and a lot of effort. And I asked him, 'Why do you want to photocopy books while they're shut anyway? What's the point?' And he said, 'Sorry, I can't tell you that.'

"Theoretically, yes you could do that using T-rays, but it would be a huge problem to solve. I think I underquoted him by saying it would cost \$30 million."

There's no doubt that T-rays are beginning to spark the imagination, not just in the real world but also in Hollywood. T-rays have hit popular culture, with the characters of the spy thriller TV show *Alias* using as-yet-undeveloped terahertz technology on a regular basis.

"They're ahead of what the actual developments are, which is great," Dr Abbott said, "much as a show like *Star Trek* was

ahead of the game with personal communicators, which are now a reality."

The reality for Dr Abbott and his colleagues is that T-rays research is an exciting field, with many potential benefits.

"I think this will become a very strong area within the University because of its multi-disciplinary implications," he said.

"It will bring people in the molecular sciences together with engineers, and physical scientists, chemists, chemical engineers, electrical engineers, biologists... it will bring many people together, and I think some very interesting work will come out of that."

For example, one of Dr Abbott's former PhD students, Dr Sam Mickan, is blazing the trail in T-ray biomolecular fingerprinting and T-ray detection of liquids.

Dr Mickan's liquid techniques are creating much interest and have recently sparked a collaboration with Dr Chris Colby in the School of Chemical Engineering in the area of chemical detection in the wine industry.

"The technology that allows us to create and study T-rays has come along in leaps and bounds since we first started this work. It's a very good time for us," Dr Abbott said. ■

Story David Ellis



120 years on

MED SCHOOL GEARS UP FOR CHALLENGING FUTURE



The University of Adelaide's Medical School has an interesting story to tell, from its humble beginnings in 1885, to modern times where issues such as doctor shortages, internationalisation, globalisation and increased accountability are commonplace.

Now, 120 years on, the medical school is entering a new era.

But, before embarking on Professor Justin Beilby's journey when he succeeds Professor Derek Frewin in July this year as Executive Dean of the Faculty of Health Sciences, let's turn back the clock and take a stroll down memory lane.

In his informative account of the Medical School's history (*The Medical School of the University of Adelaide: A brief history from an administrative viewpoint*, August 1991), former registrar Vic Edgeloe says the University Council took its first faltering steps towards providing education for the medical (and legal) profession in 1877, but in each case found itself unable to finance even a significant beginning of a formal course.

"The first real step towards establishing a medical course was taken in 1881 when Dr Edward Charles Stirling was appointed part-time lecturer in physiology," Edgeloe writes.

Council and Dr Stirling regarded the appointment as a prelude to the introduction of at least the first part of a medical course. However, at that stage the Council envisaged providing only the first two years of a five-year course, with the students having to transfer to Sydney or Melbourne or travel overseas to complete the remaining three years.

Although Sir Thomas Elder, a personal friend of Dr Stirling, gave £10,000 (\$20,000) for a Chair in the Faculty of Medicine, there still remained a substantial hurdle to overcome. The General Medical Council in London required the various subjects of the curriculum to be taught by independent people, and chemistry was not provided for independently of biology.

The way was finally cleared in April 1884 by John Howard Angas, who promised £6,000 (\$12,000) for a chair in chemistry.

This allowed Council to take the necessary steps to start the beginning of a medical course in 1885: the appointment of professors of anatomy and chemistry, the passing by the provincial government of an appropriate Anatomy Act, the appointment of a University nominee of the Adelaide Hospital Board, and the provision of a small dissecting room for anatomy.

It was also in this same year that Council prepared a statute to establish a Faculty of Medicine and in October 1885, the Senate approved it and the faculty was formally constituted.

In *The University of Adelaide: 1874-1974*, authors WGK Duncan and Roger Ashley Leonard write that a "building to house the medical school was then built at the rear of the University, so severely plain in appearance that the Register said that there was 'nothing ornate' about it, 'any more than there is about a 300-gallon iron tank.'"

Although the building might not have been elaborate, the Medical School has produced many distinguished alumni over the years.

Sir Henry Newland, who lectured in many aspects of surgery, became a world-renowned plastic surgeon. Sir Hugh Cairns was another outstanding graduate. He went to Oxford as a Rhodes Scholar, became a neurosurgeon, and was appointed Hunterian Professor at the Royal College of Surgeons in 1925, and the first Nuffield Professor of Surgery at Oxford.

Another Rhodes Scholar became famous as the leader of the team of scientists that isolated penicillin. Howard Florey received many honours: he shared the Nobel Prize for Medicine in 1945, was knighted in 1944, and



Professor Derek Frewin (left) with Professor Justin Beilby, his successor as Executive Dean of Health Sciences. Professor Frewin's outstanding career at the University has extended over almost 40 years, including almost 15 years as Dean/Executive Dean.

created a life peer and admitted to the Order of Merit in 1965.

With the 20th century offering glorious memories and achievements, what is the future role of the Medical School as it moves further into the 21st century?

Professor Justin Beilby, the incoming Executive Dean of Health Sciences, said that he hopes to build on the exceptional and personable fashion in which his predecessor, Professor Derek Frewin had managed the Faculty.

"Professor Frewin has an extraordinary ability to work with all kinds of people and at different levels. He does everything in a gentlemanly way and this unique manner typifies the quality of the man," he said.

"This approach has provided a solid base for growth in the future."

Because the Medical School is now part of a large faculty, some adjustment will be required as all disciplines are more effectively integrated, Professor Beilby said.

"Psychology, nursing and health science graduates will become as important in providing service delivery in South Australia as medical graduates.

"And as the health system faces challenges from an ageing population, increasingly articulate and informed consumers, and the move to specialisation in postgraduate training, the faculty will need to learn to balance input from all discipline groups," he says.

He adds that the growth in team-based health care will create the need for excellent training for all these groups. And there may even be place for debate regarding the role of a generic health worker, who is trained across all the faculty disciplines over a three-year period.

Professor Beilby says our medical workforce will also be expected to fill medical vacancies across the globe.

"Training will need to embrace this perspective. Conversely the Medical School will be called upon to provide more training options for countries across the Asia-Pacific region. We have to make our Medical School user-friendly to all potential applicants."

He adds that we now have a workforce that wants to work shorter hours. At the same time we have lengthened our postgraduate training.

"The debate is now required about our undergraduate training. Is six

years too long for our medical course? This is even more pressing when you consider rising medical costs to study medicine," Professor Beilby says.

In discussing educational models, he says there is a need to review how we deliver clinical teaching.

"The apprentice model of placements in hospitals and general practices may need to give way to more focused clinical placement, with planned and focused educational experiences with specific skill training.

"It may be opportune to better define the core competencies that we need all our final year graduates to have, and work out the most efficient model to deliver this training."

Professor Beilby says the Nelson reforms have flagged a number of challenges for the Medical School around the measurement of the quality of research and educational outcomes.

"The Medical School will need to develop tools to measure these outputs and find a way to regularly capture these outputs."

It's a tall order, but pales in comparison, perhaps, to what our forebears faced. ■

Story **Howard Salkow**

Dr Ian Musgrave freely admits his involvement in a world-leading research project into depression came almost completely by accident.



Dr Ian Musgrave

When hunches pay off

The Senior Lecturer at the University of Adelaide's Department of Clinical & Experimental Pharmacology was originally researching the role of an enigmatic brain receptor, known as imidazoline receptors, in regulating blood pressure.

By accident, he found that the imidazoline receptor cloned by US researcher Dr John Piletz, and known as IRAS, acts as a nerve growth factor. This has profound implications and suggests imidazoline receptors play a key role in mood and memory.

"It was one of those situations where you think 'I wonder what happens if we do that'," Dr Musgrave says.

"We had stained tumour cells with IRAS cloned into them, to see if the network of protein filaments that help cells maintain their shape was affected by IRAS.

"When we first looked down the microscope, we could see that the cells were turning into nerve cells. I just about fell off my chair and what I said was unprintable."

Dr. Musgrave's group had found that the imidazoline receptor, long thought to be a simple regulator of blood pressure, was a nerve growth factor.

Suddenly, imidazoline receptors entered the world of depression.

"Depression has previously been understood to have been a disorder of nerve communication in the brain: how nerves in the mood control centres talk to each other," Dr Musgrave says.

