

# UNSWWorld

## BOLLYWOOD REACHES OUT

Forging connections with the world's biggest film industry

### ON CAMPUS

A trailblazing cancer research centre

### ENTREPRENEURS-TO-GO

Leading the innovation game

### A FRESH PERSPECTIVE

on Arts & Social Sciences

### 21ST CENTURY

teaching techniques



# Something to Celebrate?

Our purpose-built events centre – the John Niland Scientia Building



DESIGNED BY UNSW BUILDING AND PLANNING SERVICES AHEAD

**Venues and Events**  
THE COMPLETE PACKAGE

T 61 2 9385 1715 F 61 2 9385 1415 E [venuesandevents@unsw.edu.au](mailto:venuesandevents@unsw.edu.au)  
[www.venuesandevents.unsw.edu.au](http://www.venuesandevents.unsw.edu.au)



**UNSW**  
THE UNIVERSITY OF NEW SOUTH WALES

**UNSW Venues and Events** has an impressive range of contemporary function and entertainment venues right on your door step; with wonderful views, state-of-the-art facilities, and award-winning catering by **Gastronomy Australia**.

For wedding receptions, corporate events or any celebration you can think of ...

please visit our comprehensive website  
[www.venuesandevents.unsw.edu.au](http://www.venuesandevents.unsw.edu.au) for exciting monthly specials and a host of information on our venues and locations

We look forward to welcoming you back to our beautiful address.

## Welcome from the Vice-Chancellor



I am pleased to welcome you to this latest issue of *UNSWWorld*. This magazine aims to keep you in touch with what is happening at the University, and bring you news of some of the notable achievements of our alumni.

In 2007, UNSW has benefited enormously from recognition and support of its endeavours by the wider community. Most outstanding is the \$10 million gift from the Lowy family – the largest single philanthropic donation ever received by UNSW – which will help fund a \$100 million cancer research centre to be built on the Kensington campus. Housing researchers from our own medical faculty and the Children's Cancer Institute Australia (CCIA), it will be one of the largest dedicated cancer research centres in the southern hemisphere, and the first in Australia to bring together childhood and adult cancer research.

Nura Gili, the University's Indigenous Programs Centre, also benefited from philanthropic support for its valuable work, receiving its largest corporate donation ever through the generosity of global financial services firm, UBS.

The University's strength as an internationally recognised research institution was confirmed in the latest round of grants from the National Health and Medical Research Council. UNSW won a total of 50 grants, worth more than \$30 million. Not only is this the best ever result for the University, but we were awarded almost a quarter of the funding allocated to NSW universities.

Some individual alumni have received remarkable accolades. Just two are Saul Griffith, a graduate in Material Science and a widely celebrated inventor, who has taken out one of the coveted MacArthur Fellowships in the US, and Professor Matthew England, a co-director of UNSW's Climate Change Research Centre, who received The Royal Society of Victoria Research Medal.

Another cause for celebration on campus was the official launch in September of the Australian School of Business, which combines the strengths of the former Faculty of Commerce and Economics and the Australian Graduate School of Management. We highlight the role of its new Centre for Innovation and Entrepreneurship, which will not only combine excellence in research and teaching and provide opportunities for emerging entrepreneurs, but also promises to make a significant contribution to Australia's future entrepreneurial endeavours.

I hope you enjoy the magazine and take advantage of the many opportunities to stay involved with the University community.

Frederick G Hilmer AO  
Vice-Chancellor

## NEWS

### 4 Highlights

The latest on campus and beyond

### 8 A Corporate Boost for Nura Gili

Funding the future for the UNSW Indigenous Programs Centre

### 9 On Another Planet

Meet Australia's most exceptional planet hunter

## FEATURES

### 10 Leading the Innovation Game

Opportunities for a new generation of entrepreneurs

### 12 Lowy Family's Gift to Cancer Research

Philanthropy kicks off a pre-eminent medical research initiative

### 14 Memories are made of this

The original approaches of three inspiring teachers

### 16 Faculty in Focus: Medicine

2007: An outstanding year

### 17 Faculty in Focus: Arts & Social Sciences

Arts and the shock of the new

### 18 From the President of the Alumni Association

19 Fundraising

The UNSW Book Fair turns 40

### 20 Evolutionary Research

When looks can kill ...

### 21 Alumni at Large – Anupam Sharma

Bollywood zooms in on Australia

### 22 Alumni at Large – Dinosaur Designs

Super-sized success

Alumni Relations  
The University of New South Wales  
Sydney NSW 2052  
Phone 61 2 9385 3193  
Fax: 61 2 9385 3278  
Email: [john.hume@unsw.edu.au](mailto:john.hume@unsw.edu.au)

Editor: Deborah Tarrant  
Design: Gadfly Media  
Cover image: iStock International Inc.

Australia Post Print Post Approved  
PP 255003/07978  
UNSW, Sydney NSW 2052  
CRICOS Provider No. 00098G

**INVENTING THE FUTURE**

Saul Griffith, an inventor of engineering innovations spanning optics, high-performance textiles, and nanotechnology, has been awarded a coveted MacArthur Fellowship.

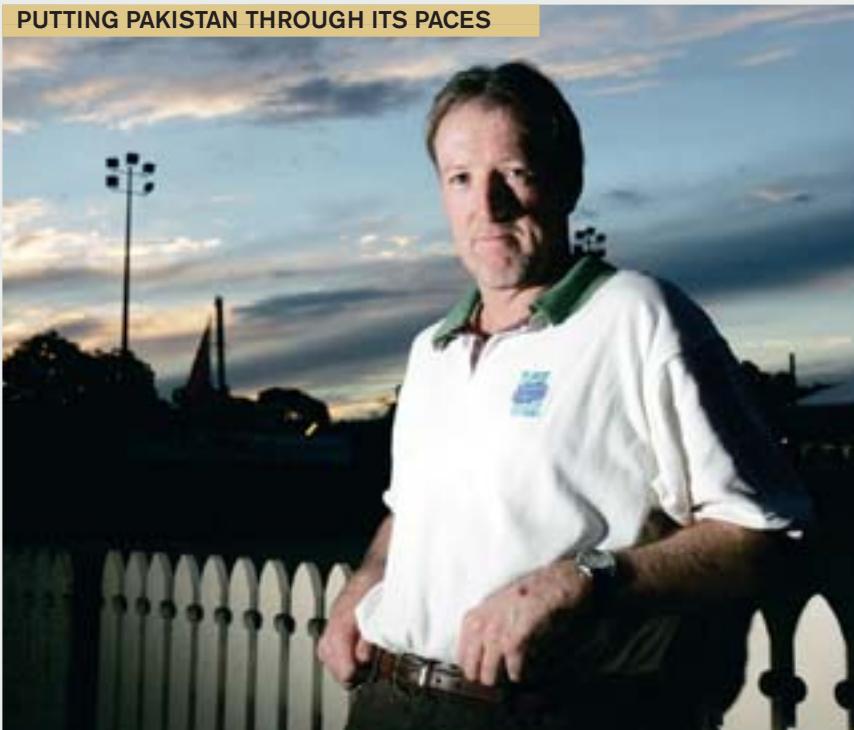
UNSW alumnus Griffith who was awarded first-class honours in Material Science, before undertaking a Masters degree at the University of Sydney, and subsequently a Masters and his PhD at MIT in the US, is a pioneer who brings computer-driven intelligence into objects and materials, or as he has modestly described himself, "someone who keenly observes the world and then likes to tinker with it".

As an undergraduate at MIT, he created a unique membrane-based moulding system with the potential to change the economics of corrective lenses in rural and underserved communities. He also co-founded Thinkcycle.org, a web community that has produced socially conscious engineering solutions, such as novel household water-treatment systems.

He went on to become one of the founders of Squid Labs, a trailblazing engineering design and technology innovation company based in Alameda, California.

Griffith is the creative force behind HowToons, an animated educational resource designed to engage children in hands-on science and engineering projects. Through a spin-off company Potenco, he also initiated the project design for a hand-held human-powered generator, which has the potential to improve access to electronic devices such as laptops and water purifiers. "The MacArthur Foundation supports highly creative individuals and institutions with the ability and the promise to make a difference in shaping and improving our future," says MacArthur President Jonathan Fanton. The Fellowship provides recipients with US\$500,000 in "no strings attached" support over five years.

Griffith's success is widely celebrated in the UNSW community: his father Emeritus Professor Ross Griffith is a UNSW alumnus who headed the School of Fibre Science and Technology; his mother, Pamela, is a COFA graduate and renowned artist, while his sister, Selena, also a UNSW alumnus, is now a lecturer in Design at COFA.

**PUTTING PAKISTAN THROUGH ITS PACES****WHAT SHORTAGE OF SCIENTISTS?**

Australia's well-documented shortage of scientists is being tackled head-on by UNSW research. Gifted children, around 12 years of age, from six Sydney schools have participated in a year-long study conducted by UNSW's Gifted Education Research Resource and Information Centre (GERRIC). The study involved a series of workshops where students met with people from different professions, who use science in their everyday lives. Topics ranged from environmental sustainability and bioluminescence. In the final session on electromagnetism – invisible and visible energy waves across the electromagnetic spectrum – students made antennae for television reception and recorded soundwaves through them. The program challenges perceptions of what science is, says Professor Karen Rogers, Director of Research at GERRIC. "Schools often teach from a text or a set of materials which are dry and often based on memory. The students don't see it as challenging." The aim is to change views about science at a crucial age, Professor Rogers says. "It is when they decide if they want to be achievers, or slide. It's also when girls in particular move away from science."

