Science focus
What bees can teach us, and why chickens are smarter than you think

The business of being green
Panasonic partnership heralds closer ties with industry

Word to the wise
An interview with Vice-Chancellor Steven Schwartz

Our Sporting Hall of Fame
Showcasing an illustrious history

Women’s business
Advice and insights from our leading female alumni
In search of wisdom

Readers may have seen references to my annual lecture this year in which I referred to Macquarie University’s plans to introduce an undergraduate course focused on “practical wisdom”. (You can read about this in more detail on page 14.)

One of the most frequent questions I have been asked since my lecture is – is it really possible to teach wisdom?

Well, attending a course on practical wisdom will not make you wise – much in the same way as taking, say, a law degree will not make you a successful lawyer or a creative writing course will turn you into a best-selling author.

Rather, practical wisdom comes from a combination of book knowledge, good role models and lived experience.

Gu Yanwu, an ancient Chinese scholar, put it this way – to become wise, you must read 10,000 books and walk 10,000 miles.

In other words, book learning is necessary but not sufficient. If we want to become wise then we must get out of the library and walk the talk.

Modern universities in general focus on equipping graduates with the skills they will need in their chosen career.

But successful careers depend on more than technical skills; they also depend on other attributes such as critical reasoning, self-directed learning and constructive scepticism.

We don’t want to teach our students what to think; we want to teach them how to think.

Macquarie University is determined to enable its students to broaden their undergraduate education because now, more than ever, such an education is needed.

I am interested in your views on this. To make a comment just go to my blog – www.vc.mq.edu.au/blog/ – and post your response. I look forward to hearing from you.

Professor Steven Schwartz
Vice-Chancellor
Macquarie University
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Insights and advice from prominent female graduates, including Tracey Fellows, who has just been appointed Vice-President of Microsoft’s Asia Pacific business.
Edited feedback from alumni.

My Masters is doing a lot for my career in Colombia
I’d like to thank you and everyone [at the Macquarie University Applied Finance Centre] because I really enjoyed my Masters. I think it is already doing a lot for my career. If you want me to speak here in Colombia at one of your marketing events I only have good things to say about Macquarie and the Applied Finance Centre!
Manuela Ramirez Mejia, Risk Analysis Unit, HSBC, Columbia

Like your magazine
I think Macquarie Matters is interesting, informative and I look forward to receiving copies in future.
Peter Keating, Managing Director, Pearl Financial Services, Melbourne

Please, make it available for smartphones
Please make the magazine available for reading on smartphones. The page size on the link is too large.
Mark Highfield, Financial Controller, BlueCHP Limited, Sydney

Back in touch
I was very pleased to receive the latest issue. It was doubly pleasing to read the articles as it gave me information about a former school friend with whom I’d lost contact, Dr Penglase. Thank you for a quality magazine.
Dawn Bradner, Sydney

Library borrowing rights, please
As a student who commenced almost at its beginning I’ve always had a keen interest to know what’s happening and see the many changes that have taken place at Macquarie. I enjoy the alumni magazine.
What I would really have liked to be able to do as an alumni is have borrowing rights for the library [but] I think the various alumni scholarships are really good. It would be good if alumni were offered a discount on enrolling in subjects. I am also interested in the development of the private hospital; it’s in my field.
Gary Arthur, Vietnam

Free borrowing rights are available to alumni. Please register on the website at: www.alumni.mq.edu.au/Alumni/ then click on Benefits on the left-hand side of the page. – Ed.

It boosts our image
Thank you for providing me with the electronic version of Macquarie Matters. It is fantastic, both in content and organisation. It covers a wide range of things which are a showcase for and capable of boosting the image of the university.
Dr Ernest Akerejola, Macquarie University

Contact the Manager, Alumni Relations at alumni@mq.edu.au or at Level 2, BD Building, Macquarie University, North Ryde, NSW 2109.
Macquarie University will again run a free guided walks program on campus in 2011. Under the expert direction of professional guides, walkers can stroll the grounds and discover some of the University’s hidden secrets.

Here’s a sample of what’s on offer in the year ahead:

**TOUR OF THE CAMPUS ARBORETUM**
10AM TO 12PM, 12 FEBRUARY
The Macquarie University Arboretum was launched in 2010 as part of the Lachlan Macquarie Bicentenary celebrations. This will be the first public walking tour of the Arboretum, whose trees are a valuable resource for teaching and research.

For bookings and enquiries, contact Samantha Newton, who will lead the tour, at samantha.newton@mq.edu.au

**SCULPTURE PARK TOUR**
10AM TO 12PM, 8 MARCH
Set in the University’s open parkland and heritage sites are some 130 original works by leading and emerging Australian and international sculptors.

This tour will be led by Leonard Janiszewski, Macquarie University Art Gallery, and Jennifer Farrer, City of Ryde. The tour will conclude at the Macquarie University Art Gallery where walkers will enjoy a guided tour of the artworks on show. For bookings and enquiries, call City of Ryde Customer Service on 9952 8222.

**SUSTAINABILITY TOUR**
10AM TO 12PM, 30 APRIL
This tour, conducted in conjunction with the City of Ryde, will celebrate the biodiversity of the campus and showcase initiatives to improve sustainability around Mars Creek.

It will be led by Belinda Bean, Macquarie University Sustainability, and Jennifer Farrer, City of Ryde. For bookings and enquiries, call City of Ryde Customer Service on 9952 8222.
In a class of their own
How our students are helping India’s disadvantaged children

In 2006, while walking across a bridge on the outskirts of Jaipur, India, Macquarie University history student Jennifer Purcell spotted a young child below, wading through raw sewage to collect recyclables to sell. When Purcell looked closer she was shocked to realise that the youngster was a student in the Year 2 class in which she was working as a volunteer teacher.

