Sawdust and machine tools aren’t standard features of most laboratories but the FBE Design Lab is not a standard facility. It’s the testing ground where student designers and architects employ fretsaws, drills and 3D printers to give their ideas physical form.

Beside them throughout the process are Tony Jones and Peter Kolasinski, the Manager and Senior Technical Officer of the Design Lab, who along with FBE design lecturer Associate Professor Oya Demirbilek had the vision to create a space dedicated to the creative process.

Oya Demirbilek:
“When we set up the Design Lab in 2007 I was inspired by the BMW factory in Leipzig, Germany, where the internal organisation is transparent. Our core workshop is visible from all around, from the studios and the 24-hour access area. The making of 3D objects and forms is what we do. I’m also talking with Tony and Peter about my design practice project where I’ll be using 3D printing and working in glass and silver forms to produce jewellery.”

Peter Kolasinski:
“Tony and I are almost teachers with what we do. A lot of people want instant solutions and you have to say ‘hang on, you have to learn how to do things’. Computers and laser cutters are tools, but they are just a couple of tools among many. Seeing the students develop is something I enjoy. For me it’s the form that’s important, not how you get there. The feel and the weight of something, how it looks in different light, aren’t things you learn from computers.”

Tony Jones:
“I came to UNSW five years ago from architectural and commercial model-making. Peter’s been the driving force behind the workshop for 10 years. I moved into the role of manager three years ago and brought in the 3D printers. The variety of our skill sets plays a big part in the place working efficiently.

“Seeing students develop through feedback is really satisfying; the real challenge is in helping final-year students realise their designs in time. The beauty of the job is that no matter how long you’ve been in it you are learning all the time – it keeps the joy in the work.”

Oya, Peter and Tony spoke with Peter Trute.

To nominate a researcher and technician for “Lab Talk” please email uniken@unsw.edu.au.
Driving on sunlight

UNSW will be among the first Australian organisations to commit to an electric vehicle (EV) fleet as part of a research and infrastructure agreement with EV services provider Better Place.

Better Place will provide charge spots and additional services to support an EV fleet, in a new Solar Precinct to be established by UNSW as part of its Campus Solar initiative. UNSW’s Centre for Energy and Environmental Markets (CEEM) and Better Place will also begin research, funded by the Australian Research Council, to investigate the impact that charging significant numbers of electric cars will have on Australia’s power grid.

CEO of Better Place Australia, Evan Thornley, said the partnership with UNSW would enable vital research to allow Australia to move to a sustainable transport future.

UNSW Vice-Chancellor Professor Fred Hilmer said that under the Campus Solar initiative, new solar panel arrays in the Solar Precinct will generate most of the energy needed for an EV fleet, with the remainder to come from other sustainable sources.

“UNSW is a world leader in solar photovoltaics and environmental sustainability is a research priority for us. We will be driving on sunlight on this campus,” Professor Hilmer says.

Towards a greener world

UNSW will establish Australia’s first professorship in the field of electricity power economics – a position which will help develop an understanding of any emissions trading scheme (ETS).

EnergyAustralia has committed $1.25 million over five years to establish the Chair.

The appointee will focus on innovative and sustainable infrastructure provision and regulation taking into account technical, economic, societal and governance aspects.

“This position is needed because it is fundamental to the way the energy strategy for the country is going to go,” says the Dean of Engineering, Professor Graham Davies.

“There are lots of people supplying power to the electricity grid from photovoltaic cells at their homes, but the question is – how do you cost it? That is at the heart of a possible ETS scheme.

“From knowing the costs and hence the price, you can determine an ETS or carbon credit scheme, or subsidy for different fuels,” he says.

The EnergyAustralia Chair in Electrical Power Economics is expected to be filled from early next year.

New appointments

Professor Michael Frater has been appointed to the position of Rector, University College, Australian Defence Force Academy, following Professor John Baird’s retirement.

Professor Frater, who will take up the position in January, has been the Head of the School of Engineering and Information Technology at UNSW@ADFA since the formation of the School in July 2009.

The Vice-Chancellor, Professor Fred Hilmer, congratulated Professor Frater on his appointment and paid tribute to the outgoing Rector,

“John has made a great impact in his time as Rector. He has overseen a significant increase in research output for the College, with research increasing by 130 per cent since 2004, the greatest improvement of any faculty. He has made considerable strides in every strategic priority area for the College,” he said.

Professor Martin Nakata has been appointed Director of Nura Gili Indigenous Programs at UNSW. When he takes up the position in late November, he will also hold the title of Professor of Australian Indigenous Education.

Professor Nakata is currently the Director of Jumbunna Indigenous House of Learning at the University of Technology, Sydney.

Professor Nakata is the first Torres Strait Islander to gain a PhD in Australia. His contribution to higher education has been in the areas of Indigenous education, research and knowledge.
UNSW’s College of Fine Arts is part of a new artistic hub at Sydney’s Taylor Square. By Susi Hamilton

C OFA has taken temporary lease of the top floor of a landmark building in Taylor Square, bought by the City of Sydney as part of its plan to reinvigorate the area.

The new creative centre houses 10 local and international postgraduate students working in the schools of design, media and fine arts; while RG 2010, formerly known as Reverse Garbage, will be on the lower floors. RG 2010 is a not-for-profit group that sells industrial discards to the public, reducing the amount of waste going to landfill.

COFA Dean Professor Ian Howard says the College is delighted to continue its association with the Oxford Street Cultural Quarter. “This will help bring about a vibrant creative community to the heart of Taylor Square,” Professor Howard says.

The students will use the building as studio and working space while the building exterior is being renovated over the next six months.

Lord Mayor Clover Moore MP says the new tenants will make a great contribution. “This is a big step forward in the city’s revitalisation of Oxford Street, both culturally and economically,” Ms Moore says.

The building will eventually be converted into a bike hub for commuter cyclists.

Meanwhile, the impending COFA redevelopment has brought about the birth of a new national institute to be based at the Paddington campus.

The National Institute for Experimental Arts (NIEA), launched in July, will incorporate exhibitions and research focusing on experimental practice.

“When the new gallery opens, you will see world-class exhibitions, but they won’t be imported from elsewhere, up for a month and then gone. They will be the product of exciting international research collaborations, grounded in the research that we are doing at COFA and the Institute, and in other areas of UNSW,” says NIEA director Professor Jill Bennett.

“As an academic research institution, we are undertaking innovative work at the intersection of arts and science, arts and engineering, and arts and social development that can’t be pursued on any scale at an institution that is simply geared to exhibitions.”

The exhibition and laboratory facilities will allow students to engage with leading researchers globally.

The Institute will host workshops and events such as the recent HotHouse at the Opera House that looked at art and sustainability.

“Our aim is to demonstrate the value of creative thinking and practice in regard to a number of pressing social issues, including urban development and sustainability and community development. We are working on a number of large-scale projects with planners and development organisations, developing fresh perspectives and new methods to deliver change.”