**TAKING CARE OF BUSINESS**

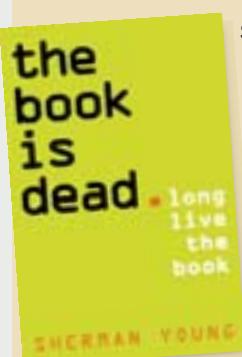
The Australian School of Business, which combines two of the country's most esteemed business education institutions – the Australian Graduate School of Management (AGSM) and the UNSW Faculty of Commerce and Economics – was officially launched in September.

At the launch event attended by many of Australia's top business leaders, Dean Alec Cameron noted that many months of hard work had harnessed "the excellence of two of Australia's benchmark business education and research institutions". "The result is an entity that is far 'stronger than the sum of its parts,'" he said.

The School is located in a new, environmentally sustainable state-of-the-art building on the site formerly occupied by the Heffron Building.

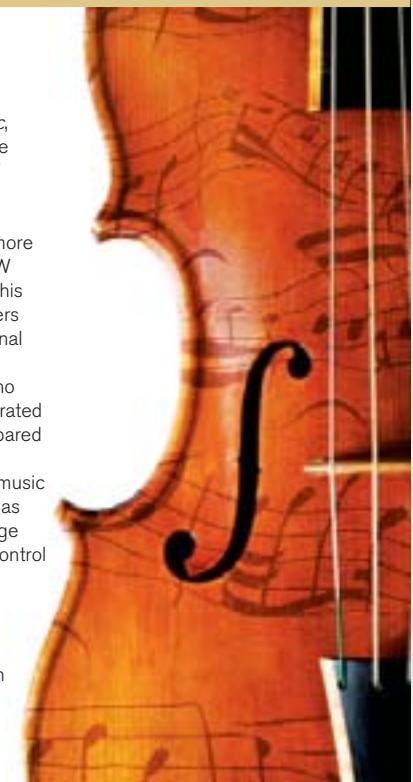
"The building gives physical expression to our intention for the Australian School of Business to be a world-class centre of excellence for business education and research," Professor Cameron said.

"The School offers business a greater depth and breadth of programs than any other business school in Australia. It has 10 research centres, nine disciplinary-based schools, and many internationally recognised business academics. Nine new professorial chairs have been created to attract more leading academics from around the world." Among the first initiatives is the creation of the School of Strategy and Entrepreneurship. For more on this, see page 10.

**REBIRTHING THE BOOK**

Sometime in the late 20th century the book died, according to Dr Sherman Young. "As people turned their attentions towards other sources of information, knowledge and entertainment, the book became a commodity with a comparatively short shelf life," he observes.

As a passionate book lover and a consumer and producer of digital technology, UNSW alumnus Young wrote the determinedly provocative, *The Book is Dead (Long Live the Book)*, published by UNSW Press. His mission is to make the book matter again. While investigating the economics and technological demands of publishing, Young, a UNSW Bachelor of Science (Design) graduate and former *Tharunka* editor, makes a case for the continuing existence of books and the more languorous reading experience they offer. They have a future, but perhaps not in their current form, he argues. So why was his book published in standard-bound hard copy form? The academic world – to which he still belongs as an expert in copyright cultures – continues to most value traditional published works on paper, Young points out.

**BRINGING ON THE DAG FACTOR**

Music that expresses more emotion than is felt by listeners is likely to be unpopular or "daggy", according to new empirical research. The research, published in *Psychology of Music*, reveals that music is considered more enjoyable when its emotionality closely matches listeners' emotional response.

"The smaller the gap between people's 'felt' emotion and music's 'expressed' emotion, the more they enjoy it," explains the study's author, UNSW music psychologist Emery Schubert who says this Differential Affect Gap – or "DAG factor" – offers a new quantitative predictor of people's emotional liking for music.

Dr Schubert's prior research showed people who expressed dislike for Barbra Streisand's music rated it as having a high degree of emotionality compared to their own emotional response.

Until now, people's like or dislike for particular music has been viewed by some social psychologists as a proxy for belonging to a particular social or age demographic, and this idea has been used to control group behaviour. For example, young "hoons" were successfully discouraged from meeting in a Sydney suburban car park by playing Barry Manilow music through loudspeakers. However, this social psychological phenomenon is difficult to measure. By contrast, the DAG measure offers new understanding into how people relate to music.

## Accolades all round



### HIGH ENERGY EINSTEIN

UNSW scientist Professor Martin Green has won the 2007 SolarWorld Einstein Award for his work in photovoltaics, developing new solar power technologies.

Professor Green, from the School of Photovoltaic and Renewable Energy Engineering, who has worked for decades with great success within the solar energy field received the award at the 22nd European Solar Energy Conference in Milan, Italy.

As one of the directors of the ARC Photovoltaics Centre of Excellence, Professor Green has directed a team that holds the world record of 24.7 percent in the degree of efficiency of crystalline solar silicon cells. A much-published author in both books and technical journals, Professor Green is held in high esteem in the solar technology industry.

In presenting the award, Head of Research of the SolarWorld subsidiary Deutsche Cell GmbH, Dr Holger Neuhaus, said:

"Professor Green is an outstanding scientist who time and again shows us new horizons and who has fundamentally advanced the field of photovoltaic science."

### EUREKA MOMENTS



UNSW researchers won two prestigious Eureka Prizes for their work in medical research in 2007. The Eureka Prizes are Australia's premier award scheme for outstanding science and are presented annually by the Australian Museum. Described as one of the most outstanding researchers of his generation, Professor Levon Khachigian, Senior Principal Research Fellow at UNSW's Centre for Vascular Research, was awarded the NSW Office for Science and Medical Research Jamie Callachor Eureka Prize for Medical Research. Professor Khachigian was recognised for ground-breaking work revolutionising the understanding of transcriptional control in blood vessels using innovative small-molecule gene-targeting agents which may impact on the treatment of cardiovascular disease and other conditions involving inflammation. This is the second time Professor Khachigian has won a Eureka Prize. The Voiceless Eureka Prize for Research which Replaces the Use of Animals or Animal Product went to Children's Cancer Institute Australia/UNSW researchers, Associate Professor Maria Kavallaris, Dr Sela Pouha and Dr Nicole Verrills.

### ENGINEERING CHANGE

UNSW's record-breaking solar car racers, Sunswift, and one of the University's most innovative graduates took out two of the state's most prestigious engineering prizes at the 2007 Engineers Australia Engineering Excellence Awards. The Sunswift project received the Excellence award in the Welfare, Health, Safety, Education and Training category of the Awards, delivering a massive boost to Sunswift's dedicated volunteers as they prepared for the World Solar Challenge, a 3000 km race from Darwin to Adelaide, in late October. Gary Zamel, a UNSW mining engineering graduate and advisory board member of UNSW's new Centre for Innovation and Entrepreneurship, was named Entrepreneur of the Year. Mr Zamel, who graduated from UNSW in 1975, operates a private equity investment company and has long had a focus on developing business models around smart technology and working with industry.

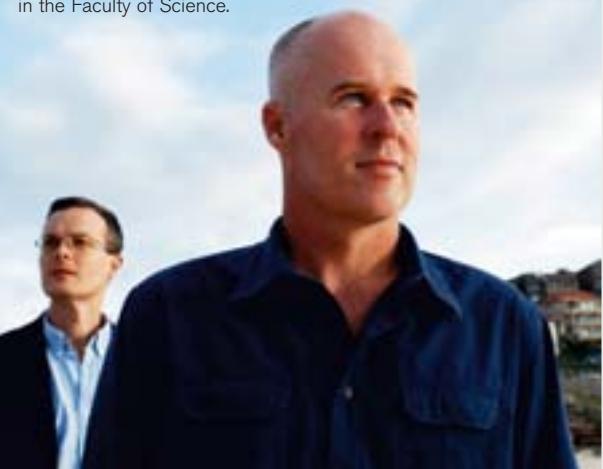


### LEADERS OF THE PACK

UNSW alumni, benefactors and advisors dominated *The Bulletin* magazine's *50 Most Influential in Business* list this year. UNSW Chancellor and Foundation Chairman David Gonski was described as "one of the most well-connected company directors in the country". Mr Gonski who is also an alumnus completed a Bachelor of Commerce in 1976, and a Bachelor of Law in 1977. Westfield founding chairman and chairman of the Lowy Institute for International Policy, Mr Frank Lowy, was named Australia's most influential businessman. Mr Lowy received an Honorary Doctorate from UNSW in 1999 and recently donated \$10 million to establish the Lowy Cancer Research Centre. For more on this, see page 12. Other prominent alumni to feature on the list included Leighton Holdings CEO Wal King, Macquarie Bank executive Nicholas Moore and Walmart board member and former Woolworths CEO Roger Corbett.

### OUTSTANDING SCIENTIST

Professor Matthew England has received one of the most coveted Australian science awards – The Royal Society of Victoria Research Medal. The 2007 Medal was awarded for outstanding scientific research in Earth Sciences. One of few non-Victorians to receive this honour, Professor England, who is a Federation Fellow and Co-Director of UNSW's Climate Change Research Centre, has been endowed with this medal for research that advances our knowledge of the Southern and mid-latitude oceans and their role in both regional and global climates. Professor England is also Director of the Climate and Environmental Dynamics Laboratory (CEDL) in the Faculty of Science.



### STAY IN TOUCH!

To continue receiving *UNSWorld* (wherever you may be on the globe) and to make sure you are invited to UNSW functions in Asia, Australia, Europe and the United States, please keep us up to date with any changes in your contact details. You can do this:

**online at:** [www.unsw.edu.au/alumni/pad/updateform.html](http://www.unsw.edu.au/alumni/pad/updateform.html)

**by email to:** [alumni@unsw.edu.au](mailto:alumni@unsw.edu.au)

**by post to:** Reply Paid 61244, UNSW Alumni Association, UNSW Sydney NSW 2052, Australia

**by phone to:** +61 2 9385 3279

**by fax to:** (using the address flysheet which came with this magazine) +61 2 9385 3278

Please give us your postal address (home, work or both) and your preferred email address. If we haven't got an email address for you already, please let us have one because, increasingly, our communications to graduates are electronic, particularly invitations to receptions and lectures.