It was that moment that inspired her to start Tara.Ed, an organisation that works with teachers from some of India’s poorest areas to improve the lives of disadvantaged children. Tara means ‘star’ in Hindi and her organisation’s aim is to develop star teachers to help students shine, Purcell explains. “We hope to reach 20,000 children by 2020,” she says.

Purcell established Tara.Ed in 2007 with the help of a $US10,000 grant from the Goldman Sachs Global Leaders Social Entrepreneur Fund. She set it up with three main aims – to create cross-cultural links between Australian and Indian schools, to deliver practical training programs for Indian and Australian teachers through teacher tours and skills exchange and to provide resources for rural Indian schools to improve their students’ education.

A long-term commitment
“we’ve always known we need to create a program that’s sustainable,” says Purcell. “The best way to do that is work with teachers rather than students. We don’t just want to go into a school for five years, make a difference while we’re there, and then leave. we want the program to continue working long after we’re gone.”

Two Macquarie University students, Michelle Low and Keryn Simpson, were selected to visit India in 2009 as part of Tara.Ed’s pilot program. Macquarie University’s Vincent Fairfax Family Foundation Chair in Education Professor Ian Gibson led the pilot teacher tour, supervising the teaching experiences and running professional seminars for Indian teachers.

In 2010, Gibson led another cohort of six students to teach in one of three partner schools near Goa for three weeks, while Purcell moved to Bangalore to run the program and build relationships with future partner schools.

It’s been a seminal experience for Purcell, who spent three months living in Indian slums and working as a volunteer teacher in 2007. “I had one year of university under my belt and yet here I was being handed a class of 48 kids and nothing but a blackboard under a tree to teach them with,” she says. “i cried for the first week.”

While the experience was daunting, it was “an incredible eye opener”. Purcell learned from local teachers who had no degrees but decades of experience. “Seeing what they had achieved with so few resources was amazing,” she says.

Ensuring continuity
To ensure continuity of quality education, Tara.Ed gives partner schools equipment and resources and the services of Australian trainee teachers. The Tara.Ed Sister School Relationship Program links Australian and Indian primary schools to create cross-cultural ties and interaction between teachers and students.

Tara.Ed is overseen by a board comprising leaders in business and education. More information can be found at www.taraed.org.
EKTAAL – THE ARTS FACULTY’S GREAT INDIA PROJECT

Macquarie University’s focus on India is being extended via an ambitious new project of the Faculty of Arts. Ektaal: The Great India Project aims to engage with the Indian community and develop a mutual understanding and respect for Indian and Australian culture. Ektaal in Sanskrit means “one beat” or “one rhythm”. The project’s main objectives are to establish an Indian research centre, a triple-badged Master of Arts in Media and a multi-dimensional cultural program that includes exhibitions, concerts, lectures and a three-day symposium on Indian films. The High Commissioner of India in Australia Mrs Sujatha Singh has already pledged the support of the Indian Government for the project by agreeing to help fund a professorial chair, the Tagore Chair in Indian Arts and Culture, for five years. Meanwhile the Faculty of Arts is actively engaged with business and community leaders in seeking advice and support for the project.

Macquarie University hopes many more benefits will flow from Ektaal. By encouraging a more comprehensive understanding of India as an emerging superpower, it is expected to help individuals and corporates do business in, and with, the subcontinent.

Ektaal is an attempt to understand India and to develop relationships which work on the basis of mutual respect, shared skills, shared interests and adult conversation between equals.
NEWS FROM INTERNATIONAL AND DEVELOPMENT

As 2010 draws to a close, I would like to reflect on some important milestones for Macquarie University this year. Many of these have been covered in the pages of *Macquarie Matters*, but just to quickly highlight a number:

- Opening the Macquarie University Hospital in June, covered in our last edition. The hospital has been operational now for almost six months.
- Welcoming the global headquarters of Cochlear Limited to our campus.
- Presenting degrees to 9,620 new graduates, 8,924 in Australia, and 696 in Hong Kong, Beijing and Singapore. We ran 39 graduation ceremonies with over 24,000 guests this year. This brings the number of Macquarie alumni to over 124,000.
- Welcoming 23,825 undergraduate students, 9,858 postgraduate coursework students and 1,809 higher degree research students this year. Our annual enrolments now exceed 36,700.
- Welcoming over 10,000 international students from over 100 countries.
- Achieving the highest-ever share of school-leaver first preferences.
- Reconnecting with 28,400 of our alumni for the year to date. This is a gratifying result but is only the beginning.
- Winning two new Australian Research Council Centres of Excellence – more on this story on page 26 of this edition.
- Establishing three new research chairs through the generosity of our supporters:
  1. The Panasonic Chair in Environmental Sustainability – thanks to the generosity of Panasonic Australia Pty Ltd.
  2. The Tagore Chair in Indian Arts and Culture – thanks to the generosity of the Indian Council for Cultural Relations.
  3. The Genesis Care Chair in Radiotherapy – thanks to the generosity of Genesis Care Pty Ltd.

2010 has been a year of significant developments at Macquarie. My hope is that the continued growth of your University makes you proud to be a Macquarie alumnus. All the best for a happy and healthy festive season, and for a terrific 2011.

Caroline Trotman, Deputy Vice-Chancellor, International and Development

Introducing our Shanghai chapter representatives

Australian alumni are “a distinct and different breed” in the talent market in China. And the Macquarie University and MGSM alumni network is broad and deep, offering opportunities for jobs, business intelligence and talent development in the dragon economy.

So says Clement Tsang, an Australian citizen of Chinese heritage who lives in Shanghai as an expatriate with his wife and young family. Tsang was elected Vice-Chair and Chairperson of the Student Council in the 1990s while studying at Macquarie University and became heavily involved in university life. He completed his MBA in 2004.

Now Country Manager for MediaMind Technologies Inc., he manages teams in Beijing, Shanghai and Guangzhou, supporting global media advertising agencies and their multinational clients. He typifies many of the Macquarie University graduates who have used their Australian study experiences to make rapid progress in their careers in China.

