

ISSUE 50 • MARCH/APRIL 2009

uniken

Making waves

Islamic and surf cultures merge



UNSW video
channels go live

Black history

Is Obama America's
first black president?

White coat crusade

Saving lives around the world



UNSW
THE UNIVERSITY OF NEW SOUTH WALES

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Cover: Muslim swimwear designer Aheda Zanetti with one of a series of surfboards which combine Islamic and surf cultures
Credit: Peter Rae, *The Sydney Morning Herald*

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Celebrating **60 YEARS** of extraordinary achievement

WHY IS IT SO?



Photo credit: Rick Munitz

Why do stars twinkle?

*By Professor Michael Burton,
UNSW School of Physics.*

Stars themselves don't twinkle. It's simply that the light from them has to pass through several kilometres of the Earth's atmosphere and the atmosphere blurs the light before it reaches our eyes.

As light passes through the atmosphere it bends, just as a stick seems to bend where it enters water. Light passes through water more slowly than through a vacuum and the same is true for the atmosphere. The amount of bending also depends on the temperature, with tiny fluctuations causing the light rays to bounce around as they pass through. The light is blurred, a phenomena we notice as twinkling.

While the twinkling may look beautiful, astronomers want the sharpest images possible. Astronomers call this the "seeing". The only way to overcome these limitations is to put your telescope in space, but that is very expensive. Astronomers now try to mitigate seeing, by adjusting the optics of their telescopes to compensate for it.

Another way to get good images is to go to a site where twinkling is minimal. UNSW astronomers have discovered that on the very summits of the Antarctic plateau – at elevations above 5000 metres – the seeing is the very best on Earth. But the telescope needs to be raised above a narrow surface boundary layer to benefit from this. UNSW's Pathfinder for an International Large Optical Telescope (PILOT) project will allow for the clearest images possible from a telescope on the Earth's surface. •

FOR THE RECORD

"Worse than useless." Professor Neil Stoughton of the Australian School of Business commenting on the Rudd government's stimulus package – ABC Radio.

"A drink a day can keep dementia away." Professor Leo Simons of the Faculty of Medicine – Sunday Territorian.

"I think it's part of this prestige idea that if you have an interesting job title you must be an interesting person." Professor Chris Jackson, Australian School of Business on the backlash against self-important job titles – Courier Mail.

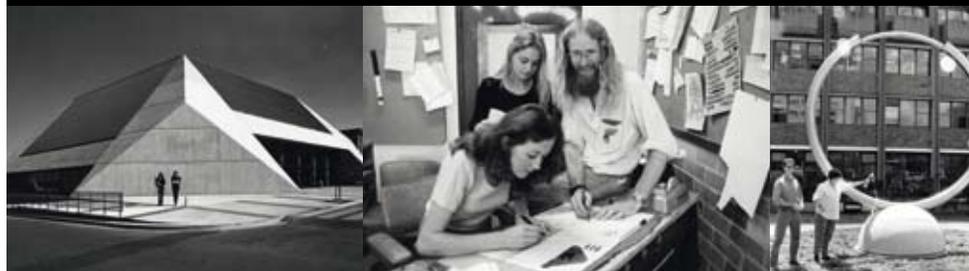
"Our findings will help to improve seasonal rainfall forecasts and directly benefit water and agricultural management for farmers." Dr Caroline Ummenhofer, Climate Change Research Centre, on breakthrough research linking temperatures in the Indian Ocean and rainfall in the south-eastern states of Australia – The Australian.

"Despite (sometimes) good intentions, the bulk of policy made for Indigenous people hasn't improved Aboriginal lives and in many instances has made them infinitely worse."
Dr Sarah Maddison from the School of Social Sciences and International Studies, commenting on whether the Rudd government can provide real autonomy for Indigenous Australians – National Indigenous Times.

"Australians are telling us that they do not support legalisation of drugs, but they do support government programs that reduce harm for drug users."
Associate Professor Alison Ritter of the National Drug and Alcohol Research Centre – The Daily Telegraph •



Celebrating 60 years of extraordinary achievement



This year our University celebrates its 60th anniversary. Not a long history compared to such august institutions as Oxford or Cambridge, or even some of our “sandstones” here in Australia. But a rich history and one I think that, by its very brevity, can lay claim to extraordinary achievement: we are one of the very few institutions of our age to be ranked among the top 50 in the world.

The journey from the University’s incorporation in 1949, as the New South Wales University of Technology, has been remarkable. As Patrick O’Farrell noted in his colourful history of the first 50 years, (*UNSWA Portrait*, UNSW Press), this is a story of collective endeavour – from leaders such as our first Vice-Chancellor, the visionary Sir Phillip Baxter, to the thousands of hard-working and determined people who have contributed to what might have seemed, in 1949 at least, an impossible dream.

The brash, unorthodox newcomer, starting from nothing just six decades ago, has grown into one of Australia’s premier universities – with 40,000 students, a 5000-strong staff and a reputation for world-class research and teaching excellence. In the words of our longest-serving Chancellor, the late Gordon Samuels, this transformation was achieved “very much under the ordinary time for the course ... (UNSW) was the epitome of the hungry fighter seeking success and recognition”.

It is a history to be proud of – and while we are not planning lavish celebrations, we will be taking opportunities throughout the year to mark this important milestone. There will be a special anniversary feature in *Uniken*, while our alumni magazine, *UNSWorld*, will mark the occasion by featuring 60 of our outstanding alumni. Among a range of events, we are planning a special graduation in Beijing in October, to coincide with the 60th anniversary of the People’s Republic of China.

Professor Fred Hilmer
Vice-Chancellor

Leading by example

UNSW has been judged the top university in Australia for the quality of its learning and teaching.

The results of the Federal Government’s Learning and Teaching Performance Fund for 2009, announced by the Deputy Prime Minister Julia Gillard, show UNSW achieved top overall scores for both excellence and improvement.

The Fund rewards universities that demonstrate excellence in teaching and learning for domestic undergraduates, awarding scores across four discipline groups.

For the third consecutive year the University is number one in the country for business, law and economics. It also achieved the top score for science, engineering, computing and architecture. It rated in the A1 band for humanities, arts and education, and achieved an A2 ranking for health.

UNSW will receive a total of \$6.9m from the Fund, the largest allocation to any Australian university. •

Golden opportunities

UNSW’s medical researchers have made a golden start to 2009, securing over \$46m in grants from the National Health and Medical Research Council (NHMRC). UNSW professors dominated the latest round of NHMRC Program Grant funding, winning a record 80 percent of the \$59.6m on offer in NSW.

Professor John Kaldor, from UNSW’s National Centre in HIV Epidemiology & Clinical Research (NCHECR), will receive \$9.1m for research into the prevention and management of sexually transmitted infections; **Professor Richard Bryant**, from the School of Psychology, \$7.1m to build the nation’s capacity to reduce psychological problems after trauma such as Victoria’s devastating bushfires; **Professor Perminder Sachdev**, \$6.1m to carry out long-term studies into new methods of diagnosing dementia; and **Professor Robert Graham**, at the Victor Chang Cardiac Research Institute, \$9.4m to enhance investigations into defects in the development, repair and function of heart-muscle cells that are responsible for adult-onset heart disease.

Also announced recently were prestigious \$4m NHMRC Australia Fellowships awarded to **Professors George Paxinos** and **Levon Khachigian** for their groundbreaking medical research in neuroscience and vascular cell and molecular biology. UNSW **Professor Richard Harvey**, from the Victor Chang Institute, also received a \$4m boost for his work on congenital heart disease.

The accolades came on top of a \$2.4m NHMRC capacity-building grant awarded to **Professor Perminder Sachdev**, to develop a cohort of young researchers who can translate knowledge of the major neuropsychiatric problems facing Australia’s ageing population. •

Father of Reconciliation joins UNSW

Pat Dodson – one of Australia’s most prominent Aboriginal leaders and former Chairman of the Council for Aboriginal Reconciliation – will head up a new Indigenous unit at UNSW.

His professorial appointment is in the Indigenous Policy and Dialogue Research Unit, which is part of UNSW’s prestigious Social Policy Research Centre in the Faculty of Arts and Social Sciences.

