Can a new generation of campus comics revive a flagging tradition?

Laugh Lines

PEOPLE OF INFLUENCE  INSIDE THE GRATTAH THINK TANK
Want more? Go online!

Social media can connect you with many of the University’s 300,000-strong alumni community. Our alumni are represented on all the major networks. Go to alumni.unimelb.edu.au/my-network/social-media to find out more.

Pinterest
Find out what your fellow alumni are up to by following the Alumni in the news board on Pinterest.

Facebook
With more University of Melbourne alumni on Facebook than any other social network, it is the place to go for the latest alumni news, events and benefits.

Twitter
Go to Twitter to follow famous alumni like 3010 cover star @ronnychieg, or to enjoy live tweets from selected alumni events.

Weibo
Get University updates and connect with Chinese-speaking alumni on Weibo, China’s popular microblogging service.

LinkedIn
Keen to move up the career ladder or help others who are? Go to LinkedIn to get — or give — career advice and find new opportunities.

Flickr
Check out photos from alumni events around the world on Flickr — you might even spot yourself!
We were heartened by the warm response to the first issue of 3010, the new-look Melbourne University Magazine, which was published in June.

3010 is the postcode for Parkville, and is unique to the University of Melbourne.

We welcome your feedback.

Email your comments to alumni-office@unimelb.edu.au
Write to us at:
The Advancement Office,
The University of Melbourne,
Victoria. 3010 Australia
Call us on:
+61 3 8344 1751.

EDITORIAL TEAM
MANAGING EDITOR
Val McFarlane
EDITOR
Ken Merrigan/Mediaxpress
DESIGN
Bill Farr/Mediaxpress

UNIVERSITY NEWS
Teaching to the masses 4

OAR GLORY
Getting ready for the boat race 13

ON YOUR MARKS
Athletics club celebrates 125 years 19

MARKETS & MINDS
So what is neuroeconomics? 22

CARING FOR CULTURE
Art conservation gets a boost 24

DECODING EPILEPSY
Gene research cracks a mystery 26

DOOKIE’S EVOLUTION
An old campus, a new faculty 28

ALUMNI PROFILES
Startup stars 31

WELCOME TO MELBOURNE
Alumni extend a hand 34

ALUMNI NEWS
Plus milestones 35

THE LAST WORD
Art takes to the streets 38

THE ESSAY
OUR URBAN DESTINY 14
Professor Rob Adams argues that cities hold the key to our economic, social and environmental challenges.

PROFILE
PHILANTHROPY INC. 16
Audette Exel uses her flair in global finance to help the poor in the world’s remotest places.

COVER STORY
FUNNY BUSINESS 10
A University tradition of nurturing fresh comic talent may be undergoing a welcome revival.

OUR COVER:
Still laughing: Ronny Chieng, Libbi Gorr and Rod Quantock.
PICTURE: JULES TAHAN
INNOVATION

Researchers to give milk a shake

Longer-lasting Australian dairy products with high nutritional value will soon be available to consumers in Australia and overseas thanks to a major industrial research initiative.

The new ARC Dairy Innovation Hub will help Australian dairy manufacturers to develop new products to meet the increasing local and global demand for high-quality dairy products, particularly in Asia.

New products could include butter and dairy blends with improved taste and spreadability, lactose-free and reduced fat, long-life milks that really do “taste like real milk”, yoghurt that will retain its texture for longer without “watering off” in the fridge, and a wider range of more consistent, natural cheese flavours and textures.

Hub Director, Associate Professor Sally Gras (BSc(Hons) 2002, BE(ChemEng)(Hons) 2002), from the University of Melbourne’s Department of Chemical and Biomolecular Engineering, says the initiative brings together three of Australia’s leading dairy research groups in a five-year, $13 million research program co-funded by the Australian Research Council, Dairy Innovation Australia, the University of Melbourne and the University of Queensland.

“Dairy manufacturing is currently worth more than two billion dollars to the Australian economy and will continue to increase as the demand for food required in Asia doubles in coming years,” she says.

Dairy Innovation Australia CEO Dr Lesley MacLeod says the new centre will focus on translating research excellence into industry value. “This approach will use innovation to help our manufacturers both grow and add value in domestic and export markets,” she says.

Over the five years, researchers will also evaluate new processes to improve dairy manufacturing in Australia. “These insights will help manufacturers make new products and design processes that can reduce waste and lead to water and energy savings,” Gras says.

EDUCATION

MOOC: teaching to the masses

“The more the merrier” is not a phrase often associated with class size, but the increasing popularity of online learning may change that. The University of Melbourne’s Graduate School of Education (MGSE) has launched a Massive Open Online Course – or MOOC – on how to give school children the skills to survive in a world of ever-changing technology.

More than 15,000 people have enrolled in the course, titled Assessment and Teaching of 21st Century Skills. They are among 500,000 who have enrolled in the University’s MOOCs since it joined international platform Coursera in 2012.

Course co-ordinator Professor Patrick Griffin (BSc 1968, MEd 1976) says the scale is unimaginable for face-to-face teaching. The course has attracted students from 160 different countries, about 50 of which are in Asia. The cohort is highly educated: 9 per cent have doctorates, 38 per cent hold higher degrees, and a further 38 per cent have completed undergraduate degrees.

Like all MOOCs, Assessment and Teaching of 21st Century Skills is offered free and enrolment is open to anyone. While students get the chance to learn from world-leading researchers, the researchers are enthusiastic about the opportunity to share and collaborate with thousands of people.

“In such a new field, harnessing the insights of such a large group is very exciting,” Griffin says.

“MOOCs challenge everyone involved – participants and staff – to use and improve their skills in digital learning, which is in itself a 21st-century skill.”

Organisers say they have learnt a lot from running this MOOC and are investigating the prospects of delivery in different languages.

MOOCs at Melbourne: le.unimelb.edu.au/moocs
A new study of satellite sea ice measurements shows that dramatic changes in the world’s sea ice cover have occurred over the past 35 years. Lead investigator Professor Ian Simmonds, from the University’s School of Earth Sciences, says: “The late-summer Arctic sea ice coverage has shrunk by three million square kilometres since 1979. “There were significant decreases for every month of the year, with the greatest rate of decrease in September. Some are now suggesting that September sea ice could disappear from the Arctic in as little as 25 years. “In contrast, Antarctic sea ice has been expanding, and 2013 was a record-breaking year. In September, we saw the greatest coverage of sea ice since satellite records started in 1979.” Overall, sea ice around the world is shrinking by about 35,000 square kilometres a year. These dramatic changes are of concern, as the polar regions influence global climate patterns. “It seems counter-intuitive, but the growth in the Antarctic sea ice is consistent with global warming and the effects of increased atmospheric carbon dioxide,” Simmonds says. “There is strong evidence to indicate changes in the concentration of greenhouse gases in the atmosphere are leading to region-specific changes in climate. “The greenhouse effect is strengthening the westerlies over the Southern Ocean and this could be causing the increase in the Antarctic sea ice zone. Ultimately ocean warming will counteract this but it may be a number of years before that takes place.”

This study is published in the Annals of Glaciology.

Footy flourished as work week cut

AFL probably wouldn’t be Melbourne’s dominant sporting code today had city workers not won Saturday afternoons off in the 1860s. A new study by the University, published in the journal Sporting Traditions, questions the origins of Aussie rules. The study found that the 1856 campaign for the eight-hour workday was the most important step in the game becoming Melbourne’s dominant code. “For a sport to become the dominant code, more than anything it needs to attract large numbers of paying spectators,” says study author Dr Tony Ward, an honorary research fellow in the School of Historical and Philosophical Studies. In the 1850s, the city’s population boomed with the gold rushes, but people worked long, six-day weeks. Then, in 1856, stonemasons working at the University won the right to an eight-hour working day. Other trades soon followed. In the 1860s and ‘70s, Melbourne workers became the first in the world to win Saturday afternoons off. “Workers wanted entertainment and to let off steam when they clocked off on Saturday afternoon. A trip to the footy was the ideal outlet,” says Ward.

Believe passes key milestone

More than $300 million has now been raised by Believe – the Campaign for the University of Melbourne. Thanks to the generosity of more than 16,000 donors across six continents, the Campaign total passed the $300 million mark in June. The aim is to raise $500 million by 2017. “Support for the Campaign has been tremendous,” says Vice-Principal (Advancement) Sue Cunningham. “Reaching this important milestone is yet another opportunity to thank our donors for their generosity, and emphasise the transformative impact their gifts have had on the lives of others.” The Campaign has three major priorities: educating tomorrow’s leaders, finding answers to the world’s grand challenges through research and enriching communities, in Australia and beyond.

Recent gifts include $10 million from leading philanthropist Greg Poche AO to create the University of Melbourne Poche Centre for Indigenous Health, and $250,000 from Campaign Board Member Jason Yap OAM to the Asia Institute, supporting research into the role of Asian-Australians in the Asian Century.

The Campaign figure also includes donations generated through the University’s Annual Appeal, which broke its record this year, passing the $1 million mark in only five months.

The $300 million milestone was celebrated with the production of a video featuring just some of the students, researchers and projects that are benefitting from the funds raised.

To view the video and learn more about the Campaign visit campaign.unimelb.edu.au
Deep in thought
Its mission is to help shape Australia’s big policy debates – and so far the Grattan Institute seems to have hit the mark. Gay Alcorn goes inside the think tank.

They are into bold ideas and big thinking but today the policy specialists at the Grattan Institute are taking a moment to savour a small success in their quest to influence the nation’s agenda.

One of the think tank’s reports on superannuation has just created a splash with its details on how excessive fees – $20 billion a year in total – are hurting the retirement incomes of Australians. The report has generated headlines, soundbites, commentary and more than a little disquiet in some quarters.

“Lots of outrage,” as one of the institute’s researchers puts it, “which is what we want.”

At the weekly meeting of the institute’s program directors – the key people driving the research – this feedback is well received, particularly the part about vested interests being upset.

But the job is far from complete, Professor John Daley, the Chief Executive, tells his colleagues. “Step one,” he says, “is to win the people who really think about this stuff deeply. Step two is to win the public. That’s where this will have to go next, so congratulations everyone.”

Then the meeting turns to possible follow-ups – hosting dinners with backbenchers from all sides in Canberra, as well as private and public talks and briefings to push the case for superannuation reform.

Dr Jim Minifie (BA(Hons) 1988, MCom(Eco) 1992), the program director of the Productivity Growth section which produced the report, says the research is being picked up. “Lots of outrage,” as one of the institute’s researchers puts it, “which is what we want.”

Dr Stephen Duckett has held senior positions in health care in Australia and Canada. Headed the Commonwealth Department of Health.

Tony Wood worked at Origin Energy for 11 years, and was an adviser to the first Garnaut climate change review.

Jane-Frances Kelly (below) spent three years in the British Prime Minister’s Strategy Unit. She has also worked for the Queensland, Victorian and Commonwealth governments.

with limited practical relevance. It conducts rigorous research, proposes solutions, and argues for them in the media, at private briefings, at public events and before parliamentary committees. It wants to change things.

For inspiration, three of its rooms are named for people devoted to evidence as the driver of reform and change – nursing pioneer Florence Nightingale, Nobel Prize-winning physician Barry Marshall and Australia’s first Solicitor-General, Robert Garran.

Minifie, an economist who joined the institute two years ago, worked intensely with two other researchers for four months to complete the Super sting report. There’s no formal academic peer review system, but the work is tested before release – in this case, academics reviewed it here and overseas, the OECD reviewed the content, and it was sent to experts so they could “tell us what we’ve got to fix”.

The goal, Minifie says, is to change policy. “If in doing you’ve got to think about the steps… some combination of the public, the political class if you like, and the senior public service need to be sufficiently aligned that the policy would then have a chance of being picked up.”

Grattan is politically agnostic, unlike many well-known think tanks in Australia such as the libertarian Institute of Public Affairs, the right-wing Centre for Independent Studies or the left-leaning Centre for Policy Development. It’s evidence-based. This in an era – often labelled post-truth or post-evidence – of rancorous politics where common ground is viewed as a sign of weakness.

Daley is a sharp and energetic 47-year-old whose degrees in science and law from the University of Melbourne were followed by a DPhil from Oxford. He has spent years working in both the public and private sectors. The Grattan job appealed because it was “a bit public sector, a bit private sector and a bit academic” and because a think tank has the freedom to look at anything it thinks is important, which is not always possible in the public service.

He says policy debate in Australia is less hopelessly partisan than people might think.