Emotional connections

Moreover, being involved with the Shanghai alumni chapter allows Tsang to maintain an emotional connection with what he considers to be an important developmental part of his life. “Having spent 10 years on campus, I still cherish those memories,” he says.

The chapter offers a connecting reference point for alumni returning to China, whether it’s for assistance with business or personal information. “And we connect with other university alumni via the Australia-China Alumni Association,” he adds.

Likewise, Anna Gu, a Chinese citizen who gained her Masters in Applied Finance in 2005 before returning to Shanghai, treasures her memories of the University and stays connected with peers.

Gu now works as a project manager and senior analyst in a consulting company owned by the Commonwealth Bank.

“Returning home [to China] means that alumni need to use the network they’ve developed to grow local connections,” says Gu, who chose Macquarie University because of the excellence of its Applied Finance program.

In addition to facilitating connections and providing recruitment information and suggestions on living in Shanghai, the chapter organises events. A highlight in 2010 was an alumni dinner hosted by the Vice-Chancellor, attended by 70 alumni.

For more information please visit www.alumni.mq.edu.au. Or contact Anna Gu anna1021@hotmail.com and Clement Tsang cdtsang@gmail.com.

Clement Tsang

Anna Gu
Macquarie University researchers routinely punch above their weight in making breakthroughs which cause the scientific community at home and abroad – and the media – to sit up and take notice. Here we showcase some of their most recent and newsworthy achievements.


Chickens are the most underestimated animals on the planet, “says Macquarie University postdoctoral researcher K-lynn Smith. “People think they’re stupid and automatically respond to things; if there’s food, they eat; if they’re scared, they make a sound. This is not true. Their communication is sophisticated.”

This is among the fascinating findings made by Macquarie University animal behaviour researchers Professor Chris Evans and Dr Smith, who recently won the prestigious Australian Museum Eureka Prize for scientific research that contributes to animal protection.

The Eureka Prizes – widely acknowledged to be “the Oscars of Australian science” – are presented annually by the Australian Museum and are collectively worth more than $190,000. Macquarie University has sponsored a Eureka Prize for 10 years and recently extended the sponsorship for a further three years to recognise the work of young researchers.

The animal-protection prize is sponsored by Voiceless (www.voiceless.org.au), an organisation established by father-and-daughter team Brian Sherman AM and Ondine Sherman. (Ondine is a graduate of Macquarie University and was featured on the cover of the Spring 2009 edition of Macquarie Matters.)

Professor Evans and Dr Smith used several methods, including 3-D animation and high-definition video playback, in their long-term study to decipher the language of the henhouse. Their discovery reveals that chickens communicate with one another and will change messages according to which other birds are around. Their language, in fact, is as sophisticated as that of some primates.

When a rooster finds food, for instance, he will signal to a female by bobbing his head up and down repeatedly and making a distinctive call while picking up the food and dropping it until the female comes over. If a rival male is around, the rooster will simply eat the food himself.

**Specific warning calls**

The birds have specific calls for predators like hawks swooping from the sky, as opposed to those on the ground, like foxes. It appears that the males may also cheat to keep female affection, Smith adds. They might pretend to find food to lure the female away from another male, or give a fake warning about predators to stop the hen from approaching his rival.

The research shows that chickens are intelligent creatures that should not be kept in the grotesque conditions of battery farms, adds Smith. “We need to stop seeing chickens as egg-laying machines and change the conditions they live in.”

**Prize for young researchers**

The Macquarie University-sponsored Eureka prize for Early Career Research is awarded for outstanding research conducted by an individual or groups of early career researchers who are 35 or younger. The latest winner for this award is Australian Biomedical Fellow and Principal Investigator at the Research School of Biology at the Australian National University, Dr Rowena Martin, for her work uncovering the mechanisms of drug resistance in malaria parasites. She received $10,000.

The annual Eureka Prize program culminates in an award dinner that brings together industry leaders, journalists, politicians, researchers, policymakers, scientists, philanthropists, school students and science enthusiasts to celebrate the achievements of Australian science.
Just as in humans, cocaine can be artificially stimulating for bees. When foragers that have been treated with tiny amounts of the drug get back to their hives they’re more likely to “dance”, and dance more vigorously, than other bees.

And when regular cocaine treatments are stopped, bees experience symptoms exactly like the cognitive and learning problems seen in drug addicts in withdrawal.

These are some of the discoveries made by Macquarie University scientist Dr Andrew Barron, for which he recently received a Young Tall Poppy Science Award recognising early career researchers who have achieved significant scientific milestones.

Signposts for a cure?
Why are Barron’s findings significant? Because the bee provides a simple experimental system for exploring how brains react and adapt to cocaine, he says. Ultimately, they may point to a cure for addiction.

“If we can identify the molecular changes causing cocaine tolerance and sensitisation, or the basis of withdrawal, we may be able to design a pharmacological intervention to stop the brain reacting to cocaine and thereby inhibit the development of addiction,” he explains.

“Perhaps the humble honey bee can help us understand, and finally overcome, the complex problem of drug addiction.”

Best and brightest
Barron, who works at the Centre for the Integrative Study of Animal Behaviour, and Macquarie University’s Dr Anina Rich were named among the best and brightest young scientists at the Young Tall Poppy Awards for New South Wales at Sydney’s Powerhouse Museum in October. They were among 10 finalists to receive an award.

The work of Anina Rich, Senior Lecturer and ARC Research Fellow based in Macquarie University’s Centre for Cognitive Science, focuses on two aspects of attention – balancing competing internal and external demands and how attention is involved in integrating information from different senses.

The Young Tall Poppy Awards are in their eleventh year. All 10 finalists will now share their knowledge and promote science among school students, teachers and the broader community as part of a campaign run by the Australian Institute of Policy and Science.