Professor Dodson’s work will foster new types of dialogue, involving all Australians, on issues most vitally affecting Indigenous people.

“We will begin this process at the regional level, where too often local communities feel excluded from policies and decisions that directly affect their daily lives,” Professor Dodson said.

Professor Dodson will be featured in the next edition of *Uniken*. •



Photo credit: Susi Hamilton

Aboriginal deaths: a failure to act

Twenty years after a royal commission into Aboriginal deaths stirred our conscience, Indigenous Australians continue to die in prisons due to government inaction, a survey of legislative responses to coronial recommendations has found.

The Royal Commission’s 1991 Final Report called for mandatory responses by governments to recommendations made by a coroner in an inquest.

However, the survey – contained in a special edition of the *Australian Indigenous Law Review* – shows that many governments have failed to respond.

“The survey shows that the Royal Commission’s call for mandatory responses has been largely ignored, which obviously is not good enough,” said one of the *Review*’s editors, Megan Davis, director of the UNSW Indigenous Legal Centre.

“A consistent legislative approach is needed across jurisdictions if more deaths are to be prevented,” said Davis.

The edition was launched by the Minister for Home Affairs, Bob Debus. •

Taking care of business

The AGSM MBA Program has been ranked as the leading full-time MBA in Australia and 52nd in the world in the *Financial Times*’ (UK) 2009 ranking of the top 100 global MBA programs. This is the tenth consecutive year the AGSM MBA Program, which is delivered by the Australian School of Business, has been in the top 100. •

Watershed moment

The Federal Government has announced UNSW will take a senior role in the new \$60m National Centre for Groundwater Research and Training (NCGRT).

It is expected that UNSW will receive about \$8m over five years through its Connected Waters Initiative – jointly supported by the faculties of Science and Engineering – for new capital equipment, research projects, scholarships and additional staff.

The bid included a commitment from the NSW government for a further \$815,000 to establish a research and training facility for groundwater issues on a rural property already owned by UNSW at Wellington, in central-western NSW.

The Centre is jointly funded by the Australian Research Council and the National Water Commission with another \$50m contributed from the 20 organisations involved. The consortium is led by Flinders University. •



Tough landing

Padded headgear does not reduce the rate of concussion or head injury for rugby union players, according to a major new study led by UNSW. The study concluded that although individual players may choose to wear the padded headgear, its routine use cannot be recommended to reduce the chances of sustaining concussion while playing or training. A team led by Associate Professor Andrew McIntosh, a biomechanics expert in the School of Risk and Safety Sciences, monitored the on-field performance of more than 4000 rugby union players.

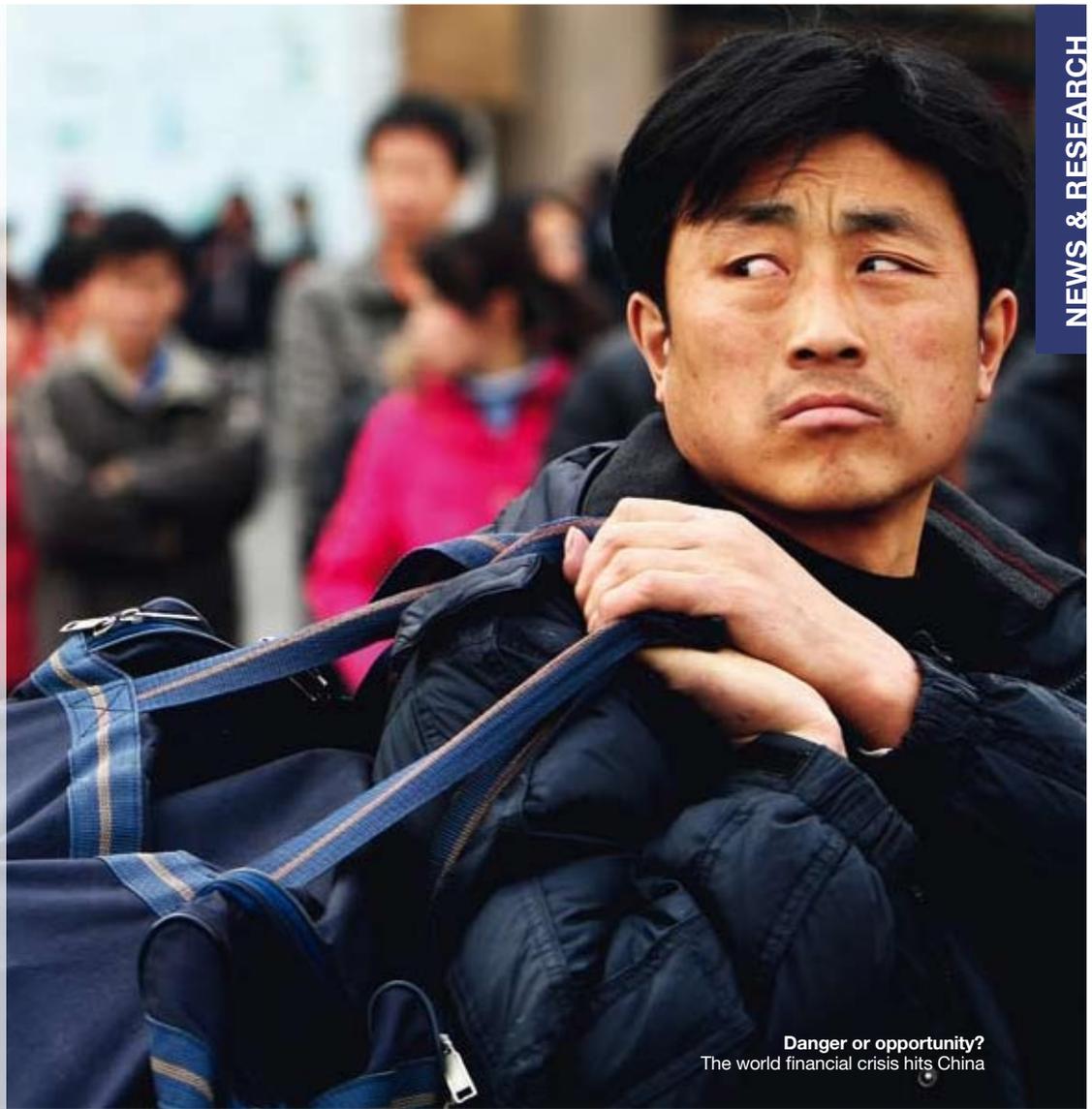
“Skull fractures and intracranial bleeding are rare in rugby injuries, but concussion is relatively common,” says McIntosh. “There’s some evidence that the standard headgear may prevent some minor head wounds but our study found that it was of no benefit in preventing concussion.”

The research was funded by the International Rugby Board (IRB) with support from the Australian Rugby Union.

Photo credit: Darren Pateman/Fairfax photos

The sleeping dragon

As the world financial crisis bites, most Chinese are laying low and continuing to save, but others are poised to buy up interests in foreign companies.
By Chris Sheedy.



Danger or opportunity?
The world financial crisis hits China

The Chinese middle-class save for a rainy day. Compared to Australians, who on average save very little or nothing at all, the Chinese tend to put away around 27 percent of their disposable income says Professor Mark Uncles of the Australian School of Business. But that rainy day has arrived. The global financial crisis raises the interesting issue of whether those savers are actually going to spend their funds and therefore provide a much-needed boost to the wider economy.

“I think we’re unlikely to see a change in the savings ratio or, if there is a change, Chinese consumers will save an even greater proportion of their income,” Uncles says. “They are likely to feel confirmed in their view that they should have saved.”

This will affect the Australian economy too, says Uncles. If the Chinese economy is not boosted by spending then fewer of our products and raw materials, such as iron ore, copper and coal, will be needed. “Given our dependence on resource exports to China, this is seriously bad news for Australia, particularly those states more prone to boom and bust in the resources sector such as Western Australia, Queensland and South Australia.”