“This is rightly a political and not a legal process. The constitution says nothing about hung parliaments, or how such a situation is to be resolved.” – Anthony Mason professor of law George Williams comments on the Federal election, Sydney Morning Herald

“I share despair at the quality and expense of our current election campaign with its narrow, superficial focus and avoidance of the complex and challenging issues.” – Assoc Professor Cheryl Kernot, Centre for Social Impact, announcing her return as a Senate candidate nine years after quitting politics, Herald Sun

“The chances of getting killed in a terrorist attack in Australia are close to zero . . . in comparison to other risks, terrorism is a triviality.” – Dr Chris Michaelsen, Faculty of Law, calling for a review of Australia’s approach to counter-terrorism, Canberra Times

“How is it that this government has fallen so far behind a comparable government in the UK, which two years ago passed the landmark Climate Change Act 2008?” – Dr Sarah Waddell, Faculty of Law, National Times

“You’ve always got to be wary of the fact [spin] could happen, but I’m sceptical about whether they are trying to hide things.” – Dr Alyce McGovern, Faculty of Arts and Social Sciences, on the recent growth in NSW Police public relations, Sydney Morning Herald

“Every time I talk to people about alcohol figures it’s as if they’re not shocked. That’s what bothers me. Something is happening . . . it’s become more acceptable to drink at risky levels.” – Acting director of the National Drug and Alcohol Research Centre, Maree Teesson, West Australian
Climate change is the great threat to our future and while our political response is still being debated, there is agreement on at least one point – UNSW will play a national leadership role in Australia’s response to this mounting challenge.

The new Centre for Climate System Science, headed by the co-director of the UNSW Climate Change Research Centre, Professor Andy Pitman, was awarded $21.4 million in the latest Australian Research Council Centres of Excellence grants.

“Climate change presents an unacceptable risk to the wellbeing and prosperity of Australians,” says Professor Pitman. “Using the best science to minimise threats and maximise opportunities is a national priority of international significance. This will have direct economic, social and environmental benefit by improving advice to all levels of government and the broader community on the scale, speed and timing of regional climate change.”

The new Centre of Excellence was one of three awarded to UNSW – out of only 15 funded nationally – with a total value of $58.6 million in combined funding over seven years. It was the best result of any university. The centres are designed to be hubs of expertise through which high-quality researchers develop Australia’s international standing in research areas of national priority.

The other new Centre of Excellence is the Centre for Population Ageing Research headed by Professor John Piggott from the Australian School of Business, which was awarded $12.7 million. It will bring together researchers, government and industry to address one of our major social challenges. The Centre’s work promotes policy outcomes that will improve the wellbeing of the aged, says Professor Piggott.

The Centre for Quantum Computation and Communication Technology, headed by the Director of the Centre for Quantum Computer Technology, Professor Michelle Simmons, was made a Centre of Excellence for a second time, receiving $24.5 million in the process.

“It will allow us to maintain the international leadership we currently have.”

made a Centre of Excellence for a second time, receiving $24.5 million in the process.

“The most important thing about being made a Centre of Excellence is that it will allow us to maintain the international leadership we currently have in quantum information. If we hadn’t won it, it would have jeopardized that,” says Professor Simmons.

“By having a coordinated international research effort you can achieve more ambitious goals with highly collaborative, interdisciplinary teams.”

A team from the Centre recently made headlines around the world by making the world’s smallest precision-built transistor – a “quantum dot” of just seven atoms in a single silicon crystal.

“Australian researchers are at the forefront of an international race to develop and commercialize powerful new information technologies based on quantum physics,” she says. “Our success will establish access to unprecedented communications security and computing capability for Australia.”

UNSW’s star also shone brightly in the earlier announcement by the ARC of the esteemed Australian Laureate Fellowships, valued at up to $3.1 million each over five years. The scheme is designed to attract and retain world-class researchers to key positions in Australia and three of the 15 fellowships awarded nationally came to this University.

The recipients are Professor Matthew England, who with Professor Pitman is joint Director of the UNSW Climate Change Research Centre; Professor Chris Turney, a Professor of Physical Geography at the University of Exeter in the UK, who will soon join UNSW, and Professor Mark Bradford of UNSW’s Faculty of Engineering.

Professor England is an expert in the ocean’s role in the global climate system, climate change and large-scale climate dynamics.

Professor Turney researches past and future climates, how people respond to change, dating of natural archives, and recent human evolution and migration.

Professor Bradford will develop a “green” sustainable, composite steel-concrete building frame system that reduces greenhouse gas emissions throughout the life cycle of building construction, usage and deconstruction.
X-ray vision

*World-leading solar-cell technology has helped power a researcher to the top of the inventors’ league, writes Dan Gaffney.*

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olar-cell scientist Thorsten Trupke has won the UNSW Inventor of the Year Award for a world-first technology helping to improve the global competitiveness of our photovoltaic industry.

Trupke, the Deputy Director of the ARC Photovoltaics Centre of Excellence is the co-inventor of solar-cell and wafer inspection systems that measure the quality of silicon bricks and wafers and solar-cells in less than a second.

Solar-cell inspection tools – known as photoluminescence (PL) imaging – can be likened to an X-ray machine for the solar industry – providing high-resolution images that can spot hidden faults and defects affecting the performance of solar cells and silicon wafers.

Three years ago Trupke and UNSW colleague, Robert Bardos, established BT Imaging (BTI) as a UNSW spin-off to commercialise PL-imaging technologies with applications across the PV manufacturing supply chain. Today the patented technology has triggered sales to leading cell and wafer manufacturers around the world.

Winners in the other prize categories were ADFA's Dr Obada Kayali (Environment), Professor Levon Khachigian (Medicine), Associate Professor Christoph Arns (Information and communication technologies), Thorsten Trupke (Science and Engineering) and Henner Kampwerth (Student Inventor of the Year Prize).

This year's awards also recognised the Best New Inventions submitted to NewSouth Innovations.

Presented annually by NewSouth Innovations, the UNSW Inventor Awards carry a total prize money of $28,000.

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The last time that Martin Green won a Eureka award, there were only 50 guests at the event and everyone had to buy their own dinner afterwards on Oxford Street.

Twenty years later, Green has again won in his category – but this time it was at a black-tie event attended by around 600 of the country’s top scientists, journalists and politicians. There was a trophy and a $10,000 cheque – not to mention a three-course dinner laid on.

He took out the Australian Museum Eureka Prize for Leadership in Science for world-leading innovation in solar-cell technology. His team has held the world record for converting the sun’s rays into electricity for the past two decades.

“I did get a lot of emails of congratulations afterwards,” says Green modestly. “It’s such a well-known award. A lot of the other awards I have won are more important scientifically, but this one has the profile. It’s important in terms of attracting funding and generating political interest.”
It also gets substantial media interest. Scientia Professor Green, who is the Executive Research Director of the ARC Photovoltaics Centre of Excellence in the Faculty of Engineering, was up early the following morning, doing live interviews on radio and television.

"The more time goes on, the more apparent it becomes there are very real issues with climate change. The election result shows that a lot of Australians are thinking that way as well."