“We’ve had a highly partisan public debate about climate change, but when it comes to what else divides our politicians, the answer is, by and large, it’s relatively thin,” he says.

“The real differences between Australian political parties are not that big, particularly when you compare us to the United States where the divide on policy is enormous. In Australia, there are huge chunks of policy on which the parties basically agree.”

Good policy just takes time. “If you look back

CONTINUED PAGE 8
at the history of reform in Australia, if a government does one really big thing every year it has comprehensively outperformed. If it does one thing every three years, it’s probably batting about average… I would say that the best evidence wins a lot of the time. ‘’

The Grattan Institute may be politically unaligned, but it’s not value-free. Its ethos is to contribute to policy in Australia “as a liberal democracy in a globalised economy” . It chooses its subjects in seven areas – Cities, Energy, Health, School Education, Higher Education, Australian Perspectives and Productivity Growth – and focuses on big, achievable things that aren’t being tackled elsewhere.

Daley is conscious that only one of its program directors – Jane-Frances Kelly, head of Cities – is female. “If you look at the senior levels of policy makers across Australia they are very (male) skewed, and that is ultimately the kind of pool we are drawing out of. If I had more female program directors I would be happier. ”

For the work itself, it is an “article of faith that we are driven by the evidence and we talk to all sides of politics and we are not aligned” .

“People in education tend to do or talk about what they’re really good at, which is analysis, not action. We don’t usually get a response from policy makers about our reports,” he says.

‘’

The Grattan Institute is being noticed. Daley points out that both the majority and dissenting reports of the recent Senate inquiry into the Government’s pre-budget Commission of Audit quoted its work, something that pleased him enormously.

Grattan is regularly cited in the mainstream media as a credible source of factual information on contested topics, and it has played a part in shifting the parameters of some debates.

Two years ago, Grattan proposed increasing to 70 the age for accessing the aged pension and superannuation.

“ At the time everybody said we were crazy, and today, it’s official government policy to move the pension age to 70 and the Treasurer (Joe Hockey) has said that he and the PM are thinking of moving the superannuation age as well, so in two years official policy has moved a very long way, ” he says.

Then there’s the work of Dr Ben Jensen (BCom(Hons) 1996, PhD 2003), until recently the program director of School Education, on the consistent steps needed to turn disadvantaged schools around. His 2012 report, Catching up, looked at the best-performing education systems in East Asia, and what Australia could learn from them.

His work has been taken up in state bureaucracies, and has shifted the debate beyond the constant demands for more money.

There’s also Grattan’s work on childcare showing that reducing its cost is much more important than paid parental leave when it comes to increasing workplace participation – now a widely accepted proposition.

Andrew Norton, program director of Higher Education, points out that across politics there was scepticism about the demand-driven system in higher education, in place since 2012, which uncapped undergraduate student places.

Norton’s 2013 report, Keep the caps off!, argued that overall the system was working well to lift the supply of graduates, improve choice and increase accessibility to disadvantaged students. That position is now widely accepted. And Dr Stephen Duckett, a former health department secretary and now in charge of Health at the institute, has put the high cost of Australia’s Pharmaceutical Benefits Scheme in clear focus. His report, Australia’s bad drug deal, revealed we were paying at least $1.3 billion a year too much for prescription drugs compared with countries such as New Zealand.

Drug companies were not happy, but Duckett and other Grattan program directors are unafraid of entering political debate. Duckett points out that the evidence is Australia’s health system is efficient by international standards and he has strongly criticised the May Federal Budget, which “took a wrecking ball to trust in Commonwealth-state relations” .

The idea for a well-resourced, heavy-hitting domestic policy think tank came from Terry Moran AC about 2005, when he was Secretary of the Department of Finance.
Premier and Cabinet in Victoria (he was later the Secretary of the Department of the Prime Minister and Cabinet under the Rudd Government).

The broader story is a case study in how these things get up – a coming together of wounded state pride, personal connections and a few people who kept pushing. Moran gives credit to then-Premier Steve Bracks AC for embracing big ideas, to Greg Hywood and Chris Barrett (BCom 1990, BA(Hons) 1991, MA(IntRel) 1999) – then working within the Department of Premier and Cabinet – Treasurer Peter Costello AC for agreeing in principle to federal matching funds, and Professor Glyn Davis AC, the Vice-Chancellor of the University of Melbourne.

The idea stalled for a year when the Victorian Government and the University of Melbourne bid for the US Studies Centre, which eventually went to the University of Sydney with the support of Prime Minister John Howard. Bracks says “we were really angry” about that, and determined to push ahead with a major think tank for Victoria. The University was also disappointed and refocused on supporting what would become the Grattan Institute.

Moran is blunt about the gap the institute was intended to fill.

“Firstly, universities are doing a terrible job of turning the fruit of their research into papers and positions that will contribute to public policy,” he says. Second, most policy is multi-disciplinary, which can be hard to pull off at a university. The third reason was that it “was obvious then that media was heading for trouble and it was an opportunity for public policy work to be taken up when the media was less and less able to afford the resources to go and research things”.

Norton, a former adviser to Federal Education Minister Dr David Kemp (BA(Hons) 1965, LLB 1966) in the Howard Government, spent more than a decade in government and says the public service has been “cut to the core” through successive efficiency dividends and is nervous about big-picture policy work in case it causes political controversy.

“I know when I worked in government we stopped the public service doing things because of the danger of it being revealed publicly before it was ready to be. That has a negative influence on public policy debate,” he says.

There has been rigorous discussion over the years about how many areas Grattan should focus on – take on more or do a few topics in depth.

Moran says of the Grattan Institute that “for a while I felt they were just there to put out papers and weren’t worried about having any impact, but that debate has been won from my point of view”.

Bracks says the Grattan Institute is “now seen as the pre-eminent domestic policy institute in Australia, and there’s a bit of competition in that space. It’s addressing issues that no one else is really doing. ”

Daley is confident it is having an impact.

“I don’t think I can prove that Grattan was a primary driver of any (policy shifts). Success always has lots of parents…What we can say is that some important recent changes are at least consistent with the direction we were pushing, and at the time we were in a relative minority pushing for them and today they have more or less happened.”

There’s a sense of intensity about the work at Grattan. It’s serious work but great fun, says Daley. “It’s intellectually interesting, it’s engaging, it matters for the future of the country, you get to work with a good number of people who are similarly motivated. What’s not to like?”
A funny thing happened.
Can Ronny Chieng and a new generation of comedians rekindle a University tradition that began with Barry Humphries?

BY LIZ PORTER

Comedian Ronny Chieng is on stage at the 2014 Melbourne International Comedy Festival's late festival club, riffing on internet piracy. "The US film industry says piracy is costing it $20 billion a year," he says. "Can you believe that?"

He pauses a beat. "Don't they know they can download that stuff for free?"

Then he recounts a row with his girlfriend about sexist US rapper Kanye West.

"OK, let's have this conversation," he tells her. "I went to an elite law school. I do not lose verbal arguments. OK? I will debate this until I win – or one of us dies."

While Chieng's law degree from the University of Melbourne is a rich source of material for his on-stage persona, his University background has further significance.

Born in Malaysia and educated in the US and Singapore, Chieng is one of the brightest young comics in the country, a stand-up who has garnered rave reviews at comedy festivals from Melbourne to Montreal and Edinburgh, rave reviews at comedy festivals from the US and Singapore, Chieng is one of the brightest young comics in the country, a stand-up who has garnered rave reviews at comedy festivals from Melbourne to Montreal and Edinburgh, ...
Kate McCartney (a comedian and actor).

And now there's Chieng, who arrived at the University of Melbourne knowing nothing of its extraordinary comic tradition, or its apparent decline.

Yet this history touched him in 2009 when, in his final year of law, he took on the job of producing the Law Revue and found himself with a $2000 donation from Working Dog to spend on props. "They weren't asking for sponsorship," he says. "They just did it and it was a huge deal for us – it went a long way."

With Chieng now one of Australia's busiest comics, it's hard to imagine him as the hesitant law student who regularly signed up for auditions and then backed out – once even making it as far as the waiting room before slinking away.

In 2009 (the year he graduated with a Bachelor of Laws and Bachelor of Commerce), he put his name down as an entrant for the Campus Comedy competition for the third year in a row. This time he went through with it – and won. He still has the tape – "pretty rough stuff, not for polite company; a bit about race, a bit about being mugged, and dating" – and plans to put it on his upcoming DVD.

The win gave him the confidence to tackle gigs off-campus. Unable to find a job as a lawyer, he devoted himself to comedy and was runner-up in the 2010 Melbourne International Comedy Festival's national RAW Comedy competition, staged at the Melbourne Town Hall.

Winning the 2012 festival's Best Newcomer Award was his big break. He also appeared that year at the Montreal Comedy Festival, "Our venue was the Prince Patrick Hotel for a future job, we were just having fun."

Rod Quantock observes that student revues of his era were staged in a time of full employment, with no separate university semesters, no continuous assessment and courses that "you could pass with three or four weeks' work at the end of the year".

He recalls an Archi Revue with 120 students involved, half doing such work as making and painting scenery, the others in on-stage roles. The last one he saw, sometime in the '90s, had only four to six people on stage.

Quantock also sees a link between the creativity of his era and the fact that his peers were the first generation of students with working-class parents to arrive at university. "There were all these people who – a generation earlier – would never have got into uni or thought about it," he says. "They chose architecture because it was the only creative subject."

The University's proximity to Carlton's Pram Factory theatre (which opened in 1970) and John Pinder's new comedy theatre restaurant, The Flying Trapeze Café (founded in 1974), was also crucial. These offered venues for the former archi students, who had by then become the Razzle Dazzle Revue troupe and were so eager to perform that they opened their own venues – The Banana Lounge, Le Joke and The Comedy Cafe.

"It was as much about Carlton as it was about the University," recalls Quantock. "It was a symbiotic thing but the seeds were definitely sown in that very concentrated area of the University and Carlton."

The legacy of this work, he says, was a "career path" for the University revue stars of the 1980s. "By then you could see that comedy had a future. That wasn't the case when we left uni."

By the time Libbi Gorr was in the last years of her law course, and part of the all-girl musical comedy act The Hot Bagels, the working path for student performers was leading straight into the vibrant Melbourne pub scene of the 1980s.

"Our venue was the Prince Patrick Hotel – and this coincided with the beginning of the Melbourne Comedy Festival," she says. "I was initiated into the comedy scene through the University. But I was slammed into it through The Hot Bagels, which took me from university into the pubs."

The "Melbourne University factor" was vital in getting her comedy career started, she recalls. "It was because of the contacts – and the pedigree and because of the confidence. You were begat of a good tribe."

Gorr notes that, while the traditional role of university revues has faded, there are now many other established and alternative paths into comedy.

"There is a definite career path: festivals (local and international). Grab yourself a breakfast radio gig. Get yourself a bit of TV. "Stand-ups have business cards and managers – and career plans. "Someone like Ronny Chieng is much more polished and sure of where he's going and what he's doing than any of the stand-ups I remember in my time."
Rivals vie for rowing glory

One student is determined to be on Sydney Harbour to experience a fierce contest.

BY IAIN GILLESPIE

Science student Hedda Cooper has already led an Australian team to victory in the world's top junior rowing competition. Now one of her dreams is to help her university win a legendary rowing event much closer to home.

The University of Melbourne will face its traditional rowing rival, the University of Sydney, in the annual Australian Boat Race on Sydney Harbour on October 26 – and hoping for crew selection is no minor ambition.

The universities alternate the race each year between the harbour and the Yarra River. They have the two most successful rowing clubs in Australia, both more than 150 years old, and between them contributed 18 athletes to the country's 2012 Olympic rowing team.

"I was stunned to get into the boat race crew last year, which was stacked with previous and future Olympians along with a few of us young ones," Cooper says. "It was awesome to be in that, and I learned so much from others in the crew."

On a typical day, 19-year-old Cooper rises at 5am, cycles to the University's boathouse for a few hours' tough training on the Yarra, and then sprints up Swanston Street for her University classes before another rowing session or gym workout in the evening.

In between, she somehow sets aside the necessary private study time for her Bachelor of Science degree and works as a coach for both the cross-country skiing and rowing teams at her old school, MLC.

A clearer picture of this talented and determined sportswoman emerges when you visualise her battling rapids during her primary school years and dreaming of competing in international whitewater canoeing championships. Cooper eventually left the rapids to concentrate on rowing at high school. Her prowess blossomed at the University's rowing club. In a remarkably short time, she has graduated from state, to national, to international levels.