Uncles’ study, a collaborative effort with Fudan University in Shanghai that began

in 2005, shines a new light on the Chinese consumer. Despite broadly understood cultural differences between the East and the West, Uncles says urban middle-income people in China have remarkably similar patterns to equivalent groups in the West when it comes to buying branded products and patronising modern stores.

Chinese are using some of their savings to acquire interest in overseas companies – such as mining stocks.

Thanks to such international outlets as Carrefour and Wal-Mart operating within China, the structures, brand management systems and operations of many organisations have very similar presentation and processes to Western business models. The influence extends to consumer behaviour.

Younger Chinese follow brands, trends and fashions, Uncles says. As some of them abandon the major cities and move back to their home towns as a result of the economic crisis, they will take this knowledge and those Western-style expectations with them,

creating demand for new levels of service and products in the hinterland.

This creates opportunities for smart marketers in China to turn the current economic climate to their advantage. “During any economic downturn there will be winners,” Uncles says.

“The only question is who the winners in China will be. We’re seeing evidence that the Chinese are now using some of their savings to acquire a significant interest in overseas companies – such as mining stocks. So rather than foreign companies moving in to China, we’re seeing greater evidence of China moving in on foreign companies.”

“If foreign businesses want to make the most of the opportunities offered by China then it’s important for them to realise that now is not the time to prove you’re only a fair-weather friend by pulling out of their market. Now is the time to strengthen relationships. And when the world economy recovers those who stayed in China are likely to be rewarded by the Chinese political community as well as by consumers and local business communities.” •



Listen to the podcast by clicking on the iTunes icon on the UNSWTV home page www.tv.unsw.edu.au



East meets West ... artist Phillip George with Muslim swimwear designer Aheda Zanetti (foreground) and model.

Making waves

A COFA artist is claiming space for Muslim culture on the Aussie surf scene. Fran Strachan reports.

Surf culture, with its laid-back sensibility, is rarely associated with overt political statements.

But artist, surfer and COFA academic Dr Phillip George, has utilised the surfaces of 30 custom-made surfboards to inscribe historic Islamic motifs in a fusion of Eastern and Western culture.

George hopes the unique integration of Australian beach culture with Islamic art will help bridge the tense cultural divide that culminated in Sydney three years ago with the Cronulla Beach “race riots”.

“From an Arabic point of view the designs are familiar, but when you see them on a surfboard they claim some space for Muslims in the Aussie surf scene,” says George.

The surfboards, which form George’s most recent exhibition, *Borderlands*, are adorned with photographic images taken in Persian, Ottoman and Arabic mosques during the artist’s extensive travels in the Middle East.

The boards are accessible, providing a transparent view of a culture too frequently shrouded in mythology and misrepresentation, he says. George’s political statement is strong but simple.

“This isn’t about blaming anybody. It’s just saying, ‘Hey, look at

this artwork coming out of Islamic culture.’ In a soft way the boards are saying, ‘Everyone’s got a right to be here.’”

En masse, the boards command an almost religious veneration that replicates the atmosphere of the mosques the designs came from. The artwork includes intricate details from internal walls and entranceways and “Tree of Life” motifs chosen for their design, colour, patina and historical and spiritual significance.

George says the motifs were replicated with “the utmost respect” for Muslim culture, despite their unusual placement.

“There are two boards that have ‘Inshallah’ or ‘God Willing’ inscribed on them. None of the boards will be stood on or ridden, they are artworks and it would be disrespectful for those words to be underfoot,” he says.

David McNeill, deputy director at the Centre for Contemporary Art and Politics at UNSW, said the surfboards had a “seismic resonance that is entirely of their time and place ... they exemplify political art at its best and most powerful.”



Watch the video in UNSWTV’s Arts and Society channel at www.tv.unsw.edu.au

Photo: Peter Rae, The Sydney Morning Herald



Photo: Casula and Breenpace Gallery copyright Phillip George 2009





Photo credit: Jason South and Fairfax

Unmasking Australia's big dry

The causes of south-eastern Australia's longest, most severe droughts have been discovered, with the surprise finding that they originate far away in the Indian Ocean.

A team of Australian scientists, led by Dr Caroline Ummenhofer and Professor Matthew England of the UNSW Climate Change Research Centre, has detailed for the first time how a phenomenon known as the Indian Ocean Dipole (IOD) – a variable and irregular cycle of warming and cooling of ocean water – dictates whether moisture-bearing winds are carried across the southern half of Australia.

The landmark study explains the current record-breaking drought in south-eastern Australia and solves the mystery of why a string of La Niña events in the Pacific Ocean – which usually bring rain – has failed to break it.

It also reveals the causes of other iconic extreme droughts in recorded history, notably the World War II Drought from 1957 to 1945 and the Federation Drought from 1895 to 1902, and challenges the accepted understanding of the key drivers of Australia's climate.

The findings are published in the journal *Geophysical Review Letters*. The team included researchers from the CSIRO Centre for Australian Weather and Climate Research, and the University of Tasmania.

“We have shown that the state of the Indian Ocean is highly important for rainfall and droughts in south-east Australia. More than the variability associated with the El Niño/La Niña cycle in the Pacific Ocean, the Indian Ocean Dipole is the key factor for driving major south-east Australian droughts over the past 120 years,” says Dr Ummenhofer.

“During this latest drought – the so-called ‘Big Dry’ – recent higher air temperatures across south-eastern Australia have exacerbated the problem.

“Our findings will help to improve seasonal rainfall forecasts and therefore directly benefit water and agricultural management,” she added. •

By Bob Beale

A rising opportunity

A major new facility will give UNSW unprecedented capabilities in solar-cell research.

The world record for silicon solar-cell efficiency has been held by UNSW academics for 20 years, but despite international leadership in research, Australia has fallen behind other countries in the manufacturing and implementation of solar power technologies.

Now the University is poised to become a regional leader beyond the laboratory, with the establishment of a solar-cell pilot production line which will dramatically enhance Australia's national capabilities in solar photovoltaics research and development.

UNSW's pilot production line will be known as the Solar Industrial Research Facility (SIRF). The SIRF is one of three foundation projects of the Australian Solar Institute (ASI) – a \$100m research and innovation grant scheme established by the Federal Government in January. The Australian National University and the CSIRO are the other partner organisations in the ASI, establishing projects in solar photovoltaics and solar thermal technologies respectively.

“UNSW's capabilities in photovoltaic research have been recognised around the world for many years.”

UNSW Faculty of Engineering Director of Business Development, David Jordan, said the SIRF will be a pilot scale, industrial-quality manufacturing line which will be the only one of its kind in Australia, and will provide the backbone infrastructure for advanced crystalline silicon cell technology at UNSW and ANU.

“UNSW's leading capabilities in photovoltaic research in the ARC Photovoltaics Centre of Excellence have been recognised around the world for many years and with this facility we are able to demonstrate them beyond the lab and in an industrial environment,” Mr Jordan said.

A new, purpose-built interim building on the UNSW upper campus will be home to the SIRF initially while the University's recently announced, \$150m Energy Technology Building (ETB) is completed. The Federal Government committed \$75m to the ETB in December 2008. •

By Peter Trute



Powering into the future ... the Energy Technologies Building

The vision of Alec Tzannes

One of Australia's best-known architects hopes to influence future generations – and not just through his own buildings. Peter Trute meets the new Dean of the Faculty of the Built Environment.

Visit the NSW State Library and you can see sketches by Alec Tzannes of some of the world's most famous structures. The celebrated architect has recorded iconic buildings including the Ponte Vecchio in Florence and the Parthenon in Athens. In the same collection are sketches of the Sydney skyline. It's a mix which represents well Tzannes' passions for enduring design and the city of Sydney. Those interests – and a conviction that good design has a vital role in saving the planet – played a big part in his recent appointment as Dean of UNSW's Faculty of the Built Environment (FBE).

Professor Tzannes, one of the nation's best-known architects, sees his profession as central in determining the shape of the world to come – not only the physical dimensions of buildings but the sustainability of our societies. When he accepted the position of Dean last October, he saw the opportunity to engage with the architects, builders and designers of the future. This new generation of professionals, he believes, must be equipped now to face challenges never confronted by their predecessors.