Any other questions may be addressed to the Alumni Relations office using the email address or the phone number above.



## A corporate boost for Nura Gili

Indigenous programs at the University of New South Wales will benefit from a major investment by global financial services firm UBS. In support of programs for Indigenous students run by UNSW's Nura Gili Indigenous Programs Centre, UBS is investing \$1 million over four years and will become a founding partner of Nura Gili.

In addition, UBS will lend business expertise to students through a mentoring program and provide material assistance to Nura Gili staff.

This is the largest corporate donation ever received by Nura Gili. The UBS support will be particularly focused on the Indigenous Winter School and will enable the program to be expanded to accept a yearly intake of 150 students over the next three years.

The Winter School is a residential pre-University program that assists Indigenous high school students in Years 10, 11 and 12 to prepare for tertiary study.

Students from all over Australia are invited to attend the program which aims to help them identify paths of interest, and provides information and guidance on the subject areas required for further study in their chosen fields.

Faculties and schools involved in Nura Gili programs are NIDA (Performing Arts), COFA (Visual Arts), Medicine, Law, Social Work, Education, Architecture and the Australian School of Business.

"Nura Gili is very excited at the prospect of developing this relationship with UBS," says Nura Gili Director Associate Professor Sue Green. "With this funding secured, we were able to accommodate a record number of students in our Winter School in July. In the past, we have not had the resources to cater

to the demand from students."

In this year's week-long Winter School program, 127 Indigenous students came from Broome in Western Australia, Bamaga at the tip of Cape York, Castlemaine in Victoria and Halls Creek in the Kimberley. The program focused on the importance and role of culture in education and many students took the opportunity to showcase and share dance, music and performance from their communities, while Nura Gili staff showcased the diversity of Indigenous cultures inherent within the UNSW Indigenous community.

UNSW Vice-Chancellor Professor Fred Hilmer says the partnership with UBS is a significant development. "UNSW's retention and graduation rate for Indigenous students equals the rate for its non-Indigenous students, compared to a national Indigenous retention rate of only two-thirds. Our preparatory programs, combined with the ongoing support provided to our Indigenous students by Nura Gili, are essential to achieving this."

"The UBS partnership is a model for corporate philanthropic support for Indigenous higher education. It expands the support needed at a vital stage to encourage Indigenous students into tertiary study, and it provides ongoing assistance and expertise as a partner in the enterprise."

UBS Chief Executive Officer Brad O'Neill says the firm was quick to see the advantages of forming a landmark corporate partnership with Nura Gili. "UBS is particularly supportive of innovative ideas that equip and encourage Indigenous students to further their education. Nura Gili's programs are in keeping with the education focus of our existing community programs, including the UBS Young Women's Leadership and Finance Academies." ■

### NURA GILI'S INSPIRATION

The Nura Gili Indigenous Programs Centre provides pathways to learning across the UNSW campus and supports opportunities that embrace Indigenous knowledge, culture and histories.

Aboriginal Studies courses have been taught through the Nura Gili Indigenous Programs Centre since 1992. The diversity and number of courses has steadily increased and Nura Gili staff now convene numerous courses offered through the UNSW Faculty of Arts and Social Sciences.

Staff and students at Nura Gili Indigenous Programs Centre support community outreach programs to actively spread the message of the availability of tertiary studies. They also work together to promote the centrality of arts, culture and heritage for Aboriginal and Torres Strait Islander peoples throughout UNSW and the wider community.

The words Nura Gili are from the language of the Eora people, Nura meaning "place" and Gili meaning "fire/light". Nura Gili at UNSW brings together these concepts to create the meaning "fireplace" or "campsite". Nura Gili draws strength from a connection to an archaeological campsite unearthed on the grounds of the Prince of Wales Hospital.

The idea is that there is a place in UNSW where a fire has been burning, a place where people traditionally came and still today are invited to gather and share the inspiration and purpose for all involved in Indigenous Programs at UNSW. All courses are taught by academic staff with input from elders from the local Indigenous community and Indigenous specialists.

Students came from all over Australia for Nura Gili's 2007 Winter Program

## On another planet

by Dan Gaffney

**F**ew can say they've scanned the heavens and found a new planet but with 30 discoveries to his credit, UNSW astronomer Chris Tinney is indisputably Australia's most exceptional planet hunter. It's an impressive tally, considering that astronomers have identified only 230 or so "exoplanets" beyond our solar system since the first was found some 40 light years from Earth just over a decade ago.

Dr Tinney led the Australian contingent of an international team that in June announced the discovery of 28 more planets in our galaxy. They have been discovered over the past year and raise the number of known worlds orbiting other stars to 236 – a 12 percent increase.

The team used telescopes at the University of California's Lick Observatory, the W.M. Keck Observatory in Hawaii and the Anglo-Australian Observatory, near Coonabarabran in western NSW. Together, the team has discovered more than half of all known exoplanets.

Although most of the new finds are probably giant balls of gas, more like Jupiter than Earth, Dr Tinney believes the escalating pace of discovery is improving the odds that our galaxy is "swarming with smaller, rocky and potentially habitable worlds" too small to detect with today's telescopes. "I think it's extremely likely that we eventually find habitable planets," says Dr Tinney, an ARC Professorial Fellow who joined UNSW this year after 12 years as head of astronomy at the Anglo-Australian Observatory.

"It's mostly a challenging technical problem. What we do know is that every time we advance our detection techniques towards finding lower mass planets, we find more planets. And so I think it's extremely likely that, as we extend down to finding Earth-mass planets, we'll find them as well."

"They may not be as common as the giant gas planets such as Jupiter that we're mostly finding at the moment but even if they were, say, a hundred times less common than the gas giants, and if there were 100 billion sun-like stars in our galaxy then that's still at least 10 million Earth-like planets out there."

The 28 newly confirmed planets are among 37 new objects, which

include seven brown dwarfs – objects too small to become stars but too big to be called planets – and another two "borderline" objects, which are either very large planets or small brown dwarfs.

"Brown dwarfs are the little stars that couldn't," says Dr Tinney, who received his PhD from the California Institute of Technology and who returned to Australia in 1994, following a research fellowship in Europe.

These sub-stellar objects fall somewhere between being a planet and a star. Their mass is too small to generate nuclear fusion at their core, so they don't burn as brightly as stars.

Like a cosmic game of hide and seek, Dr Tinney says the key to successful planet hunting is knowing what to look for.

"The universe is a big piece of real estate," he says, "so astronomers have developed a few techniques to improve their odds of finding planets in the vast cosmos beyond our solar system."

One method, informally known as the "Doppler wobble" method, measures tiny changes in a star's velocity, caused by the mutual gravitational pull of planet and star, which makes the stars execute a tiny orbit of their own.

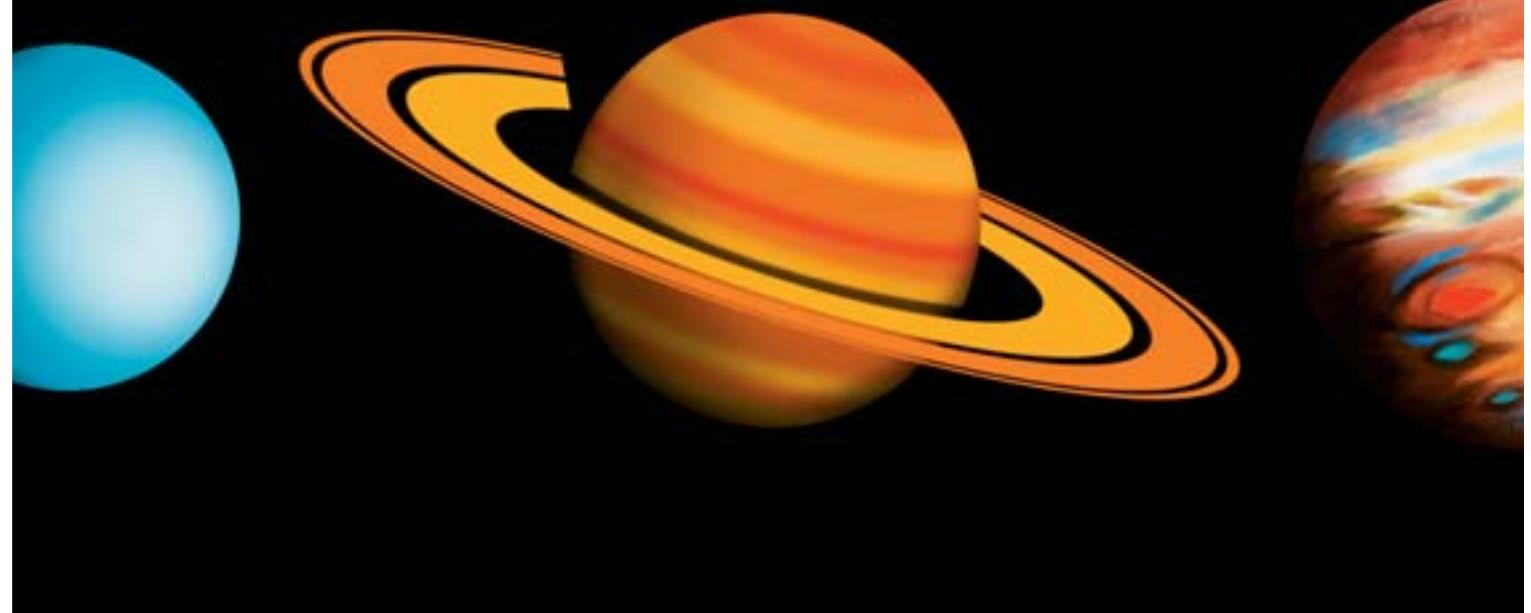
Astronomers can identify this orbit as a cyclical "Doppler" shifting in the frequency of lightwaves the star emits. Detected as a red-blue oscillation in the visible-light spectrum, this stellar wobble is a hint that something, possibly a planet, is orbiting the star. This technique has been used to locate most known exoplanets and was used by the Australian-US-UK team

that announced the new crop of planets.