Last year she represented Australia in the Junior World Championships in Lithuania as a member of the women's coxless four, and led the crew on the water as the rower who makes the calls from the bow seat. Her race in the B final was unforgettable.

"We were neck to neck with Canada with 400 metres to go," Cooper says. "I was the one doing the calls, and I knew if we started the wind early (winds are when a crew rows as fast as possible) we'd just die and they'd pass us."

"But we got a half boat length ahead, and won."

Apart from arduous training – which included three-hour non-stop speed rowing sessions as part of her world championship preparations – there are lots of tactics to learn. Even minor psychological warfare can be involved.

"In Lithuania, the German team were playing all sorts of rhythms on their legs to try to distract us. Even people's attitudes walking around the boat parks; there's a million factors come into it and they're certainly not only physical," Cooper says.

"It's such a consuming sport, and you can end up just being friends with rowers. That's something I've realised quite recently, so I'm very conscious of making sure I still maintain other relationships.

"I think the biggest thing I've achieved is learning a lot about myself. I've gained a lot of knowledge from rowing about how to react and how to communicate with other people. Often when people are driving me crazy, I remember that if I was rowing I'd either leave it, or confront the issue right away and get it sorted."

Cooper can feel the Australian Boat Race beckoning as she trains for next year's world championships. Given that Melbourne beat Sydney on the Yarra last year, there will be a fierce battle on Sydney's home water in October.

"This year it's going to be even more competitive to be selected," Cooper says. "But I think I'm at the level to get in, and I'm definitely hoping."

Don't miss all the excitement of the Australian Boat Race 2014 to be held on Sydney Harbour on Sunday, October 26. Alumni can cheer from the shore or indulge in a spectator package. More details can be found at: go.unimelb.edu.au/7ivn
Cities contribute 70 per cent of global greenhouse gases and will be home to 70 per cent of the world’s population by 2050. And in Australia, 80 per cent of all economic activity takes place in our major urban centres. So why is it that the world’s cities are so often overlooked in discussions about our future?

I quickly recognised the failings of our modernist cities as places for people.

Wanted: choreographers to shape our urban destiny

Cities contribute 70 per cent of global greenhouse gases and will be home to 70 per cent of the world’s population by 2050. And in Australia, 80 per cent of all economic activity takes place in our major urban centres. So why is it that the world’s cities are so often overlooked in discussions about our future?

It was this question I had in mind when I attended my first World Economic Forum in November 2009 as a member of what was to become the Council on Urbanization. My aim was to articulate an argument for cities to be included on the agenda by world leaders at Davos.

So imagine my surprise as I sat in the plenary session after three days of deliberation and realised that cities had once again been unsuccessful in getting onto the agenda. Were they not seen as a central part of the debate about our future?

This issue has rattled through my head in one form or another for the past 45 years.

Indeed, my thinking around the nature and future of our cities began to crystallise after three highly formative experiences in the late 1960s and early 1970s.

The first of these experiences happened in Europe during a period of travel study, as part of my architecture degree, in 1969. After visiting cities in Scandinavia and Italy I quickly recognised the failings of our modernist cities as places for people. Whether it was the satellite towns outside Stockholm, the housing at Albertslund in Copenhagen or the new towns of the UK, the preoccupation with minimalist architecture and single-use programs had placed the emphasis on separation and single objects above the overall quality of the public realm and produced soulless living environments.

Equally, their suburban cousins – products of the Garden City Movement that was built on the promise you could live in the country (suburb) and work in the city (CBD) – were starting to fail as they were increasingly spread thinly over vast areas, fast becoming the producers of traffic congestion and social isolation. All of this was in contrast to the urban riches of more traditional town and cities.

At around the same time as this eye-opening experience, I read Alvin Toffler’s *Future Shock*, which made me acutely aware of the pressures of unconstrained population growth, and our failure to combat or accommodate it. It was nearly a decade later when I was working in squatter settlements in Harare, Zimbabwe, that I first recognised that as families migrated to urban areas, and opportunities for employment and betterment increased, family size tended to reduce. In short, our developed cities have shown us that urbanisation can be a very effective contraceptive.

The final experience that was critical to my early thinking around cities was my return to the University of Cape Town and the (then) recently formed Campus Planning Unit in 1970. This was a time when large numbers of baby boomers were enrolling in tertiary education and most universities around the world were in expansionist mode.

However, Cape Town University’s ability to grow was constrained by its location on the side of Table Mountain and the surrounding national parks. The university’s challenge was how to get more out of a constrained site while respecting the medium-rise design framework put in place by British architect Sir Herbert Baker.

This challenge, and the realisation that many of their facilities were under-utilised (lecture theatres were used for only 17 per cent of the day), led them to a program of re-timetabling and gap filling rather than expanding their “footprint”. This approach allowed the university to triple its student population over the next four decades while saving hundreds of millions of rand by getting more out of its existing infrastructure. Another effect of this greater concentration of students was a vibrant campus that was active for most of the day.

I thought that if this approach worked for a university then why not for a city?

These three experiences helped formulate my thinking around the central role cities would need to play in mitigating many of the global issues facing us as we enter the 21st century.

I realised that communities seemed to attain a better balance when they came together in dense, mixed-use situations that had good connectivity (where people can meet most of their daily requirements on foot or public transport), and a high-quality public realm designed for local conditions. In addition, it appeared that these compact places provided greater choice, resulting in less need or desire for the large families that typify many rural areas.

And the lesson from Cape Town was that if you could achieve...
shape our urban destiny

greater efficiency out of existing assets or infrastructure, you were likely to reduce the costs of accommodating an expanding population while creating greater vibrancy.

The opportunity to test these propositions was to come some years later in central Melbourne. The achievement of the City of Melbourne's 1985 Strategy Plan's objective of increasing density through the addition of residential apartments in a high-quality public realm with improved connectivity has seen a once-dying city centre transformed in just 30 years into one of the top urban environments in the world. All of this as the tax burden on ratepayers dropped from 13 cents in the dollar in 1996 to 4.5 by 2013.

Since the 1980s this process has been replicated in several cities around the world. There is now no real mystery about the ingredients needed to make a good city. What is lacking, though, is an acknowledgement at the highest levels that the world's cities are key players in discussions about the critical issues we face in the 21st century.

So why are our cities not appropriately recognised on the national and international stage, despite the fact that they have been increasingly successful in addressing key issues such as climate change, social cohesion, poverty and economic vitality?

I think the answer lies in the very format of our governments, institutions and international meetings such as the World Economic Forum.

The forum is structured around 50 separate "council" discussions, each preparing its own pitch and each vying for attention. What this format lacks is a broader context, a structure within which the priorities and actions of each discussion can be framed. The realisation for me was that cities – with their physical reality – were, in fact, the contextual framework that could give meaning to these many debates.

Indeed, maybe the reason cities were starting to succeed was because their leaders could choreograph a "whole of city" approach, where all those separate issues were seen in a physical context. The reality is that city mayors stand or fall by their ability to co-ordinate these different issues, often achieved through advocacy rather than direct control. This contrasts with the narrower approach of federal or state-level ministers who necessarily focus on their portfolios (e.g. transport, health, land use, education).

There is undoubtedly an urgent need for enlightened choreography to oversee the development of our cities, and universities are arguably well positioned to facilitate this cultural shift away from the traditional siloed approach of government. Just as the University of Cape Town illustrated that trying to build their way out of a problem might not be the best strategy, so universities today can lead the way in developing the urban choreographers needed to help shape our increasingly compact cities.

The introduction of the "Melbourne model" at the University of Melbourne is a significant step forward in achieving this goal.

The Melbourne model provides a generalist base for students before they begin to specialise in a field. Like the study of medicine – where doctors are trained to understand the full complexities of the human body before moving on to specialise in one of its many component parts – so too should our built environment professionals be trained in the many complexities of our cities before specialising in one field.

It is an approach that will provide students with perspective and an appreciation of the bigger picture.

In 2006, I witnessed first-hand a profound loss of perspective when the highly acclaimed urban design unit set up at Copenhagen University by Danish architect and urban designer Jan Gehl was closed. There appeared to be no good reason for the closure other than the siloed envy of the traditional disciplines of architecture, landscape architecture and planning. They apparently felt threatened by the success of this new discipline.

If we are to produce the urban choreographers of the future, the context of urban design – the city – will need to form the platform for our built environment professionals. It can no longer remain a sideshow. Just as leading cities continue to work for greater cohesion and innovation in the delivery of city and global solutions, so too should universities continue to break out of traditional professional silos and produce graduates capable of urban choreography.

Forty-five years after stepping into this debate I now have little doubt that cities will be key players on the 21st-century stage. Their ability to grapple successfully with the looming challenges of economic vitality, social cohesion and environmental sustainability will be determined by whether our governments, institutions and decision-makers have the courage and leadership to step out of their comfort zones – out of their narrow 20th-century silos – and onto the big stage. Our future depends on it.

Will this be signalled in 2015 when our leaders return to Davos? Will cities and their future role be on the agenda?

Professor Rob Adams AM is Director of City Design at the City of Melbourne.
To reach the headquarters of the ISIS Group you venture down a narrow alley in the inner Sydney suburb of Rozelle and vault up a flight of steps. "ISIS: Uganda, Nepal, United Kingdom, USA, Bermuda, Australia" reads the sign at the door. What could possibly unite such disparate destinations? Audette Exel is the simple answer.

I’m a little early for our chat and catch the University of Melbourne-trained international finance lawyer padding around the office of the unique business-for-purpose venture she started in 1998 – a global commercial business that feeds a philanthropic organisation focused on Nepal and Uganda – in bare feet. She heads off to slip into something less comfortable and returns atop high heels. Around the oval wooden table of a meeting room whose bookshelves are lined with guides to far-flung places and biographies of moral heroes such as Nelson Mandela, she explains the yin and yang principles that form the ISIS Group.

The company has a business face, ISIS (Asia Pacific), and a philanthropic face, ISIS Foundation, and both are united in common purpose: to help support the poor in remote regions of the developing world. Exel is Chief Executive of the former, Chair of the latter. Her stated aim is to “have the world of business hold hands with the world of development,” and in this she has been strikingly successful.

She needs to earn more than $100,000 a month, she says, to keep the motor of the charity, which directly and indirectly employs more than 140 people, purring along. A mere 10 staff are employed on the business side, though as Exel’s core skill is international finance she does much of the lifting herself. Her financial expertise is put to use advising banks on, as she puts it, “buying and selling each other and how to invest hundreds of millions of dollars”.

By her reckoning about 30,000 people are benefiting from the Foundation’s assistance. “We don’t fund grants, we do our own work in teams on the ground,” she says. “And we are known the world over for our remote work. Our most remote service was 25 days’ walk from the road when we began working there 16 years ago.”
Most of this work targets the health and education of women and young children, including early school education and the fight against child trafficking. The virtuous circle linking both the finance and humanitarian facets of ISIS puts a smiling public face on the banking sector, a rarity this side of the global financial crisis, and it produces some nice ironies.

Exel closed a deal last December that earned $2 million in advisor’s fees for ISIS. “People in Uganda and Nepal, all over the world, were celebrating a US private equity fund,” she recalls. “I suppose that’s unheard of.”

Asked why her efforts are focused on isolated communities abroad when there are so many remote Aboriginal communities closer to home in distress, she has a ready answer to what is doubtless an often-asked question: “If I had all the hours in the day and all the money in the world there’s so much need on the planet that I don’t know where to start.”

She agrees that Indigenous communities are in need of support, as are refugees. “I think refugees are heroes. But what I say about giving is that everyone should follow his or her passion. It doesn’t matter if it’s environment activism or work for children in poverty. For me the most vulnerable people in the world, the people who get me up every day, are women and children in extreme poverty, in remote places. There’s a Jewish saying that if you save a life you save a world. I profoundly believe that and my motto is: just do something.”

The backstory of this Kiwi-born and philanthropically oriented global finance whizz is every bit as interesting as her day-to-day work. As she tells it, her first three years of university, in New Zealand, came to an abrupt end when she was injured in a skydiving accident in Australia. Unable to return for treatment because of the New Zealand accident compensation system, she applied to

CONTINUED PAGE 18

PICTURE: JONATHAN TORGOVNIK/torgovnik.com

The people business: Audette Exel in Kathmandu with two of the children her ISIS Foundation has rescued.

Audette Exel has deployed her skill in global finance to help the poor in the world’s remotest areas.
finish her law degree at the University of Melbourne and was successful. At that moment everything changed.