Mimicking human dosages
Barron and colleague Eirik Søvik used an inventive method to administer cocaine to the insects they studied. They trained forager bees to use a sugar-water feeder as an artificial flower. As the bees fed, they applied a minute drop of cocaine dissolved in a solvent to their backs. “We worked with very low doses that mimicked in the bee the cocaine dose range taken by humans in recreational drug abuse,” Barron told Macquarie Matters.

They observed that bees treated repeatedly with a very low dose of cocaine become more resilient to the effects of a higher cocaine dose than bees that have never been exposed to it. The next step is to see if the insects also lose the rewarding effects of a low cocaine dose with repeated cocaine treatment, Barron adds.

“If we can induce cocaine tolerance and sensitisation in honey bees, we can examine these phenomena at molecular and genomic levels, to reveal the gene expression changes in the brain that are responsible for long-term neuroadaptations to drugs of abuse.”
Macquarie University has congratulated the “Thunder Down Under” team on their success following an impressive performance at one of the world’s leading tournaments for engineering and technology students.

Made up of more than 20 Sydney high school students, Macquarie University engineers, industry mentors and “Wombot,” the soccer-playing robot they built, Thunder Down Under was the first Australian group to compete in the US-based FIRST Robotics Competition and achieved an unprecedented level of success for a bunch of rookies.

They were awarded the Rookie All Star Award – the highest recognition a first-year competitor can receive – for their efforts in designing and building Wombot and for their excellent results during three days of regional competition in New Hampshire.

The task assigned to the robots changes each year. In 2010 teams were required to construct a robot that could kick or push a soccer ball around a field while navigating obstacles. Wombot survived four practice matches on the first day before going on to compete against other robots from all over the world in ten qualifying matches.

The Australians impressed the American crowd and competition officials with their enthusiasm and dedication, says project coordinator Associate Professor Mike Heimlich, from Macquarie University’s Department of Physics and Engineering. “Half of New Hampshire now knows the ‘Aussie, Aussie, Aussie’ chant and embraced the team as their own,” he says. “Everybody wants us to come back.”

The team was delighted to meet with the founder and Chairman of FIRST (For Inspiration and Recognition of Science and Technology), Dean Kamen, whose organisation, founded in 1989, aims to inspire students in engineering and technology.

Thunder Down Under was also presented with a safety award acknowledging its support of a safe working and playing environment, a Dean’s List mention for team member Sarah Heimlich and a FIRST Volunteers Award acknowledging the efforts of Mike Heimlich and his wife Luan in bringing the program to Australia.

The team is sponsored and supported by Macquarie University, National Instruments, De Rossi Industrial, BAE Systems, Altium, Institute of Instrumentation, Control and Automation and Phoenix Robotics.

Meanwhile, for a younger group of competitors, the national FIRST Lego League tournament was held at Macquarie University in December 2010. The FIRST LEGO League (FLL) is a robotics program for nine- to 16-year-olds designed to get children excited about science and technology, and teach them valuable employment and life skills.

It sets real-world scientific problems to engage children in research, problem solving and engineering. In each annual challenge competitors must build an autonomous robot to carry out pre-designed missions. “The idea is to provide real-life information to these kids in a fun way,” says honorary adjunct faculty member at Macquarie University and operational partner for FLL in Australia, Luan Heimlich. Another was a broken bone, which they had to “mend.”

Macquarie University will be further boosting its efforts to take science and technology into primary schools in 2011, with a special focus on kids from disadvantaged backgrounds. A new University outreach program aims to stimulate young learners and invigorate teachers’ classroom activities through a year-long series of multi-disciplinary science, technology, engineering and mathematics (STEM) activities.

The program will target youngsters who are less likely to proceed to university – Indigenous children and children from low socio-economic backgrounds.
Macquarie University’s commitment to sound environmental practice and a sustainable campus was recognised recently by a New South Wales “Green Globe” award.

Now in their eleventh year, the Green Globes are the leading environmental awards in Australia’s most industrialised state, showcasing achievements in the sustainable use of resources and leadership in tackling climate change.

Macquarie University won the Public Sector Award for 2010, impressing judges by the way the University had incorporated sustainability initiatives in all aspects of its operations, policy and planning.

“They didn’t do bits and pieces on sustainability, rather they’ve looked at the way the whole University is run and used,” General Manager of the Water Services Association of Australia and panellist Grant Leslie told media.

As the first Fair Trade campus in the southern hemisphere, it has introduced a range of environmental initiatives. It uses only 100% recycled paper, for instance, and has a recycle-and-reuse policy that diverts up to 70% of university waste from landfill. That has so far included over 25,000 kilograms of e-waste.

Meanwhile the installation of a third chilled water tower on campus has reduced peak cooling demand by more than 813kWh, saving 273 tonnes of CO₂ each year.

“I think what made us stand out was the fact we didn’t just report on water, energy and waste savings we’ve made in our submission, but on how we’re trying to embed sustainability into everything we do across the University,” says Leanne Denby.

Winners were selected by an independent panel of experts and announced at a New South Wales Parliament House ceremony hosted by the Minister for Climate Change and the Environment Frank Sartor.

If the wanderlust is upon you, Odyssey Travel – a not-for-profit organisation specialising in educational tours – is offering alumni terrific deals on overseas group travel to fascinating places.

Macquarie University is one the Australian, New Zealand and China member universities of Odyssey, on whose board Dr Brian Spencer, former Registrar and Vice-Principal of Macquarie University, now serves as Chairman.

Odyssey helps its member universities satisfy their requirements for continuing education, life-long learning and educational outreach programs. A key target market is people who are retired or ‘empty-nesters’.

“We describe our programs as Odyssey Ed-Ventures,” explains Macquarie University alumnus and CEO of Odyssey Travel, Denis Simond. “An odyssey is a journey with a purpose or a peregrination in search of wisdom, truth and knowledge, and an Ed-Venture is a genuine educational experience.”