Another method for locating distant planets is to look for telltale dimming, or "transit", in the light emitted by solar-like stars, which indicate that a planet is passing in front of its parent star. Says Dr Tinney:

"These dimming events interest astronomers because, unlike the Doppler wobble method, they allow measurement of the precise mass and radius of exoplanets and low mass stars."

The Anglo-Australian Planet Search led by Dr Tinney is monitoring the 240 nearest and brightest Sun-like stars visible from the Anglo-Australian Telescope on 32 nights of the year. It has been operating since 1998, and is expected to run until 2010. ■



# Leading the innovation game

Two vital initiatives are creating exciting opportunities for students, corporate players and a new generation of entrepreneurs, reports Chris Sheedy.



**I**t is widely accepted that entrepreneurs are vital to Australia's future global business success, particularly as large organisations increasingly rely on outsourcing non-core activities. At the same time, world-class research on entrepreneurship and innovation, and educational facilities for people who wish to become entrepreneurs, has been sorely lacking.

To address this, the Australian School of Business has established the School of Strategy and Entrepreneurship, headed by Associate Professor Peter Murmann, and created a new professorial chair (see box, page 11).

The new School along with a Centre for Innovation and Entrepreneurship, directed by entrepreneur and venture capitalist Christopher Witt, will build on the innovation and entrepreneurship programs already in place both in the Australian School of Business and within other faculties at UNSW.

They will create powerful links between the academic community, student bodies and the business world via networking events, conferences, internships and research projects.

"There's going to be a mesh effect," says Mr Witt, founder and managing partner of the Kalori Group. "There will be a number of ways the corporate world will intersect with the student world. There will be a coursework segment at undergraduate and graduate levels. We'll be intersecting with commercialisation bodies such as NewSouth Innovations, the Australian Technology Park incubator and NICTA (a world-class research institute for information and communications technology). There will be internships, a Meet the Entrepreneur event series and an Entrepreneur Opportunities Convention in 2008. The overall effect will create a grooming process for the next generation of entrepreneurs."

"We have a number of pockets within the University, not just in the Australian School of Business but also in the Faculties of Science and Engineering, which are very important nurseries for entrepreneurial activity," Mr Witt continues. "In these fields there are already some great things happening such as the Successful Innovations Program for PhD

students in Engineering, and the Entrepreneurs of Science Program. We're going to add to and build on these great programs."

Mr Witt's enthusiasm for the project, and for the opportunities it will present to students and business people alike, shows no bounds. It is matched by Associate Professor Murmann's passion for bringing the power of academia to bear on an area that has previously been more about trial and error than solid, thoroughly researched facts.

#### Commercial connections

"MBA programs were created in the '60s and '70s to train people to be managers in large corporations, and while MBAs have changed with the times, we're bringing rigorous and leading-edge entrepreneurial teachings and content directly into the MBA courses and other programs," Associate Professor Murmann says. "We're bringing together academics and practitioners to get the right mix. We want to create some frameworks and ideas which allow people to see the generality of experience,

#### A CHAIR FOR ENTREPRENEURIAL EXCELLENCE

A new Professorial Chair in Innovation and Entrepreneurship will provide a focal point for entrepreneurial teaching and research within the Australian School of Business. The Chair has been established as a result of a gift from businessman and successful entrepreneur, Michael Crouch. Mr Crouch is the Executive Chairman of Zip Industries, a globally recognised supplier of instant-boiling hot water heaters used in offices internationally. He has owned the company, which has subsidiaries in Australia and the United Kingdom, since 1962. A member of the APEC Business Advisory Council for more than 10 years, he has also served on numerous not-for-profit boards, becoming the founding Chair of the Friends of the Royal Flying Doctor Service of Australia in 2005. In this role, he has spearheaded the effort to raise more than \$10 million for the purchase and fit-out of two new aircraft.



Associate Professor Peter Murmann and Christopher Witt

stripping away the details and seeing what is consistent and similar across several entrepreneurial experiences.

"On one level we'll be coordinating the existing entrepreneurship and innovation efforts of various faculties within UNSW to allow these activities to become more prominent, to build on one another," he says. "The second theme is to bring the commercial world closer to the students so the step from university to the commercial world is smaller."

Associate Professor Murmann explains that the increased need for, and importance of, the entrepreneur has occurred as a result of "deverticalisation". Companies like General Motors used to own and manage every aspect of their business, from taking the raw materials out of the ground to building the car to servicing the vehicle long after it had left the showroom floor, he points out. But in the last 15 years, as a result of globalisation and competitive pressures, companies have had to shrink and they now only take care of those parts of the value chain that they do better than anybody else. Everything that is not core is outsourced to external experts.

"Now specialist providers take care of large parts of the value chain and this has opened up an enormous amount of entrepreneurial space," he says. "And the internet makes that space unlimited. There are a lot of opportunities for new ventures to work with corporations."

***"The second theme is to bring the commercial world closer to the students so the step from university to the commercial world is smaller."***

Mr Witt believes one of the great values of the new UNSW offerings will be the minimisation of defects, in other words an education that helps to ensure the entrepreneur makes as few mistakes as possible once they're in the real world. The well-trodden path of the entrepreneur need no longer be littered with expensive failed ventures. As academics within the School work with entrepreneurs to analyse and break down their experiences, both positive and negative, the result will be a framework that allows students to think about things in a systematic way, avoiding the trial-and-error nature of entrepreneurship.

"Anyone who is working right now recognises that if you have not been to university the only way you learn is through your own mistakes or by watching somebody else's mistakes," Associate Professor Murmann says.

#### Networking know-how

On top of the obvious educational benefits, Mr Witt is most excited about the networking opportunities that will develop as the Centre for Innovation and Entrepreneurship makes its presence felt in the business world. The Meet the Entrepreneur events are a series of presentations by luminaries of the business world for students, alumni and corporate staff. A major annual conference, to be launched in 2008, will be open to anybody interested in the future of entrepreneurship.

The conference will be about opportunities in the world of entrepreneurship and will bring together academics and leading entrepreneurs to debate key issues such as the impact of the internet on entrepreneurship and the opportunities and threats posed by climate change.

"As far as course content goes, today we have 400 to 500 students with some degree of exposure to entrepreneurship studies, but by year two I think this will double and the exposure will be much more focused across the campus."

"I like to think of the Centre for Innovation and Entrepreneurship as advanced schooling for anybody who has chosen the life of the entrepreneurial adventure." ■



## Lowy family's gift to cancer research

The largest single philanthropic donation ever received by UNSW will fund a pre-eminent cancer research centre, writes Susi Hamilton.

**A** major new research facility, the Lowy Cancer Research Centre, is being built on the Kensington campus. The \$100 million-plus facility will house up to 400 cancer researchers, from UNSW and the Children's Cancer Institute Australia (CCIA). It will be one of the largest dedicated cancer research centres in the southern hemisphere and Australia's only fully integrated childhood and adult cancer research centre.

Prominent businessman and philanthropist Mr Frank Lowy, and family, have agreed to donate \$10 million towards the cost of the new building. This is the largest single philanthropic donation ever received by the University. In addition to the Lowy gift and University resources, other funding has come from individual donors, trusts, foundations and grants awarded to CCIA by the NSW State Government (\$18.3m), the Commonwealth Government (\$13.3m), and most recently the Australian Cancer Research Foundation (\$3.1m).

Construction of the building at the northern (Randwick) end of the campus began in October.

Vice-Chancellor Professor Hilmer says the Centre is the first stage of a major redevelopment of the University's medical facilities. It is also a significant addition to the Randwick medical precinct, being closely linked with the Prince of Wales Hospital, the Royal Hospital for Women and the Sydney Children's Hospital.

"UNSW is a leader in the field of adult cancer research, with internationally recognised medical scientists such as Professors Philip Hogg, Robyn Ward and Levon Khachigian, while CCIA has renowned researchers of childhood cancer including Professors Michelle Haber, Murray Norris and Glenn Marshall. Bringing the two areas together will lead to new insights and discoveries," he says. "I believe this will take cancer research in this country to a new level. It will be a world-class facility which will enable us to attract more of the best and brightest people from around Australia and overseas."

"We are enormously grateful to Frank Lowy and his family for their very generous donation. We also gratefully acknowledge the support of the State and Federal Governments, and of other donors who are contributing to the project."

The University's Chancellor Mr David Gonski says it is important that such significant support had been forthcoming from the private sector. "We need to move further towards a culture of giving in Australia, to support our universities and other institutions that contribute to the public good," Mr Gonski says.

Dean of UNSW's Faculty of Medicine, Professor Peter Smith, says the new Centre will make a major contribution to cancer research and through its translational programs to better health outcomes in prevention and treatment of cancer.

"It will be the first centre in Australia to have a dedicated cancer bioinformatics and data management facility which will link research activities in the Centre with cancer registries,

clinical trials, centres and overseas networks," he says. "This will improve the treatment and survival of people with cancer, by providing a nexus between these areas. It will also help to train the next generation of research leaders, with postgraduate students able to work with many of the top scientists in the field."

Professor Philip Hogg, a world-renowned

***The new Centre will make a major contribution to cancer research and ... to better health outcomes in prevention and treatment of cancer.***

cancer researcher who has developed two anti-cancer drugs, won dozens of awards and has an enviable track record with funding and publications, will be co-director of adult cancer research at the new Lowy Centre, along with Professor Robyn Ward.