"In response to that thinking, drugs like Prozac have been developed which improve nerve communication by increasing neurotransmitter concentrations.

"We now know it is far more complex than that. Drugs like Prozac take several weeks to take effect, when by the neurotransmitter hypothesis they should act rapidly.

"It turns out that that these drugs also have the effect of causing cells in the brain to make more cell connections. It is this increase in nerve cell connections, which takes place over weeks, that may be causing the antidepressive effect.

"John Piletz and I found that imidazoline receptors are most concentrated in the areas of the brain responsible for mood and learning.

"John also found that imidazoline receptor number is altered in depressed people, and thought that imidazoline receptors might play a role in depression.

"Our discovery that imidazoline receptors increase the formation of nerve connections provides a mechanism for this action."

On the basis of this unexpected finding, Dr Piletz, from Jackson State University in Mississippi, spent a month in Dr. Musgrave's lab, investigating the interaction of IRAS with other nerve growth factors.

Dr Musgrave is now part of a three-country research project further examining imidazoline and its benefits. He is collaborating with Dr Piletz, and the Anding Psychiatric Hospital in Beijing, China.

Dr Musgrave's role is researching the effects that IRAS has on the memory and learning of mice, Dr Piletz will be examining the basic neurochemistry of its effects while Anding Hospital will examine how IRAS works on human patients by looking at natural IRAS mutations in human populations.

Part of Dr Musgrave's research will involve knocking out the IRAS gene in mice, and replacing it with mutant human versions identified by Anding Hospital.

"Eventually we hope to use IRAS to come up with a much clearer picture of depression and how it works, and because of that it will be easier to develop better treatments for it," he said.

The developments surrounding IRAS's impact on depression could lead to a better understanding of other conditions, including high blood pressure—the focus of Dr Musgrave's original research—and neurodegenerative diseases such as Alzheimer's.

"It's still early days for a lot of our research concerning IRAS and the role it can play in the brain," Dr Musgrave says.

"At the same time it's very exciting, because the more we learn about it and what it can do, the more we are realising how important it could be." ■

Story **Ben Osborne**

Thebarton: success through innov

Adelaide University Research Park at Thebarton is a fascinating place. Located on the banks of the Torrens River, and just 4km from Adelaide's city centre, it provides office space to highly motivated and innovative individuals who are industry leaders in a number of areas.

This issue of Lumen highlights two Thebarton success stories, Scan Optics and Community Capacity Builders.

The Thebarton precinct—different from the rest of the University in its proximity to industrial activities and provision of incubator facilities—has resulted in the creation of a unique culture.

The precinct has developed a successful suite of programs designed to foster collaboration, entrepreneurial enterprise, and closer links with communities and industry, specifically for the purpose of education and service provision.

This meets important objectives of not only increasing cultural and social capital, but also driving innovative economic development.

The programs at Thebarton help faculties to enjoy relationships with business and the wider community, and to stimulate greater levels of enterprise and economic growth for the State.

As one of the premier University-owned technology/research parks in Australia, the Research Park is also a physical base that develops student projects and student skills into new business enterprises.

The Industry Linked Programs match graduates with small to medium companies to develop specific projects under the guidance of an academic supervisor. The Graduate Entrepreneurial Programs help graduates to develop skills in entrepreneurship and innovation around a core of their own knowledge-based businesses.

The criteria for occupancy at the Research Park are based upon a tenant's ability to enter a useful association with the University of Adelaide. This may involve participation in cooperative education and postgraduate student programs, joint research activities with members of University staff, and provision

of work experience to students. In turn, tenants are encouraged to utilise University facilities and expertise.

The Research Park is home to the University's Office of Industry Liaison and hosts a range of applied research activities in engineering, the physical sciences and occupational health.

Commercial enterprises at the Research Park include businesses involved in materials engineering, biotechnology, environmental services, information technology, industrial design, laser/optics technology, health products, engineering services, radar systems, telecommunications and petroleum services.

With the development by the State Government (through Bio Innovation SA) of new Bioscience and Biotechnology Precincts that adjoin the Research Park, the creation of a dynamic 'Thebarton Innovation Hub' has the potential to become a reality.

In keeping with the innovative theme at Thebarton, the Thebarton Business & Research Alliance provides a united marketing entity to showcase member capabilities to the local, national and international business communities. All enterprises located within the Thebarton Innovation Hub belong to the Alliance.

"Members meet for monthly networking events and the Alliance is proving extremely popular and enhancing our profile in the community," says Kankana McPherson, Alliance organiser and coordinator of the Graduate Entrepreneurial Programs.

The recently launched website www.thebartonalliance.com.au offers potential clients easy access to the capabilities of Alliance members and to stories of their recent successes. ■

Story **Howard Salkow**

Teaching people how to dream again

In discussing how she coaches community leaders, community builder Sharon Zivkovic sums up her work with a charming anecdote.

Saving diligently, a lady was able to pay for a 15-day boat cruise. Unbeknown to her, the fare included all meals. In budgeting for the trip, she allowed for breakfast. As she could not afford dinner, she discreetly took food from the breakfast buffet table, which she stashed in her handbag for later. What she did budget for was dinner at the Captain's Table on the final night of the cruise. On the night, she arrived at the table to be greeted by those she had met at breakfast, who were eager to discover her whereabouts at lunch and dinner. The lady then told her story to the group. Clearly bemused, her fellow travelers told her the ticket she had purchased included all meals.

"The core of what I do is assisting people to understand their world so that they can collaboratively make informed decisions that benefit their community. And I like to use this example because it has so much meaning," says the owner and founder of the Thebarton Campus-based Community Capacity Builders.

In offering a community leadership program to communities facing change, including communities with high levels of welfare dependency, Ms Zivkovic is reaching deep into the hearts and minds of individuals who are sometimes in despair.

She has created a leadership program that equips communities to manage the changing world, and bridges the traditional silos of health, environment, education, employment, planning, business and community development.

She discusses the importance of education and lifelong learning. She



dispels the notion that schooling is not important ("because I did not finish high school, you need not bother") and explains what is meant by a changing or new world.

It's not unrealistic to regard this as a tall order. The task goes beyond restoring self-esteem and encouraging welfare recipients returning or entering the workforce.

Yet, if anyone is suited for the job and can literally "walk the talk", it's Ms Zivkovic.

After dropping out of school at 14—"I thought school was a social event, I did not believe I was there for learning."—she spent 15 years on welfare as a Housing Trust tenant.

Eventually, she returned to Para Hills High School and completed her schooling.

Then, in a space of 10 years, she obtained a Bachelor of Accountancy, a Graduate Diploma in Education and undertook a course in Introduction to Electronic Commerce. She is currently enrolled in the University's Master of Entrepreneurship program at Thebarton Campus.

Her tertiary education provided excellent opportunities and for two years she was Finance Manager for a large Australian company.

However, her calling to assist disadvantaged people was answered in September 1999 when she was hired as Employment Development Officer for the City of Salisbury, a position that laid the foundation for Community Capacity Builders.

It was during the interview stage that Ms Zivkovic first used her well-oiled phrase that she wanted to teach people how to dream again. Her vision was enough to sway the votes and as her new career took off, this same vision was taking effect as many she had dealings with turned to education or found their niche in the workforce.

"Although I do not use my own case when I meet with groups, I readily concede that my life's experiences have assisted me.

"It allows me to talk on the same level. I understand how they are thinking and the participants relate to me, and this has proven to be most successful," she says.

Today, as she goes about fulfilling this dream, communities seeking out the Community Capacity Building Framework will find that, like Ms Zivkovic, they too will see a whole new world. ■

Story **Howard Salkow**

Seeing the light: simple products for a complex problem

In manufacturing affordable, appropriate and accessible medical equipment to help prevent blindness, it's not surprising to find Scan Optics' products in 121 countries.

In fact, this Thebarton Campus-based company is a major exporter, with 95% of its revenue coming from its overseas links in Africa, Asia and Latin America. And each year more than 600,000 people across the world have their sight restored by Scan Optics equipment.

At their Adelaide facility, they manufacture a range of products covering operating microscopes for both ophthalmology and ENT (ear, nose and throat), hand-held portable slit lamps, portable surgical

lights, indirect spectacle mounted ophthalmoscope and operating table extension.