She had come from what she describes as a “socially active left-wing” milieu at the Victoria University of Wellington, and found herself sitting at the campus cafeteria, or drinking at Jimmy Watson’s, talking to fellow undergraduates about the mountains of money awaiting a successful Queen’s Counsel.

“It was the first time I’d really met such people,” she recalls. “I was even amazed to see students driving their own cars to university. And I realised I had a huge hole in my knowledge base. I believed strongly in social justice and human rights and I saw that if I wanted to effect change I needed to be able to reach across to people of wealth, power and influence. I needed to study the world of money and work for the most business-friendly law firm I could find.”

She fell in with a circle of like-minded “humanist focused” law students such as Richard West (LLB(Hons) 1982), Gail Furness SC (LLB(Hons) 1984, LLM 1990) and Richard McGregor QC (LLB(Hons) 1985), who have cut more conventional paths through the law. Audette Exel opted for a much more tangential direction, which took her in stages to Bermuda, where she ran a bank.

But first she needed to find that business-friendly law firm and had the “incredible good fortune” to be accepted by the commercially and globally oriented firm of Allens. “If I hadn’t gone to Melbourne University I wouldn’t have got into Allens, and if I hadn’t worked at Allens I wouldn’t be where I am,” she says.

When we meet she is preparing for a circuit of work engagements in Singapore, London and Manhattan. “I so love New York,” she says. “They really know how to think big.” She is no stranger to the wide-angled lens of global ambition herself, and is planning new ways of engaging the corporate world in projects that will aid the beneficiaries of ISIS: the poor.

“A life of engagement with the poor and vulnerable in extreme poverty in Nepal and Uganda. We never have. We never will.”

Recently the group advertised for a staffer in Uganda and realised just in time that it called for applications to work for ISIS without distinguishing itself from that militant group. “It could so easily be misunderstood,” she says. “We could so easily have ended up on some list and found our bank accounts frozen.” The sobering reality is that she is considering a name change for her baby of 16 years. “Who would have thunk it?” she sighs.

A life of engagement with the poor and vulnerable in extreme poverty in Nepal and Uganda. We never have. We never will.”

Despite her gloomy prognostications of a fractured world she pronounces herself an optimist. “We’ve survived many crises at ISIS. We’ve survived Ebola outbreaks, Maoist terrorists, the world economic crisis. But we’ve never given up. We never have. We never will.”
The University Athletics Club is about to mark 125 years of success, all the way to Olympic glory.

BY CHARLES HAPPELL (BA(HONS) 1984, TRINITY COLLEGE)

It’s been a talent production line for countless Australian Olympic teams, and a vibrant hub of University life for as long as anyone can remember, and next year the Melbourne University Athletics Club celebrates its 125th anniversary.

The club, which has been represented by the likes of Ralph Doubell, John Landy, Merv Lincoln, Nova Peris-Kneebone and Jana Pittman, has produced a raft of Australian champions, national record holders, Olympians and Olympic medallists.

None has been better than Doubell. After honing his skills on the MUAC red cinder track, he sensationally claimed the 800-metre gold medal at the 1968 Mexico Olympics in a time (1 minute and 44.3 seconds) that was a joint world record then and still stands as a national record.

Located in the heart of the Parkville campus, the MUAC is the University’s fourth-oldest club – behind the cricket, rowing and football clubs – and maintains a proud record of producing elite athletes and sports administrators.

While a fledgling athletics club was formed in 1872, in conjunction with the cricket club, it is generally agreed that the MUAC was established in 1890, primarily by medical students who had been urged to take up running “to enable them to stand the stress and strain of the grandest profession in the world”.

In those early days, training and competition took place on a grass track on the main University oval. Into the new century, the club began to establish itself as a force in intervarsity competition, winning the first seven titles.

Regular interclub competition was introduced by the Victorian Amateur Athletics Association in 1913 to provide athletes with a year-round calendar of events. By 1928, University athletics competitions had become so popular that 1500 people attended a relay meeting on the campus.

But it was the lead-up to the Melbourne Olympic Games in 1956 that heralded a brave new era for the club.

Sir Frank Beaurepaire, a former Melbourne Lord Mayor and Olympic swimmer, was head of the Olympic Games organising committee and had close links to the University. He was instrumental in having a new running track built on the campus as a training venue for the Olympics.

The new track was the reason Kevan Gosper AO, for one, joined the club in 1955.

Gosper, who hailed from Newcastle in NSW and would go on to become a leading figure on the International Olympic Committee, had forged a successful track career at Michigan State University in the US before returning to Australia in 1955.

Working for Shell in Melbourne at the time, Gosper was invited to train and compete for the MUAC, an offer he enthusiastically accepted given it boasted this new red cinder track and he was one of the leading contenders for the 400m title at the upcoming Olympics.

He occasionally trained with John Landy – the famous miler (and University of Melbourne student) using Gosper to help with sprint training and Gosper relying on Landy to help build his stamina.

A club competition would be held each Saturday during the warmer months. Amateur athletics was thriving. Gosper remembers a time of good fun, strong competition and lasting friendships. “Although none of us were big drinkers, we used to socialise together on Saturday nights,” he recalls.

At that time, Alf Lazer AM was the team captain and club stalwart. In fact, few amateur sports administrators in...
Australia can have had a greater impact on a club than Lazer did with the MUAC.

He joined it as a student during the war, then became an office-bearer in a raft of different roles, including president for 31 years, over the next six decades. His extraordinary dedication was rewarded with a Gold Medal by the University, and he was appointed a Member of the Order of Australia by the Federal Government in 1985.

MUAC also had another reason to be thankful for Beaurepaire’s interest in track and field and Olympic sport.

In 1955, he recruited the world-famous track and field coach Franz Stampfl from Oxford, less than 12 months after Stampfl had helped Englishman Roger Bannister achieve fame by breaking the four-minute mile barrier.

Stampfl accepted the invitation to become Director of Athletics at the University of Melbourne and quickly settled in. Eleven of his athletes competed at the Melbourne Games.

One of those athletes was Merv Lincoln who, in March the following year, would become just the 11th man and the third Australian to run a four-minute mile. He achieved the feat in front of Stampfl, and many of his own MUAC teammates, on the University’s Rawlinson Track. Landy had become the first Australian to join Bannister as a sub-four-minute miler, just six weeks after the Englishman in 1954.

The Austrian-born Stampfl, a cyclonic force of nature if all the stories are to be believed, pioneered a scientific system of interval training, which became popular with sprint and middle-distance athletes, including – eight years later – Doubell.

It essentially revolved around speed and quality, rather than the conventional method of volume and quantity.

Now 69, Doubell remembers meeting Stampfl – whose reputation as a coach and feisty autocrat had preceded him – when he enrolled at the University in 1963 and soon joined the athletics club.

Doubell’s commitment to running, however, was initially only lukewarm. It was only after hearing about the travel potential offered by the sport that he approached Stampfl. “I told him that I wanted to run 50 seconds for the quarter (mile) and train

Perhaps our most famous Olympian, Cathy Freeman OAM, came to live in Melbourne in 1992 and enrolled in an Arts course. Her biography notes that while she was “far from committed” as a student, she enjoyed “being part of a freethinking community”.

The University has a long and proud involvement with the Olympic movement. Students, alumni, staff and club members have represented Australia at the Games on some 140 occasions.
three times a week,” he recalls. “Franz peered at me through his monocle and very matter-of-factly said: ‘I will tell you how much and how often you train’.

And so it proved. Stampfl soon had his new charge churning through the work.

“What do I remember of that time? Mostly pain,” Doubell says. “But Franz and I got to know each other incredibly well; it was almost a father-son relationship. He pushed the boundaries but he knew how much work I could absorb.”

The camaraderie among the middle-distance runners at MUAC helped Doubell through the tough times. “I trained with a group of people who helped me enormously but didn’t have the same success. I certainly couldn’t have done it without them,” he says.

“Many people would see repetition after repetition at Melbourne University as very boring, and sometimes it was. But we had a fine group of people who would swap stories and work experiences... You always had that spirit of camaraderie and co-operation.”

On Fridays, his day off, Doubell and his headstrong mentor would head off to Gina’s restaurant in Lygon St for lunch between noon and 3pm, then move to Jimmy Watson’s for a “warm down” for an hour before Doubell had to attend a lecture at the University at 4.15pm.

“After those four hours with Franz, when we used to discuss music, food, wine, literature and, of course, his training philosophies, I felt like I could beat anyone in the world.”

Their friendship, and partnership, culminated in that one magical race in Mexico in 1968 when all of Doubell’s hard work, overseen by his no-nonsense mentor, was rewarded with a gold medal.

Doubell’s famous kick – his finishing sprint, which was honed on the Rawlinson Track – meant he was able to pass Kenya’s Wilson Kiprugut in the straight to become just the third Australian man to win an Olympic gold medal on the track.

In the Stampfl era, University athletics flourished and the Rawlinson Track was regarded as Australia’s premier training venue. Of the 1040 athletes to represent Australia in track and field competition, according to Athletics Australia, 53 have been MUAC members.

As well as Landy, Doubell, Lincoln, Pittman, Gosper and Peris-Kneebone, that group includes the javelin thrower Petra Rivers (DipTeach 1978), a two-time Commonwealth Games gold medallist, Judy Canty (BSc(Hons) 1973, University College, St Hilda’s College), who won gold at the Edmonton Commonwealth Games, and John Higham OAM (BA, LLB 1974, Newman College), a national champion in both 400m and 800m.

Some of the club records date back more than 50 years. These include the 1957 mile record of Dr Merv Lincoln (BCom 1954, MBA 1968, PhD 1983, Queen’s College, Ormond College), Doubell’s 800m mark and Higham’s 400m time from 1978.

That remains the challenge of the University’s new generation of athletes and their highly regarded coach – Stampfl’s successor, Manfred Lewandowski.

The University of Melbourne’s Bachelor of Science degree links three of Australia’s best-known Olympic gold medallists.

Ralph Doubell AM, whose scorching time in winning the 1968 Olympic Games 800-metre gold medal remains a national record, graduated from Melbourne with a science degree in 1967.

Kathy Watt OAM, who became Australia’s first female cycling gold medallist when she claimed the road race at the 1992 Barcelona Games, was also a Bachelor of Science graduate, having majored in physiology and pathology.

Herb Elliott AC MBE, the 1500-metre colossus whose victory at the Rome Games in 1960 came in the middle of a four-year period when he was undefeated over that distance, began a science degree at Melbourne before completing it at Cambridge.

Other University of Melbourne Olympians

John Landy AC OBE (BAgrSc 1954, LLD 2003), former Governor of Victoria; 1500-metre bronze medal, Melbourne 1956.


Kim Crow (BA(Media & Comm), LLB 2010), Australian athlete of the year in 2013; double sculls silver medal and single sculls bronze medal, London 2012.
FIVE QUESTIONS ON THE NEW FIELD OF NEUROECONOMICS

Professor Peter Bossaerts freely admits that he is considered something of an oddball in the world of finance and economics. The researcher, who joined the University this year, is leading a revolution in how economic theory is developed and tested. His methods are regarded as radical – but they could just help us solve some of the world’s biggest financial issues. Val McFarlane meets him.

You’re regarded as one of the founders of neuroeconomics. Can you tell us what that is?

Neuroeconomics is an exploration of the neurobiology behind individual decision-making. Traditionally with economics, people will construct models, different schools of thought, and with that they will make policy recommendations. They use their model to explain what is happening in the world but there is no scientific evaluation, no experiment to see whether the theory is right. That’s where we come in. We work with people from other disciplines, such as neuroscience, computer science, psychology and engineering, to run experiments in controlled environments that help us understand more about decision-making, at every level from the individual to the market.

Why is this approach useful?

Financial economics relies too much on observation of choices – people in the field call this “revealed preference”. This has gotten the field into trouble, because there is so much heterogeneity in behaviour out there, across people and across circumstances. We want to understand the algorithms that the brain uses to generate choices. This necessarily involves mathematics, and this is a good thing. First, because financial economics is actually good at describing choices in terms of mathematics. And second, mathematics means you can measure things, and that’s the first step to real science.

What particular areas are you working on?

At the individual level, we study how humans deal with outliers. Outliers are very important in financial markets. They happen all the time, and humans do not cope well. In order to understand why, we have been exploring the neurobiology.

We’re looking at dark markets, among others, where secretive, unregulated trading happens. These markets have been effectively outlawed in Europe and the US, partly because many economists think they contributed to the global financial crisis, and they think these markets are inefficient and unfair. But there are also people in finance who are against outlawing these markets because they claim that they play an important role, and they have a theory to back that up. If their argument is correct, then what is happening in Europe and the US is wrong and we are eliminating an extremely good form of market. We want to run experiments to shed light on which argument is right.