Travel programs with a difference Odyssey is delighted to be celebrating 27 years as Australia and New Zealand’s premier educational travel program operator, Simond adds. It offers excellent travel deals, and because of the nature of its main target market, customers often travel with like-minded companions. Moreover Odyssey will make a significant donation to the University based on the participation of alumni.

To learn more, please visit www.alumni.mq.edu.au/Alumni/InformationAbout/TravelProgram/

When booking, mention that you’re a Macquarie University alumnus so that the University will benefit from your participation.
"I was the first person in my family to go to university and my wife Claire was the first in hers," says Macquarie University Vice-Chancellor Steven Schwartz. "It changed the direction of our lives."

Professor Schwartz never forgets his good fortune in being able to benefit from tertiary education. But many others aren't so lucky, he observes – not because they lack intelligence, but because they can't afford it.

The Macquarie University Equity Scholarships Appeal aims to make a difference with the support of the alumni community – to increase funding for scholarships in 2011 and beyond.

"That's the reason I'm appealing to members of the alumni community to give something, whatever you feel comfortable with, to those who've not had the opportunities you and I have enjoyed," says Professor Schwartz.

Funds raised in the appeal will support the following scholarships:

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**THE MACQUARIE EDUCATION COSTS SCHOLARSHIP**
valued at $4,500 annually, which helps students with ongoing costs of university expenses.

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**THE MACQUARIE ACCOMMODATION SCHOLARSHIP**
valued at $9,000 annually, which gives rural or city students facing hardship the opportunity to attend university by providing for their accommodation costs.

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**THE MACQUARIE STUDENT EMERGENCY FUND**
which assists students experiencing financial difficulties to get through a difficult patch and complete their studies.

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**THE MACQUARIE UNRESTRICTED EQUITY SCHOLARSHIP FUND**
which supports equity initiatives at the discretion of the Vice-Chancellor.

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The amount raised so far is around $80,000, says Macquarie University Director of Advancement Services Ray Villarica, representing donations from over 850 alumni.

One of these is Claude Tarazi, who graduated in 1997 with a Bachelor of Arts degree and is now a primary school teacher at Our Lady of Fatima Kingsgrove in Sydney. Tarazi recently generously gave $1,000 towards accommodation scholarships and another $1,000 towards education costs scholarships.

"I received a quality and highly enjoyable education at Macquarie University," he writes. "It was always my hope to pass [my good fortune] onto others and I'm glad to achieve that through my donation."

Jessie Wang, recipient of a Macquarie Education Costs Scholarship, also points to the benefits of the tax-deductible gifts. "Every donation, even small, is powerful enough to change someone's life," she says. "I cannot thank the donors enough and hope that one day I can also help to make a difference."

Indeed everyone benefits from such generosity, says Ray Villarica. "The students gain a tertiary qualification," he says. "The Macquarie University community gains the satisfaction of giving back and the nation gains through the increase in our university educated population."

You can help to change lives today with a gift of any amount, and amounts donated regularly allow us to plan for future scholarship awards.!
Understanding the Establishment of the Rule of Law in Australia

Some of the earliest court decisions in Australia – and the role of the early-nineteenth-century governor of New South Wales Lachlan Macquarie in establishing the rule of law – were examined at an event at Macquarie University recently.

A lecture by Brent Salter, an outstanding Macquarie law graduate currently employed at our law school, gave attendees at the inaugural Lachlan Macquarie Lecture Series a glimpse of the man who came to re-establish order after soldiers became dissatisfied with Governor Bligh in the fledgling colony.

Salter, who has published extensively in Australia and internationally, suggested that Lachlan Macquarie’s role in the establishment of the rule of law in Australia could not be understood without an appreciation of the significant contribution made to the same cause by judicial officers in the years before and after the coup by Bligh. He also examined some of the earliest court decisions in Australia.

The Lachlan Macquarie Lecture Series was aimed at enriching our knowledge of the important legacy of Governor Lachlan Macquarie. Brent Salter’s lecture was chaired by the President of the Australian Human Rights Commission, Catherine Branson QC.

Other speakers in the series included Matt Peacock, an ABC journalist (on the James Hardie asbestos case), Macquarie University academic Dr Keith Suter (on the global financial crisis; is it over?), the Governor of New South Wales, Professor Marie Bashir (on the contribution of Lachlan and Elizabeth Macquarie), and Chris Tobin, a Darug man who is a traditional custodian in the Blue Mountains region (on an Indigenous perspective of Macquarie’s era and legacy).

You can view each lecture in the series at: www.mq.edu.au/bicentenary/lecture_series.php

Brent Salter graduated with a Bachelor of Laws with First Class Honours and the University Medal.

Alumnus Makes His Mark in Singapore

Around the world, Macquarie University alumni are making their mark. Among their ranks is Dr Moh Chong Tau, who has received Singapore’s Public Service Medal in the 2010 National Day Awards conferred by the island state’s President.

The award was recommended by Singapore’s Ministry of Manpower for Dr Moh’s contribution to the professional development of the precision engineering industry in that country, where he is today President and CEO of Makino Asia, a division of a multinational machine-tool manufacturer. Moh is also Chairman of the precision engineering Industry Skills & Training Council in Singapore, a post he’s held since 2004.

Dr Moh completed a Master of Arts in Marketing Management at the Macquarie Graduate School of Management in 1997, which he credits for equipping him with deep knowledge of business management.

“The acquisition of knowledge was just the beginning,” he told Macquarie Matters. “The true challenge was to learn how to apply it in the real world of business, especially in today’s dynamic markets.” But interactive learning with fellow students – “with guidance from the learned lecturers and professors of Macquarie University” – helped provide an environment in which he could pick up knowledge and skills quickly, he says.