Another man who is no stranger to the winner's podium, Professor Philip Hogg, almost didn't make it to the red carpet at all, due to a diary malfunction. He dressed up just in time to accept the prize for Medical Research Translation. The Director of the Lowy Cancer Research Centre was acknowledged for a new class of cancer therapeutics that target and disable the "power supply" of tumour cells. He has also developed an imaging agent that identifies dying tumour cells, enabling the effectiveness of chemotherapy to be monitored in almost real time.

"Converting discoveries in the lab into benefits for the community and commercial outcomes is an enormously challenging process, in fact more so than the discovery itself. As a country, we have always struggled to do this effectively in the medical area. I think awards that recognise this success will help breed further success," he says.

Persistence paid off for Associate Professor Greg Leslie and his colleague Professor Bruce Sutton, from the University of Sydney, who took the Water Research and Innovation prize. The pair, finalists in the same category last year, developed a very efficient system for farmers to grow crops using saline water, including groundwater, without damaging the soil. They will continue their work – with Professor Sutton moving to UNSW to pursue it – through commercialisation.

"It could be ready within 12 months," he says. "And winning the Eureka will help. More people know about it, so we have a better chance of getting a good field demonstration and getting farmers involved. That's key."

As the researchers mingled, waiting to get their photographs taken, there were congratulations for other UNSW finalists, who were nominated in six categories.

Conjoint Professor Vanessa Hayes made a flying visit back from the US especially for the event. She was in the country for just a few hours but went away empty-handed. Hayes was a finalist for the Prize for Scientific Research for her work at the Children's Cancer Institute Australia and UNSW Medicine in establishing the most comprehensive collection of DNA samples in the world, representing diverse population groups.

The iCinema Centre for Interactive Cinema Research was nominated for Excellence in Research by an Interdisciplinary Team for the second year in a row.

Also nominated, The Copenhagen Diagnosis, an Australian-led international initiative headed by Professor Matt England and Dr Ben McNeil from UNSW's Climate Change Research Centre, which was a finalist in the inaugural Advancement of Climate Change Knowledge prize.

Five UNSW staff members were judges and the University again sponsored the prize for Scientific Research, presented this year by Vice-Chancellor Professor Fred Hilmer.
Environmental impact is caused by three driving forces: population, consumption per person and technological impact. We need to address each of them with different government policies.

Population growth is particularly problematic in Australia, which has one of the highest rates of population growth and the highest per capita greenhouse gas emissions in the developed world. Every additional Australian has on average a bigger greenhouse impact than an additional person almost anywhere else. Unless we stabilise our population numbers, climate mitigation, protecting biodiversity, supplying rural and urban water, and providing infrastructure will all become much more difficult.

There is much obfuscation in the public debate. Limiting population growth has nothing to do with racism or prejudice against refugees. Indeed, the existing immigration policy is biased towards certain groups because it places no restrictions on the entry of New Zealanders, facilitates the residence of overseas students who graduate in Australia and has tight limits on refugee intake.

We could easily double Australia’s refugee intake, which is less than five per cent of immigration, provided we cut skilled immigration. Surely it’s time to increase funding to university education for people already in Australia and has tight limits on refugee intake.

Another fallacy is the short-sighted claim that we need more births and young immigrants to create the wealth needed to look after our ageing population. But when these younger people age, we would need even greater numbers of young people to support them, an infinite regression. Many European countries provide excellent support for their large proportions of older people. Why can’t Australia?

The failings of public debate serve to divert attention from the powerful vested interests pushing for “a big Australia”: notably the housing/property development industry and employers who want a large pool of cheap labour.

Getting old is not a problem. What is a dilemma is how the needs of an ageing society can be met and afforded. This is where immigration has a role to play as it addresses population ageing, which is an indicator of a population imbalance.

Population modelling from the Australian Bureau of Statistics indicates that without substantial targeted immigration by 2051 one-quarter of the population will be over 65 while those of labour-force age will fall to less than 60 per cent. Immigration ensures a sustainable tax base for pensions and infrastructure expansion and renewal.

The ageing population will necessitate urban policy and infrastructure planning changes along with ensuring a viable aged-care workforce. This is because population ageing creates additional demand on accommodation, transport and public amenity. First, in terms of quality and second in terms of how new or improved infrastructure will be paid for. These two factors are interrelated, as unless we can maintain a majority of the population within the labour force, the tax base will shrink while demands on pensions and services will increase.

Institutional aged-care is not only the last choice by older people; it is unsustainable in terms of infrastructure and care. Our recent research for the Australian Housing and Urban Research Institute has shown that in-home care is 15 to 23 per cent cheaper than institutionalised care. However, realising these savings requires enough housing that is accessible, affordable and located in areas where self care and informal care can be maximised.

Older people who can’t drive will need to live in communities that are wheelchair and mobility device-friendly and that offer accessible public transport. For this
to happen, we need additional off-peak shuttle buses, space for mobility scooters, pedestrian drop-off points, and improved, accessible transport.

Our ability to respond to our changing infrastructure requirements depends largely on our tax base and economic viability as a nation. Increasing immigration is critical to the creation of a more livable community with greater economic security.

**Professor Bill Randolph,**
City Futures Research Centre, Faculty of the Built Environment

There is no obvious answer to the number of people Australia can support. About 36 million is a reasonable best estimate. Unlike the *Hitchhiker's Guide to the Galaxy,* there is no Number 42 awaiting the diligent policy maker. Instead there are a range of contingent and uncertain outcomes. But this does not mean we are unable to envision our future; just that it will require a level of concentrated effort and considered debate.

There was once a positive view of Australia’s population future: “Populate or perish” was a popular political mantra for many decades. So why the current retreat from a positive engagement with what the future may deliver? Most obvious is the undoubted backlash against the pressures – environmental, social and economic – our big cities are facing. This is a big country, but 75 per cent of us live in just six major urban areas. I don’t think we can argue against more efficient use of our cities, but that does not mean we have to adopt unproven urban design. The question has to be resolved over what level of density really does deliver the livability bonus and for whom. It would be a gross failure to consign those with least choice to the highest-density housing.

The issue of a national settlement pattern has also not featured in the debate. Sustaining a larger population in regional centres with lower per capita resource needs should be high on the agenda. Markets won’t deliver this kind of considered planning. Only governments can do this.

More fundamentally, 30 years of economic rationalism has undermined our belief that we can plan our way into the future, especially in our approach to the spatial economy. The key point about infrastructure is not that we don’t know what is needed, but there is political deadlock on how it can be funded. Until this is broken and a viable way of financing long-term public infrastructure is agreed, we will not move forward.

Arguably, this anti-planning philosophy is the antithesis of our need over the next three decades to manage population growth. But without a reasoned debate about the options and a national population and settlement plan for the future, backed with appropriate infrastructure, we will surely simply populate to perish.