We are also studying high-frequency or robotic trading, where computer algorithms are used to rapidly trade securities. Opinions are divided as to whether it is good or not. Some people will tell you it is bad, that they are destabilising...
FIVE QUESTIONS

Markets. And how do we regulate it? The regulators call a group of wise men, ask them what they think, and argue about it. They can come up with an argument as to why it is wrong or right, but where is the scientific evidence?

Why has this work not been done before?

Most people understand what I am doing here but it doesn't fit traditional structures. Teamwork is necessary to run the experiments we are involved in. Economics and finance is way behind, for example, engineering in working with a team of people from different fields to tackle a problem. Neuroscience too has become team work. We need to bring together people from different fields because the problems we are facing cannot be solved by one traditional field alone. It's a gigantic revolution in the way things are done in this field.

Bringing people together from different fields is the best way to make interesting things happen. I wanted to find an opportunity to set up a team that could work in a genuinely interdisciplinary way, and Melbourne has given me that opportunity.

I don't need my own office. I want to be sitting together with the people I am working with on a daily basis because this is the way research eventually gets done. What I don't want is to be in a department only with people from my field. I would get very bored!

What do you hope your research will achieve?

Our research has a fundamental aspect to it but there is also a practical application, in terms of the regulation of the markets. I became interested in this area because I realised that if we keep on acting according to economic theory we are going to destroy this planet. There are situations when the markets do a very good job, but only with the right rules of engagement.

On an individual level, we see people struggle with our decision-making games in the lab and we see how badly they do, but then we are increasingly making them personally responsible for their savings, their superannuation… people have real issues dealing with the risk in these situations. We want to help people, give them tools to improve their behaviour. If we can decode the brain, we can also find ways of helping in other areas where people have to deal with similar decisions.

It’s not easy. It is very difficult to actually define what makes a good experiment in finance. We are having to develop it ourselves. But physics used to be hard in the Middle Ages. There were theories out there, but it wasn’t until we started running the right experiments that we worked it out. Once you do that everything falls into place.

Radical approach: Peter Bossaerts doesn’t follow traditional methods.

PICTURE: CHRIS HOPKINS

Peter Bossaerts is Professor of Experimental Finance and Decision Neuroscience at the Faculty of Business and Economics, and an Honorary Professorial Fellow at the Florey Institute of Neuroscience and Mental Health. Watch an interview here: go.unimelb.edu.au/3ivn

minds

Radical approach: Peter Bossaerts doesn’t follow traditional methods.

PICTURE: CHRIS HOPKINS
When a flash flood raged through Turkey Creek in 2011, the Gija people in the East Kimberley lost more than their homes. Their precious art collection – a living link to their history and culture – was inundated by the “angry water.”

That’s when the peak Aboriginal artists’ association, ANKAAA, called the University of Melbourne’s Centre for Cultural Materials Conservation to help save the works. Conservator Marcelle Scott (GCertUniTeach 2005) and PhD candidate Lyndon Ormond-Parker flew to Kununurra, in northern Western Australia, to assess the damage. About 400 paintings and artefacts had been airlifted to the town by a helicopter provided by Argyle Diamonds.

“There were paintings on canvas, paintings on wood, chipboard and plywood, and a large number of wooden carvings,” recalls Scott. Most were mouldy, others were encased in mud, with bits of twigs and leaves and “other material” stuck on to them.

The paintings and artefacts, known as the Warmun Community Collection, had been housed in an inner room at the Warmun Art Centre. Gija elders, some of whom had gone on to become prominent Australian artists, had produced the paintings, boomerangs, spears and carvings to teach Gija children about their traditional way of life and beliefs.

The flood knocked out Warmun’s power and phone lines and forced most of the population to be evacuated. “The members of the community were in several different places,” recalls Scott. “Some were stranded on the other side of Turkey Creek, some were evacuated to Kununurra.”

Despite the many problems they faced, senior members of the Warmun community travelled to Kununurra to examine the saved works. The effort they made during a time of crisis made a big impression on Scott. “I saw that it was a very, very important project,” she recalls. “It was a hugely emotional moment for me and the elders.”

The Warmun collection, she explains, represented the collective wisdom of generations. “To me, that is what art conservation is about, and it brought it back to me in a real way.”

Scott and Ormond-Parker worked to document and stabilise the works – a process of “art triage.” About 300 pieces requiring laboratory-based treatment were then loaded into a refrigerated truck and driven 4500 kilometres to the University’s conservation laboratories in Carlton. Scott promised that all the pieces would be treated respectfully, and returned.

“Most people don’t have a clear idea what we do, or the need for it,” says the Centre’s director, Associate Professor Robyn Sloggett (BA(Hons) 1979, PhD 2010). “They think it’s about fixing up paintings. In Australia, it’s very different to that.”

The Centre’s work has just received a massive boost with a $6.9 million donation from the Cripps Foundation, as part of Believe – the Campaign for the University of Melbourne. The money will allow the Centre to move to dedicated modern laboratories opposite the University’s Ian Potter Museum of Art. The donation will also support an endowed Chair, with the inaugural appointment expected in early 2016.

The new facility, expected to be ready by the end of the year, will be known as the Grimwade Centre for Art Conservation. The original centre was founded in 1989 with support from the Ian Potter Foundation and the Sir Russell and Lady Mab Grimwade Miegunyah fund.

The Centre’s work encompasses academic research and real-life practice and is also multi-disciplinary. Graduates applying for the Master’s program must...
have an interest in art and science. Chemistry is a compulsory component; a bridging chemistry subject is offered for students who have an arts background, while science students are expected to have knowledge of fine arts.

“We are rigorous,” says Sloggett. “Our students are phenomenal. Good critical thinkers. Very highly motivated.”

When talking about the Centre’s work, Sloggett often uses the word “materiality”. Conservators need to respect the historical and cultural significance of the pieces they work on, but just as importantly they need to understand how they are made – whether from clay, canvas, woven silk or pieces of bark.

The Warmun collection was made using traditional methods, but also from modern materials that the artists found. Repairing the salvaged Gija art works presented many challenges – some material, some cultural.

In October 2011, Gija elders Patrick Mung Mung, Nancy Nodea, Eileen Bray and Mabel Juli travelled to Melbourne to assist in the restoration work. Their advice was that flood damage should be treated but that no repainting should occur.

The elders shared the songs and stories associated with the paintings, so the University’s students and staff could understand their significance. Conservators and students worked on restoring the collection over two years. When the paintings were returned to Warmun, “a jooomba”, or big ceremonial performance, was held to celebrate.

Patrick Mung Mung explained how the “two-way learning”, which initiated the collection, continued during the restoration: “These paintings were made by the old people to teach young Gija people. Now they are used for young people at the University, and soon they will be used in Warmun to educate Gija young people again.”

Work with remote communities is an important part of the Centre’s work. A Specialist Certificate is now offered to

‘Our students are phenomenal. Good critical thinkers. Very highly motivated.’

ROBYN SLOGGETT

Indigenous people with high levels of skill and experience, which may provide the option of going on to do a Master’s degree.

Student conservators from the Centre are also engaged with East Timor, with some learning one of the country’s official languages, Tetum.

Sloggett’s crowded office shows a delight in the material world: a bird’s nest teeters on a bookshelf and Timorese weavings are draped on a chair.

Businessman and philanthropist Robert Cripps first approached the conservators in the late 1990s because he wanted to take better care of his paintings – works depicting East Anglia, a region in England with a strong family connection. The Cripps Foundation was established by the family in 1956.

When the Centre began to teach a Master’s course in 2004, Robert was asked to join the advisory committee. “I wanted Robert because of his understanding of collections and collectors, and also as a business person,” says Sloggett. “He was a sympathetic partner.”

Universities are now encouraged to develop commercial arms and partnerships, but in 2006 a University restructure meant the Centre’s commercial operation was under threat, says Sloggett. She considered it vital that it continue.

“We need to know what the relevant questions are out there in the real world,” she says. It is also important for graduates and researchers to “have a relationship with the people managing collections”.

The commercial services provided by the Centre combine art historical research, caring for physical materials and science-based solutions. The Cripps gift means the work done will continue, and grow.

“The work takes place in the real world. You can’t make it up,” says Sloggett. “We respond to real need.”

Saving an icon: Gija woman Roseleen Park works to restore a flood-damaged figure from the Warmun collection.

PICTURES: CHRIS HOPKINS (OPPOSITE PAGE), JOE ARMAO (LEFT)
Decoding the mystery

Genetic research is shedding new light on a brain disorder that has long drawn an unfortunate stigma.

BY CAROLINE MILBURN

When Sam Berkovic was a young medical intern in 1978 doing a training rotation in neurology at Melbourne's Austin Hospital, he entered the orbit of a brilliant physician, Dr Peter Bladin AO.

Dr Bladin specialised in treating epilepsy, a brain disorder shrouded in stigma and mystery due to its unknown cause. Dr Bladin (BSc 1951, MB BS 1954, MD 1971) became a mentor to Berkovic and inspired the young intern's interest in epilepsy research.

Fast-forward 36 years and Professor Sam Berkovic AC is now the Chair of Epilepsy Melbourne, renowned as one of the world's largest and most effective teams of epilepsy researchers.

"The brain is the last frontier in medicine," he says, reflecting on why he chose to specialise in treating epilepsy, which can cause debilitating physical seizures and cognitive impairment for those who have the disorder.

"Dealing with epilepsy involves patients' physical symptoms – how it affects the brain – and almost always significant psychological factors that contribute to patients' loss of quality of life. One deals with a lot of young people who have the condition and therefore if you can fix it or improve it you're giving them a lot of healthy years to look forward to."

Epilepsy Melbourne is a coalition of Melbourne-based medical researchers working at four University of Melbourne teaching hospitals and two research institutes, the Florey Institute and the Bionics Institute. Their collaboration has led to groundbreaking discoveries about epilepsy and helped revolutionise the way the disease is diagnosed and treated.

Berkovic (BMedSc 1974, MB BS 1977, MD 1984) is a neurologist and director of the Epilepsy Research Centre at the Austin Hospital, where his team focuses on identifying the genetic causes of epilepsy.

About 3 to 4 per cent of the Australian population has epilepsy at some time in life, which ranges from mild forms with barely noticeable symptoms to much more severe types that involve chronic seizures.

"Historically it has been a disease where people have suffered inordinately because of the stigmatisation, where people thought it involved a spiritual element of possession," Berkovic says.

"That sort of view persisted until not all that long ago. In modern society that sort of thing is no longer believed but many people still have a considerable fear of people with epilepsy."

"We can easily empathise with someone who has bad asthma and how the condition might affect them, but the idea that someone might be lucid for most of the day and then be seized and convulsing or possibly lose consciousness is something that gives an unfortunate extra stigma to epilepsy. There's a lot of misunderstanding about this disease at all levels of society."

More than 20 years ago the medical profession had made small inroads into cracking the mystery of what causes epilepsy. Doctors were able to identify that a variety of physical injuries to a person's brain, such as a serious head injury from a car accident or a fall, a stroke or other types of physical injury caused about a quarter of all diagnosed cases of epilepsy.

But in most cases the cause remained undetected. Recent advances in gene technology have since confirmed what the medical profession had long suspected— that genetics held the key to unlocking the mystery.

In 1995 Berkovic's team made history with a remarkable breakthrough in genetic research. His group, together with molecular genetic collaborators in Adelaide and Germany, discovered the first faulty gene that causes epilepsy.

Then in 2003 the Human Genome Project, an international consortium of hundreds of scientists, provided a giant leap forward for science worldwide by publishing the completed sequence of the human body's entire genetic code – about 20,000 genes.

It allowed genetic researchers to move from investigating a single gene to investigating large-scale genome

Leading the way: Professor Sam Berkovic and Professor Ingrid Scheffer.
sequences. “We’ve known that there’s been a hereditary component to epilepsy since time immemorial. Hippocrates thought that there was a genetic component,” Berkovic says. “Over the years we’ve known that there’s been a higher rate of family history in most people with epilepsy, but what’s becoming clear is genetics is even more important than we had realised from the straight clinical genetics.”

Since 1995, Berkovic’s team has discovered that epilepsy is caused by many genes rather than a single gene and should therefore be thought of as a series of epilepsies rather than as a single condition.