“I wasn’t only learning from the lecturers and professors, but gaining from the shared experiences of fellow students who were experts in their own fields of business,” explains Moh, an enthusiastic advocate of lifelong learning. “Learning and knowledge enhance your interest in work and your ability to contribute to the society.”

Business success

In Dr Moh’s case his studies have considerably enhanced his success. As CEO of Makino, he has established manufacturing operations in China, India and Singapore and increased orders for Asian markets more than fourfold to $S600 million. Today the Asian group employs more than 1,000 people.

The alumni community in Singapore is proud of Dr Moh’s achievement, says the President of the Macquarie University Alumni Association, Matthew Bull. “Your involvement... over many years has served to greatly enhance the university’s reputation in Singapore,” he wrote in a congratulatory letter.

Dr Moh Chong Tau
STEVEN SCHWARTZ
speaking words of wisdom

Knowledge is not enough. Universities should be in the business of teaching wisdom, says Vice-Chancellor Steven Schwartz. In this interview with *Macquarie Matters*, Professor Schwartz explains what he means . . .

MM: At your Vice-Chancellor's annual lecture you chose to speak about restoring wisdom to universities and illustrated the relevance of doing so by recounting a story of two soldiers whose decisions in the face of extreme circumstances had different outcomes . . .

Vice-Chancellor: I told the true stories of these soldiers because they demonstrate, with terrifying clarity, that we have to live with the choices we make, the reasons we make them, and their consequences.

Andy McNab led eight SAS commandos into Iraq in 1991. Their mission was to destroy a communications link so Saddam Hussein could no longer launch Scud missiles. Hiding in a gully waiting for darkness, McNab and his men were discovered by a young shepherd, who ran off. McNab knew if the boy warned the Iraqis and his patrol was discovered, he and his men could expect no mercy.

There was one certain way to prevent this. McNab, an expert marksman, trained his rifle on the boy's back but couldn't bring himself to pull the trigger.

The boy ran directly to the nearest Iraqi soldiers. In the ensuing action, three of the commandos died, one got away, and four others, including McNab, were captured and tortured.

Despite what happened, McNab had no regrets. No matter what, SAS soldiers never shoot children.

The other story was about Marcus Luttrell. Like Andy McNab, Luttrell was a commando, a US Navy Seal, serving in Afghanistan in 2005. Also like McNab, he led a small group of soldiers on a mission behind enemy lines. Instead of a shepherd, Luttrell's patrol encountered three Afghan goatherds, one of whom was a boy.

The soldiers kept their rifles trained on the goatherds as they debated what to do. If they let the captives go, they might alert the Taliban. Luttrell put it to a vote. His soldiers were evenly divided, so he cast the deciding vote. Listening to what he called his "Christian soul" he voted to release the captives.

The goatherds immediately informed the Taliban of the patrol's presence and everyone but Luttrell was killed. A detachment sent to rescue him was also massacred.

Unlike McNab, Luttrell regrets his actions. In his book *Lone Survivor*, he wrote that voting to let the Afghans go was the "stupidest, most southern-fried, lame-brained decision" he'd made in his life and that "it will haunt me till they rest me in an East Texas grave".

Andy McNab justified his actions by an appeal to a moral imperative. But Marcus Luttrell was not satisfied with having followed the moral dictates of his "Christian soul". He judged the morality of his action by its consequences.

These stories are relevant because they're about the reasons and consequences of choices we make. Divorce is a decision with...
serious consequences, as is having an abortion or allowing your organs to be harvested when you die or leaving your money to charity or bending the rules when the umpire is not watching. How do you make these decisions? Do you rely on a moral imperative or are you more concerned with the consequences?

MM: So how do you even begin to teach and learn wisdom?

Vice-Chancellor: Confucius, the Chinese philosopher, said there are three ways to gain wisdom – by reflection, imitation and experience. Gu Yanwu, an ancient Chinese scholar, put it this way. To become wise, you must read 10,000 books and walk 10,000 miles. In other words, book learning is necessary but not sufficient. If we want to become wise then we must get out of the library and walk.

MM: Since your announcement that you intend teaching a course on practical wisdom, there’s been some debate in the media and in online blogs about whether wisdom can indeed be taught in a modern university. What will the course cover?

Vice-Chancellor: The relevant literature. Students will read about what great thinkers have said about wisdom. They’ll also address real-life issues, especially those about which well-meaning people may hold different views.

For example students from deprived backgrounds grow up in homes with few books and often attend substandard schools. Recognising their poor start, some have argued that fairness demands that they be admitted to university with lower entry scores than those from more advantaged backgrounds. Others believe this is unfair, that everyone should have the same entry score.

“Book learning is necessary but not sufficient. If we want to become wise then we must get out of the library and walk.”
Our goal is not to convince anyone to adopt a particular position. We want to teach what others have said about fairness. We want to show students how to reason about fairness and disadvantage, for example, and reach their own conclusions. Thinking through issues like this helps students understand just what they mean when they say they believe in a fair go.

Well-meaning people may disagree about many issues, gay marriage, stem-cell cloning, euthanasia for instance. Again, we want our students to understand the arguments on each side and reach their own conclusions.

I don't want to teach students what to think. I want to teach them how to think.

MM: Isn't this what universities are already doing?

Vice-Chancellor: Unfortunately no. Universities were once about character building. But we live in the age of money and money is what the modern university is all about.

Among politicians, a kind of cargo cult has developed around universities. Want to rev up your economy? Build some impressive looking buildings, preferably out of sandstone, hire a few caps and gowns, print diplomas on fake parchment and then sit back and wait for the dollars to roll in.

If you can't afford this, simply rename some colleges and technical schools as universities.

Not surprisingly in the age of money university courses are increasingly vocational. These courses are designed to train graduates for their first job after leaving university, not only in law, accounting and pharmacy, but also in golf course management, contemporary circus and physical performance, hairdressing-salon management, equestrian psychology and fashion-and-lifestyle products.