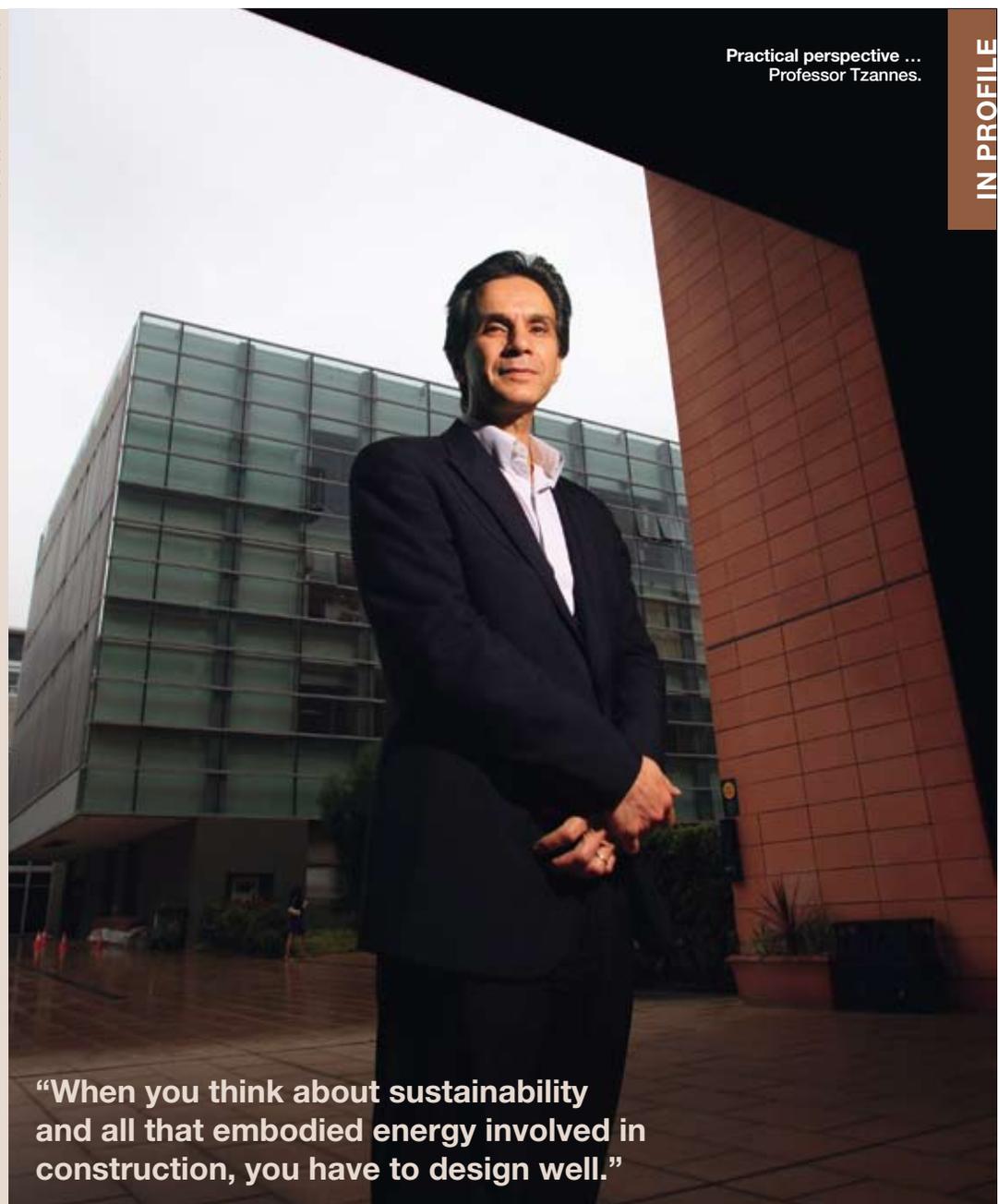
"I think we are going to look back on this period and see it as an enormously significant period of change," says Tzannes.

"I felt privileged to be considered for this role because it afforded me an opportunity to bring into the Faculty a practical perspective and contribute to developing even more pathways and relationships between real-time, real-world architecture and the teaching and virtual modelling which happens in academia."

Stronger ties between academia and industry are one crucial factor in meeting what Tzannes sees as a major challenge facing society today: how to design, construct and manage sustainable built environments.

"When you think about sustainability and all that embodied energy involved in the construction process, you have to think about designing well," he says.

Photo credit: Patrick Cummins



"When you think about sustainability and all that embodied energy involved in construction, you have to design well."

Another factor is teaching students the art of collaboration: the architect with no grounding in urban design will struggle in the mire of council planning requirements. To this end, FBE, with programs in architecture, design, construction and planning, is a powerful teaching facility.

"We recognise that students enter our programs to become a specialist in one of many fields of endeavour, for example, a builder, a planner or an architect, but what tends to happen is we have points of intersection across all our programs," says Tzannes.

"So the culture of the collaborative project, the interface between all the related disciplines in FBE, is far more alive as a result of being represented or researched under the one roof than they are in other design and architecture faculties. There is no faculty that delivers graduates better-placed to deal with the urban world as it emerges at a complex level."

Tzannes will spend three days a week at his office in FBE and the remainder of his

time at Tzannes Associates, the high-profile architectural firm he founded in 1982.

"I was fortunate to be at the stage in my professional life where I could split my role because my practice is stable and healthy, but I'm passionate about continuing as a practising architect," he says.

Tzannes lists among his recent reading *The Fellowship*, a study of the architectural luminary Frank Lloyd Wright. Yet in a nod to the interdisciplinary world of the future, the book that he encourages all students to study is not strictly about architecture. *The Powerbroker: Robert Moses and the Fall of New York* is the Pulitzer Prize-winning, 1974 biography of the powerful bureaucrat hailed as "New York City's Master Builder".

"To read this authoritative account of how New York State and New York City developed from about 1910 through to about 1970, as an architect you are very well advised and warned about how to get things done and what can happen in the process," says Tzannes.

"It's a fabulous story." •

Thinking beyond the box

UNSW's own TV channel



UNSW has just become the first university in Australia to have its own high-resolution online video channel and its own TV show on Foxtel. Louise Williams reports.

Midway through last year UNSWTV – that click-on screen on your UNSW web front page – suddenly found itself with a potential global audience of 1.2 billion people.

The story was an environmental research breakthrough which had been snapped up and commercialised in China. UNSWTV's modest web-based operation went into co-production with China's Phoenix TV, the Murdoch-owned global satellite network, to tell the tale of an innovative UNSW solution for the polluting fly ash residue from coal-fired power stations.

Using shared footage from Australia and China, the story was broadcast by Phoenix, which reaches up to 1.2 billion Mandarin speakers worldwide. At the

same time it was uploaded in English onto UNSW's web-based channel. What might have previously been the stuff of academic and industry journals was out there for the world to see.

Web-based video is the ultimate in show and tell. The marriage of new digital media technology and global web-based video platforms like YouTube is revolutionising the way media is produced and consumed. We are all broadcasters now; or at least we can be if we have access to a camera and the internet.

Already more than half a million views have been logged since UNSW's debut on YouTube in November 2007.

A new high-resolution platform launched in February – with easy-to-



So many channels, so much on ... (clockwise from bottom) UNSWTV team Shaun Dougherty, Brad Hall, Mary O'Malley and Patrick Stoddart

Photo credit: Grant Turner and Mediakoo

“surgery without stitches” have brought international investors.

The so-called “long tail” of the net means searchable video can be shared across any digital platform – even if your story will never make the evening news. And, for stories that do make the headlines, UNSWTV footage is already being used by major broadcasters.

Then, there’s learning and teaching. Global leaders such as Harvard University are posting free-access videos and UNSW is following suit with content also available on iTunes U. Does that mean empty lecture halls as students log on at home? Not necessarily, according to Pat Stoddart, UNSW’s manager, Web and Innovation, and co-project leader of UNSWTV. One major Australian study, he says, found some slight falls in attendance are balanced against the opportunity to review and revise.