"An active research and development program ensures the development of new products, and we are currently finalising an affordable small high resolution digital fundus camera," says general manager Brian Staples.

The Scan Optics Fundus Imaging System (SOFI) is a completely integrated digital fundus system, comprising both camera hardware and image database and enhancement software.

"It will produce high resolution digital photographs of the back of the eye in a smaller and lower cost instrument than is currently available.

"This will allow it to be more readily available and it will be ideal for screening for diseases such as diabetes," says Mr Staples. Prototypes will be available in October this year, with the first sales in March 2006.

SOFI will have a five-year development program that supports Scan Optics' philosophy of manufacturing equipment to help reduce suffering throughout the world.

"In producing SOFI and other products, we have been able to differentiate ourselves by making our products simple and appropriate for use anywhere in the world," says Brian Staples.

"Our products are power and battery-driven, robust, non-ferrous and durable. This has proven to be crucial in some of the Third World African



countries. If, for example, a product falls from the back of a donkey, it will not get damaged.”

In employing engineers, software experts, technicians and tradesmen, Scan Optics has a wealth of expertise within its ranks. Its founder and chief executive Dr Rod Watkins, along with Brian Staples, received a solid grounding at one of the largest manufacturers of plastic ophthalmic and sunglass lenses, and ophthalmic and defence optics.

A former lecturer in Applied Optics, Dr Watkins is a winner of numerous awards for his work. He has many international appointments and also serves on a number of boards.

Scan Optics has also not gone unnoticed on the world stage. In 2001 and 2002, they were recognised for

corporate achievement in the Deloitte Technology Fast 50 Awards. In 2001, they were acknowledged for their “commitment to innovation and in particular the development of optical equipment for the examination and treatment of hearing and vision” by the Commonwealth Department of Industry, Science and Resources.

“The most satisfying part of our business is witnessing our product assisting people overcoming blindness. And coupled to this, we seek as much feedback as possible allowing for continuous improvement,” Mr Staples says.

Staples says the company uses a mixture of trained distributor staff, independent service people and e-mail to maintain effective and responsive global service arrangements. It

conducts regular service training programs in developing regions.

“To meet the strong interest for our products in China, we opened a representative office in Shanghai in 2000. China is currently our largest export market.”

To maintain their focus and strong position in the market, the company attended the Asia Pacific Academy of Ophthalmology meeting in Kuala Lumpur, Malaysia in March this year, and the Congress of Ophthalmology and Optometry China meeting in Shanghai, China in April. In October, they will be attending the 109th annual meeting of the American Academy of Ophthalmology in Chicago, USA. ■

Story **Howard Salkow**

Writing from Strength to Strength



Professor Tom Shapcott has been one of Australia's leading writers for some time—and for the past eight years at the University of Adelaide he has also been helping usher in the next generation of literary talent.

The first Professor of Creative Writing at an Australian university, the recently-retired Professor Shapcott has seen the program expand and produce many writers now making an impact here and overseas.

However, this appeared to be quite some way off when the program first started in 1997.

"When we began we just had the MA in Creative Writing. A lot of people enrolled who had a lot of life experience and who wanted to be writers," he says. "When this course came along, it became an outlet for them and we were faced with a huge outpouring of material which needed quite a bit of work in many cases.

"But the thing that struck me was how much they improved, even just in their first year here. If you compared

their writing at the end of the first year to the start of their first year, it was so much better because they had been exposed to the skills and attributes needed to improve."

The program has since gone from strength to strength, and given a new energy to writing in South Australia. In 2000 a PhD in Creative Writing was added, and students from as far away as the US, Sweden and India have enrolled.

Past and present students such as Stefan Laszczuk (see story on next page) and Anne Bartlett (*Knitting*, available through Penguin) have also released debut novels to widespread acclaim.

"The publication rate of students in our programs has been very good but it's not the only benefit of the course," Professor Shapcott says.

"We have had critical success with the various anthologies of students' work that they write, edit and produce, and I think that the way the course is structured, it gives students the opportunity to improve their skills in

the craft of writing, which I believe is really important.

"We have also introduced a mentoring scheme for PhD students which sees them getting feedback on their work from some very good writers (including Nobel Prizewinner, JM Coetzee)."

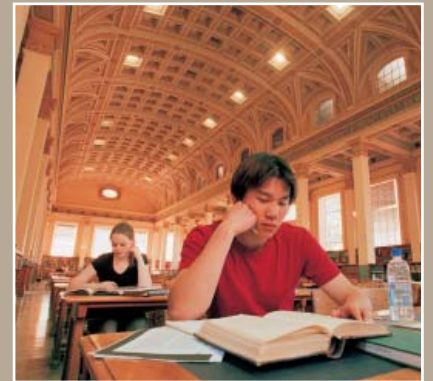
After retiring from his position at Adelaide, Professor Shapcott moved back to Melbourne to further concentrate on his own writing. His most recent novel is *Spirit Wrestlers* (available through Wakefield Press).

"I'm looking forward to having a little bit more time to spend on my writing, but I'll continue to be the supervisor to a few PhD students who are close to finishing," he says.

"I believe the course at Adelaide has been a successful course, and I hope my successor can build upon what I've done and also build their own ideas into the course to keep it challenging and relevant." ■

Story Ben Osborne

The Barr Smith Library – supporting lifelong learning



In 1932, at the official opening of the Barr Smith Library, guests heard mathematician, Professor John Wilton announce that the proposed stack extension storage equipment that housed 500,000 volumes would be “ample for 100 years to come”. It took only 37 years to reach that capacity.

Today, the Barr Smith Library houses 2.1 million items that require 63 kilometres of shelving. Over 20,000 people use the Library each week, with electronic access to approximately 45,000 journals provided online and over 500,000 items lent annually. It is a key resource for the students, staff and alumni of the University—and also the wider community—who rely on its services. It is a facility that is used not only locally and nationally, but one that is also accessed globally.

Maintaining and keeping such a large collection up to date and relevant is a costly exercise, however, and the annual Barr Smith Library Appeal targets specific areas of need in the Library. Past Appeals have raised funds to increase electronic access via e-books and to use scanning technology to convert valuable resources into digital format. This year, the Library is looking to fund the extensive and costly repairs caused by the March flood. Over 100,000 items have been affected, with 10,000 books damaged and around 3,000 volumes so damaged they require professional treatment.

Your continued support for the Barr Smith Library and its work is vital and very much appreciated. We ask that you make a tax-deductible gift to the Library now to allow us to continue to provide a premier facility that supports lifelong learning for current and future generations.

For further information about how you can make your tax-deductible donation, please email Robyn Brown, Development & Alumni at robyn.brown@adelaide.edu.au or telephone +61 8 8303 4994.



Critical acclaim

Stefan Laszczuk had already gone through a number of drafts of his first novel when he began his Master of Creative Writing at the University of Adelaide.

But he says his first “real” draft came after showing it to Professor Tom Shapcott for the first time.

“Tom spent a lot of time helping me with it,” Stefan says. “The thing about Tom is that he doesn’t try and tear down what you’ve done with his feedback, he’s very gentle about it.

“I went through a lot of drafts and he would always find the positives in what I was doing, and making his suggestions about how I could improve things in a subtle way.”

Stefan is now regarded as one of Australia’s best up-and-coming novelists. His first novel, *The Goddamn Bus of Happiness*,

was published earlier this year to widespread acclaim, after he won the Festival of Literature Award for Best Unpublished Manuscript by an emerging South Australian writer in 2004.

He has finished his Masters, almost finished his second novel, and has begun work on his third as part of starting his PhD in Creative Writing at Adelaide this year.

“I was working as an assistant manager in a bottle shop for a while, and I just couldn’t see myself working in retail for the rest of my life,” he says.

“I was playing in bands so I guess I had a bit of creativity in me, and I was doing a bit of writing in my spare time.

“It was my mum who suggested doing the Creative Writing course, and I haven’t looked back since.”



Volunteers keep rich history alive

The University of Adelaide's 130-year existence is filled with a rich history, and a group of volunteers is playing a significant role to ensure that history is kept alive.

Members of the University Archives Volunteers Group give their time processing documents, photographs, newspaper clippings and other archival records, some over 100 years old.

University Archivist Kylie Percival said the activity is not only important to increase accessibility of records for staff, students and the public, but also to contextualise how important the University is in South Australian history.