Politicians and universities often refer to skill shortages. Apparently we need more circus performers and salon managers. No one seems to worry about a shortage of philosophers, historians and ethicists.

MM: But isn't it understandable that students are focused on getting a job? An editorial in The Sydney Morning Herald argued that tertiary education is now for the most part about training, not education.

Vice-Chancellor: I would argue that successful careers depend on more than technical skills; they also depend on the practical application of wisdom. Unfortunately, modern universities are not in the wisdom business. We educate students but don't try to make them wise. For evidence we need look no further than the global financial crisis or the parliamentary expenses scandal in Britain.

Many of those involved were graduates of the world's most prestigious universities and business colleges. The GFC showed us that highly educated people were corrupted insidiously – an unsecured mortgage here, a housing bubble there and a get-rich-quick opportunity.

Unwinnable wars, unsustainable industries, dangerous home insulation programs – these were not unavoidable catastrophes like pandemics or tsunamis, they were the result of human beings making unwise choices. People making choices and decisions drive events.

Students who learn to think for themselves are likely to make more enlightened contributions to the common good than those who merely follow the opinions of others.

Students who learn to think for themselves are likely to make more enlightened contributions to the common good than those who merely follow the opinions of others.

Similarly, a university that decides to spend millions of extra dollars on a building to make it more environmentally sustainable, as Macquarie University has done with its new library, should be able to explain its reasons.

We want students to think about our decision. Do we owe a debt to future generations, a debt that requires us to build sustainable buildings? Or is it more important to use our money to meet the needs of today's youth? Students who've had the opportunity to reflect about such issues, and to see the university as a role model, may be disposed to act with regard to what is good.

MM: And experience?

Vice-Chancellor: We do this by providing experiences outside the classroom. We host clubs, sporting teams, orchestras, choirs and political and religious societies. We also provide opportunities for work experience, volunteering and study in different countries.

Why? Because in this way students learn to work with others. They learn communication skills, to keep their promises, be dependable and meet deadlines. They learn tolerance, justice, fair play and to treat others as they'd like to be treated. These are the building blocks of practical wisdom.

There's one more thing. By gaining experience outside the classroom, students get the opportunity to learn about their own capabilities. Learning about one's self is vital for success in any field.

One way for students to come to know and master themselves is to test themselves in difficult situations. That's why the new curriculum www.mq.edu.au/currentstudents/news/new_curriculum_faq.html we introduced this year requires all students to participate in service learning – work or study outside the University. We want them to acquire the self-confidence that comes from putting themselves in an unfamiliar situation and learning to cope.

Of course we hope that none will ever be confronted with terrible choices. But we do want them to learn how to make wise and defensible decisions.
Enrich the University’s future – consider a bequest

More and more alumni are opting to leave a bequest to Macquarie University in their wills to support the University’s future. Leaving a bequest gives our alumni membership of The Joan & John Lincoln Society, a body established by the University Council to honour our bequest givers.

When the Joan & John Lincoln Society was launched last year, His Hon. Dr John Lincoln AM, for whom with his late wife Joan it is named, announced he was also establishing a scholarship fund for Indigenous students and leaving a bequest to augment the fund.

Judge Lincoln is a key figure in the establishment of Macquarie University and one of its elder statesmen. He was on the committee that established the University, which he chaired from 1958 to 1964, a member of University Council from 1964 to 2009, Deputy Chancellor from 1976 to 2000 and Emeritus Deputy Chancellor since 2000. Judge Lincoln was also the first Chairman of the Standing Committee of Convocation from 1974 to 1983. The Lincoln Building for student services was named after him.

A current John Lincoln Oral History project will form an important part of the society’s and the University’s history.

Over the past year, others who have made bequests to the University include Vice-Chancellor Professor Steven Schwartz and his wife Claire. Along with Judge Lincoln and Derek To – the graduate who started the bequest program in 2008 – Professor and Mrs Schwartz are founding patrons of the society.

The gift of a bequest to the University is one that does not require an immediate financial outlay, but can be taken into consideration – along with gifts for family and other causes – when people make their estate plans.

HOW TO MAKE A BEQUEST
To find out more please contact Anne Peedom, in confidence, at (02) 9850 1392 or via email at anne.peedom@mq.edu.au

Margaret’s choice
Margaret Rush of Sydney is one alumna who recently contacted Macquarie University to say she’d left a bequest to the University in her will.

What motivated Rush to do so? A decades-long attachment to the University which remains “very strong”. After schooling at MLC Burwood for 11 years she accepted a scholarship to Sydney Teachers’ College in 1938, and in 1940 was appointed as an infants’ teacher in the Department of Education where she stayed five years. Rush entered Macquarie University in 1968, graduating in 1972 as a mature-age student. Later she returned to finish an MA degree in the School of History, Philosophy and Politics.

Much of her life since has been dedicated to raising a family of four children, music and voluntary work, with an interest especially in Indigenous people. She was motivated by her friend, Macquarie University graduate Dr Julie Waddy OAM, who worked for 30 years in linguistic and ethnobiological research on Groote Eylandt.

“I also support cancer research and the ancient history department,” says Rush. “By making a bequest to the University you’re making a gift that enriches students’ learning experiences.”
A new Macquarie University study shows women remain poorly represented in senior business positions. We asked some of our successful female graduates why – and what’s helped them achieve success.

This year has seen a dramatic increase in the number of women in high ranking political positions. In September the country’s first elected female Prime Minister was sworn in by its first female Governor-General. In both New South Wales and Queensland, the positions of Premier and Governor are held by women.

The business landscape, however, portrays a different picture. According to a recent Macquarie University report, in the private sector women hold only 8.4% of listed company board positions – or 123 seats out of 1,467 – 8% of key executive management positions and only 4.1% of line manager roles such as chief financial officer or chief operating officer.