**Dr Nigel Stapledon**
Associate Head of School, School of Economics

The capacity of any country to support a population is a function of technology and technology is not static. Without the advances in technology of the past 200 or so years, Australia would be able to support only a fraction of its current population. Looking forward, there is every reason to expect that advances in technology will come along that enable, for example, more efficient use of scarce water resources and less carbon-intensive energy. So even if 22 million was defined as sustainable today, the figure will be larger tomorrow.

If economic signals are allowed to do their job, even with existing technology we can have more favourable outcomes for the environment, whether the population is 22 million, or somewhere nearer 36 million. For example, a national water market that puts a price on water to

**"A larger population in regional centres with lower resource needs should be high on the agenda."**
reflect its true value, including value to the environment, would lead to more sensible use of this scarce resource, providing adequate water for both a larger population and repair of our presently badly depleted river systems.

The pace of growth of the world’s population is decelerating, but nonetheless it is going to grow by another 50 per cent by 2050. The population of our Pacific island neighbours will probably double.

Australia cannot shut itself off from this world. Australia’s population will grow courtesy of immigration. To what figure is anyone’s guess, but there is no chance of it staying at current levels.

On the related and topical issue of infrastructure, cities such as Sydney are going to take their share of that growth. Sydney will need to expand its borders and build more infrastructure to accommodate that growth. Infrastructure generates services that future households as consumers and taxpayers will (if allowed) be prepared to pay for. Although it would mean less need for infrastructure if the population were capped, the real problem is that short-sighted state governments have over a number of decades lagged in responding to demand. The answer is to get on with the job and build the infrastructure.

Thinking big …

Professor Richard Goodwin, architect, artist and researcher, College of Fine Arts

Human beings are good at cities – very good in fact. Human history proves we are like termites when it comes to density. Cities and types of suburbia work as long as we provide infrastructure on an armature that also understands the cities’ need for food, water and power.

If we get it right, 200 million of us can live harmoniously here. That figure is based on international populations by proportion.

We will need to be more inventive in order to survive. This includes putting a price on carbon and the radical transformation of existing structures. We should maintain building exteriors where possible and refit with new technologies and new structures that sit on top of them – I call them parasites – which improve public space and agriculture.

The “age of terror” is changing architecture – damaging the social construction of the city in favour of capital. A healthy city balances the private realm with porosity or access. Tokyo is safe (porous), Los Angeles is dangerous (impermeable) – the crime statistics speak for themselves.

“If we get it right, 200 million people can live here.”

The greenest thing we can do is to radically transform existing structures where possible and modify urban planning codes to suit. The grid of the city is a text that needs constant re-writing. Architecture should always be in a state of becoming rather than a pedestal object, which architects stuck in early modernism still vaunt. In short, we need to dissolve the notion of architecture as we know it.

The world population is too high if we wish to prevent death as a result of shortages of food and water, disease, war and environmental catastrophe. However, even if we achieve zero population growth the extraordinary numbers on the Earth’s surface need to be treated humanely if we are to remain civilised. In a country like ours we have an obligation to the third world for our years of privilege. Regardless of arguments about ideal populations in an arid country we will need to house increasing numbers of refugees to fulfil a humanitarian agenda on which our claim to be civilised depends.

Focusing on so-called “boat people” is pure xenophobia, greed, ignorance, arrogance and cruelty. In short – it is uncivilised. Of course Australia can house more – most from elsewhere – humanely relocated as the waters rise. *

Sydney’s suburban future will be one of clashes and complaints between neighbours unless developers, planners and residents act to address problems in high-density living, new research has found.

With about two-thirds of new housing in Sydney over the next 25 years to be some form of high-density living, a report by UNSW’s City Futures Research Centre for non-profit housing advocacy group Shelter NSW has found that the key problems of intrusive noise and smells and the use of parking and shared common areas are the most significant barrier to enjoying high-density living.

However, having better-designed, better-built and better-managed apartments, and educating people on how to live in higher density housing, can avoid a looming social and economic problem, said report lead author Dr Hazel Easthope, of the City Futures Research Centre.

“This is not just about neighbours not getting on. We’re not being given the high-density we deserve,” she said.

The report makes a number of suggestions including addressing building standards to minimise noise, designing buildings to provide shared areas for children to play, and investigating apartment management structures which encourage less turnover in rental tenancies, thus allowing stronger residential communities to form. *
Julia Gillard’s recent proposal for a “Citizens’ Assembly on Climate Change” was greeted almost universally with scepticism and derision. But are there any reasons for thinking that the basic idea is not all bad?

In principle, the citizens’ assembly seems odd. We elect politicians to represent us and to debate the issues in parliament – why do we need another 150 randomly selected people to determine the nation’s policy on climate change? In practice however, if as a community we really are to tackle the threat of global warming it will require a large majority of us to be convinced of the need for action. Most of us need to make up our mind that climate change is real and has serious consequences: without that consensus, the political case for action will remain stalled.

Climate scientists are frustrated by the fact that significant sections of the media, politicians and public fail to grasp (or deliberately ignore) that climate change is happening. The scientists “do” the science, analyse their results and draw their conclusions. For them the evidence is overwhelming. However, the way in which humans interpret, react to, and form views based on evidence, is not merely related to the quality of that evidence. As a psychological scientist interested in judgement and decision-making, I am keenly aware of myriad factors that can influence the way in which we process information and evaluate evidence – especially about a complex, uncertain issue like climate change. The role that psychology can and should play in the climate change debate has been discussed for at least 30 years and there has been a growing body of research at the intersection of psychology and climate science, especially in the past decade.

In a paper published in the Bulletin of the American Meteorological Society, Professor Andy Pitman, the co-director of the Climate Change Research Centre at UNSW and I describe some highlights of this research in an aim to combat some of the frustration and increase the chances of the climate scientists’ message being heard and heeded.

The paper discusses four classes of psychological phenomena that provide food for thought to help us collectively make up our mind about climate change.

The first is the concept of sampling issues, which refer to clarity about the source and representativeness of samples of evidence that you use to form inferences and draw conclusions. For example, if you read or hear opinions from climate change sceptics about 50 per cent of the time then this could lead to a bias in the perception of the balance of evidence in your mind – that is, that the science is only about 50 per cent certain.

The second phenomenon is framing issues, which relates to our sensitivity to the format in which information is conveyed. Mathematical equivalence does not ensure psychological equivalence: 0.2 means the same as 20 out of 100, but the latter is somehow more concrete. Likewise the amount of carbon dioxide in the atmosphere can be described as 0.0384 per cent by volume or as a single collapsed layer eight metres deep. Only the latter seems to promote imagery with the appropriate level of urgency.

The third phenomenon is the importance of having correct mental models. By way of analogy, for many of us, our fragmentary knowledge (or mental model) of the links between cancer and smoking is sufficient to represent the risks appropriately. By contrast, understanding how and why an increase in atmospheric carbon dioxide leads to warming and how and what we do as individuals and communities affects the composition of the atmosphere is much harder. Educating our mental model of climate change is crucial.

Finally, for the debate to “move forward” we need to ensure that we engage in successful consensus building, and research on the psychology of group decision-making can help in this endeavour. Successful pooling of information, unbiased discussion and avoidance of “groupthink” tendencies can all contribute to effective, objective and transparent decisions.