"The University was one of the institutions in a small colony, and it was big news at the time. The

University played a major part in the development of South Australian society. In terms of the wider history of South Australia, these records are significant and valuable," she said.

The group, which began in April 2003 with only 12 volunteers, has now attracted 40 individuals ranging in age and cultural background—some are retirees, while others are looking for work experience or to pursue a personal interest.

Tupp Carmody, Volunteer Coordinator of the group, said she couldn't be happier with the people involved.

"The depth of knowledge and experience is very strong among the group, and we have recent graduates looking for experience, so there's a diverse mix," she said.

"The quality of people is amazing. All our volunteers have very good skills and they bring a lot to the task."

Other staff members involved with the group include Sue Coppin as the Collection Archivist, and Helen Bruce as Reference Archivist.

Volunteer Nara Barreto, who is new to Adelaide after recently leaving Macau, said doing some volunteer work was a good start in a new city.



Left: Brian O'Donnell with a special rig he built for the camera equipment used to photograph archival material. Above: volunteers at work in the AP Rowe Room.

"I found out about the archives volunteers through the internet, and I contacted Tupp to see if I could get involved," she said.

Alan Graham, who is retired, had only been with the group for four weeks and said it was an interest for him—a hobby.

"I'm doing this to exercise my eyes as much as anything else," he said

"I like old documents—I hate it when anyone throws them out. I've got a track record of keeping old documents myself—I've got many personal records back to 1964."

The volunteers meet every Tuesday morning and gather in three main rooms, to conduct their work: in the AP Rowe Room, the Council Room and in the Archives offices in the Wills Building.

The volunteer work contributes directly to the Archives. One of the tasks, the Digitisation project, consists of transcribing the University's earliest correspondence by hand. Many of

the volunteers said they had found it difficult to read and "translate" because of the style of English and the handwriting of the time. The transcribed material is then scanned to provide an electronic version and is later catalogued and placed into a searchable database and will soon be available online at the Archives website (www.adelaide.edu.au/records/archives/).

Other volunteers sort through old newspaper clippings, maps and architectural plans for buildings, and some of the University's earliest correspondence, dating from 1872.

Ms Carmody said the scandal and gossip that occurred over a hundred years ago often becomes a topic of conversation for the day.

"There is a sense of ongoing engagement with the work they're doing. It's not unusual for someone to read a letter and say 'Oh, Mawson's been a very naughty boy today'," she said.

Among the volunteers are members of the Roseworthy Old Collegians Association, who are a very active sub-group. They use the time to not only go through important items of Roseworthy's history, but also have a chance to socialise and swap old Roseworthy stories.

"The Roseworthy sub-group is important. There are eight of them, all graduates, and they have lots of stories to tell," Ms Carmody said.

"Having a volunteer group the size that we have is unusual for a moderately sized Archives and the University is getting so much benefit out of it," Ms Percival said.

"The community involvement, that connection between the University and members of the community, is very important." ■

Story **Natalie de Nadai**

There are many opportunities for volunteering within the University. Visit www.adelaide.edu.au/volunteers



Interview:

MICHAEL LLEWELLYN-SMITH

Welsh-born Michael Llewellyn-Smith was recently appointed Chair of the University of Adelaide Alumni Association. He talks to Lumen's Howard Salkow about his early life, career and future role with the University of Adelaide.

Lumen: *You were born in a truly delightful and historically rich part of the world. Do you ever get to re-visit Tintern, Monmouth in South Wales?*

Michael Llewellyn-Smith: Yes I do. I often get back to Britain and I always take the opportunity to drive to Wales and up the Wye Valley along the winding road from Chepstow. The house where I was born is just a stone's throw from Tintern Abbey. I find it very relaxing and refreshing to have a drink sitting by the River with the ruins of the Abbey in the background.

Lumen: *What was it like growing up in South Wales?*

ML-S: My father, and indeed my grandfather, were Welsh Methodist Ministers. This meant moving every three years. I was only 18 months old when we left Tintern and moved to Tenby. Then we spent time in Bridgend, Cardiff and Neath. While I'm an only child, I had many cousins and there were extensive family gatherings. I spent three years at Neath Grammar School, and when my father was invited to a church in London, I was fortunate to win a scholarship to Alleyn's, Dulwich. I certainly have very fond memories of growing up in South Wales, particularly our regular family visits back to Tintern.

Lumen: *How did you benefit culturally and otherwise when you won a Rhodes Travel Scholarship to Canada?*

ML-S: I had gained a place at Pembroke College, Cambridge to read architecture, but being awarded the travel scholarship enabled me to take time off after school and travel extensively in Canada. It was a great experience to visit all the major Canadian cities in the early 60s. I particularly enjoyed the train journey through the Rockies from Calgary to Vancouver and appreciated the vast distances in Canada compared to Britain. I was fortunate to visit a number of architectural offices and city halls and this experience provided me with a broader base than I would have had otherwise when I started at the Cambridge University School of Architecture.

Lumen: *In winning a Commonwealth Fellowship to Sydney University in 1970, was this your first trip down under; and, at the time, did you believe that one day you would settle in Australia?*

ML-S: No it wasn't. I spent 1966-67 working as an architect with Sir Roy Grounds in Melbourne on the National Gallery of Victoria. While I enjoyed Melbourne, I really fell in love with Sydney so that when the opportunity arose for me to return to Australia I was thrilled. I was a resident tutor in architecture at Wesley College as well as lecturing and was also studying for a Masters Degree in Town Planning. I fully intended returning to Britain at the end of the two-year fellowship, but met and married an American. My wife Ida

and I decided to spend at least one year in Sydney after we got married on the basis of "neutral territory" rather than going to Britain or America. But both of our careers just evolved and we've lived in Australia ever since.

Lumen: *Living in the UK it's easy to appreciate the magnificent ancient architecture. Is this what drove you to choose a career in architecture and planning?*

ML-S: Living in London I certainly appreciated the heritage of the city as well as the development of new buildings that was occurring in the 1950s. There was an expectation at school that there would be a number of entrants to Oxbridge each year. I ended up doing "A" Levels in Physics, Double Mathematics and Art. This combination of subjects was a really good basis for gaining entrance to an architectural course and I was very fortunate to be accepted at Cambridge. Town Planning was rather different. I was working as the design architect for a new comprehensive school. Our client was the Local Education Authority and I was sent along to the council to get a development approval. It was the first time I'd actually come across the town planning system (which I still consider to be a failing of architectural education) and discovered there was another profession, which could have a significant impact on design outcomes. I was appalled that someone who didn't

Interview: MICHAEL LLEWELLYN-SMITH

have a design background but was working in development assessment could influence the decision of the local council. So on the basis that if you can't beat them, join them, I started the part-time town planning course at the University of London. This was taken into account when I completed the Masters Degree in Town Planning at Sydney University.

Lumen: Besides teaching for two years at Sydney University and serving in senior roles in London, Sydney, Melbourne and Adelaide, you have given extensive presentations to academic institutions and professional bodies in the United States, Canada, the UK and Australia. Did you ever consider academia as a full time career?

ML-S: The two years I spent at Sydney University were incredibly busy. As I said earlier, as well as being a lecturer I was a college tutor, completing a Master's Degree in Town Planning and I was also working as an architect with the firm of McConnel, Smith and Johnson. They were part of George Clarke's consulting group preparing the first City of Sydney Strategic Plan. What I really enjoyed was the ability to teach as well as being in practice. This was common in Cambridge where the professor and lecturers had the right of private practice, and were actively involved in the architectural profession and the design of new buildings. But no, I never really considered a full-time academic career.

Lumen: You had a 20-year tenure with the City of Adelaide, from 1974-1994. What were the highlights of your time as the City Planner and then the City Manager (Chief Executive Officer)?

ML-S: I was the Deputy City Planner in Sydney when I was invited to Adelaide to become the City Planner and set up a new Department of City Planning within the Adelaide City Council. The

City of Adelaide Planning Study was really at the cutting edge of a new approach to town planning and my main task was to convert the study into a workable system. There was a great deal of cooperation between the City and State in those days.