“New genes are discovered almost every week with the new technology,” he says. “The concept now emerging is that it’s not so much an individual gene that one might target but it’s a pathway that a bunch of genes might fit into. If we can target that pathway it might lead to new avenues for treatment. We’re also finding that there are drugs available that are being tested in humans for other disorders that might be effective acting on that pathway as well. We’re using genetics to improve therapy.”

By identifying the causes of epilepsies the team has also helped lift the pall of guilt that many parents mistakenly feel when their child is first diagnosed with the disease.

Berkovic says parents often wrongly assume that vaccinations or a trivial event, such as their child falling over, may have caused their child’s seizures.

“When one can tell families there’s nothing they could have done to prevent the condition it’s an enormous relief for them. It means they can get focused – that little Johnny has a change in this particular gene. If you can tell families why, it really empowers them.”

Berkovic works closely with paediatric neurologist Professor Ingrid Scheffer AO (PhD 1998), who is based at the Austin Hospital and the Royal Children’s Hospital.

The team has identified epilepsy genetic changes that are hereditary and others that have nothing to do with a person’s family history. This year they found a gene believed to be a major cause for the most common form of epilepsy, affecting 60 per cent of people with the brain disorder.

Scheffer was recently honoured with the prestigious GSK Australia Award for Research Excellence. She and fellow team members have identified more than half of the 30 known epilepsy genes.

In an interview with ABC television’s 7.30 soon after she won the award, Scheffer described how the team’s work is helping pave the way for more effective treatments of epilepsy and more accurate assessments about the hereditary risks linked to the condition.

“I can imagine that in the future, a baby will be born, some cord blood will be taken and we’ll go and do their whole genetic fingerprint,” Scheffer said.

“So we might be able to identify genetic changes that will be a problem earlier and maybe then if we can implement treatments or particularly genetic therapies – they’re not really there yet, but earlier, then maybe we can prevent the seizures... and make a huge, long-term difference.”

Scheffer and other members of Melbourne Epilepsy are also involved in global research projects, a sign of the team’s international reputation for identifying specific types of epilepsy.

She and Berkovic and Professor Terence O’Brien (MB BS 1988, MD 2000), of the Royal Melbourne Hospital, are part of the Ep4K Consortium, a global project that aims to find as many genetic explanations for epilepsies as possible by sequencing about 4000 genomes from patients and their families.

The work of Professor Scheffer and Professor Berkovic builds on epilepsy research across the University, where a host of leading researchers, including Professor O’Brien and Professor Mark Cook, are enabling insights into how epilepsy can be managed to improve quality of life.
The ‘living laboratory’ of Dookie Campus gives students a high-tech grasp of our future food needs.

BY IAIN GILLESPIE

Imagine a place where robots gather food as well as vital production data, where remote-control drones fly overhead, in-ground sensors link to sophisticated computer programs and roaming self-drive vehicles carry out automated tasks.

What might sound like plans for a future colony on Mars is actually a modern farm, and apart from the flying drones, which are still in development, such leading-edge agricultural technology is part of everyday life for students at Dookie Campus.

An agricultural research centre has existed at Dookie since 1877, but its association with the University of Melbourne began in 1910, when Bachelor of Agricultural Science students spent a year there as part of their degree studies.

It’s a place where early agronomists grappled with the laws of hybridisation and World War I soldier settlers learned to eke out a living on the land. Now it’s a 2400-hectare “living laboratory” where students prepare to meet the challenges and rich career opportunities of a world threatened by climate change and food scarcity.

Dookie – 220 kilometres north of Melbourne in the Goulburn Valley – no longer trains farmers. It produces agricultural scientists, consultants and resource managers with specialised skills and amazing technology at their fingertips, and the current crop of first-year students have a strong sense of mission.

One first-year student resident at Dookie, Aisha Ozaksoy, sums it up this way: "It’s definitely exciting. When you say agricultural science, people think it’s only to do with farming, just checking out the soil or something, but it’s a lot more than that.

“Agriculture is such a broad sector you can almost go into anything. We’re studying climate change and impacts, learning more about the need for food security, and we want to contribute to that. There will be more and more work as the years go on.”

Aisha is one of a growing number of female students studying at Dookie who have contributed to a four-fold increase in enrolments in the program over the past two years. The proportion of female students has now reached 60 per cent, a remarkable change in a campus that, until 1972, had only male students.

Having served as a catalyst for agricultural innovation for almost 130 years, Dookie Campus reached another historic milestone last month when it became part of the University’s new Faculty of Veterinary and Agricultural Sciences.

The newly named faculty combines Dookie’s on-farm animal and plant production activities with the Faculty of Veterinary Science, a move that unites their expertise and cements the University’s national prominence in animal health and agriculture.

“All the activities we have been involved in will continue, but they will merge into the new faculty and students won’t be affected,” says Dookie Campus Director Ros Gall (BCom 1985).

“It’s a positive thing, because there are a lot of synergies between veterinary science and what we do here. Dookie has a lot to offer vet students in terms of research opportunities as well as training in animal handling.”

The new faculty will continue to offer the Bachelor of Agriculture, along with masters by coursework programs that include Masters in Agriculture, Animal or Food Science.

“There’s also a one-year full-time pathway program offered here at Dookie called Diploma in General Studies,” Gall says. “Students can live on campus, and articulate from that into agriculture. It’s particularly designed as a cost-effective way to allow rural and regional students to get a taste of tertiary study, because it’s pretty expensive to have to relocate to Melbourne.

“The idea is that you can do a generalist undergraduate degree, then build on more discipline-specific studies as part of your masters.”

Dookie Campus is an extraordinary hive of education and experimentation, with contemporary classrooms, student accommodation, laboratories and agricultural projects bristling with advanced technology mixed with historic farm buildings.

Researchers are using a six-metre long tethered blimp with optical and thermal cameras to monitor variations in plant water stresses from up to 90 metres above the campus’s dairy paddocks and automatically irrigated orchard.

A new robotic dairy allows cows to wander in to be milked whenever they feel like it. Troughs of grain entice them into cubicles where sensors automatically position suction cups on their udders. After sensing no more milk is being produced, the mechanism gently withdraws, the cubicle doors open, and for good measure the cows are given an...
Rural and regional students to get a taste of tertiary study.

It’s particularly designed as a cost-effective way to allow rural and regional students to get a taste of tertiary study.

FROM PAGE 29

Enjoyable rub by a rotating bristle brush on their way out.

“New technologies are increasingly used on farms, and are taking over some manual routine operations,” says Campus Manager, Bill O’Connor. “People talk about self-drive cars in the future, but self-drive vehicles have been on farms for nearly a decade.

“All the tractors coming on to the market now have auto-steer on them. They can be programmed to drive down a paddock with an accuracy range of two centimetres. They have maps stored in their computer systems, so parts of the paddock that are more productive can have more fertiliser and more seed automatically put onto them.

“This is a big open laboratory. Third-year research projects can be set up here under the guidance of an academic, and veterinary students can explore animal health and production while also gaining hands-on experience with livestock.”

The campus includes a broad-acre cropping and sheep enterprise as well as an apple orchard on the southern slopes of Mount Major, which are all used as part of the teaching and research resources. There’s also a nationally significant 270-hectare bushland reserve that enables education and research involving fuel reduction, flora and fauna conservation and pest, animal and plant management.

Deputy Dean of the new faculty, Associate Professor Brian Leury, points to the overlap between agriculture and veterinary science, and says combining them in one faculty will help students address crucial challenges in future food production, including climate change, limited or scarce resources and developing markets.

“Down the track with more students enrolling – and we envisage enrolments will go up – the number of specialisations will probably grow as graduates are required to work in an increasing number of important areas,” he says.

“A lot of what we are doing now is about addressing at a scientific level how we can meet those challenges, but equally important – if not more important – is the number and capability of people who will be qualified to work on them.

“We are seeing now that the number of employment opportunities exceeds the number of agriculture graduates. We need to position ourselves to produce very capable graduates who can meet the challenges of the future across a number of key areas.

“The Bachelor of Agriculture has a Production Animal Health major that a lot of students are undertaking with a view to applying for the Doctor of Veterinary Medicine, and I think that’s also opening their eyes to the importance of livestock.

“I envisage that not only are we going to have more agriculture graduates who will increase our capacity to produce food through research and policy, but we will also have more veterinary science graduates who will be involved in food production.”

Aisha Ozaksoy backs up the Deputy Dean’s belief. “In second year you can choose whether to go more into either animal or crop production, and I’ve chosen to follow the animal pathway,” she says.

“They’ve predicted there will be a food shortage within 50 years, so tackling that problem is definitely a priority.”

NEW FACULTY

The newly-named Faculty of Veterinary and Agricultural Sciences has consolidated the University of Melbourne’s strengths in food production teaching and research, in a move that effectively converges three faculties into two.

All activities relating to on-farm animal and plant production at Dookie Campus, including the Bachelor of Agriculture, have been moved from the former Melbourne School of Land and Environment to the renamed faculty.

The former school’s Creswick Campus, which is engaged in forest science, and Burnley Campus, which provides environmental and ornamental horticulture education and research, have been absorbed by the Faculty of Science.

The new structure will not affect current teaching programs. The role of the Veterinary Hospital, and the teaching and accreditation of the Doctor of Veterinary Medicine and other coursework programs, will continue unchanged. However, the move will create greater cohesion of the University’s learning, research and engagement programs in the production of animal and plant food and fibre, and an increased scope for new initiatives.

Professor Ken Hinchcliff (BVSc(Hons) 1980, Trinity College) will remain Dean of the new Faculty of Veterinary and Agricultural Sciences. Associate Professor Brian Leury has been appointed Deputy Dean.

“There were already strong synergies between what was the Department of Agriculture and Food Systems and the Faculty of Veterinary Science – for example the Animal Welfare Science Centre worked across both,” Leury says.

“There are other synergies around animal health, microbiology and food production. The new faculty will consolidate the University’s strengths in producing graduates to meet the important challenges and opportunities involved in future food production.”
HEN Cameron Adams completed a degree in Science and Law in 2002 he wasn’t sure what he wanted to do, so he worked as a graphic designer building websites.

An interesting career option? Maybe. But given it was his part-time job during university, which later led to a job at Google and a role co-founding design website Canva, it was an inspired decision.

Adams, 34, found his computer science degree came in handy when writing code and two books on JavaScript, the computer language used for web design.

In 2007 he “got a call from Google” asking him to work in Sydney with Lars Rasmussen, the creator of Google Maps. “It was a great learning curve,” Adams says.

Then, after three-and-a-half years, he struck out with a couple of computer engineers to build a startup called Fluent. “It was a futuristic email client but we weren’t lucky enough to land a deal.”

The Google network threw up a meeting with Canva co-founders Melanie Perkins and Cliff Orbrecht, who had run a successful business called Fusion Yearbooks. Canva takes that concept to a higher online level.

When his startup fell over, Adams got in touch with Perkins and Orbrecht. The pair were in San Francisco raising money for the site and suggested he “jump on board”

They raised $2 million from the US-based funds Matrix Partners and Inter-West and, back in Sydney, attracted funds from Paul Basset, formerly of Seek, Ken Goldman, the CFO of Yahoo, and a Sydney-based startup called Blackbird.

That was in 2012. Fast-forward two years and the site that allows average Joes to design visuals for their website, blog, Facebook page or Twitter post is going gangbusters.

“Our aim is to democratised the field and provide tools for anyone to create beautiful design,” says Adams. “If you need a blog image, a business card, a flyer image, or presentation graphics you can do it yourself.

“As part of the design process you can choose from our massive library of elements; some are free and some are a dollar.”

When the user is finished, Canva adds up the cost of the chosen elements. The typical charge is about $3. Most users are bloggers, marketers and social media professionals.

Like any good web-enabled startup Canva reduces the cost of entry into a market, in this case graphic design. “We’re not going to replace really high-level design,” says Adams. “It’s the grunt work that is tedious for graphic designers.”

Launched in August 2013, the company now has a team of 26 and enjoys revenue and user growth of about 400 per cent month-on-month.

The ambition of the Canva team is to create a great self-sustaining Australian company. “We are not planning to sell out or get acquired,” Adams says. “We just want to change the world by introducing great design to everyone.”

canva.com
Simply startups

GILLIAN TEE
(BCompSc(Hons) 2004)
Co-founder of Rocketrip

When Gillian Tee started a Computer Science degree in 2000 she soon realised the power of the technology she was studying. "It gave me a really good technical grounding," says Tee, speaking from the New York offices of Rocketrip, a business travel application that rewards users who save on travel expenses for their companies.

It's an apt name for her startup, which has raised $6.1 million from investors in the US and is launching worldwide this year.