UNSW was one of the first Australian universities to jump into the new video web space, with a \$700,000 investment and a professional UNSWTV media team led by Executive Producer, Emmy-award winning documentary maker, Mary O’Malley.

“There is such a profound difference between telling and showing. People are now starting to realise video is a very powerful medium,” she says.

UNSW on YouTube’s view numbers, she says, have exceeded expectations. A clip showing a robotic clarinet, for example, went to 20,000 in a couple of days, then to over 40,000 views.

“Even with modest view numbers of a few thousand you can reach the same number of people in a week with video that might take you a year to reach in face-to-face talks.”

The new high-resolution UNSWTV platform means better quality pictures, full screen capability, easy uploads and none of the inappropriate related links that sometimes pop up on YouTube. UNSW videos will continue to be added to the existing YouTube channels. Students have their own new YouTube-based channel, accessed through the Arc website and an iTunes U-based radio station.

UNSWTV is not a PR machine, it’s an information platform, say O’Malley and Stoddart. It’s an open space for debate, opinion and comment and the rules are based on the simple YouTube model. Content will only be pulled down if it is deemed offensive.

“What the new UNSWTV allows is for an entire community to self-publish material ... it is a paradigm shift, this really is open communication,” says Stoddart.

follow instructions on how to upload material for staff and students – means the video web space is just going to get more interesting.

Already it’s a window into learning and life at UNSW. Tens of thousands of people from all over the world have peered through the video web browser into student flats, lecture theatres and labs. They’ve traipsed along “Jay’s way” spoof campus tour and followed the satirical student-produced “faq you” info-series.

Other videos are taking UNSW to the world. UNSWTV’s “Don’t get sucked in...” video which reveals rips in the surf using time lapse footage of purple dye has been picked up by surf websites and broadcasters worldwide. Videos of breakthroughs like “green steel” and

The accidental video star

When Richard Buckland talks hundreds of thousands of people listen.

And, perhaps, no-one is more surprised than the modest UNSW computer science lecturer himself.

Buckland’s accidental rise to global teaching renown began with a humble goal and a target audience of two.

The former actuary, now a senior lecturer at UNSW, wanted to find a way to allow passionate, young “computer enthusiasts” to access his first-year computer science course. The problem was, he says, getting kids still in high school onto the UNSW campus for lectures dotted throughout the school week.

The solution was UNSWTV. But, when Buckland uploaded his video-taped lectures onto the YouTube-hosted platform, last year’s trial class of two high school students turned into a global virtual lecture theatre. On UNSWTV’s YouTube channel his lectures have had 135,000 hits and on iTunes U numbers went higher, he says, especially after Apple tagged his 55-hour series as a favourite.

“I wasn’t sitting at home thinking about the power of video, so the whole worldwide thing was entirely accidental,” Buckland says.

His virtual sit-in students are using the lectures for anything from self-education, to refreshing their qualifications, backing up their own tertiary studies, or to decide whether computing is interesting enough to embark on a face-to-face degree. Buckland’s belief in the role universities play in disseminating knowledge beyond their gates has been bolstered by the flood of personal emails from around the world.

“The idea that the people who can’t afford to go to uni, for example, can watch these videos and take away a positive learning experience is very exciting from a social justice point of view.

“In my whole life I could never speak to so many people face-to-face so that makes me very happy.”

Buckland’s first lecture series was recorded before he realised just how many people might tune in. He’s still adamant the UNSW students in the lecture theatre come first and that teaching should never become a tool for self-aggrandisement, despite a Facebook student fan club in his honour, and a 2007 national award as one of Australia’s most outstanding university teachers.

“Teaching is not a cult of personality. The lecturer is quite secondary; the important people in the room are the students. They are your focus and the videos are a bonus,” he says.

However, with a second core subject due to be filmed later this year he does have one nagging worry, “When you think only a couple of people are watching you are relaxed. Maybe this time I’ll have to brush my hair.”

UNSW has a limited number of places for high school students to study first year computing this year. Please see: <https://wiki.cse.unsw.edu.au/info/HighSchoolComputing> •



Photo credit: Patrick Cummins



"They used to say a picture paints a thousand words," says Russell Lowe. "Video is 30 pictures per second."

Photo credit: Susan Trent

Game on: how video games are changing architecture

Of the millions of gamer devotees around the world of "Unreal Tournament 3" and "Crysis", a handful have put down their digital guns.

A team of academics at UNSW is using the gaming software for a very different interactive purpose, and sharing the experience via UNSWTV.

Lecturer in Architecture, Russell Lowe, is leading a project to build interactive 3D

visualisations of proposed buildings. By modifying animated games characters, which would otherwise stalk around their virtual worlds looking to kill, UNSW researchers are able to test the usability of major projects. One current consulting program has digital nurses working in a virtual version of a planned public hospital; to make sure every aspect of the design works before construction begins. The first

nurses were made from "shooter" skeletons; their guns removed. Now Lowe's team use a full custom-made skeleton and animations, so their nurses can perform specialised tasks.

"There are enormous advantages in using games software for purposes other than entertainment. You can gauge how the design works and avoid very expensive problems such as doors being too narrow for moving beds."

For architecture students at UNSW, the 3D visualisation experience begins immediately. By the end of their first week, first-year students are creating videos of 3D images and posting them on UNSWTV. Video is also working at all levels to improve teaching, says Lowe. He's compiled entire lectures using video from YouTube, and posts his own teaching material and research videos on UNSW's YouTube channel.

"Physically we teach 200 students a year in this particular course, for example, but with web video you can reach many, many more and potentially contribute to education in a much broader way," he says.

"They used to say a picture paints a thousands words - video is 30 pictures per second." •



Watch the video on UNSWTV www.tv.unsw.edu.au by following the links to the Engineering and Design channel.

See what I mean?

Photo credit: Mike Gal



Adam Micolich has no illusions about the difficulties of engaging second-year Physics students. The UNSW senior lecturer's own enthusiasm for the way the physical world works is palpable, but it can be a hard sell when you are standing up in front of a lectern trying to get complex concepts across by waving your hands around.

Which is where video comes in. Nowadays, Dr Micolich's second-year students can see what he means.

When he wants to explain why water expands when it freezes, there's extraordinary footage of a lake freezing over in Canada, with all the pinging and popping noises as the expanding pieces of ice compete for space. Or there's footage of a can collapsing as the air inside it cools. What he'd really like for his growing teaching collection is good-quality footage of an egg frying on a computer processor to demonstrate the growing problem of heat-generation as computers get smaller and faster.

"It's the frustration of trying to get things across waving your hands around which gets you in," says the senior lecturer of his video teaching methods.

"Physics is a difficult subject to get across. So video is a dream, because you can walk in and show students what they are going to understand, and they can get excited about it. If you just come in with equations, it can seem like blah, blah, blah."

Micolich says useful video is increasingly available on public platforms like YouTube and the BBC, but copyright remains complicated. He sources or produces many of his own videos and posts them through UNSWTV on YouTube for other physics lecturers to use. In the future he sees an emerging academic role for web-based TV platforms; as visual academic archives, which will be as important as libraries full of books and papers. •

Broadcasting to the world

When Mandla Mandela, the grandson of Nelson Mandela, moved an audience to tears during a public lecture at UNSW last year, his message didn't just stop there. With UNSWTV's cameras rolling, his speech about the importance of compassion – and life within the family which led the struggle against apartheid in South Africa – became a publicly accessible resource. Not only was the video posted on the UNSWTV website, but it was picked up in its entirety by ABC Foru, a collaboration between the Australian broadcaster and the US fora.tv, which brings together the most engaging speeches and debates from all over the world.

In just over a year, UNSWTV footage and packages have appeared on ABC news on ABC1, ABC Foru on ABC2, the Australia Network, Channel Ten news, Reuters TV, the Chinese-language global satellite channels of Phoenix TV, and on news websites such as smh.com and news.com.

With the explosion in broadcasting made possible by digital technology, UNSWTV is likely to be seen more often in future on television programs and on web-based video sites.