The joint body, the City of Adelaide Development Committee, consisted of John Roche, Jim Bowen and John Chappel from the Council and Bob Bakewell (Head of the Premier's Department), Hugh Stretton (the highly respected author and at the time Reader in History at this University) and Newell Platten (the then Chief Architect of the South Australian Housing Trust) from the State. The Lord Mayor of the day was Chairman. The City of Adelaide Development Control Act came into effect on 1 March 1977 and put in place a highly sophisticated planning system. The results of some of the policy initiatives can be seen today, such as a significant increase in the residential population. The Council took a proactive role with the removal of the Halifax Street works depot and improvements to the public realm with an attractive streetscaping program. Becoming the Town Clerk (subsequently being known as the City Manager/Chief Executive Officer) was certainly a significant change for me. But my planning background was very useful in terms of Strategic Planning and a corporate approach to Council activities. There were initiatives in developing and improving the Park Lands, the introduction of a Heritage Incentive Scheme, involvement in the Grand Prix, new Sister City relationships, the introduction of Urban Design Guidelines as well as the five-yearly reviews of the City of Adelaide Plan. Personally, I became the National President of Local Government Managers Australia, and the Vice-President of the International City Management Association.

Lumen: In 1994 you established Llewellyns International and became its Managing Director. How has your considerable international experience assisted you in this role?

ML-S: Through my company, I have been fortunate to be Policy Adviser in Poland (Kracow) for USAid, in Sri Lanka (Colombo) for the Asian Development Bank and in South Africa (Bloemfontein) for AusAID. Consulting internationally is very rewarding and I have got to know some outstanding colleagues in these countries. The company has had clients throughout Australia, both public and private, and it has associated offices in the United States, Britain and New Zealand.

Lumen: Has anyone had a major influence on your career?

ML-S: My father was undoubtedly the major influence on my life and career. He imbued the value of family relationships, hard work, concern for others, utilising your talents to the best of your ability, the importance of thinking analytically, the value of education and learning from your mistakes. When he realised I wasn't going to follow in the footsteps of the Methodist Ministry, he organised the move from Wales to London so that I would have the opportunity of a broader education, culture and experience. He encouraged my artistic abilities and the choice of architecture as an initial career.

Lumen: What has been the driving force behind your success from the time you first entered Cambridge University to your most recent achievement: a Master of Arts (ad eundem gradum) from the University of Adelaide?

ML-S: I suppose the values I've just referred to above. It's too simplistic to say the 'Protestant Work Ethic', but this was certainly an ever-present factor.



My wife is an Associate Professor at Flinders University, my son graduated with First Class Honours in Engineering at this University, and my daughter is currently a student at UniSA. So as the only one in the family not to be involved with a South Australian university, I was particularly honoured to be awarded the Master of Arts degree.

Lumen: *As the new Chair, what is your vision for the future of the Alumni Association and what do you hope to achieve?*

ML-S: It's important to recognise that the University isn't only about research and teaching, it's also about its people, the alumni. I have a personal view that the Alumni Association needs to have an identifiable focus and high profile on the North Terrace campus. From their first day at the University students would then be aware of the role of the association in developing relationships and creating new opportunities. I believe that the association has a key role to play, in close cooperation with the faculties and the University's management, to ensure that the University of Adelaide is one of the great universities of the world.

Lumen: *Is it realistic to expect interstate or overseas alumni to maintain interest in a distant University, no matter how fond their memories of it may be?*

ML-S: I have just returned from graduation ceremonies in Kuala Lumpur, Hong Kong and Singapore. I had the opportunity of meeting with four of our five overseas Chapters. The warmth of feeling from our overseas alumni to their alma mater is immense and there is a commitment to maintaining effective communication. We live in an increasingly electronic age, making it much easier for our graduates to stay in contact and for the Association to expand its data base.

Lumen: *How do you see the Association working with the alumni to increase participation and engagement?*

ML-S: The Chapters play a key role and we rely heavily on the goodwill, time and efforts of the many volunteers who maintain and expand the networks. As students are exposed to the Alumni Association from their earliest days rather than waiting until they graduate, I believe the participation and engagement will increase.

Lumen: *What is the role of the Board?*

ML-S: The Board has a major role to play through the development and updating of the strategic plan. This has to be done in close cooperation with the Chapters to ensure that it continues to be relevant. But it also ties in with the University's future directions so that the objectives and actions are aligned. The Board also has a key governance role and needs to provide the frameworks and protocols within which the individual Chapters can operate, having regard to their particular circumstances.

Lumen: *Finally, how would you characterise the current relationship between the University, its alumni and the wider community and what does the future hold?*

ML-S: There has recently been a major review of the Alumni, Community Relations & Development Office and it has been renamed Development & Alumni. With its new Director (Anne Gribbin) and its energetic and committed staff, and with the goodwill of all our alumni volunteers, both internationally and locally, I am very confident about the future of the University and I look forward to playing a part as Chair of the Alumni Association. ■

A new name, a fresh approach!

From March 31, the Alumni, Community Relations & Development office will be known as the Development & Alumni office. The change of name symbolises a new era for the office, with a fresh focus and direction.

Director of the Development & Alumni Office, Anne Gribbin, summarises: "2004 was a big year for the office. There was quite a bit of work going on behind the scenes, which has allowed us to move forward in a very positive way. We underwent a review, had quite a few staff changes and have started the implementation of our strategic plan, The New Landscape. The mission statement and office values have also been agreed to by all staff."

Anne went on to say: "2005 will see the consolidation of all this hard work. We plan to develop the business further by increasing the knowledge, awareness and interest within the University and the general community about our work, promote our successes and stories, as well as motivate our alumni and graduates to become more involved in Development & Alumni initiatives and programs.

"We are committed to looking at ways we can add value to the University and its work with students, faculties and alumni. We are working with faculties to develop a model for Community Engagement, we are currently compiling a database of Trusts and Foundations and Corporate Sponsorship opportunities to help meet the University's financial needs, and we are renewing the Data Sharing Agreements between Chapters and Networks. All in all, it is a very exciting time for Development & Alumni." ■

Story **Diane Lee**

For more information about the Development & Alumni difference, telephone the Director, Anne Gribbin on +61 8303 4275 or email anne.gribbin@adelaide.edu.au, or visit www.adelaide.edu.au/alumni/membership/whatis_acro.html

Making their Mark

Senator Penny Wong: BA (Jurisprudence), LLB (Honours) 1993

Penny Wong was elected to the Senate for South Australia in 2001, becoming not only the first Chinese-Australian woman to be elected as an MP for the Australian Labor Party, but also Australia's first female Asian-born federal politician.

Born in Kota Kinabalu, Malaysia in 1968, to a Chinese-Malaysian father and a European-Australian mother, she moved to Adelaide with her mother and brother at the age of eight. She attended Coromandel Valley Primary and subsequently won a scholarship to Scotch College before studying Law and Arts at the University of Adelaide.

Penny's ethnic origins and upbringing in the relatively less multi-cultural Australia of the 1970s instilled in her a strong sense of social justice.

She began her political career as a student politician at the



University, and was soon elected to the National Executive of the National Union of Students (NUS).

Determined to bridge the gap between the "haves" and the "have-nots", she spent several years working in the labour movement, as a union organiser, a senior policy

analyst in the Carr Government, and with a labour law firm.

Penny Wong also worked as a barrister and solicitor in Adelaide from 1996-2000, and as a legal officer with the Liquor, Hospitality and Miscellaneous Workers Union from 2000-2002. She is also involved in a number of community organisations.

Within the ALP, she has been Deputy Chair of the Platform Committee (SA), Member of the State Executive (SA), Member of the National Policy Committee on Industry, Infrastructure and Regional Development, and a Delegate at the Party's National Conference.

Currently, Penny Wong is Shadow Minister for Employment and Workforce Participation, and Shadow Minister for Corporate Governance and Responsibility. She remains committed to the goal of creating a cohesive and equitable Australia.

Dr Stuart Brasted: BDS (1969)

Stuart Brasted is Chief Executive Officer of Micronix Pty Ltd, a company whose platform technology adds value to the placement of catheters by enabling a user to observe in real time the movement of the catheter towards a chosen target site within the body.

Catheters are inserted into the body via the mouth, nose or vein largely by "feel", which is derived from training and experience. Current best practice for confirming correct placement requires the patient to be X-rayed. If the catheter is not placed correctly the entire placement process must be repeated, which is costly, inconvenient and potentially dangerous.