And here’s where the citizens’ assembly might not be such a bad idea. Not for determining policy, but by providing appropriately framed, representative samples of information, an assembly could educate the general public’s mental model of climate change and facilitate building the consensus that we so desperately need.

Citizens’ involvement could help our nation to make up its mind to act on climate change, writes Dr Ben Newell from the School of Psychology.

“An assembly could educate the general public’s mental model of climate change.”
Your age shouldn’t define who you are or what you do, says Francis Ward, and he should know. At 101, the former racecourse track worker is in good health and continues to do many of the things he’s always done. A horseracing lover, he maintains an active TAB account and has had cable TV installed in his room, to give him access to the 24-hour racing channel.

He also refuses to use a walking frame to get around his northern Sydney nursing home, infuriating his daughter and staff. He prefers his walking stick.

“If I fall, I’ll just get up again!”

Asked about his life at 101, he says: “I’m 100 per cent. I’m happy and I’m confident.”

Living to 100 is no longer an exclusive club. Ward is just one of more than 5,100 Australians who’ve reached the milestone. Centenarians are the fastest-growing segment of the population, their number expanding by more than 8.5 per cent a decade. In 1901 there were just 50. By 2020, we can expect 12,000 and by 2050 the number of Australian Methuselahs will have swelled to more than 78,000.

“Most people are shocked when they hear those statistics. You have to repeat them,” says Professor Robyn Richmond who, together with Dr Charlene Levitan and Scientia Professor Perminder Sachdev, leads the University’s Australian Centenarian Studies.

Coordinated by UNSW’s Schools of Psychiatry and Public Health and Community Medicine, the studies aim to give the most comprehensive snapshot yet of our oldest citizens, including what makes them tick.

There are demographers saying that more than half of the people born today have the capability of living to 100. That raises a lot
“People tend to have very definite ideas about centenarians,” says Richmond. These include that centenarians live long lives characterised by chronic illnesses like heart disease, cancer and Alzheimer’s; that they are a drain on the health system; and that most live in nursing homes and confined to their beds.

“In fact, none of these things are true. Centenarians have a markedly reduced prevalence of diseases and conditions associated with ageing, particularly cardiovascular disease, cancers and dementia.”

While the majority of Australian centenarians are women (78 per cent), Richmond and Levitan found it is the men who are in better shape. “It’s quite shocking to use the word ‘culled’ but that’s essentially what it is,” says Richmond. “The men who survive to 100 are cognitively really intact and strong. If they’ve survived the 60s and 70s where men generally get a lot of cancers, stroke and heart disease, they are the healthier ones.

“It’s a case of the older you get the healthier you have been. We only had seven per cent of our centenarians – both men and women – who had cancer, that’s very low. And there were remarkably low rates of dementia and depression as well.”

The studies found many of the centenarians, particularly the men, still lived independently, either with family, in retirement villages or on their own, and many still did their own washing and cooking. Eighty-eight per cent had family contact at least one to two times a week and more than three-quarters participated in organised group activities on a regular basis.

“The majority of centenarians are not weak, depressed or confused,” says Levitan. “Most are not unhealthy, or a burden on resources, they actually lead a rich, fulfilling, active life.”

The secrets of longevity
If you want to live to 100 you’ll need a positive outlook, regular physical activity and to stay socially connected, the studies suggest.

Past research points to genetic factors as contributing 20 to 50 per cent to longevity. “But that leaves another 70 to 80 per cent, which are the modifiable lifestyle factors,” says Richmond.

Not smoking, drinking at safe levels (no more than two drinks a day, according to NHMRC guidelines), exercising and maintaining a healthy weight throughout your lifetime were all strong indicators.

Ruth Richards is 104. Born in NSW in 1906 as one of four children, she has remained single her whole life. Richards believes her secret to longevity lies in her healthy lifestyle. She has never smoked and only drinks a glass of white wine when socialising. She strongly believes in a healthy, balanced diet with “three meals a day containing meat, multi-coloured vegetables and carbohydrates”. A good night’s sleep is also important, “I sleep at every opportunity!” she says.

Centenarians also pointed to fitness as important, with around 60 per cent saying they do exercise such as walking or push-ups every day. Francis Ward says he’s remained active his whole life. “I used to walk from Ettalong to Woy Woy (around 3 km), whereas people drive everywhere these days,” he says.

Another factor is personality. “What we saw was that the personality of centenarians – and I haven’t found anyone to the contrary – is optimistic and resilient, so that means they are able to adapt to change – they are flexible,” Richmond says.

“They may have had many negative things happen in their lives – trials, tribulations, they’ve lived through wars and dislocation from home countries – but they’ve been able to come through it and come out the other end with resilience, grace and dignity. As one man said to me ‘the people I’ve known who have died young, they were all pessimists’.”

Helen Croft has certainly had her fair share of loss in her 100 years. Her mother died in childbirth and her father was sent away to fight in World War I when she was four, only returning six years later.

As a young adult, her fiancé serving in the Australian Navy drowned. She never re-partnered, but dedicated the remaining 35 years of her working life to the navy. Today, Helen remains remarkably active, goes for lengthy daily walks, reads avidly and knits her own jumpers. Those who meet her remark about her optimism, sense of humour and fun.

Centenarians display many traits in common and there may not be just one factor that explains extreme old age, says Levitan.

“You can’t say there is one thing that jumps out. It’s more the interaction between different factors,” she says.

The Australian story
While the United States boasts the largest number of centenarians (more than 70,000 and estimated to reach 800,000 by 2050), Australia ranks in the top eight developed nations.

One of the aims of the UNSW centenarian studies is to discover what makes Australia’s 100-year-olds unique.

“There’s clearly been recognition by the government of the importance of our work,” says Levitan. “But to date, we don’t know much about the uniqueness of Australian centenarians, or what it is about our lifestyle that has contributed to longevity.”

Richmond says: “In Okinawa (Japan) and Sardinia (Italy) genetics and blood lines are very important to longevity; their isolation has had a very positive effect, but here in Australia we don’t have those same geographical clusterings. So there has to be other factors at play.

“There are many questions still to be answered.”

Living to 100 – the Science and the Art will be hosted at UNSW on 11 and 12 November. For more information go to http://web.med.unsw.edu.au/livingto100/
Shadows cast on golden years

The so-called golden years of retirement may be tarnished by loneliness and poverty.

By Julian Lorkin and Susi Hamilton.

Retirement might be a time when most of us expect to relax and enjoy the good life, but UNSW research indicates it is not all smooth sailing.

Social Policy Research Centre Research Fellow Dr Roger Patulny says while social contact in older age is vital for wellbeing, research shows men are often isolated – putting them at risk of depression and poor physical health.

Before retirement, men and women spend similar time with family and friends outside the household (70 minutes versus 75 minutes per day), he says.

But post-retirement men retreat to their families, spending just 53 minutes a day on social contact outside the home, while women spend almost double that time – 103 minutes – socialising outside.