Professor Hogg recently won \$3.75 million in state government funding for his work on anti-mitochondrial cancer drugs. These drugs will be tested in Australia on patients with bowel cancer as early as 2008. Clinical trials for the earlier version of the drug were carried out in the UK; the new Centre will allow the work to be carried out here.

Once developed, the drugs could target and kill the cells that supply the cancer with the blood it needs to survive. "This would make cancer a manageable condition in the long term, rather than being a 'cure,'" says Professor Hogg.

The drug would also be able to be used in the treatment of other types of tumours – including those in the breast, prostate, colon, lung and brain. The human trials will be managed by Robyn Ward, a Professor of Medicine at the Prince of Wales Hospital, who

will be Director of Clinical Trials at the Centre.

Already three award-winning cancer researchers have announced they will return to Australia to work in the new facility. They are haematologist John Pimanda; cell biologist Anthony Don, and breast cancer specialist Carolyn Ford.

Professor Ward's work focuses on the other key area in cancer research – genes. This year Professor Ward and her team at St Vincent's Hospital discovered an entirely new pattern of disease inheritance which has implications for people with a family history of bowel, ovarian and uterine cancers. The team found the presence of a chemical marker, or tag, on a critical gene can be passed from parents predisposed to cancer to their offspring. Professor Ward also has developed a cancer vaccine that is currently being trialled in patients with prostate cancer. "What makes the Centre so important is not only the research, but its strong clinical focus," says Professor Ward.

A key collaborator within the Centre will be Professor Levon Khachigian.

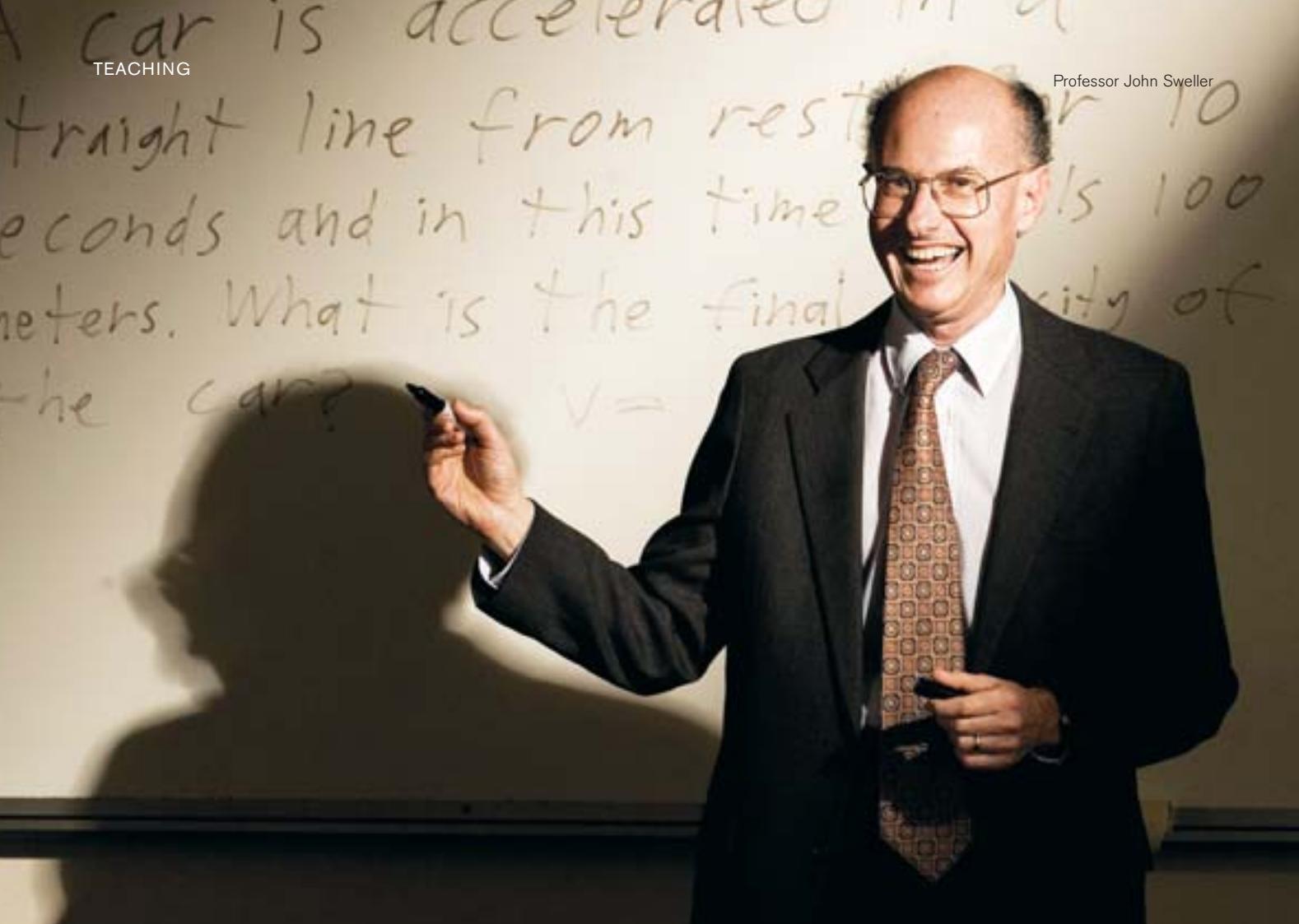
He and his team have developed a new class of experimental drug, which shows promise for certain types of skin cancer, among other health problems. He has just been awarded a grant of almost \$3 million from the state government to further develop the gene-targeted therapy for basal cell carcinoma, one of two non-melanoma skin types which are the most frequently occurring cancers in Australia.

Professor Michelle Haber, Executive Director of CCIA, will be the Centre's director of childhood cancer research. She is known internationally for her research on delineating mechanisms of resistance to anti-cancer drugs in the treatment of neuroblastoma. Professor Haber has also been a key contributor in developing new approaches to improving the outcomes of children diagnosed with acute lymphoblastic leukaemia. ■

### ALL IN THE FAMILY

As a young man, Czechoslovakian-born Frank Lowy (pictured) arrived in Australia with no worldly possessions. His rise to prominence as one of the country's most distinguished business leaders and foremost philanthropists is now Australian business folklore. Mr Lowy grew his business interests from a suburban delicatessen into the multi-billion dollar Westfield shopping centre empire over some 50 years. Today, Mr Lowy remains Chairman of Westfield which leads the industry in Australia and is acclaimed as the most successful Australian company operating in the US. With his passion for business is a sense of social obligation which Mr Lowy meets through support of the arts, sport, medical research and education. As the Holocaust allowed him only six years of formal schooling, he is cognisant of the value of education and society's duty to provide it. While serving on the AGSM's Advisory Council, he arranged an endowment which enabled the expansion and naming of the Frank Lowy Library at the School. Business should be prepared to contribute to the cost of education because it benefits from employing capable graduates, says Mr Lowy whose three sons, David, Peter and Steven, all have commerce degrees from UNSW – and each is a managing director of Westfield. Their wives, Margo, Janine and Judy hold UNSW degrees too, as does Frank's wife, Shirley, who graduated as a mature-aged student.





Professor John Sweller

## Memories are made of this

UNSW is celebrated for its educational excellence with good reason.

Meet three inspiring teachers who show vital and original approaches to helping us learn.

**M**ost of us are being taught the wrong way, from primary school through to university level, according to a UNSW education expert. John Sweller, from the School of Education, is the founding father of Cognitive Load Theory, the subject of a recent international conference at UNSW.

The theory is based on the notion that one can either solve a problem or learn a solution, but not both simultaneously. "Much teaching doesn't take into account the way we think and learn, and so it fails," says Professor Sweller, who, with his research students, began developing the theory at UNSW in the 1980s. It relates to "working memory", which refers to part of the brain that provides temporary storage and manipulation of information necessary for complex cognitive tasks such as comprehension, learning and reasoning.

The key, says Professor Sweller, is to get information out of our severely limited working memory and into our effectively limitless long-term memory as quickly as possible without overloading our working memory. "Everything we are aware of goes through working memory, which has a limited capacity of only three to four items of information that can be held for only three to four seconds without rehearsal," he says. "Almost all information goes after 20 seconds, unless there is rehearsal."

Professor Sweller first tested his theory on university students solving numerical problems, such as: "Convert 31 into 3 by multiplying by 3 and

subtracting 69 as many times and in whatever order you need."

His intention was to study problem solvers learning how to do this, but they didn't learn it, although they had solved many such problems in the past. "At first, I thought that the people involved in the trial were not so bright. Then I realised that everyone's brain works in that way! If you told people the solution rather than have them solve the problem, they could learn it instantly and solve all the problems of that sort, even extremely long and difficult ones!" he says.

The theory goes against the trend of widely used problem-based learning, which according to Professor Sweller is lacking evidence of its effectiveness.

"Problem solving places a great demand on working memory, so teachers are better off giving students solved problems to study and store in long-term memory for future use," he says. "Once stored in long-term memory, whenever students see a similar problem ... they can bring the solution from long-term to working memory and easily solve the problem. It's what experts in a field do. The cognitive processes involved in learning and solving problems are different, so we need to cater to the way the brain works."

Cognitive Load Theory is used in Europe and the US, even in the corporate sector. In Australia, it is taught to those studying teaching at UNSW but other institutions have been slow to take it on.



**"It doesn't matter which subject it is, as long as it's with Richard,"**

says Peggy Kuo (centre), learning computer programming through game playing with Joe Xie, Martha Winata and Richard Buckland (far right)

### Classroom philosophers

A class of 12-year-old students are without their teacher. He dashes in, preoccupied. "Kids could you please rearrange the furniture and if I don't get back, just start," he says. Such is the enthusiasm for philosophy at Buranda Primary School, in Brisbane, that the class began without a hitch, according to Associate Professor Philip Cam, who was sitting in on the lesson.