Stuart Brasted has been working on solving this problem since the 1980s. In partnership with Don



Chorley, who identified the market need, Micronix was formed with electronics buffs William Besz and the late Robert Walker, who harnessed technologies otherwise used for missile tracking and location of under-water shipwrecks.

Micronix has developed small, portable, easy-to-use technology

that enables the movement of the catheter tip to be displayed on a computer screen as it is being placed.

As well as providing a "live" schematic representation of the catheter's path through the body, a hard copy record of the track can be made as a permanent record of the procedure. This has the potential to displace the need for an X-ray.

The technology platform developed by Micronix is unique, and protected by strong patents. It has commercial potential for a range of medical applications.

Stuart Brasted graduated from the University of Adelaide in 1969 with a Bachelor degree in Dentistry. In 1970 and 1971, he practised in the UK before returning to Adelaide. From 1973 until 2003 he worked in his own solo dental practice.



Best of the best

An exceptional university is one that attracts promising students and produces award-winning graduates.

Among the University of Adelaide graduates to receive global and national recognition over the past 12 months are Hannah Tonkin and Matt Wenham, winners of the Rhodes Scholarship, and Katherine Daniell and Olivia Thorne, recipients of the John Monash Awards.

The John Monash Awards reward academic excellence, leadership and community service, and are valued at up to \$150,000 over three years.

Civil Engineering and Arts graduate Katherine Daniell will use her scholarship to undertake a PhD in sustainable water resources research at the renowned Ecole Nationale du Génie Rural des Eaux et des Forêts (or ENGREF) in France. She has served as a volunteer in numerous community projects, and is also a violinist and a volleyball player.

Ms Daniell has a historic connection with General Sir John Monash through her great-grandfather, Edward William Mattner, who fought under Monash in World War One. He was awarded the Military Medal and Bar, Distinguished Conduct Medal and the Military Cross, and later became a Federal Senator for South Australia.

The other John Monash Award-winner, Civil and Environmental Engineering graduate, Olivia Thorne will pursue her PhD at Cambridge University with a focus on the impact of climate change on the Australian water industry.

Ms Thorne is a Fellow of the Cambridge Commonwealth Society and an A Grade netball player. She is a Tournament of Minds facilitator and a former Joey Scout leader, and has also been involved with Elizabeth Mission, Mission SA and OXFAM.

Both award winners commend the exceptional learning environment at the University of Adelaide, and proudly acknowledge its contribution to their own success.

"I believe that the reason for the success of the University of Adelaide's graduates lies in the combination of rich university life and the exposure to world-leading research at an undergraduate level," Ms Daniell said.

"Not only has the University of Adelaide provided a strong technical foundation for my engineering career, but the staff support I received both during my course and even now has helped guide me down the path I have taken," Ms Thorne said.

Meanwhile, two more Adelaide graduates will head to Oxford to further their studies thanks to the Rhodes Scholarship, one of the world's most prestigious.

Law student Hannah Tonkin, Rhodes Scholar for South Australia for 2005, will pursue a Masters in International Relations at Oxford University. After being an intern at the International Criminal Tribunal for the former Yugoslavia in The Hague, Ms Tonkin, who is already a graduate with a BSc (Jurisprudence) and Diploma in Languages (French), has a sound future ahead of her.

Olivia Thorne (left) and Katherine Daniell with Professor Fay Gale at the official presentation of the John Monash awards in Canberra

"Through postgraduate study at Oxford, I hope to equip myself with the knowledge, qualifications and life experience necessary to continue my pursuit for social justice in the international arena," she said.

Science graduate Matt Wenham received one of the five Rhodes Scholarships for Australia at Large for 2005. Currently working as a researcher at the Royal Melbourne Hospital, Mr Wenham will now head to Oxford University to begin a D.Phil in Biomedical Science.

Mr Wenham has previously been a Vice-President of the Youth Affairs of SA and President of the Adelaide Chapter of the Young Scientists of Australia. He has refereed soccer in the South Australian State and Premier League competitions, and is also a musician and singer.

"The achievements of these graduates demonstrate the exceptional potential of the young men and women who choose to study at the University of Adelaide, as well as the University's exceptional ability to tap their potential," said the Vice-Chancellor, Professor James McWha. ■

Story **Sukhmani Khorana**



Music pioneer celebrates milestone

A late start didn't stop Tristram Cary forging a pioneering career in music.

At age 80, Tristram Cary is still actively composing music and continues to inspire new talent at the University of Adelaide's Elder School of Music.

Cary, a pioneer of electronic music, has managed to make a name for himself despite starting his career much later than he would have liked.

Born and raised at Oxford, England, Cary decided he wanted to become a composer while he was in the navy during World War Two.

"I was brought up with music. My mother was a wonderful cellist, singer, pianist... we all played the piano, we all sang. It wasn't until I got in the navy that I was taken away from it. I suddenly realised there was no gramophone, no piano," Cary said.

Having been a radio enthusiast during his teens, and working in the navy as a radar specialist, Cary possessed a great deal of technical knowledge. While in the navy he became aware of a new technology that enabled the recording of sound onto magnetic tape.

"I was told that there was this linear method of recording that was easily cut—you could chop it with a razor blade, stick it back together again, it was very editable.

"It occurred to me that instead of just being a reproductive medium,

something to record a concert with, for instance, that here was a chance to have a new sort of music altogether. The editing capacity meant that you could cut sounds together that were not normally together. Also, if you were writing a piece for orchestral music you could say, 'Well, we won't have drums here we'll have a recording of thunder instead'. Those were the first ideas that I had."

But Cary's dreams of becoming a composer had to be put on hold for some years. After the war, he returned to Oxford in 1946 to finish his undergraduate degree, then moved to London to study at the Trinity College of Music. In 1952 he bought his first tape recorder and began composing electronic music as well as orchestral music.

Cary's work on music for BBC radio plays led to his first film score: *The Ladykillers*, a black comedy starring Alec Guinness and Peter Sellers. The film became an instant classic, with critical and public success (it was recently remade in the United States, starring Tom Hanks).

"I was very lucky to get straight into my first feature film, and a good one too," Cary said.

More film and television work followed, among them two movies for the Hammer horror studios and the

Disney feature *The Prince and the Pauper*. Cary is also famous for being the first composer to score music for Doctor Who's arch enemies, the Daleks, in the first series of the 1960s TV show.

As well as being a composer, Cary was one of the founding members of the company Electronic Music Studios (EMS), designing and building some of the world's first electronic synthesisers. His work on one of these synthesisers eventually led him to Australia in the 1970s. Having spent some time in Melbourne to instruct music lecturers on how to use one of the devices, he was offered a one-year visiting composer position at the University of Adelaide's Elder Conservatorium.

The move to Adelaide seemed to make sense for Cary, who could not only make the change into academia but also concentrate on composing his own music.

"I suddenly realised in the early 70s that I was approaching 50, and I had hardly any concert catalogue. Most young composers put together a symphony or two, or a concerto or two, or a string quartet or whatever, so that by their mid 30s they've got a bit of a catalogue. Well I hadn't. I did have a few things... but mostly if the phone rang and it was a job in film,



television or radio, I just dropped what I was doing and did it.”

His one-year term as visiting composer at the University of Adelaide instead became 12 years as senior lecturer, teaching orchestration and composition. Following his retirement in 1986 he was made an Honorary Visiting Research Fellow.

“I’m still very much attached to the University,” said Cary, who still undertakes some higher degree supervision. “I like to know what the students are doing, I keep in touch with the staff, and I’m a life member of the Staff Club.” A University of Adelaide Masters student, pianist Gabriella Smart, is currently writing

a thesis about Cary’s work, and to celebrate Cary’s 80th birthday, a concert was held in the University’s Elder Hall in early May.

A member of both the Australian Music Centre and the British Academy of Composers and Songwriters, Cary continues to compose music in his studio at his Adelaide home. In 1991 he was awarded the Medal of the Order of Australia (OAM) for services to Australian music. In 2001 he earned a Doctor of Music degree from the University of Adelaide.

While commercially available CDs of Cary’s music can be found at good music stores or on the internet, Cary himself has been creating a full archive

Tristram Cary in his home studio

of his work on CD. So far he’s filled 68 CDs, with many more to come. He’s also writing an autobiography in his spare time.