Recently, UNSWTV was approached by Aurora TV, the new community station on the Foxtel and Austar networks, to produce regular half-hour shows. As both networks are promoting into schools, the UNSWTV specials will feature material geared to the transition from school to university, from students talking about life on campus to their uni projects, including one group building their own racing car. UNSWTV will also feature on the new A-Pac (Australian Public Affairs Channel) cable and satellite channel produced by Sky News.

UNSWTV project leaders, Mary O'Malley and Pat Stoddart, said the University is committed to making material available free, to enhance the University's capacity to educate beyond its lecture theatres. •



Gums give up the ghost

Ancient red river gums are dying in vast numbers due to water diversions from the Lachlan River in central NSW, according to a new report. It reveals 85 percent mortality over the past 12 years among *Eucalyptus camaldulensis* within the Booligal Wetlands.

UNSW researchers investigated more than a century of rainfall patterns and hydrological changes to the river, as well as changes to the supply of water to the gum's swamp communities within the nationally-recognised wetlands. They then analysed a sequence of aerial photographs, spanning 35 years, to determine trends in river red gum health, backed up with on-the-ground assessments.

The devastation of the gum species is the most obvious and measurable effect of ecological decline, although waterbirds, fish, frogs, reptiles, invertebrates and plants are likely to be affected by water restrictions to this sensitive area, says the report by researchers at the UNSW Australian Wetlands and Rivers Lab.

The report's lead author, Jessica Armstrong observes, "These wetlands are now like graveyards. The red gums are like silent dead sentinels in what was once a remarkably productive ecosystem, brimming with biodiversity. We just don't know how much all of the other plants and animals rely on the red gums."

The researchers found no long-term decline in catchment rainfall where most flows for the Booligal Wetlands are generated. However, they noted significant declines in the Lachlan's flow that have profoundly affected the ecology of the Booligal red gum swamps – changes that have coincided with increasing impacts of major river regulation and diversion of water for irrigation.

The Lachlan catchment covers 85,000 square kilometres, extending westwards from the Great Dividing Range to the Riverina and generates 14 percent of the state's agricultural production. •

By Dan Gaffney

Sold down the river

Billions have been spent in trying to ensure water flows in the Murray – with little result. Instead the supply might have been shored up at a fraction of the cost.

Lisa Lee has been interested in the environment since she was a child. Now a Postdoctoral Research Fellow at the Centre for Applied Economic Research at UNSW, Dr Lee's work is highlighting serious issues in planning and policy-making for the Murray–Darling river system.

While \$21.4 billion has been spent on the system since 1992, Lee argues that by spending just a fifth of that, water could now be flowing reliably through the mouth of the river year-round. Currently, the river mouth is dry for 40 percent of each year.

Almost 90 percent of the river system's water is used for agriculture and town water supplies.

"Suppose we had put this money towards a buyback from irrigators years ago ... at \$1000 a megalitre we could have purchased 21,000 gigalitres, almost double the natural discharge level at the Murray mouth," says Lee. "That's four or five times the amount we needed."

"Instead, poorly informed investment decisions and politically motivated buck passing has seen billions spent but little achieved," she says.

Part of the inspiration for her work came from meeting farmers and irrigators during previous research efforts. "It was a real eye opener to go out and see them," she says.

"These are the people whose lives are directly affected." •

By Chris Sheedy



The White House's black history

Barack Obama might have gone down in history as the first black American president, but Dr Helen Pringle from the School of Social Sciences and International Studies argues there are others who went before him who were not open about their heritage.

Barack Obama made history as the first black American president. But is he? In 1998, the Nobel Prize winner Toni Morrison defended Bill Clinton as “the first black president”, saying that he was “blacker than any actual black person who could ever be elected in our children’s lifetime”. According to Morrison, Clinton fitted “almost every trope of blackness: single-parent household, born poor, working-class, saxophone playing, McDonald’s-and-junk-food-loving boy from Arkansas”.

There are persistent rumours however that there have been other black presidents before Obama, even before Clinton. The first, allegedly, is Jefferson, derided during the 1800 presidential campaign as “nothing but a mean-spirited, low-lived fellow, the son of a half-breed Indian squaw, sired by a Virginia mulatto father”. When Jefferson’s mother died, the president destroyed all her papers

and portraits and wrote to everybody who received letters from her, asking for their return. Jefferson carefully saved more than 18,000 of his own papers. Some writers have concluded that Jefferson might have been trying to hide something.

The next possibility is Andrew Jackson, president between 1829 and 1837, who was said to be the son of an Irish woman married to a black man, and whose oldest brother had been sold as a slave. And the third possibility is Abraham Lincoln, whose opponents drew him in a cartoon as “Abraham Africanus the First”.

Most of these claims about the race of Jefferson, Jackson and Lincoln were smears by their enemies: blackness is not usually understood as a political advantage in the United States.

Perhaps the most convincing case has been made about Warren Harding, president from 1921 to 1923. Harding was arguably one of the



“There are persistent rumours that there have been other black presidents before Obama ...”

worst presidents in the history of the Union – and unarguably gave the worst inaugural address. Harding had a dark complexion and wiry hair, and was called “nig” as a boy. When he was a newspaper editor in Ohio, the editors of a rival paper slurred him as a “kink haired youth”. Harding’s great uncle had been a conductor on the Underground Railroad, leading escaped slaves out of the South to freedom.

Harding’s father, George T. Harding, was described as having thick lips and chocolate skin, and his second wife was rumoured to have divorced him because George was too much Negro “for her to endure”. When Warren Harding married Florence Kling in 1891, Kling’s father is said to have denounced her for polluting the family line.

It was rumoured that Harding had black ancestors on *both* sides of his family. Harding’s nemesis in this matter was William Estabrook

Chancellor, an openly racist professor at Wooster College in Ohio. Chancellor’s genealogical research outed Harding’s great-grandmother as a “Negress”, and on the other side of the family, his great-great-grandfather as a black sea captain from the Caribbean. Harding himself acknowledged all this speculation to the journalist James Faulkner, saying: “How do I know, Jim? One of my ancestors may have jumped the fence.”

Calvin Coolidge has been identified as the fifth black president. The sixth had long been hinted at, but was publicly named only in 1995. Eisenhower’s mother came from a town with two families called Links, one black and the other white. Neighbours said that Eisenhower’s mother was long referred to as “that black Links gal”. Perhaps the most telling piece of evidence was her wedding photo, which shows a woman who would probably have been refused entry to public restrooms throughout the South.

Whatever the truth in all this speculation, most blacks in the White House have not come in through the front door. Ted Sorensen, who was speechwriter to President Kennedy, noted, “The history is not so uneven at the lower level ... In the kitchen, the folks have always been black. Even the folks at the door – black.” These folks were the White House servants whom Harry Truman characterised as “an army of coons”, in a 1936 letter to his daughter. People like Eugene Allen, who first came through the White House side entrance in 1952, and worked under eight presidents, six days a week, never missing a day. Gene, as President Truman called him, was hired as a “pantry man”, washing dishes, shining silverware, stocking the cupboards. He worked his way up to become the maître d’ in 1980.

Gene was washing dishes in the White House in 1955 when Rosa Parks refused to give up her seat at the front of the bus. He was shining the silver in 1957 when Martin Luther King became President of the Southern Christian Leadership Conference and argued, “We must forever conduct our struggle on the high plane of dignity and discipline.” Gene was stocking the shelves when Eisenhower used troops to enforce Court-ordered desegregation of the Central High School in Little Rock in September 1957. He was working in the White House in 1960 when four black students from North Carolina began a sit-in at a Woolworths lunch counter after they were refused service. When Eugene went home to his birthplace in Virginia for a visit, he was barred from using the public restrooms.

Gene served in the White House in 1965 when President Kennedy invited 800 blacks there for the 100th anniversary of Emancipation. When Sammy Davis Jr arrived at the celebrations with his white wife, Kennedy ordered that no photographs of the couple be taken.