Professor Cam, from UNSW's School of Philosophy, created this part of the school's curriculum over 10 years ago. It is a dedicated part of students' learning – just like English or maths – during which they discuss scenarios, which typically involve a problem or a dilemma. Philosophical questions include "What is it for someone to be a friend?" or "What is a work of art?"

The process of engaging with the ideas has changed the students – and their school. "It was a small, inner-city school, going out backwards that had been earmarked for closure by the state government," he says. "The new principal was looking for ideas and approached me."

Since philosophy was included in the curriculum for the upper primary students, the school has become so popular, it is full to capacity. Not only has academic achievement improved, according to objective statewide testing measures, but bullying is in the past.

"They are a lot nicer to one another and they learn to deal with problems on the basis of being reasonable," reports Professor Cam. The program to help kids think more critically and communicate more effectively is also running in several Sydney schools.

The world we are living in is rapidly changing. "You can't just teach information for students

to record and memorise," explains Professor Cam. "Information is cheap. What students need is to know how to interpret the information, how to tell if it's reliable and how to apply it to problem solving. Philosophy is all about dealing with issues and problems for which there is not a single answer, so it prepares the students well for the real world."

Teaching of philosophy tends to focus on the greats such as Plato, Socrates, Aristotle and Descartes, but there is a world of difference between "doing" philosophy and learning about it, he says. "I encourage students to engage with the ideas philosophically ... to be excited about ideas, to be inquiring and thoughtful. Learning to think well is not merely of academic interest, it's education for life."

### Factoring in fun

Some doubt that his computer science students can learn anything when they are having so much fun in lectures. But the man who authored a teaching guide called, *How I Learned to Stop Worrying and Love the Job*, also has a string of teaching honours, including an Australian College of Educators Quality Teaching Award and a Vice-Chancellor's Award for Teaching Excellence.

"Every adult learner has a little kid inside who wants to be fascinated and entertained", says Richard Buckland, who got his introduction to teaching as a Year 9 maths teacher. "Children love learning new facts and skills. So, if we bring creativity and a sense of wonder to the way we engage learners – no matter what their age – I believe we can meet people's innate desire to learn about themselves and the world."

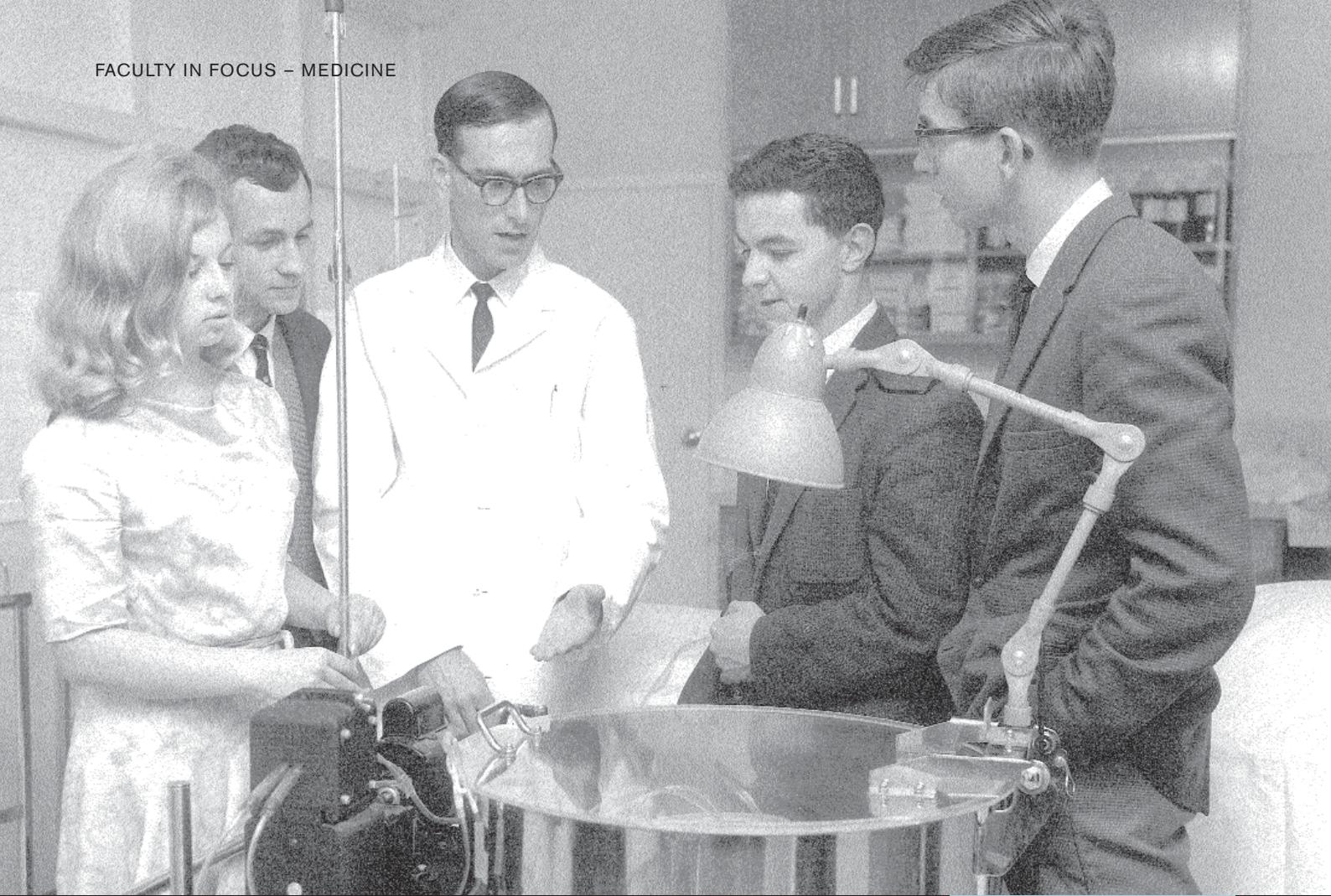
In addition to 10 years teaching at UNSW, Buckland – a senior lecturer in the School of Computer Science and Engineering – has successfully taught and mentored people of all ages and abilities including children with learning maths and language difficulties, gifted children, highly numerate actuarial students, and guest-lectured at Stanford, Oxford and Imperial College London.

His ability to reach even the youngest of students is helped by being a father of three young children. Buckland's policy of engaging learners means that his first-year computer science students get entertaining challenges such as creating robotic hands from Lego that can manipulate and solve Rubik's cube problems. His students also indulge their childish side while learning to program railways using Thomas the Tank Engine toys.

Creative learning opportunities have been extended to outreach learning workshops that the School of Computer Science and Engineering offers to schools and teachers from Year 4 to Year 12.

In a workshop with learning outcomes tied to the NSW Department of Education's Software Technology syllabus Buckland ran earlier this year children used three robot designs – DanceBot, RescueBot and SoccerBot – and programmed their robots by "dropping and dragging" computer icons that needed no knowledge of programming code.

However, the joy of technology has parameters for this expert in computer security, cyber-crime, cryptography and former Microsoft Research Fellow. Buckland doesn't own a mobile phone and spurns email, insisting "people have become far too reliant on email as a communication tool". ■ Dan Gaffney



## An outstanding year

**2007** has been a year filled with achievements and significant milestones for the Faculty of Medicine, including the 40th anniversary of its first graduation ceremony.

Capping off a great year were 50 grants, worth more than \$30 million, which were awarded to UNSW in the latest round of funding from the National Health and Medical Research Council (NHMRC). This is the University's best ever result!

The number of grants comprises almost a quarter of the total funding allocated to all NSW universities.

One of the largest sums, a \$5.8 million program grant, was awarded to a team led by Scientia Professor Gordon Parker and including Professor Phil Mitchell, both from the School of Psychiatry and the Black Dog Institute. The grant is for the Institute's work on the causes of mood disorders, their differentiation, diagnosis and management.

"We were the first team of mental health researchers in the country to be awarded a program grant and this is now the third such award. We are very pleased and privileged to have our work recognised by the NHMRC," Professor Parker says.

Other project grants to begin in 2008 include two investigations into Indigenous health, one led by Professor Tony Broe into dementia in urban-dwelling Indigenous Australians, and an investigation by a team led by Dr Elizabeth Comino into the health of Aboriginal children in urban settings. This research project involving a group of children within the broader Aboriginal community of Campbelltown will be the first systematic data collection of its kind on an urban birth cohort of Aboriginal infants.

"We know that many Aboriginal children born are hidden in data collections as 40 percent of them

have an Aboriginal father and a non-Aboriginal mother and thus are identified only by their mother's background," explains Dr Comino. "We also know that there is no proactive follow-up of children of Aboriginal descent with little knowledge about their health needs or access to and use of health services."

Other program grants will support a study by a team led by Dr Elizabeth Sullivan of the National Perinatal Statistics Unit who were awarded a grant to develop the Australian Maternity Outcomes Surveillance System, a national program of research looking at rare and severe disorders in pregnancy. This project will provide evidence-based research to improve safety and health outcomes thereby contributing significantly to the quality of pregnancy care in Australia.

A team led by Professor Glenda Halliday will conduct a study into cellular changes in brain cells related to Parkinsonism, and Dr Wei Wen and his team will be using brain-imaging technology in an attempt to predict late development of dementia.

Associate Professor Colleen Loo will conduct a study of non-pharmacological treatments for depression, while Dr Katharina Gaus, a promising young researcher and previous winner of the Fresh Science and Tall Poppy awards, is part of a team examining changes in cell membranes related to immune responses.

Associate Professor Marissa Lassere, has been awarded her third concurrent NHMRC grant with over \$513,000 assigned to her team's work on better assessing the cost-effectiveness of medicines.