“Now I’m 80, Adelaide is a nice place to live. It’s reasonably quiet, you don’t get traffic jams much... and the food and wine here are wonderful.

“I’ve done what I meant to do, which was to compose a lot of concert music,” he said, “and I’m expecting another commission any minute...” ■

Story David Ellis



The Jazz CONNECTION

It seems much of Australia—and the world—is falling under the influence of etypejazz.

All members of the popular quintet—Beth Lyon, Katrina Ryan, Ritsuko, Damien Eldridge and Mike Haynes—boast University of Adelaide music degrees and met during their studies.

Beth and Ritsuko formed the band while they were students in 1994, along with three other then-students. Damien and Mike joined later, with Katrina replacing long-time singer Lisa Michelle in July 2004.

With their seventh album *Under The Influence* just released and a loyal following locally and interstate, it could be easy to forget how tough the early days were for etypejazz.

"It was a lot of hard work when we first started," Beth says. "We were young and didn't know much about the business of running a band—we just had to learn as we went along.

"I spent thousands of hours pounding the streets, handing out demo tapes to anyone who'd listen and who might give us a gig.

"We just wanted to play—we were doing a performance degree,

not a teaching degree, and we wanted to perform."

Fast forward 10 years, and the band has twice been voted Australia's best live jazz act (2002 and 2003), and sold tens of thousands of its independently recorded and produced albums.

"There is a real sense of connection within the band—we genuinely respect each other's abilities and enjoy listening to each other play," Katrina says.

"So I think audiences pick up on that connection between us, but we also aim to make sure we connect as a group with the audience and give them as much entertainment as we can."

Mike says the group's time at University has played no small part in its current success.

"I think one of the best things about the jazz course at Adelaide is the networking that you can do," he says.

"You're surrounded by like-minded people who all want to play the best music they can—for us, this networking turned out to be this fantastic opportunity to become etypejazz." ■

Story **Ben Osborne**

Australia House jingled and boomed to the sounds of Christmas as the UK alumni celebrated Christmas with carols led by Felsted School's Chapel Choir. Warmed up with mulled wine and mince pies, all robustly sang many favourites including the Antipodean Six White Boomers. The Twelve Nights Of Christmas (Oz Style) was enthusiastically led, along with picture aids, by the chapter committee and friends. A brilliant night ended with Father Christmas dishing out Fruit Tingles to the little ones (and the not so little).



UK Alumni pool resources

Graduates reunited in celebration is a wonderful example of the type of program offered by the Combined Chapters of South Australian Universities Alumni Associations in the United Kingdom.

The University of Adelaide Alumni Association UK Chapter was inaugurated on 27 August 2001, and under the guidance of Dr James Storer (BSc 1986) has been an active chapter of the Association. Dr Storer was also one of the driving forces behind a combined SA Universities' event in September 2003 which launched the UK Branches of the University of South Australia and Flinders University Alumni Associations. The event initiated the tripartite UK Chapter of the South Australian Universities Alumni.

"It was soon apparent to all involved with the organisation of this event that the only way forward for us in the UK was to pool our resources and energies into a single entity representing the alumni from the three South Australian universities," says Dr Geoff Turner, Chairman of the Combined Chapter.

The Chapter's Executive Committee is comprised of graduates from all three SA Universities. "We see ourselves as representing South Australian universities, not the particular university we may have

attended: the bigger picture. This enables us as a group to draw on more people to attend events," said Dr Turner.

At the Annual Meeting of the Joint UK Chapter in 2004, Dr Turner reported that "the vital ingredient in the success of the combined chapter has been the unwavering support of the Agent-General for South Australia, Maurice de Rohan OBE. Maurice graciously accepted our invitation to be our Patron and through his support we have been able to start building a strong and viable organisation based in London."

Mr de Rohan (B Tech 1960) says: "Our graduates are great ambassadors for South Australia and the universities they represent. The combined chapters alumni program demonstrates the quality and strength of our educational institutions in South Australia. It also reflects the goodwill of graduates who continue to support their alma mater in a variety of ways. I am pleased to be able to play a role in further developing this important link between our graduates and their universities in Adelaide."

The first year of the combined UK Chapter saw the emergence of a dedicated and enthusiastic group of alumni determined to develop opportunities for graduates of

Maggie Farrell (BA 1975), Deputy Chairman of the Combined SA Unis' Alumni Chapter, with Maurice de Rohan OBE (B Tech 1960), the Agent-General for South Australia

the South Australian universities, and their families and friends, to meet together at a range of social events.

Among the events offered by the combined chapter has been the wine tasting, enjoyed by over 140 alumni, held at Australia House with renowned South Australian sommelier Matthew Wilkin as the special guest, and the Carols evening held in December 2004, also at Australia House. Future plans include a football match against an English Australian Rules Team. ■

The Chapter is currently in contact with around 700 graduates, however the number of graduates in the UK is estimated to run into the thousands. If you know someone who is living in the UK who might be interested in reconnecting with fellow graduates from South Australia, they can obtain further information by emailing alumni@adelaide.edu.au or by visiting the Development & Alumni website at www.adelaide.edu.au/alumni

Story **Kim McBride**

Development & Alumni Program

June - December 2005

MONTH	PROGRAM	ORGANISED BY
June	Alumni Board Meeting	D&A
	Alumni Association Annual General Meeting and Annual Alumni Dinner	D&A
July	Deadline: Applications for Mutual Community Postgraduate Travel Grants	D&A
August	30 and 40 year Reunions for Graduates of 1965 and 1975 (to be confirmed)	D&A
	Deadline: Adelaide Sarawak Alumni Scholarship	D&A
	Graduation Ceremonies	Graduations Office
	Presentation of Honours Alumni University Medal	D&A
	University of Adelaide Open Day	Marketing & Strategic Communications
	Alumni Board Meeting	D&A
September	Australian Marketing Week	Commerce Chapter
	Combined Board and Chapters Meeting	D&A
October	School of Agriculture and Wine Prizes and Awards	ROCA
	Golden Jubilee - 50 Year Reunion for Graduates of 1955	D&A
	Vice-Chancellor's Scholarship Fund Appeal	D&A
	Annual Dinner & AGM	ROCA
	Quiz Night for Chief Justice's Shield	John Bray Law Chapter
November	Alumni Board Meeting	D&A
	10 & 20 Year Reunion for Graduates of 1995 and 1985 (to be confirmed)	D&A
December	Graduation Ceremonies	Graduations Office
	Alumni Board Meeting	D&A
	Presentation of Postgraduate Alumni University Medal	D&A
	AGM and Christmas Drinks	Commerce Chapter

More information about the Development & Alumni program and chapter events is available by visiting the Development & Alumni (D&A) website at www.adelaide.edu.au/alumni, emailing alumni@adelaide.edu.au or by telephoning +61 8 8303 5800.

Alumni gallery



Top left: Dinner hosted by West Malaysia alumni chapter for alumni and University staff during the Offshore Graduations Visit—March 2005

Top right: The Hon John von Doussa, Chancellor, with Distinguished Alumni from Singapore, Dr Tony Tan Keng Yam, Dr Cheong Choong Kong and Mr Michael Khor Teik Hean at the Friends and Benefactors Breakfast in Singapore where Dr Tan's Distinguished Alumni Award was presented—March 2005.

Centre: Professor James McWha, Vice-Chancellor, Mrs Lindsay McWha and Mr Michael Llewellyn-Smith, Chair of the Alumni Association, enjoying dinner with members of the Sarawak Alumni Chapter Committee in Kuching—March 2005.

Bottom left: L to R - Gordan Lesicar, Pamela Lee and Barbara Gare - members of the MBA Alumni Association Committee at their AGM—March 2005.

Bottom right: L to R - Guest Speaker, Judge J Clifford Wallace, Senior Judge and Chief Judge Emeritus, US Court of Appeals for the Ninth Circuit, with The Hon Ted Mulligan QC, The Hon John von Doussa, Chancellor, and Professor John Keeler at the John Bray Law Chapter seminar entitled "Human Rights!—Refugees and Terrorists—What Rights?"—March 2005



"Where Am I Now?"