“Retired men report a shift towards spending more time with partners – a finding strangely at odds with what women say,” Patulny says.

The impact is likely to be worse for men who are single, separated, divorced or widowed because of their lack of support, he says.

“I suspect that a lot of men would like to be more social in retirement, but they don’t know how to make new friends out of the work environment,” he says.

The news does not get much better financially. Many people will live a lot longer than they think, meaning that large numbers of us will not have enough superannuation to pay for a comfortable old age.

Associate Professor Hazel Bateman argues that well-informed participation in our super fund is vital, yet so many of us switch off and tick the default option when faced with so many choices. She has been awarded almost a million dollars from the Australian Research Council to look into this so-called paradox of choice.

“Traditional economic theory assumes people behave as rational savers with not only the ability to understand, but also the willingness to make coherent choices in relation to retirement savings. Quite simply, many appear not to be doing that,” she says.

So far, the research shows the extent to which superannuation investment choices are influenced by the skill of retirement savers (measured in terms of their financial literacy) and the way investment risk is presented.

“We find that people make quite different investment choices when presented with essentially the same information about investment risk in different ways.”

And the recent Cooper Review of superannuation might not have all the answers either.

“I have reservations about the proposed no-frills MySuper idea. A uniform investment option will not be appropriate for everyone, and this approach may entrench disengagement. An alternative would be to encourage greater participation through better-designed information and financial education,” she says.

If the theory of rationality is flawed, she argues we need to focus on behavioural explanations for retirement savings choices. The aim of the research is as simple as the paradox: to inform policy makers and the superannuation industry on the best way to design policy and present information that ensures decisions – made decades previously – were the best saving option.

Clowns are bringing their red noses and colourful costumes into Sydney nursing homes as part of a unique project using humour to change the lives of dementia sufferers.

This follows a pilot that was so successful the nursing home involved raised up to $40,000 to keep the clowns coming back after the trial had finished.

Dr Peter Spitzer, one of the key researchers who often plays the clown himself, says the arrival of the team had an immediate impact on some patients’ lives.

“There was one nursing home resident who had been clinically depressed for a very long time. She would sit in her room all the time and not come out,” Dr Spitzer says.

“But the clowns would entice her out and she would sit with the group and that would continue even after the clowns left.

“Her family believed it was the clowns that had helped her.”

It was experiences such as these that helped the researchers secure NHMRC funding to roll the project out.
across 18 nursing homes across Sydney. 
Sending the clowns into the medical arena is Dr Spitzer's life's work.

The approach is founded in a passion for the arts and a belief in the healing power of laughter. With circus performer Jean-Paul Bell, the Southern Highlands GP launched the Humour Foundation that first put clown doctors into the Sydney Children's Hospital in 1997.

"The clown is like a partnering of art and medicine. You could say that it's like bringing the court jester into serious situations," Dr Spitzer says. "We take the performing arts off the stage and to the bedside."

Dr Spitzer has seen the medical benefits for children and in palliative care units, but more recently he also saw the clowns could play a positive role in aged care and dementia.

Determined to back up the theory with research, he came to see dementia specialist UNSW Professor Henry Brodaty.

As a result, professional clowns – armed with a collection of props, including hats, Bakelite telephones and puppets – are being sent to nursing homes two hours a week over a three-month period for the study. Their aim is to amuse and entertain, but above all, engage, the residents, some of who can no longer talk.

The clowns draw the residents into their act through tasks as simple as trying on a number of different hats, then asking if each is appropriate to wear on a date.

"There is very little connection for people in dementia facilities, especially those with more severe dementia. They get physically taken care of, but they don't get the emotional connection. It's about being happy with the person, rather than getting them to laugh per se – but you do get lots of laughter," says Dr Lee-Fay Low from UNSW's School of Psychiatry, one of the researchers on the project.

The work is focused on mood and quality of life, not improvements to memory.

While family and friends reported noticing patients were happier as a result of the trial, higher-functioning residents also gave positive feedback. They recognised the clowns after six visits and were pleased about them coming.

"The clown visits are great, but the program is much more than that," says Dr Low, who notes that it is the active, individualised treatment that works so well for patients. "It's the idea of humour being part of the life of the facility."

A staff member, who continues the work of the clowns after they leave, is called the "laughter boss". They receive special training from Dr Spitzer.

With his doctor's hat on, Dr Spitzer points out that there are a lot of physical and psychological benefits to laughter, including improved cardiovascular health, increased oxygenation of the blood, the stimulation of the reward centre in the brain, a reduction in depression and enhanced learning.

But after talking with Dr Spitzer for a while, you sense that he's happiest as a clown: "Laughter is the shortest distance between two people – to quote Victor Borge," he says. "There is a special connection that comes from working with people with dementia. It fills the heart, it fulfils a human connection."

"One of the last things to go with dementia is the sense of humour," he observes. "Who addresses that, especially if staff are run off their feet? It's possible to have smiles and laughter in later life ... it changes the journey for everyone."
Message in a bottle

Australia’s first fully compostable bottle has been developed by a COFA design graduate.

By Susi Hamilton.

If Sara Spence has her way, you won’t be throwing out the plastic bottle she’s designed – even though it is compostable. It is made from a completely recyclable and biodegradable form of plastic made from vegetable starch, called polylactic acid (PLA). It would disintegrate after two years.

But that’s not the only point of difference. The bottles fit together, when lined up next to each other – much like a couple who “spooning” – hence the name of the “Love Bottle”.

“It’s about creating connectivity between the bottles,” she says. “One bottle is part of every bottle created, so it is designed to make you think about the extent of the environmental problem when you pick one up.”

And as they are beautiful, it’s hoped they would be re-used.

“If we look after the products which we use on a regular basis and ensure they are used responsibly, we are showing signs of love for them.”

The 25-year-old is in talks with a New Zealand company to commercialise it.

“If they do go into production, I think there will be pressure on their competitors to follow suit,” she smiles. “I’m hoping that will then trickle down to food packaging, medical packaging and to other companies that use plastic in such vast quantities.”

Sweet taste of success

Playing around with our daily bread proved a winning recipe for a group of students, writes Peter Trute.

While Australia was focused on the dishes produced nightly on TV by aspiring master chefs, UNSW food science students were quietly dominating another national competition.

They were focused on the serious business of coming up with new food products that may end up on our supermarket shelves.

Two teams of food science students from the School of Chemical Sciences and Engineering produced a satisfying finish at the Australian Institute of Food Science and Technology’s Student Product Development Competition, taking first and second place with creations that give a healthy twist to some traditional favourites.

Karen Chan, Tanid Nganthavee and Noradilah Hamid took first place and a $2,000 prize with their Ve Bread, bread enriched in vegetable content which is targeted at fussy young eaters.

The motivation behind the product, which incorporates dehydrated carrot, sweet potato, pumpkin and corn, is to give parents an easy way to increase children’s vegetable intake.

“Statistics have shown that an estimated 10 per cent of adults and 38 per cent of children are meeting the dietary guidelines for recommended daily intake of vegetables,” Chan says.