Several Research and Practitioner Fellowships were also received through this year's grants' program. ■

### MILESTONES

#### Feb 2007

40th anniversary of the Faculty's first graduation ceremony.  
(Pictured above: Students from original graduating class of 1967)

#### March 2007

Official opening of UNSW Rural Clinical School Albury-Wodonga Campus.

#### May 2007

UNSW academic Professor Robyn Ward presented with the NSW Premier's Award for Outstanding Cancer Researcher of the Year.

#### July 2007

UNSW's National Centre in HIV Epidemiology and Clinical Research marks its 21st anniversary.

#### August 2007

Professor Levon Khachigian wins the highly prestigious NSW Office for Science and Medical Research Jamie Callachor Eureka Prize for Medical Research.

#### September 2007

Faculty hosts LIME (Leaders in Indigenous Medical Education) Connection II.

#### October 2007

First sod turned for the Lowy Cancer Research Centre. (For more information, see page 12.)

#### October 2007

20th anniversary of the National Drug and Alcohol Research Centre.

## Arts and the shock of the new

The skills and knowledge provided by a degree in humanities and social sciences are more relevant than ever, insists Professor James Donald.

It's tempting to suggest that the Faculty of Arts and Social Sciences isn't what it used to be. The statement is accurate, but deceptively simple. After six months as the Faculty's new Dean, overseeing a reorganisation that streamlines and refocuses activities, Professor James Donald is highly enthused.

A new structure, which follows an extensive study of the Faculty and an earlier review of the flagship Bachelor of Arts degree course, has heightened the relevance of UNSW Humanities and Social Science curricula and research for the 21st century, he says.

Like-minded disciplines from 12 previous schools have been combined into five cohesive schools: Education; English, Media and Performing Arts; History and Philosophy; Languages and Linguistics; Social Science and International Studies.

"The new larger schools will generate the possibilities for new conversations and new research groupings and teaching areas. They build on existing strengths and allow traditional humanities and social science disciplines to bring their expertise to bear on a contemporary world," Professor Donald says. In addition, they will offer an increasingly diverse range of specialist degrees.

On the research front, a fresh emphasis is on four prestigious national research centres:

- The Centre for HIV Social Research which develops social understandings on HIV, Hepatitis C and other communicable diseases.
- The Social Policy Research Centre (SPRC) which explores economic and social inequality and evaluates labour market, health and community-service policies.

• A new Centre of Social Research in Journalism and Communication, directed by high-profile academic, Professor Catherine Lumby, will combine disparate research interests including the work of Professor Gerard Goggin on new media.

• The widely recognised Gifted Education Research Resource and Information Centre, the only centre of research in gifted education in Australia.

These research centres not only engage with social issues, but inform and bring about change in social policies. "They are absolutely at the centre of what we do," says Professor Donald.

In an era when education is highly outcomes driven as students invest substantially in garnering skills and knowledge for future careers, Professor Donald upholds a strong case for humanities and social science degrees. More flexible work patterns mean people no longer come to university to study an area, work in that area and then retire. "Today we need skills of critical analysis, self-reliance and good communication, the ability to work in teams and an understanding of the world and how it works. A generalist degree delivers those aptitudes."

From 2008, the Bachelor of Arts degree course will provide greater disciplinary depth. The first major sequence of studies is now more

extensive and must be complemented with a second area of sustained study providing interdisciplinary breadth. Gone is the "pick-and-mix" approach to a humanities and social science degree, it is now more structured and progressive, Professor Donald says.

Still vital to the course are studies in traditional disciplines, such as English, History, Philosophy, Sociology and Anthropology, and majors will be offered in language studies which, he explains, have become crucial for competitive advantage and deeper cultural understanding in a globalised world. The Bachelor of International Studies satisfies a growing demand for graduates equipped to meet the challenge of work in a rapidly changing world, and the Bachelor of Media and Communications focuses on contemporary media production and its contexts and in particular develops new media knowledge and skills.

Majors are also being offered in interdisciplinary fields as diverse as economics, psychology and human resource management, to name just a few.

Professor Donald muses over possible combinations. "For example, combining international relations and development studies is fascinating for studying the globalising world but also great preparation for working in an NGO." The schools will be building in opportunities for internships and placements.

"A lot of people do a generalist degree because they are not quite sure of what they want to do yet," Professor Donald observes. "Under the new course structure, we can say 'go for something you think is really interesting and another major that will be a smart career option.'"

While Arts is the most popular other half of a combined degree, currently undertaken by around 45 percent of students, he doesn't buy the notion it's the easy half. "Humanities and social sciences are 'the difficult sciences' because we are not looking at matter, but people and how mysterious we are to ourselves and other people, and the strange motivations that make us produce great literature as well as wars, famines and global warming, for which human behaviour is responsible."

Relevance is key to the Faculty's endeavours. For instance, recent Social Policy Research Centre research has changed approaches to the provision of housing for the mentally ill, while Associate Professor Gay Hawkins' work on the ethics of waste has challenged conventional environmental thinking. Among her current projects is an investigation into the social and material impact of bottled water. ■



**Gone is the "pick-and-mix" approach to a humanities degree, it is now more structured and progressive.**

– Professor James Donald, Dean, Faculty of Arts and Social Sciences

Alumni are invited to find out more about the exciting changes taking place at the Faculty of Arts and Social Sciences. Professor Donald and the Faculty will be hosting a function for alumni on 21 February 2008, to launch the new academic year. If you are interested in receiving an invitation please send an email to [alumni@unsw.edu.au](mailto:alumni@unsw.edu.au)



## From the President

of the Alumni Association

In December 1967, approximately 750 graduates attended the inaugural meeting of the UNSW Alumni Association. For nearly 40 years the Association and its Board has represented the graduates of the University through fostering alumni programs, Chapters and networks, and in seeking new ways to support and promote our University's excellence in teaching and research.

The Association was strong in its encouragement of the employment by the University of alumni/development professionals, and today UNSW is continuing to establish various units and teams to assist faculties, schools and organisations in the increasingly important task of engagement with more than 180,000 alumni across Australia and throughout the world.

The Alumni Board is therefore focusing its attention on developing areas that complement as well as relate to the work of University staff, such as awards and scholarships (over 120

applicants for 2007), Brain Food lectures, new Chapters and associated links, young alumni drinks and networking, connection with current students, and a range of e-communication developments (including an online interest inventory).

Our Victorian Chapter has established corporate membership of Graduate House in Melbourne, with accommodation links and benefits open to all UNSW alumni, and I am looking forward to hosting a function for young alumni at the Goodenough Club, London, on 16 November.

As we celebrate our 40th anniversary, we would greatly appreciate your ideas, interest and involvement. May I also encourage you to keep us up to date with where you are and what you are doing by contacting our Alumni Office on +61 2 9385 3279 or [alumni@unsw.edu.au](mailto:alumni@unsw.edu.au).

With best wishes, Dr Ian Walker, President



## U Committee

If you have been a student of UNSW over the past 40 years, chances are you have benefited from the tireless work of the U Committee which was founded by a remarkable group of women volunteers in 1963 and has raised several million dollars for facilities and services at UNSW for students and their families.

Money raised by the U Committee has been used to fund projects such as renovations for the child-care centres: Pooh Corner and Kanga House; the Scientia Building; Io Myers Dance Laboratory; the University swimming pool; University Club extensions; Matthews Plaza; and the UNSW Solar Racing Team.

The U Committee has also supported the arts on campus by raising funds for the acquisition of artworks, and was responsible for the Mona Hessing tapestry in the foyer of the Clancy auditorium and the Bronwyn Oliver sculpture in International Square, among others. It has sponsored the Australian Ensemble for many years and supported the Oral History project of the University Archive.

Other activities of the U Committee include the annual Lost Property Sale and weekly coffee mornings for newcomers to the University held in International House every Tuesday during session.

To celebrate its 40th anniversary, the U Committee also established the UNSW U Committee Award for Research Excellence in Science. The award of \$10,000 per year (over four years) is awarded to the student judged to have submitted the best PhD thesis.

Perhaps the most recognised activity of the U Committee is

the now famous University of New South Wales Book Fair, which celebrates its 40th anniversary in April next year. The Book Fair, an annual event since 2000, is usually held in the week of Anzac Day and is now one of Australia's best-known and most successful book fairs.

The original Book Fair was held at Unisearch House (since demolished) in 1968. Legend has it that before the first Book Fair Lady Io Myers, the wife of Sir Rupert Myers, and Jean Morven Brown slept at the University in order to get to Unisearch House quickly to set things out. They chose Professor Hugh Muir's office in Metallurgy because it had "a shower and a fridge".

**Check your shelves!**  
The U Committee, which is still based on the goodwill and hard work of volunteers, says that the continued success of its major annual event, the UNSW Book Fair, depends on the donation of books throughout the year.

of books throughout the year.

The U Committee accepts books in a wide range of categories including children's fiction – from preschool to young adults – as well as primary and high school texts. Adults books cover every topic from academic textbooks through to fiction, biography, travel, religion, music and hobbies. Magazines are also sold at the Fair.

Check your bookshelves for books you can donate and please contact the U Committee on 02 9385 0210 or visit [www.bookfair.unsw.edu.au](http://www.bookfair.unsw.edu.au) for more information. ■

## Master of Business and Technology



"Do you know about business, but need to know about managing technology?"

"Do you know about technology, but need to improve on business management?"

**Take your career to the next level** with a Master of Business and Technology from the University of New South Wales available via interactive online classes.

With over 1,000 students enrolled, The **MBT Program** at the University of New South Wales is an applied masters program for managers and professionals in technology-driven environments. Choose from an exciting combination of business and technology courses in one flexible, part-time program.