The 31-year-old says her technology background has helped her career, but adds: "It is that desire to disrupt and improve existing systems that drives me."

Tee's first job was with Accenture in Melbourne, but she then felt a hankering to be "closer to the innovation." She transferred to New York and was soon working with the likes of Google. In 2010 she signed up for an MBA at Columbia University and hooked into its startup network.

"Having been very technical most of my life I wanted to be equipped to drive a business and think about marketing and strategic directions for a product," she says.

She completed her MBA in 2012 and when she was introduced to Rocketrip co-founder Daniel Ruch, she was ready. The pair built a prototype and then raised the first $3.1 million in funding through Y Combinator, a US-based seed accelerator.

What is Rocketrip? "Think about it as sales commission in reverse," she says.

"An employee needs to take a trip, so they go to our platform to get the itinerary and apply the company policy over the top. They get the 'price to beat' and if they beat it when they book their trip they pocket the savings." Rocketrip takes a percentage of that money.

A pilot using a control group of companies showed Rocketrip is saving up to 40 per cent on business travel costs and changing behaviour. "Employees are booking flights earlier because they are incentivised," says Tee. "Just last week a guy earned $2500 by taking a trip and staying on a buddy's couch."

The team has expanded to 13 and has global expansion in its growth plans. It's a truly disruptive concept. "We are hoping the value of the extravagant business travel market shrinks and is redistributed back to the company and the pockets of its employees," Tee says.

rocketrip.com

MARISSA DI PASQUALE
(BSc(Hons) 1985, JD 2007)
Founder and CEO of Cashtivity

A Science honours degree from the University of Melbourne set up Marissa Di Pasquale for more than a decade working in IT product development and consulting, which turned out to be the ideal training ground for a career as an entrepreneur.

Throughout the 1990s Di Pasquale cut her product development teeth working at Telstra on global internet products and completed a stint working for UK investment bank Kleinwort Benson managing its global IT development and outsourcing.

After the birth of her twins (now aged 11) a change in direction beckoned. Di Pasquale completed a JD at the University of Melbourne Law School and worked as a corporate lawyer for a couple of years.

But, as her children started school, she was destined to return to "what I love, which is developing products".

"I entered the classroom when the possibility of using technology to create learning applications was just taking off," she says – and the idea for Cashtivity, an online tool to create a generation of financially literate children, was born.

Struck by the impact of technology, tablets and smartphones on children, Di Pasquale asked: is it possible to develop tools to teach our children about business and money?

She started with customer research in a Melbourne primary school and over three years observed how children use, interact and learn with technology. "Kids and teens prefer to learn by actually 'doing' but when it came to teaching them about finance and business it's hard for teachers to create a practical experience," she says.

Di Pasquale developed the product over two years, working out of Australia and San Francisco, where she also conducted "deep dive" research with schools in the United States.

"Cashtivity helps students practise the fundamental principles of business in a fun and engaging way," she says.

Di Pasquale managed product development, hired a chief technology officer and assembled a team of computer engineers to build the core application. This year the Silicon Valley Founders Institute named Cashtivity its Australian startup of the year. It also received a grant from Commercialisation Australia for the launch later this year.

"If you want to bring something new to the market you need to keep focused at the grassroots, engaging with customers and what works for them," she says.

cashtivity.com

The University is nurturing the next generation of entrepreneurs through the Melbourne Accelerator Program. MAP was launched by the Melbourne School of Engineering and the Faculty of Business and Economics, but more faculties have now signed up. It is already supporting more than 15 startups and is seeking support through Believe - the Campaign for the University of Melbourne to allow it to help more. For more information visit map.eng.unimelb.edu.au and to make a gift go to: go.unimelb.edu.au/5hmn
efa Greenaway’s career encompasses an impressive range of activities – he is a practising architect, a teacher, an advocate, activist and organiser. Running through all of this is a clear desire to make a difference. This might be done at the private scale of a house alteration or by consulting on Indigenous culture and heritage for larger projects or urban design frameworks. It might be about enabling students to explore what architecture could contribute to Indigenous communities, or encouraging Indigenous students to consider architecture as a career, or advocating within the profession to help bring Indigenous perspectives into the work of other architects.

Much of this work involves exchanges between different groups and modes of knowledge. For example, Greenaway believes in the value of architecture and is interested in how the discipline can contribute more fully to Indigenous Australia. But this is not a one-way proposition. He is also committed to expressing and exploring the ways that Indigenous approaches might impact on the rethinking of the profession.

As the first Indigenous registered architect in Victoria, Greenaway joins a small cohort of Indigenous architects nationwide and he embraces the opportunities and obligations that come with this. He has a strong interest in exploring the possibilities of Indigenous place-making and to “strengthening culture and design in the built environment” and is highly articulate about the opportunities this can bring at both pragmatic and conceptual levels.

This is not just about making buildings as objects, but about developing a broader conception of place in relation to the environment and landscape. Again he sees that this can be investigated and implemented through diverse means.

These include education “as a means of empowerment and emancipation”, but also conventional planning tools such as heritage overlays, which can be used to make Indigenous knowledge available while also acknowledging that not all Aboriginal knowledge can or should be given.

Greenaway, the son of an Aboriginal activist who campaigned for the 1967 referendum, studied politics prior to architecture. He sees synergies between politics, planning and architecture. “Too often architects are not political enough – too few operate in the realm of activism and advocacy,” he says.

One important project is Indigenous Architecture and Design Victoria (IADV), which he founded with Rueben Berg. This provides support and advice “on all aspects of architecture related to Aboriginal people in Victoria”.

The IADV website (iadv.org.au) is a significant resource hub and includes guidance for other architects about how to become more engaged with Indigenous communities along with information for Indigenous people interested in becoming architects.
A friendly face in a foreign land

BY CHRIS WEAVER
(BA, LLB 2006)

It’s a cold and blustery day in Melbourne, so Odgerel Ochbold should feel right at home. Yet these conditions are not what she anticipated when she left Mongolia’s capital, Ulan Bator, in January to start a two-year Australia Awards Scholarship at the University.

Odgerel, a Master of Management (Finance) student in the Faculty of Business and Economics, arrived expecting Melbourne to be “green and hot.”

“That was my expectation, but it is very cold here!” she says – and that’s from someone from the world’s coldest capital city, where winter temperatures regularly plunge to minus 40 degrees. “Compared to Mongolia, it is not so cold – but it is very chilly, which was a shock.”

Travelling overseas to study can be a daunting experience, and not just because of surprising weather. Beyond cultural shocks, loneliness is often an unwelcome companion and finances can be stretched thin.

The University’s Welcome to Melbourne program – now in its fifth year – offers an antidote to some of the problems affecting Australia Awards students. Each semester, more than 150 students – mostly doing postgraduate studies – are partnered with a local alumni host who seeks to smooth the way and introduce them to the city and the University.

Robyn Campbell, a pioneer of the first Welcome to Melbourne program in 2010, is acting as Odgerel’s host. “I’ve had students from places as disparate as the Philippines, Tanzania, Uganda, Fiji, Mongolia, Cambodia and now Liberia,” she recalls as she sits in a cafe and does a very Melbourne thing, sharing a flat white with Odgerel and another of the students she is hosting, Cambodian Saovorak Nov.

Campbell spent five years as the External Relations Director at Melbourne Law School and still mentors Juris Doctor students, many benefiting indirectly from the Welcome to Melbourne program.

“One of my Law students is meeting with my Welcome to Melbourne Vietnamese contact – Pham – in Hanoi,” she says. “She wants to work with overseas not-for-profits, so Pham will assist her and other Australians.”

“What I’ve gained the most are many joyous relationships”

ROBYN CAMPBELL
Pictured above with Odgerel Ochbold and Saovorak Nov.

Campbell’s pride is evident as she recalls the story, and her enthusiasm is infectious. She likes to encourage her students and provide friendship on what can be an emotional journey.

Nov, who is studying the Master of Development Studies at the Melbourne School of Government, made significant sacrifices to come to Australia. He has left behind a wife and one-year-old son in Kampong Chhnang Province to learn skills that will benefit rural Cambodian communities.

“I came to Australia because the education system is one of the best in the world and I really want to improve my English,” he says.

He is effusive about the Welcome to Melbourne program and his adopted home. He laughs when asked about Melbourne’s public transport, a bone of contention for many locals.

“For me it is actually very convenient and safe,” he says of his daily commute from Springvale to Parkville. “Back home we don’t have this kind of public transport and from my province to Phnom Penh is a two-hour taxi ride.”

Odgerel, one of only 19 Mongolian students in Victoria, has worked hard to integrate with Campbell’s family and friends. She has introduced them to Mongolian tea (which contains milk, herbs, barley and salt), while they have shown her Brighton’s bathing boxes.

“I took a lot of pictures,” Odgerel says. “Seeing the sea was nice – at home it is several thousand kilometres away.”

Last month they attended a Michael Bublé concert together after it emerged the crooner is very popular in Mongolia.

“I mentioned that we listened to Michael Bublé at home – who knew I would see him in Melbourne?” Odgerel says.

Such unlikely discoveries break down barriers and lie at the heart of Welcome to Melbourne’s success.

Campbell heartily recommends becoming a student host. “We all learn something about other cultures,” she says.

“Seeing the sea was nice – at home it is several thousand kilometres away.”

Hosts are needed for the next Welcome to Melbourne program. To find out more visit alumni.unimelb.edu.au/get-involved/welcome-melbourne or call the alumni relations team on +61 3 8344 1746.
Silver celebration: Members of the gala dinner organising committee and University staff.

The University of Melbourne Alumni Association Malaysia (UMAA) has been celebrating its silver jubilee in style. The association, which started as a group of friends in the 1980s before being officially registered in 1989, held a gala dinner at the Ritz Carlton in Kuala Lumpur in June to mark the anniversary.

One hundred and eighty guests attended the glittering celebration, including Founding President, Professor Emeritus HF Chin (BAgSc 1961, MAgSc 1971, PhD 1974, PhD 1994, Ridley College, International House) and current President, Ms Gloria Goh (BCom(Hons) 1982).

“The evening was a superb celebration of the success of UMAA over the years,” Professor Chin says. “It was particularly wonderful to see the younger alumni continuing the UMAA tradition of collaboration and support for all graduates of the University.”

Other special guests at the dinner included association patron and patron of Believe – the Campaign for the University of Melbourne, YB Dato’ Sri Mustapa Mohamed (BA(Hons) 1974, DCom 1997, Queen’s College), Australian High Commissioner, HE Rod Smith PSM and Victorian State Government Commissioner to South East Asia, Mr Tim Dillon.

As part of Believe – the Campaign for the University of Melbourne, alumnus Dato’ Jimmy Lim (BCom 1973) presented a $30,000 donation to the Faculty of Business and Economics to go towards the Melbourne Accelerator Program, which provides startups with funding, office space, mentoring and access to experts.

The association runs a number of activities throughout the year, including monthly First Friday informal networking catch-ups and events designed to welcome new graduates back to their home country. New members are always welcome.

Have your say by voting

Alumni will soon be able to have their say on who should represent them on the Alumni Council.

The next Council election is being held in October 2014 and all alumni are eligible to vote.

The Council acts as the “voice” of University of Melbourne alumni and represents the alumni community in a number of important forums.

It also works on a range of projects aimed at growing alumni networks, and enriching the student and alumni experience.

Sarah Banks, Deputy Director Alumni Relations, says: “We urge all alumni to take the time to cast a vote in this important election. Alumni Council members play a crucial role, not only in ensuring that alumni views are heard, but also in helping develop programs and activities which are of benefit to all alumni.”

The voting period runs from October 3 to October 31, 2014 and successful candidates will take up their positions in November.

Visit alumni.unimelb.edu.au/get-involved/alumni-council for more information and to cast your vote.
THE ARTS

Miles Allinson (BCA 2003) has followed in the footsteps of fellow alumnus Dr Graeme Simson (PhD 2006) by winning the Victorian Premier's Unpublished Manuscript Award for Fever of Animals. Dr Simson's The Rosie Project has sold a million copies around the world and was named Book of the Year at the Australian Book Industry Awards.

Dr David Parnham (PhD 1992) explores the provocative theological writings of two 17th-century English puritans in Heretics Within: Anthony Wotton, John Goodwin, and the Orthodox Divines. Dr Parnham identifies the ways in which Wotton and Goodwin departed from orthodox norms, and offers analysis of the heated controversies to which those departures gave rise.