Eugene Allen was in the White House when Martin Luther King was imprisoned for leading a protest march in Birmingham Alabama in 1963. He was there, and we trembled, when the Klan firebombed the Sixteenth Street Baptist Church in

Birmingham in September 1963, killing four little girls waiting to lead the service. He was there when three civil rights workers were murdered in the Mississippi Freedom Summer of 1964. He was there when President Johnson signed the Civil Rights Act in July 1964. He was there when Malcolm X was assassinated in 1965, and the great cities of the United States began to burn. He was there in March 1965 when police used tear gas, clubs and bullwhips against blacks marching from Selma to Montgomery in support of their right to vote. And he was in the White House in 1967, when the Supreme Court ruled in the case of *Loving v Virginia* that laws prohibiting interracial marriage, the miscegenation of Barack Obama’s parents, were unconstitutional.

Eugene Allen left the White House in 1986. Each day of his working life, Eugene had gone home to his wife Helene, whom he met at a Washington party in 1942 and married a year later. Eugene lived to see a few blacks come through the front door of the White House, like Colin Powell and Condoleezza Rice. Eugene told his wife how proud that made him feel. Before Election Day in 2008, Eugene and his

“... most blacks in the White House have not come in through the front door.”

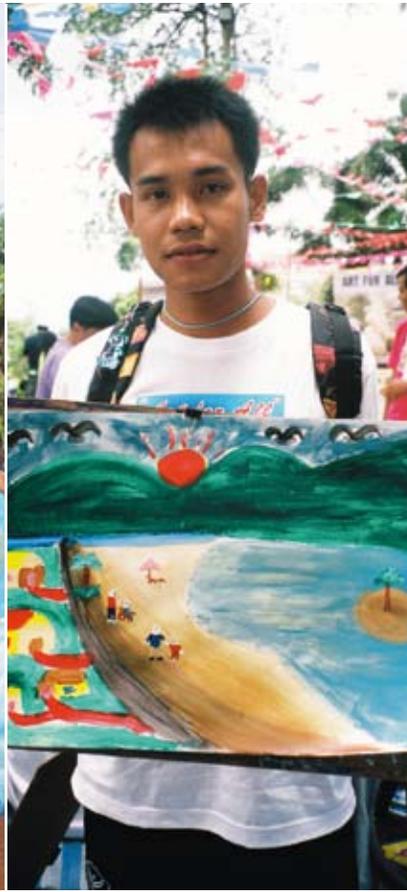
wife talked a lot about what it would mean for them if Obama became president. “Just imagine,” said Helene.

In his Philadelphia speech on race in March 2008, Barack Obama described a campaign meeting, in which the volunteers told their stories of how and why they had come to be there. A young campaign worker, Ashley Baia, told how she had pretended to like mustard and relish sandwiches when her mother was struggling with cancer, and how she wanted to stand with others who had also endured hardship and sacrifice. An old black man at the meeting announced simply, “I’m here because of Ashley.” According to Obama, it’s that moment of recognition that is so important. It’s not enough, he said, but it’s where we start. It’s a beginning. After what Eugene Allen lived in the wake of, and after what he lived through, this inauguration is not enough, but it’s a beginning. It’s a hell of a beginning, a hell of a thing.

And so, as Abraham Lincoln said in his second inaugural address, “Fondly do we hope, fervently do we pray” – we hope and pray for the success of this man in honouring the dreams of all those like Eugene Allen who came through the side door of the White House. And in honouring the dreams of Helene Allen in whose memory Eugene cast his vote in November.

Fondly do we hope, fervently do we pray. •

This is an edited abstract of a speech Dr Pringle gave at an inauguration event at the Union, University and Schools Club in Sydney on 21 January.



New imaginings: Thai children explore different environments through art

Art can take you places

Art is transforming the lives of Thai children in remote villages, allowing them to explore different worlds and their own possibilities. By Louise Williams.

In a remote hill-tribe village in northern Thailand hundreds of children who have never seen the ocean or felt the chill of snow are painting underwater worlds and Arctic landscapes with obvious delight.

Art can take you places, is the message of Australian artist and lecturer, Sylvia Ross, who has brought brushes, palettes, paper and canvases to some of Thailand's most isolated communities through Chulalongkorn University's "Art for All" project.

Ms Ross, from the UNSW's College of Fine Art (COFA) first came to Thailand on behalf of the University in 2001 and she was immediately struck by the question of how she could give something back. She tracked down and joined the "Art for All" project, which runs innovative "art camps" across Thailand, with the support from the Thai government, the United Nations and Thai and foreign volunteers.

Now, several times a year Sylvia pays her own way from Sydney to sit down on the earth with Akha hill-tribe children and help them paint their way from the known to the unknown, using art as a way of expanding their knowledge of the world.

One of the first tasks of painting a self-portrait is unexpectedly revealing for village children who often live without mirrors and have to feel the contours of their face to imagine what they might look like, she says.

Art can take the children beyond the familiar, and they journey on paper through desert and polar landscapes, to the bottom of the sea and even into the Australian bush and outback. Two of Australia's strangest creatures, the platypus and the echidna – the world's only egg-laying mammals – are brought to life in children's pictures.

A blind student asked very loudly in English: "How do you expect a blind person to paint?"

"Art can help overcome isolation and lead to new knowledge and the ability to connect with the unknown," says Ms Ross, who heads COFA's School of Art.

Isolation is not confined to remote villages geographically cut off from the rest of the world. "Art for All" and Ms Ross also work closely with disabled people in Thailand, who are often isolated by physical or intellectual limitations.

At last July's art camp held in the rural Nakhon Ratchasima province a blind student asked very loudly in English: "How do you expect a blind person to paint?" To which Ms Ross replied; "No problem, that's what I

am here for."

The student imagined which colours to choose from by using the range of temperatures from warm to cool, as well as textures like the roughness of wood and the smoothness of leaves – and then felt the shape of the painting with his hands.

"He had a big grin on his face. He did an extraordinary painting," she says.

"We work with people with all kinds of disabilities who can use art and their imagination to escape the limits of their circumstances and to imagine a place where they would be incredibly happy."

The camps are the brainchild of Associate Professor Dr Channarong Pornrungrroj, of Bangkok's Chulalongkorn University, who develops new creative ways to engage with the world. There are plans to extend the art outreach to Thailand's death-row prisoners.

"When I first went to Thailand I didn't have much experience in South-East Asia, but I was overwhelmed by the warmth of the people," says Ms Ross.

Ms Ross says her new connections with Thailand influence both her teaching and her own art.

"We are able to offer places to Thai and Asian students at COFA but I wanted to add value to that relationship. I wanted to create a relationship which gave something back." •

Class struggle

A defining moment motivated a young Scottish teenager from a poor family to get a university education and help others get one too.
By Fran Strachan.

There was plenty of love in Fiona Nicholson's childhood but little money. Growing up in a disadvantaged area of Scotland's Edinburgh, she attended a public high school where teen pregnancies were common and violence and drug abuse were rife.

"Two of my classmates died of drug overdoses in one year," she recalls.

"I remember even as a young child being acutely aware that the 15th of the month was payday because there was never any food in the house."

The only daughter of a seamstress mother and storeman father, Fiona had never met anyone with a tertiary education, let alone considered attending university herself.

"Going to university was something rich kids did, my parents aspirations were for me to get a stable job at the local bank and contribute to the household," says Nicholson.

Twelve years on, as the Project Manager of UNSW's ASPIRE Program, Nicholson deals with the mirror image of her journey to tertiary education on a daily basis.

ASPIRE, a social inclusion initiative run by the Student Equity and Disabilities Unit, aims to smooth the road from high school to university for disadvantaged students by raising their awareness and aspirations for tertiary education from Year 8 on.

Nicholson believes she would have never gone to university without a defining moment in her final year at high school.

"A very charismatic, engaging student volunteer came to speak at our school. He was from an even poorer part of the country than me, and I distinctly remember thinking, 'If he can go to university, so can I,'" she says.

Inspired to study hard in her final year at school, Nicholson became dux and was awarded a grant to attend the prestigious University of Edinburgh.

The yawning inequity exists half a world away in Australia, too. Twenty-five percent of the population are from low socioeconomic backgrounds, yet only 16 percent start university.