“In the brainstorming process we came up with other ways to deliver vegetables such as vegetable donuts – but donuts are unhealthy products – and baked vegetable muffin bars, but according to statistics 90 per cent of Australians consume bread on a daily basis so bread was the logical choice.”

The second UNSW Engineering team of Janet Liu, Hongxue Zhao, Xin Sun and Grace Liang, were highly commended at the Melbourne-based awards for their product, Bubble R-ice Cream – a low-sugar, ice-cream sandwich confectionery using rice bubbles as the biscuit base.

The team submitted coffee- and rose-flavoured samples for judging and won the sensory evaluation category of the national awards along with some encouraging feedback from the judges.

“They said this project really had a possibility to get into the market and that it was a good idea, so maybe we need to talk to some ice-cream factories,” Liu says.

Food science and technology lecturer Professor Weibiao Zhou, from the School of Chemical Sciences and Engineering, says developing new products is vitally important for food companies.

Developing food for mass production requires careful attention to factors such as texture, appearance, shelf life and production cost, as well as identifying markets and consumer preferences to ensure the product’s viability.

“The capability to develop new products is probably one of the key issues for a company to survive – the skill here is very important,” he says.

For the video story, go to the Engineering collection of UNSWTV at www.tv.unsw.edu.au
For those working in the field of sexually transmitted infections (STIs) it remains a Dickensian world – these are, to quote the Victorian novelist, the best of times, the worst of times and the age of wisdom.

One of the researchers helping expand our wisdom is Professor Basil Donovan, a world leader in sexual health and head of the Sexual Health Program at UNSW's National Centre in HIV Epidemiology and Clinical Research (NCHECR).

The academic is a colourful commentator in the field, bringing humour to an area that too often is taboo. In 2008 he pronounced oral sex as the “new black” in the bedrooms of Australia.

“Among teenagers it’s the new abstinence in the Clintonesque sense, because it’s a way of having sex without having sex, and there are obvious contraceptive advantages too,” he said at the time.

Away from the headline-grabbing pronouncements, he works with HIV patients and consistently fights for the rights of sex workers here and overseas.

One of his research areas is syphilis. In many ways it is a tale of two communities. In the gay community it is rampant; in our Indigenous communities its reduction is an ongoing success story.

Donovan and his colleagues are hoping to turn the story around in the gay community with a large-scale trial, now in the planning stages, dubbed Syphilaxis. High-risk gay men will receive a daily antibiotic to prevent them contracting and transmitting syphilis.

At the same time, he is optimistic that in Indigenous communities, the infection could be eliminated with constant intervention at the time of outbreaks among the mostly teenage affected groups. Infectious syphilis in Aboriginal and Torres Strait Islander communities has dwindled to less than 200 cases nationally each year as a result of the progressive enhancement of health services and particularly good protocols for the control of STIs. Donovan’s group is also part of the STRIVE project, in which rural and remote Indigenous communities will receive a package of anti-STI interventions.

An STI on the edge of elimination is the coincidentally named donovanosis, an ulcerative condition almost never seen outside Indigenous communities. Thanks to greatly improved testing and treatment, it too could soon be eliminated.

By contrast, the chlamydia epidemic shows no sign of peaking. In Australia, as in every Western country, it is the most frequently notified STI. There were 60,000 notifications here last year, suggesting a real figure of more than 200,000 infections. The Sexual Health Program is participating in a new project in which 54 Australian towns and their catchment areas will be recruited into a randomised trial. In the intervention towns every young person will be offered repeated screening over three years for chlamydia and offered treatment where appropriate. This $4 million study, designed to establish the benefit of intensive screening in controlling chlamydia, will be run through all the towns’ primary healthcare services, GP practices and Aboriginal Health Services. “If you screen enough of the right people, you can break the transmission cycle,” Donovan says.

A happy coincidence

The national vaccination program of young women for the viruses that cause cervical cancer has had another benefit – a marked decline of cases of genital warts. The government-funded roll-out of the vaccination program (which began in mid-2007) was for all females between 12 and 26 years of age; about 80 per cent of schoolgirls and two-thirds of eligible women were vaccinated.

Eight sexual health services around Australia formed a surveillance network to observe the pattern of patients after the vaccination program began. After vaccination, there was a marked and continuing decline in the numbers of young women under 27 diagnosed with genital warts – a 60 per cent decline in the first 50 months of the vaccine program. Though they weren’t vaccinated, young heterosexual men experienced a smaller decline of 38 per cent, probably because many of their partners were vaccinated.

“Genital warts are distressing to the patient, as well as being difficult and expensive to treat,” says Professor Andrew Grulich, of NCHECR, who co-authored the report with Professor Donovan. “While we knew from clinical trials that the vaccine was highly effective, Australia is the first country to document a major benefit for the population as a whole.”
New books by UNSW staff

A selection of titles that are hitting the bookshelves.

Author: Professor Ken Hillman, Faculty of Medicine
Title: Vital Signs
This gripping collection of stories about the experiences of intensive care patients, their families and carers, is about ordinary people facing terrible tragedies and the ways they cope with them. The author, an experienced intensive care clinician, takes the reader on a journey inside an intensive care unit (ICU) and reveals to the public, for the first time, what really happens inside. The book traces the personal experiences of ICU patients and their families and the struggles of staff providing care in this critical environment. It also offers a searing critique of the way modern healthcare can fail those in greatest need.
Publisher: NewSouth Books

Author: Associate Professor Stewart Lone, ADFA
Title: Provincial Life and the Military in Imperial Japan
From the beginning of the 20th century, the stereotype of Japan in the West was of a militaristic society imbued with the values of an idealised samurai class. This stereotype damaged Japan’s relations, with rising hysteria in the West about Japanese expansion and with anti-Japanese immigration laws in Oceania and North America. This book uses local histories and especially local newspapers from the 1890s to the 1920s to show ordinary Japanese and the reality of relations between civilian society and the military. The harmful stereotype of the “nation of samurai” is shown to be a phantom and readers get a much clearer sense of the diversity and humanity of the Japanese people.
Publisher: Routledge

Co-author: Professor Martin Loosemore, Faculty of the Built Environment (with Florence Phua)
Title: Responsible corporate strategy in construction and engineering
This book seeks to untangle the rhetoric and reality of corporate social responsibility (CSR) in the construction and engineering industries. It argues that CSR’s role in the evolution and implementation of effective strategy has been glossed over by the unbalanced treatment which the subject has received. This book is written for a new generation of progressive leaders who recognise that in the future, competitive advantage will be achieved by leveraging human, intellectual and social capital as well as monetary and physical capital.
Publisher: Spon Press

Editor: Associate Professor Jane McAdam, Faculty of Law
Title: Climate Change & Displacement – Multidisciplinary Perspectives
This book brings together a variety of disciplinary perspectives on the phenomenon of climate-induced displacement. With chapters by leading scholars in their field, it collects in one place a rigorous, holistic analysis of the phenomenon, which can better inform academic understanding and policy development alike. The book will help to facilitate the creation of principled, research-based responses, and will establish climate-induced displacement as an important aspect of both the climate change and global migration debates.
Publisher: Hart Publishing