Australia's Children's Courts Today and Tomorrow, a new book co-edited by alumnus Professor Allan Borowski, explores one of society's most important and controversial institutions. Professor Borowski (GDiSpSocialStud 1972, BCom 1973, MA 1976) is Professor of Social Work and Social Policy at La Trobe University.

Recent VCA graduate Catherine Evans (BFineArt(Hons) 2012) is one of the inaugural VCA Graduate Mentorship recipients. She is enjoying an extremely productive 2014, with three exhibitions in Melbourne, plus artist residencies in Berlin and Canberra. Ms Evans' work incorporates photography, video and sculpture.

As a life member of the University and a Welsford Smithers Travelling Fellow in the School of Botany, who has been appointed Secretary of Education and Public Awareness.

APPOINTMENTS

Professor Philip Alston (LLB(Hons) 1972, LLM 1976, BCom 1977, Ormond College) has been appointed by the UN Human Rights Council to serve as the next Special Rapporteur on extreme poverty and human rights. Alston is John Norton Pomeroy Professor of Law at the New York University School of Law and co-Chair of the School's Center for Human Rights and Global Justice. His previous roles include UN Special Rapporteur on extrajudicial, summary or arbitrary executions from 2004 to 2010.

Anthony Healy (BSc 1989, PGDipEco 1990, PGDipFin 1996, Ormond College) has been appointed CEO of the Bank of New Zealand. Healy joined BNZ in 2009 after 18 years with the ANZ Banking Group and has held several senior executive and director-level roles in New Zealand, Australia, Asia and the Middle East.

Professor Andrew Holmes AM (BSc 1965, MSc 1967, Ormond College) has been elected the 18th President of the Australian Academy of Science. This distinction adds to his recent appointment as a Melbourne Laureate Professor Emeritus at the University of Melbourne’s Bio21 Institute. Professor Holmes is joined on the Academy’s Executive Committee by Professor Pauline Ladiges AO (BSc(Hons) 1969, GDipEd 1971, MSc 1972, PhD 1976), Professorial Fellow in the School of Botany, who has been appointed Secretary of Education and Public Awareness.

Gillon McLachlan (LLB(Hons) 1996), a life member of the University Blues Football Club, has taken on one of the most high-profile jobs in sport – Chief Executive Officer of the Australian Football League. Mr McLachlan was captain of the Blues for three years.
AWARDS AND HONOURS

**Historian Dr Clare Wright** (BA(Hons) 1991, PhD 2002) won the Stella Prize for her book, *The Forgotten Rebels of Eureka*, an account of the Eureka Stockade and the years leading up to it. It is the first non-fiction work to win the prize. Dr Wright plans to donate 10 per cent of the $50,000 prize money to be split between two organisations close to her heart – the Indigenous Literacy Foundation, which works to close the gap in educational outcomes between Indigenous and non-Indigenous Australians, and Northcote High School, to fund an annual academic award, the Eureka Prize for Women’s History.

**Associate Professor Peter Barlis** (MB BS(Hons) 1997) has been named a Fellow of the American College of Cardiology for his outstanding achievements in cardiovascular medicine. The American College of Cardiology is the foremost professional society representing heart specialists in the US and throughout the world. Associate Professor Barlis, of the University’s NorthWest Academic Centre, is particularly acclaimed for his work in the field of coronary imaging.

Two Melbourne alumni have claimed the Johann Jacob Wepfer Award for their work in the field of stroke research. **Professor Stephen Davis AM** (MB BS 1972, MD 1985, Ormond College) and **Professor Geoffrey Donnan AO** (MB BS 1972, MD 1980, Ormond College) received the award at the European Stroke Conference in Nice, France. The award honours scientists for outstanding scientific work in the field of cerebrovascular diseases (such as hypertension) and significant contributions to the knowledge about treatment of acute stroke. Professor Davis is Director of the Centre for Clinical Neurology at the University of Melbourne and a current member of the World Stroke Organisation (WSO). Professor Donnan is Director of the Florey Institute of Neuroscience and Mental Health and previous president of the WSO.

**Melbourne Law School and Professor Pip Nicholson.** Director of the University’s Asian Law Centre, have been recognised by Vietnam’s Ministry of Justice for their services to law reform in Vietnam. Professor Carolyn Evans, Dean of the Law School, accepted the prestigious Minister for Justice Certificate, which is the highest award given to an organisation by Vietnam’s Ministry of Justice. It recognises the Melbourne Law School’s collaborative relationship with the ministry in providing professional development training for their staff. Professor Nicholson (BA 1986, LLB 1988, PhD 2001, Ormond College) received the Ministry of Justice Medal for the “Cause of Justice” in Vietnam. The medal is the highest award provided by the minister to an individual, and is usually given to high-ranking officials for their work with the ministry.

**Researcher Dr Jaclyn Pearson.** has been awarded the prestigious 2014 Premier’s Award for Health and Medical Research for her ground-breaking work into how a strain of E. coli bacteria caused diarrhoea in humans by disarming immune defences. Dr Pearson (GCALL 2013, PhD 2013) is based at the University’s Department of Microbiology and Immunology at the Doherty Institute for Infection and Immunity.

**Ismail Fajrie Alatas** (BA(Hons) 2005) has been named one of the Charlotte W Newcombe Doctoral Dissertation Fellows for 2014 by the Woodrow Wilson National Fellowship Foundation. The Newcombe Fellowship is the largest and most prestigious such award in the US for PhD candidates in the humanities and social sciences addressing questions of ethical and religious values. Mr Alatas is now a doctoral candidate in anthropology and history at University of Michigan, Ann Arbor.

**VCA alumnus, performer and playwright Angus Cerini** (BCA 2000) has won the 2014 Griffin Award for his new play *The Bleeding Tree*. The Griffin Award is a national playwriting prize awarded in recognition of an outstanding play or performance text displaying “an authentic, inventive and contemporary Australian voice”. Past winners of the award include alumnus **Lachlan Philpott** (G DipDramArt(Direction) 1999).

**Professor John Tobin** was presented with the Paul Baker Award at the Law Institute of Victoria Awards. He was recognised for his extraordinary work, both within the Law School and beyond, in the promotion of human rights. Professor Tobin (BCom 1992, LLB(Hons) 1993, PhD 2009) has designed and taught several subjects for Melbourne Law School in the areas of international law, human rights, children’s rights and public interest lawyering. In 2010 he was awarded for teaching excellence by the University of Melbourne.

**Chris Summers** has won a major award for his play, *King Arthur*. Mr Summers (BCA(Hons), LLB 2013) was presented with the Patrick White Playwrights’ Award by Sydney Theatre Company for the play, which follows a retired film maker who decides to direct a sequel to a cult film he made in his youth.

**A University alumnus and staff member has been honoured for helping deliver more than 32,000 tonnes of carbon emissions since 2008. **Harry Troedel**, Sustainability Manager, Implementation in Property and Campus Services, was presented with the Business Leader of the Year Award as part of the Climate Alliance 2014 Business Leadership awards.** Mr Troedel (BCom 1998) leads the University’s Energy Reduction and Carbon Mining initiative, which aims to achieve a more sustainable campus. His work has led to annual savings of more than $3 million in energy bills for the University.

Former University Vice-Chancellor and **Professor Emeritus David Penington AC** (MB BS 1949, LLD 1995, Queen’s College) has been named Victorian of the Year for his contributions to the Victorian community and his work in medical education, research policy and public health. Professor Penington began his medical training at the University and attended Oxford for a scholarship in 1950, graduating in 1955. He returned to the University as Professor of Medicine and Head of the Department of Medicine at St Vincent’s Hospital in 1970, served as Dean of the Faculty of Medicine from 1978 to 1985 and as Vice-Chancellor of the University from 1988 to 1993. He carried out groundbreaking work on tackling the drug epidemic and the spread of HIV/AIDS in the 1980s and inspired the creation this year of the Penington Institute, a not-for-profit organisation focussed on drug issues.
dropped out of high school in year 11. Years later, a “friend” told me that she didn’t think I had the academic goods to go to uni; so I enrolled to do an Arts/Law degree at the University of Melbourne to prove her wrong. I’d probably be sitting in a nice office in an executive job right now, but for the fact that street art captured my attention, and then my heart.

I graduated in 2007 and went straight into a policy role in a State Government graduate program. I had a great job, beautiful house, nice things. A couple of years after I graduated, I met some new friends, some of whom were street artists. I was intrigued by what they did, so I made a few drawings of my own, followed them at night, and began to paste up my own drawings.

I loved it. No clients, no money, just night-time adventures in dark places, putting up drawings as gifts for strangers to think about or enjoy when the sun rose.

People started photographing my street pieces and following my work online. They also contacted me for commissioned pieces. My work became larger, more intricate, more challenging and more frequent. I moved on to aerosol, painting directly onto walls, going out as many nights as the weather would allow.

I was always very careful not to be identified or seen while painting. I usually painted with a “scout” who kept watch while I painted, and I often painted in areas hidden from public view, such as old factories, abandoned buildings and drains. I exhibited my work in group shows, sold artworks and gave interviews anonymously. The public didn’t know who Kaff-eine was, and that suited me perfectly.

I found it harder and harder to keep up 40 hours in my policy career and another 40 in street art, so in 2012 I sold my house, quit my job and left the office to pursue my career as a street artist.

In the two years since, my life has completely changed. I work seven days a week, and I absolutely love it. Every day brings new challenges and experiences. I have illustrated two children’s books (The Promise and Vera) released by Scholastic; I’ve held sell-out solo exhibitions and been in successful group exhibitions; I’ve collaborated with international graffiti icons; I’ve been invited to paint in Germany, France, the USA and the Philippines; I’ve helped raise funds for victims of Typhoon Haiyan by headlining live street-art events in Manila.

I’ve also painted public murals in chaotic Manila shanty towns; and I’ve completed a collaborative project with young people in Berry Street schools, reinterpreting their stories of poverty, violence, abuse, neglect and hope as a series of wall paintings on Melbourne’s streets, rooftops and special places.

I used to hide from the public, but that’s impossible now that I take on large public commissions, which take days to complete and sometimes require scissor lifts and traffic control. People in inner Melbourne are now pretty used to street artists doing their thing on walls, so I don’t get hassled very often.

Occasionally someone will call the cops on me, thinking that what I’m doing is illegal, but most people are actually really supportive and lovely. Over a blistering hot week last summer I painted a long wall on Alexandra Parade in Fitzroy and every day the locals would bring me coffee, icy-poles and even meals. It was such a great experience; I felt so connected to the community. I loved hearing how connected they felt to their new mural.

I love the freedom, creativity, autonomy, excitement and fulfilment I get from my street and public art. If one day everyone starts to dislike my art, I can always go back to working in a policy or legal role in an office. Thankfully, that hasn’t happened yet.

HEARTCORE, a book of young people’s stories and the artworks they inspire by Kaff-eine, will be launched on September 25. All proceeds from book sales will be used to support Berry Street’s work with young people and families.

For more on Melbourne’s street-art scene, visit unimelb.edu.au/3010

kaffeinestreetartist.wordpress.com
A world of knowledge at your fingertips...

It pays to be a member of the University of Melbourne alumni community.

Access a huge range of exclusive benefits and services, from discounts on healthcare to invitations to special events.

- Subscribe to e-journals through the University library. For $45 a year, alumni can enjoy access to many of the world's top academic journals.
- Until December 22, 2014, we're offering new subscribers a 50% discount - an annual subscription will cost just $22.50 for the first year.

So whether you are looking to bring your knowledge up to date for your next career move, or just want to win next week's pub trivia competition, it's worth signing up!

For more information visit go.unimelb.edu.au/b77

For details of all the benefits available to alumni, go to alumni.unimelb.edu.au

DON'T MISS OUT! Make sure we've got your current contact details so we can keep bringing you the latest news, invitations and offers. Updating your information is easy - just visit alumni.unimelb.edu.au and follow the links.

This publication is produced on a Forest Stewardship Council (FSC) Certified paper that is produced at an FSC certified paper mill under an ISO14001 environmental management system, using elemental chlorine free whitening processes.

Printed by Complete Colour, an ISO14001 environmental management system and ISO9001 quality management system certified printer with FSC (Chain of Custody) certification and Sustainability Victoria Wastewise Gold certification, printing on an ecologically rated printing press using a chemical recirculation system and produced with vegetable based inks made from renewable resources. This publication is fully recyclable – please dispose of it wisely.

Views expressed by contributors are not necessarily endorsed by the University.

ISSN: 1442-1349

Produced for the University of Melbourne by MEDIAXPRESS   mediapress.net.au