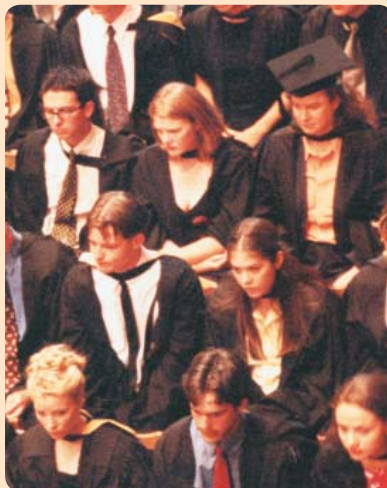
1940s

Dr John Flett AM

BSc 1941, MBBS 1951: Member of the Order of Australia for service in fundraising for charities, executive roles with St John Ambulance and groups in the Yorke Peninsula.

Prof John Keeves AM

BSc (Hons) 1947: Member of the Order of Australia for the development of statistical methods for measuring and analysing educational outcomes.



1950s

Dr William McCoy AM

MBBS 1956: Member of the Order of Australia for service to health administration and psychiatric illnesses.

Mr Richard Clampett OAM

AJA 1956: Medal of the Order of Australia for service to pharmacy, service and sporting groups.

Mr John Snewin OAM

LLB 1951: Medal of the Order of Australia for service through Beaufort Squadrons Association of Australia.

Mr Ian Purcell AM

BA 1968: Member of the Order of Australia for service to gay and lesbian people through advocacy, education, law reform and support of community events.

Dr Peter Joyner OAM

MBBS 1969: Medal of the Order of Australia for service in the advancement of rural medicine.

Mr Anthony Uren OAM

BEC 1960: Medal of the Order of Australia for service through the North Eastern Community Hospital.

1960s

Dr Aileen Cannon AM

MD 1965, Grad Dip Anthropol 1995: Member of the Order of Australia for improving healthcare for women and children and services to medical education.

The Hon Justice Margaret Nyland AM

LLB 1964: Member of the Order of Australia for service to the judiciary, human rights and equal status of women.

Mr Henry O'Connor AM

BEC 1967: Member of the Order of Australia for service to charity and welfare groups.

1970s

The Hon. Justice Rodney Burr AM

LLB 1970: Member of the Order of Australia for the establishment of the World Congress on Family Law and Rights of Children and Youth.

Mr Andrew Cannon AM

LLB 1970: Member of the Order of Australia for service to judicial administration, litigation reform, the Fallie Project and charity.

Dr Henry Newland AM

MBBS 1971: Member of the Order of Australia for service to ophthalmology in indigenous health and to eye disease in developing countries.

Dr Peter Noblet AM

BDS 1970: Member of the Order of Australia for service to dentistry as an administrator and educator.

Dr Ashleigh Thomas AM

MBBS 1978: Member of the Order of Australia for service to indigenous health in rural and remote areas and through the Royal Flying Doctor Service of Australia.

Mr Lynton Crosby AO

BEC 1977: Officer of the Order of Australia for service to politics as federal director of the Liberal Party.

Ms Mary Marsland PSM

BArch 1972: Public Service Medal for service in the public sector building and construction industry.

Mr Douglas Moyle PSM

BSc 1973: Public Service Medal for educational and community leadership.

1980s

Mr Peter Hoey PSM

MEngSc 1986: Public Service Medal for service in water resource management.

1990s

Mr Ray Sedunary AFSM

Grad Cert Mgmt 1998: awarded the Australian Fire Service Medal in the Australia Day Honours.

The University of Adelaide is very interested in its graduates and we are always keen to find out what our alumni are doing. Send your news and information 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

OFFICIAL UNIVERSITY MERCHANDISE

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University Shield Timeless addition to your study, office or mantel piece. Full colour crest on strong wooden base.



Car Sticker Full colour crest and white text on clear background



Executive Style Silver Key Ring featuring etched look logo

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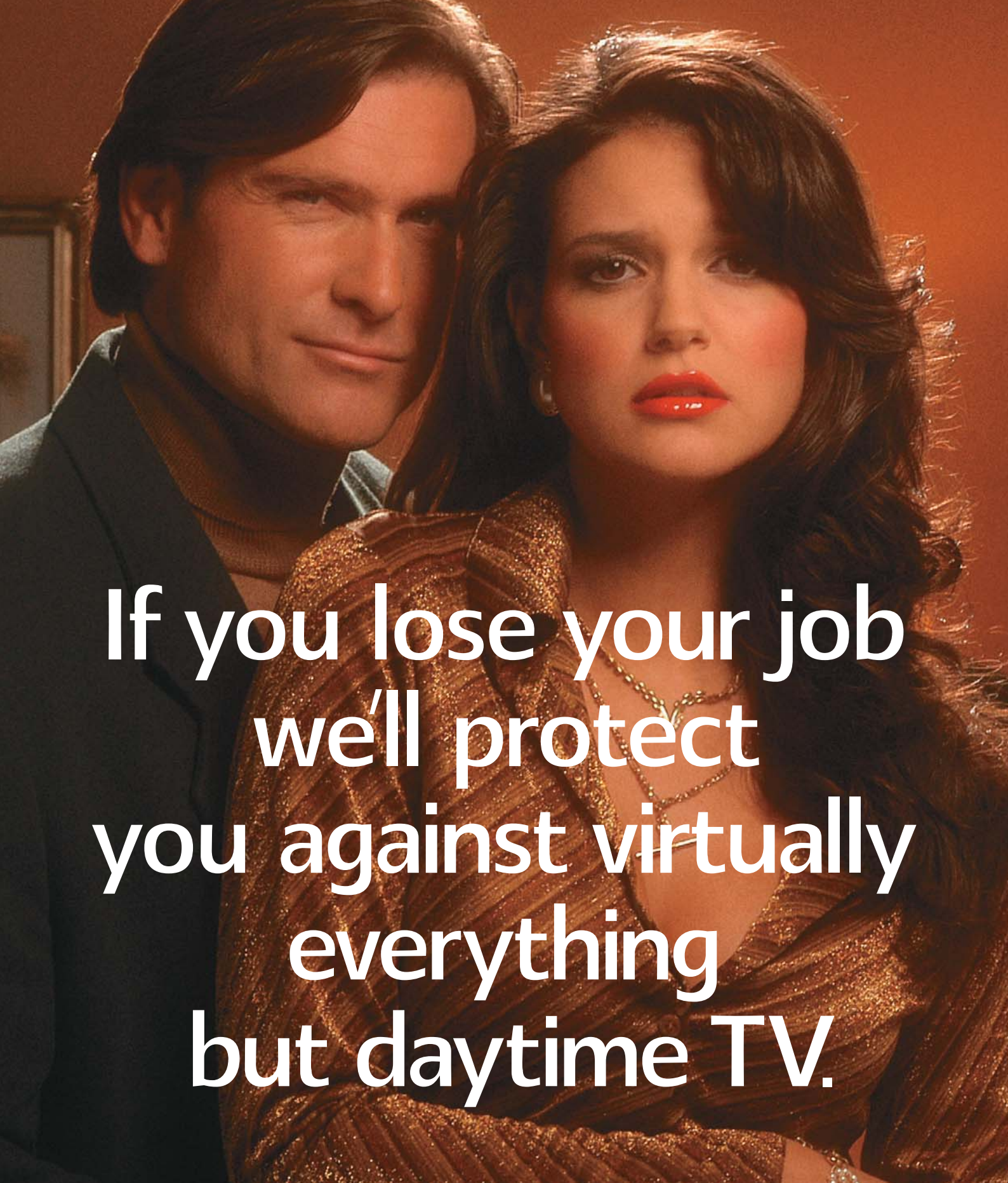
Maintaining up-to-date scientific and clinical information is important for Dental School Senior Lecturer Dr Janet Fuss and her students. And with a group of dedicated staff and volunteers, in 2003 she decided to do something about it, by launching the Filling the Shelves Appeal. In little more than two years, Filling the Shelves has raised more than \$50,000 and now supports eight dentistry journal titles in the Barr Smith Library.

With four degrees from Adelaide herself, Janet teaches here because she believes it's important for Australia to have well-trained dental professionals.

Her passion for teaching and books has resulted in a contribution to the University of Adelaide that will have a positive impact on dental and oral health students for generations to come.

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

Development & Alumni
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development@adelaide.edu.au



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