Co-author: Professor George Williams (with David Hume)
Title: People power: the history and future of the referendum in Australia
People Power is the only full history of constitutional change in Australia. It closely examines Australia’s referendum record, and explains why success has been so rare. It includes interviews with leading proponents for constitutional change, alongside political cartoons, advertising and brochures from key referendum campaigns.
Publisher: UNSW Press

Editor: Associate Professor Heather Worth (with Jing Jun)
Title: HIV in China: understanding the social aspects of the epidemic
When China’s first HIV-positive patient was reported in 1985, among those initially infected were peasants who had sold their plasma to international companies. Then it became clear that sex workers and injecting drug users were also becoming infected, and later, transient populations, ethnic groups and the poor. The realisation that HIV was a profoundly social issue had begun to dawn. It was becoming clear that this epidemic was being propelled by three main economic drivers: the blood trade, the drug trade and the sex trade. In this unique book young Chinese scholars map some of the most important social, political and cultural characteristics of the HIV epidemic in that country. The result of a collaboration between UNSW and Tsinghua University in Beijing, HIV in China uncovers some hidden truths about the spread of the disease and its social impacts.
Publisher: NewSouth Books

Suggestions for new books to include in the next issue of Uniken should be sent to uniken@unsw.edu.au.

Diary

15 Sept Former South African Constitutional Court judge, Albie Sachs, will discuss a documentary about the design of South Africa’s Court of Transformation at COFA. RSVP to 9385 1805 or ahrcentre@unsw.edu.au.

21 Sept The Great Asylum Debate. A panel discussion moderated by UNSW’s Professor George Williams. RSVP to j.mcadam@unsw.edu.au or 9385 2210.

25 Sept How mobile and social media are changing us - Associate Professor Kate Crawford in FASS’s So, What? Lecture series. RSVP to 9385 8512 or so.what@unsw.edu.au.

50 Sept Deadly Vibrations. Aboriginal and Torres Strait Islander Music Festival organised by UNSW Indigenous Collective.

21 Oct Music, power and the composer’s black art – Professor Andrew Schultz in FASS’s So, What? Lecture series. RSVP to 9385 8512 or so.what@unsw.edu.au.

For more information about these and other events at UNSW, go to www.unsw.edu.au/events.
Don Weatherburn is the go-to man of crime statistics. He’s the person the media calls when the twists and turns of crime need putting in perspective. Despite the fact he’s spent more than 20 years analysing the state’s darker side, his demeanour seems untarnished by the subject matter with which he deals.

“The work’s fascinating and there’s infinite variety,” he says enthusiastically. “The research challenges involve everything from face-to-face interviews with offenders or victims, to complicated statistical analysis of crime trends and patterns.”

Don received his BA in Psychology with first-class honours in the mid-70s and completed his PhD in 1979, but he found aspects of psychology frustrating.

“Criminology captivated me because I could apply statistical methods to very real problems. Before that I’d found parts of psychology to be detached from real-life experience.”

During his time at the NSW Bureau of Crime Statistics and Research, Don has seen crime rates plateau, and in the past 10 years hit an all-time low. Increased imprisonment rates have helped minimise crime, but for Don, locking up offenders is a short-term fix. He believes rehabilitation is the only answer.

“Research shows us that rehabilitation reduces re-offending by addressing the underlying causes of crime. Rehabilitation is an old word and an old concept, but it’s enjoying a rebirth,” he says.

Don sees the media as a “corrosive” barrier to public understanding of what’s effective in dealing with offenders.

“The media make a fortune from arousing the public’s fears, anxieties and anger. It’s just not in their interests to give a balanced view of crime.”

Don returned to academia five years ago to embrace the chance to connect with students.

“The value of this position for me is having the opportunity to get back into teaching, that’s the part of being an Adjunct that matters to me,” he says.

Earliest memory? Poking around Meadowbank dump with my brother looking for things to take home and rebuild. We used to make canoes out of galvanised iron glued together with melted bitumen we scraped off the road on hot days. Then we’d paddle around the toxic brew that’s the Parramatta River.

Treasured possession? My satellite navigation device. I was always worried about getting lost in the bush until my wife bought it for me.

Last meal? Barbecued Atlantic salmon with a nice salad and a glass of NZ sauvignon blanc, with my wife and children (Bill, 17 and Genevieve, 15).

Favourite book? Confessions of Felix Krull, Confidence Man by Thomas Mann was the funniest book I ever read. It follows an amoral man who charms his way into high society and betrays and cheats everyone – a psychopath in the technical sense. You just can’t help but fall for his character.

Where do you feel most inspired? I get most of my ideas on my morning walk from Coogee to Bronte. But my most inspiring bushwalking moment was on the Larapinta Trail in Alice Springs, sitting on top of Brinkley Bluff watching the sunset.

What are you always being asked? “What’s happening in crime … is it up?” But the question that always sticks in my mind is the crime victim who reproaches me and asks, “How can you say crime rates are down when I was assaulted last week?” You realise statistics and research only play a small role in shaping opinions about crime compared with the strength of personal experience.

If you weren’t doing this job what would you be doing? If I had the talent I’d be a novelist, preferably a successful novelist … to make a living out of your own creativity would be wonderful. *

Don Weatherburn spoke with Fran Strachan
Name: Dr Sarah Williams  
Position: International law lecturer  
Faculty: Faculty of Law  

Research: My research looks at the prosecution of genocide, crimes against humanity and war crimes by hybrid or internationalised criminal tribunals – courts of law that are a mix of international and domestic elements. I have a book out soon on the PhD I finished about a year ago where I look at several tribunals including in Cambodia, Iraq and Sierra Leone.

I look at jurisdictional issues – when tribunals exercise authority, what types of crimes they cover, their legal basis, how they cooperate with states, and where tribunals fit into the international law framework.

It’s a relatively new area and it is usually suggested that because each situation is different, the normal rules don’t apply. My research is challenging that assumption and looking for common themes or issues across the tribunals.

When they were set up it was hoped the tribunals would have the benefits of both the international and domestic processes, but they’ve ended up also having the drawbacks. Non-legal constraints such as politics and finances play a role and tribunals depend on states’ cooperation to function. It’s something that many people struggle to understand; why you can’t just go and pick someone up who’s been accused of horrible crimes and get them to the court.

But I think they are worthwhile – it’s difficult to overestimate the effect on victims of seeing perpetrators in the dock being brought to account for their crimes.

Inspiration: When I started looking at this topic I was completing my research Masters on the post-conflict administration in Kosovo and whether the UN was accountable for any human rights violations there.

I’d been working in commercial law and remember watching the situation in Kosovo unfold in the media and being quite affected. I felt I could make more of a contribution to these types of issues. Because international law is still developing, you can write an article and see that the judges are reading it. Sometimes you even see your ideas sneaking through. As a researcher, that’s very satisfying.

Sarah spoke with Steve Offner.