Photo credit: Grant Turner, Mediatkoo



Opportunity knocks: Fiona Nicholson with ASPIRE student ambassador Leimin Duong, who wants to help others "discover their chance".

"I distinctly remember thinking, 'If he can go to university, so can I'."

"It's not that these children aren't bright, it's just that they've got nothing to equate university to, no reference point," she says pragmatically. "If parents place value on a stable job and being able to put food on the table, then their child getting a degree won't even come onto their radar, and why would it?"

Peer pressure, combined with lack of encouragement, can prevent these students from actively pursuing higher education.

ASPIRE offers students from ten Sydney partner schools a range of workshops including one on understanding personality types. In this, trained ASPIRE ambassadors encourage students to take responsibility for their own learning and future by selecting subjects they're genuinely passionate about.

"We try to impress upon them that they

have to live their own life, rather than live through their friends who won't be there forever," says Nicholson.

During her degree Nicholson worked as a summer school tutor for a transition-to-university program. It was there that she saw the dark and raw side of extremely disadvantaged students.

"I worked with 15-year-old children who were fully fledged alcoholics. The only way I could get them to attend the workshops each day was to lure them in with a cooked breakfast – those are the kids you don't forget, but I know at least one of those students turned their life around and started attending school again."

Nicholson's respect for the students is evident as she talks, but her empathy for their circumstances is based on more than just personal experience.

"My passion for this work doesn't come from my own story. It comes from a belief in equitable education and the fact that this is a broad social and economic issue that needs to be addressed." •

The white coat crusader

One doctor's determination started a whole new approach to emergency medicine. Susi Hamilton reports.

She wasn't supposed to die. The patient, a 19-year-old pillion passenger who had come off a motorbike, had been taken to a London hospital with a broken leg and a fractured pelvis. It should have been a routine procedure but she died suddenly in the early hours of the morning in a general ward, as nurses adjusted the weights used to hold her leg in place.

Unbeknown to staff, the patient had slowly bled to death.

It was such an outrage to the young intensive care specialist Dr Ken Hillman that he sat down at his typewriter and composed a stern letter to the hospital executive, suggesting that he needed to "crusade for a better system of dealing with acutely ill patients". The year was 1982.

He requested that acutely ill patients in general wards should be managed by a team of specialist doctors – and that nurses should call the team early if there were any deterioration in a patient's "vital signs". These vital signs – pulse rate, respiratory rate, blood pressure and temperature – have been marked on clipboards at the end of a patient's bed for generations.

He implemented the idea of Medical Emergency Teams (MET), specialists armed with a trolley equipped with state-of-the-art technologies, who could be called when a deterioration of vital signs predicted cardiac arrest. This approach has since been introduced in many hospitals around Australia and elsewhere around the world.

On his return to Australia, Professor Hillman refined the approach at Liverpool Hospital.

"Having cardiac arrests in hospital is different from having one in the community," explains Professor Hillman, an intensive care specialist who is based at UNSW's South Western Sydney Clinical School.

"When you think of a heart attack, you imagine a 40-year-old man on the golf course who dies suddenly," he says. "Most cardiac arrests in hospital are the result of a slow and potentially avoidable deterioration."



Vital work:
Professor Hillman and the trolley used to help acutely ill patients

Traditionally, nurses may have been concerned about a patient's health, but they were not encouraged to call the only option they had then – cardiac response teams – until the patient's heart had actually stopped. They were often reprimanded for calling the team to patients who were still alive.

Even when the cardiac arrest team is called, the prospects for patients are not that good. As few as one in ten patients are successfully revived by a hospital cardiac arrest team.

The latest paper on the MET system has just been published in *Critical Care Medicine*. It shows a significant reduction in the death rates in hospitals where the system was implemented.

The more early calls made to the MET, the more dramatic the reduction of cardiac arrests

and unexpected deaths, the paper found.

"Anecdotally, if you go to a MET hospital, cardiac arrests are now a relatively rare event," observes Professor Hillman, who is also part of UNSW's Institute of Health Innovation. Despite the widespread use of MET systems, cardiac arrest teams are still used in some Australian hospitals.

He says the MET system allows specialist doctors to work together better and that nurses are given a more important role.

It is a system that, if it had been in place in a British hospital 27 years ago, would have saved the life of at least one young girl. •



For the podcast, click on the iTunes icon on the UNSWTV home page www.tv.unsw.edu.au.

The woman who took on the world – and won.

At school her teachers thought she couldn't be taught. But Ute Vollmer-Conna has proved them wrong. After stints as a carpenter and physiotherapist, the monocle-wearing, scooter-riding "loose cannon" has gone on to forge a stellar career in medical research. She spoke to Susi Hamilton.

I didn't do very well at school in Germany and left when I was only 15. I went into carpentry, which was a bit chauvinistic in the early 1970s – I was the only woman doing it. I liked sport and people, so I ended up being accepted to do physiotherapy. I did that for four or five years and then migrated to Australia.

When I came here, it was like rocks had been lifted off me. I just seemed to fit in. In Germany, people in the street used to come up and ask if what I was wearing was a statement. They would actually seem quite angry. I had a very boyish figure and the Germans often got confused – sometimes girls even asked me to dance! When I got to Australia in the early 1980s, people suddenly thought I was gorgeous, fun and interesting! At first I thought it was some kind of a joke. But I could finally just be myself and that was OK, even desirable. It was liberating!

When I got here, my English was wobbly, I started looking in the classifieds for work and I noticed a whole list under "ute" – my name. Next to it were phrases such as "beautiful body, going cheap". I finally worked out what a ute was! As I was a trained physiotherapist, I ended up looking for work as a masseur at a "health club" in the Cross. I must have been a bit slow because it took me a while to work out what the clients expected. I left straight away.

In Australia there was the opportunity to start again. Even though I didn't have the equivalent of an HSC, I was able to do a science degree. I liked the undergraduate work and did a PhD in psychoimmunology. When I went back to Germany recently, I gave a series of lectures. One of my former teachers really wanted to meet me because he was so surprised to hear what I had done. All the teachers had thought I was a hopeless student, but then so was Einstein ...

Psycho-neuroimmunology, which is the field in which I now work, extends from the fascination between the mind and the body. It looks at the question of whether the brain talks to the body or vice versa. My interest is what happens to the brain when the body is sick. When people get ill with an infection such as glandular fever, they get headaches, bodily aches and pains, poor concentration, no appetite and they need to sleep. That reaction is triggered by the immune response but mediated by the brain. We wanted to know why some people who are affected by a virus get really ill, while others affected by the same virus only get ill for a day or two and then recover. We found that genes are a big influence. How vigorously your immune system fights the virus determines how sick you are going to get.

I love teaching. My students are an inspiration to me. They teach me to never stop questioning, to keep up the enthusiasm and we teach each other the value of a good laugh. As Mark Twain said: "Never let formal education get in the way of your learning." I am also a student counsellor. My students ask me questions about life the universe and everything – just as much as about their studies. That's why I have a couch and a box of tissues in my office.

TV An interview with Ute Vollmer-Conna can be seen on the Health channel of UNSWTV at www.tv.unsw.edu.au.



Name: Catherine Bond
Age: 26
Faculty: Law

Research: My PhD thesis is titled: “Mapping Australia’s Copyright Commons – the public domain in Australia’s copyright law”.

I think copyright is incredibly relevant to all of us in a university. Every time you use a photocopier, post on the internet or download music, copyright comes into play. What is protected and what isn’t? The Federal parliament has the power to make laws with respect to copyright, often working against our implied guarantee of freedom of political communication, yet this has never been the subject of any significant analysis.

We’ve seen a big push over the last decade for extensions – just look at the US Free Trade Agreement, which extended copyright protection in Australia because it was in the US’s interest. But where was the public discussion? In the past governments have used copyright to prevent information getting into the public domain. Should this type of restriction be allowed? Is there anything in the Constitution that we can use to protect us? I’m asking these questions because they’ve never been asked before.

Inspiration: My parents, Steve Waugh (I just love cricket!) and ultimately – because I want to be an academic myself – all those female teachers who’ve shown me the value of hard work and good research. •

She spoke to Steve Offner.