- learn how technology impacts on the broad spectrum of management skills
- work with experienced class facilitators and co-participants in online or Sydney-based interactive classes
- organise your study time to suit work, travel and family commitments
- ability to enrol without a prior degree

### Information Evenings

<b>Brisbane</b>	Thursday 08 November, 6.00pm Sofitel Hotel, 249 Turbot Street
<b>Parramatta</b>	Monday 12 November, 6.30pm Sebel Hotel, 350 Church Street
<b>Perth</b>	Wednesday 14 November, 6.00pm Parmelia Hilton Hotel, Mill Street
<b>Sydney</b>	Tuesday 20 November, 6.30pm Museum of Sydney, Cnr Phillip & Bridge Sts
<b>Canberra</b>	Thursday 22 November, 6.00pm Hyatt Hotel, Commonwealth Ave

Check previous issues

For further information visit [mbtprogram.info](http://mbtprogram.info)  
Tel: 61 2 9385 6660 Email: [mbt@unsw.edu.au](mailto:mbt@unsw.edu.au)

You would be surprised at who's doing an MBT@UNSW



**UNSW**  
THE UNIVERSITY OF NEW SOUTH WALES



## When looks can kill

The "beauty" genes that help some species attract mates can have deadly consequences ...

**S**ome of us sing, some of us dress up, while others get tough. It's a jungle out there and we do it with one thing in mind – finding a mate. But what cost does putting on a show have later in life?

Dr Rob Brooks, the founding Director of the newly formed Centre for Evolution and Ecology at UNSW, has a passion for understanding the how and why of sexual attraction and evolution. "One of the most expensive things that organisms do is attract mates and reproduce with them," says Dr Brooks. "If you want to invest a lot into reproduction that comes at a cost to your survival."

Dr Brooks observed this link between living fast and dying young, while studying guppies in 2000. He noticed that the offspring of the prettiest males died much earlier than others.

According to Dr Brooks, it has everything to do with the competition between individuals to reproduce, before the effects of ageing take hold. "As we age there are all sorts of genes involved that can have late-acting side effects. This includes genes that make you very attractive and shunt a lot of energy into helping attract a mate, but have a cost that is only exacted after you reproduce," says Dr Brooks.

"Such genes cause the deterioration of the individual, but don't necessarily come at a huge cost to evolutionary fitness if being attractive has allowed the individual to pass the gene to lots of offspring before the side effects kick in."

Dr Brooks believes understanding the role of ageing within evolution is a rich field of research. "There is so much yet to learn about how natural selection shapes patterns of ageing," he says.

The Centre for Evolution and Ecology plans to explore the relationship between ageing and natural selection, complementing other research

groups within the University currently studying ageing from social, economic and biomedical perspectives.

"One of our priorities is looking at the fundamental biology of why do we age, what does it mean to age, why does it happen, and types of interventions that might be successful to prevent it," says Dr Brooks. "Evolutionary researchers at UNSW are looking at ageing from the mitochondria (in our cells) right through to the role of sexual behaviour."

The Centre will also examine the differences in ageing between males and females. "Our researchers are looking at the question of how males and females age at different rates. Why do we get different types of late-onset diseases, or why we have different expected life spans," says Dr Brooks.

Another area of research at the Centre is evolutionary eco-toxicology – examining the role of pollutants in evolution and ecology. "We want to examine how the toxic pollutants that occur in our waterways, influence the evolution of organisms, including invasive species."

The Centre aims to build the University's already excellent research reputation at the interface of evolution and ecology by drawing together researchers from various schools. "Different disciplines have often solved similar problems in different ways. Something that is a problem for a particular discipline now, might have been solved but in a different and hard to recognise way," says Dr Brooks.

The aim is to provide a "training ground" for a new wave of scientists that better recognise the need to work in a cross-disciplinary fashion. "Student training is a really important part of this business. The biggest benefit of this is being able to draw upon the strengths of a number of different departments in educating students," he says. ■ – Dan Gaffney



## Zoom time Bollywood

With expertise honed in his Masters' degree course, Anupam Sharma built a brilliant career.

government bodies as they seek to generate further connections. Sharma recently consulted to the Department of Foreign Affairs and Trade's OzArts division and has worked closely with Austrade.

He has also worked as a lecturer, broadcaster, written a guide on how to factor India into film projects and contributed to workshops, delegations and film festivals. Like an Indian goddess, his business has so many arms, he quips.

Sharma himself is making a documentary, *Bollywood Downunder*, and has a number of films in development, including an Indo-Australian co-production. His quest is to create a "Bend It Like Beckham-style" filmic success with an Australian twist.

"There are natural synergies between India, the world's most prolific film nation, and Australia, the world's most professional film nation," he argues. Bollywood is keen to harness Australian expertise which Sharma attributes to the high standard and scope of education in film here.

Originally from northern India, Sharma grew up "all over the place", moving with his father's engineering career between Singapore, the Middle East and Tasmania. His maternal family were among the first Indian doctors to move to Australia in the '60s and, in the 1980s, Sharma, escorted his grandmother here. When he finished school in India, he moved to Australia and enrolled in a Communications course at the University of Western Sydney, before heading to UNSW for his Masters.

The Indian influence has endured, he says. "When editing film, I would always do it to the Indian song and dance genre." His Masters thesis, *Indian Film Singing a Different Tune*, explored the psychological, social, historical and political reasons for why all Indian films are musicals – their vibrance offered an antidote to the commercialisation at the end of British rule, he says. "Film became a unifying cultural spine in a country with so many religions and castes." Despite an inclination to research for a doctorate, he heeded the advice of Dr Ross Harley, a lecturer in the School of English, Media and Performing Arts, who urged him to go out and get his hands dirty.

Good timing. Since then, Bollywood has become a global subculture, spread by the millions of diasporic Indians. A sign of the times, says Sharma is that some "marsala" movies – named after the Indian mixed spice because they have "something for everyone" – are now being released in mainstream cinemas in Australia, and Bollywood has become a cultural trailblazer for wide-ranging links between the two countries. ■ – Deborah Tarrant





## Super-sized success

The story of Dinosaur Designs is like a dream come true: three students meet while doing degrees in visual arts at the City Art Institute (now COFA) become friends, start selling their wares at a local craft market, then go on to become one of the most successful design brands in Australia.

Sitting at the markets back in 1985, selling very '80s hand-painted Fimo earrings, Liane Rossler, Stephen Ormandy and Louise Olsen didn't exactly foresee their future as internationally successful designers and business people. They just kept an open mind and allowed the business to grow organically.

Rossler says, "We kind of started and didn't have an end in sight. Anything is possible. That's the way we see it." Their flexible creativity and positive attitudes have paid off.

More than two decades later, the team's distinctive resin jewellery and homewares are available in outlets worldwide, as well as in flagship stores in Sydney, Melbourne and New York.

**Anything is possible.  
That's the way we see it.**



They have exhibited in venues as prestigious as New York's Guggenheim Museum and undertaken numerous commissions for companies as diverse as Louis Vuitton and Nokia, but Rossler, Ormandy and Olsen aren't content to just sit back and enjoy success.

Instead they continue to look to the future, and to those new designers who will fill the ranks. In 2005, Dinosaur Designs established the COFA Student Award, marking their 20th anniversary since leaving the College, to support new talent and to acknowledge the significance of their time at art school.

Rossler believes: "It was so important to be around like-minded people. It provided a rich experience."

In 2006, they became a carbon neutral company as another way of nurturing the future.

As for the next 20 years? Once again, they are taking an open-minded approach. Rossler laughs, as success just keeps on rolling "stopping is something that hasn't occurred to us".<sup>n</sup>

# UNSW Foundation

Registered Charity No.: CFN 12473 ABN 96 426 137 686

UNSW Foundation was established in 1988 to build the basis for supporting future generations in the University community for the greater and continued benefit of society. Alumni, friends and commercial partners play a critical role in helping UNSW Foundation achieve its mission – which is to enhance the financial and reputational capital of the University. They do this by making personal gifts in support of scholarships, prizes, fellowships and research – and / or by encouraging corporate gifts.

As a result, UNSW Foundation offers more than 230 scholarships and over 50 prizes per annum. These can be for high achieving or disadvantaged students across all faculties. These awards play an increasingly important role in the University's ability to attract and support the best students from Australia and elsewhere – and to maintain its reputation for excellence in teaching and research. We invite you to make a gift to the University by completing the coupon below or online at [www.donateunsw.edu.au](http://www.donateunsw.edu.au).

Title: \_\_\_\_\_

First Name: \_\_\_\_\_

Last Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Postcode: \_\_\_\_\_

Country: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Please update my details as per the above

Please note – this is my business address

#### Please mail your gift to:

UNSW Foundation Limited

Reply paid 61244

Sydney NSW 2052, Australia.

or donate online at [www.donateunsw.edu.au](http://www.donateunsw.edu.au)

You can also call +61 2 9385 3202 with your credit card details; or fax this form to +61 2 9385 3278.

Donations of \$2 or more are tax deductible.

**UNSW guarantees that 100% of your gift will be applied as directed. All administration and fundraising costs for UNSW Foundation are met from other sources.**

The information requested in this form is voluntary. It is for use by UNSW and UNSW Foundation to maintain your details for the purposes of communicating information about the University and associated activities to you. If you do not wish to receive any further information or you wish to check your details please contact us on +61 2 9385 3202 / [unswfoundation@unsw.edu.au](mailto:unswfoundation@unsw.edu.au). UNSW's Privacy Policy can be viewed at [www.infonet.unsw.edu.au/poldoc/privacy.htm](http://www.infonet.unsw.edu.au/poldoc/privacy.htm)

UNSWW1107



# Open for Business

Visit Australia's leading business school  
at [www.business.unsw.edu.au](http://www.business.unsw.edu.au)



AUSTRALIAN  
SCHOOL OF BUSINESS™  
THE UNIVERSITY OF NEW SOUTH WALES