The 2010 Australian Census of Women in leadership released in October was based on the annual reports of our top 200 listed companies. The census is conducted by the University for the Equal Opportunity for Women in the Workplace Agency every two years.

This year’s report shows that compared with the US, New Zealand, Britain, Canada and South Africa, Australia has the lowest percentage of women in senior positions in the private sector.*

Macquarie Matters asked a panel of Macquarie University’s women graduates who have made their mark in business and politics why they think this is so, and what’s helped them achieve success in their own fields.

*Since the census was taken, new data collected by the Australian Institute of Company Directors shows female board numbers have now reached 10.1%. The surge in appointments – 40 women directors joined boards in 2010 compared with 10 for 2009 – has been prompted in part by new ASX reporting rules which require the top 200 listed companies to disclose gender objectives and achievements in their annual reports.
Meredith Burgmann

In 1973 Meredith Burgmann joined Macquarie University’s teaching staff and taught politics at the University for 20 years. During this time she became the first female President of the National Tertiary Education Union and completed her doctorate in Industrial Relations. Her thesis was later turned into a book on environmental activism. She was elected to the upper house of the New South Wales Parliament in 1991 and served as President of the legislative Council from 1999 to 2007. With Yvette Andrews she published The Ernies Book: 1000 Terrible Things Australian Men Have Said About Women, based on the “Ernies Award”, which she started in 2007.

Michele Garra

Michele Garra has recently returned to Sydney from Los Angeles where she was Sony Pictures Home Entertainment’s Global Commercial Director. During her 19-year tenure with the company, Garra worked in Japan, served as Senior Vice President Asia Pacific and as Managing Director Australia and New Zealand. She played an integral role in the growth of the home entertainment market in Australia, now worth more than $1.9 billion. Garra has sat on the boards of the Sony Foundation Australia, Swimming Australia and the Australian Visual Software Distributors Association. She holds a Post Graduate Diploma in Management from Macquarie Graduate School of Management.

Tanya Plibersek

Tanya Plibersek, Federal Minister for Social Inclusion and Human Services, was educated at the University of Technology, Sydney, and Macquarie University, where she gained a Master’s degree in Politics and Public Policy. Following the election of the Rudd Government in 2007, Tanya was appointed Minister for Housing and Minister for the Status of Women. As Minister for Housing, Tanya delivered a wide ranging reform agenda, including significant new investments in affordable rental housing. Tanya also spearheaded a comprehensive $5 billion strategy to tackle homelessness. As Minister for the Status of Women, Tanya was responsible for development of Australia’s first ever National Plan to Reduce Violence Against Women and their Children.

Charlotte Vidor

After completing her degree in pharmacy at the University of Sydney, Charlotte Vidor worked as a pharmacist for nine years before giving up work to have a family. During this time her accountant husband Ervin was asked by a client whether he was interested in a business opportunity. At home with her three children, Vidor decided she would help him. Today their hospitality empire Toga Group has interests in a chain of hotels – Medina, Vibe, Travelodge in Australia and New Zealand and Adina in Europe – as well as in property development, funds management and aquaculture. Vidor has always been mainly involved in the design, architectural and construction side of the business. In 1982 she completed a Masters in Urban Studies at Macquarie University.
What makes a successful female business leader? Few women in Australia are better placed to comment than Catherine Livingstone. But the question, she says, does not lend itself to one-line answers.

For Livingstone, leadership exists at all levels in an organisation. You can have a person in a relatively junior position who’s a good leader and someone in a senior position who isn’t. The position does not indicate leadership quality, she says.

What does, is some degree of proficiency, integrity, consistency, the willingness to form judgments and make decisions, the ability to listen, capture the imagination of people, give them context. “And courage, lots of courage.”

The absence of women from senior roles is a complex issue, Livingstone observes. It relates to people having the skills; organisations having the right culture, systems and processes from appraisals and promotions to job sharing and leave; and senior management having the intent for diversity. All of these are factors in whether organisations keep women long enough to progress to senior ranks.

That’s why she believes simply mandating that more women be appointed isn’t a sustainable approach. “You need to look at systems and processes which may very well be hostile. In other words, look at how an organisation ticks.”

Livingstone attributes her own success to what Professor of Accounting and Finance Carrick Martin used to say when she was an honours student at Macquarie University. “He drilled into us that we had to look for ‘the second right answer.’ To keep probing and cross-checking. That’s a very good discipline as to how to approach things.”

Others are emotional resilience and the ability to work at both the detail and the big picture. “I don’t subscribe to the view that you can do the one without the other.”

You can have a person in a relatively junior position who’s a good leader and someone in a senior position who isn’t. The position does not indicate leadership quality.

**Awareness and mentoring**

Since her recent return to Australia from the US, Michele Garra has been heartened by the coverage of women in leadership she is receiving. Awareness is the first step, she says, followed by coaching. “Coaching women to obtain the necessary skills for board work – like the Australian Institute of Company Directors’ course which I did six years ago – is critical as it’s a different kind of leadership role and responsibility.”

Garra is also a strong advocate of the more formal networking and mentoring programs that are now an integral part of American corporate life. When you’re undertaking a new role or major project, someone else’s experience can be invaluable, she says.

Garra reads everything on leadership she can find and tries to learn from everyone she deals with, listening, truly understanding the challenge, then ensuring everyone on the team has a common understanding and shared approach to resolve it. “Then the obvious, execute and measure!”

Like Garra, Tracey Fellows believes awareness is a key factor in promoting gender diversity in leadership. There’s an ongoing need to raise awareness of the business value that women add, she believes. “And perhaps a subconscious lack of awareness of issues that impact women, for example, holding early morning and evening meetings.”

As someone who was hired by Microsoft when she was six months pregnant, she feels greater awareness of the benefits of diverse leadership in gender, age and background can help all businesses.

Fellows is also a believer in mentoring and supporting women in the early stages of their careers. “Had it not been for influential managers I’d never have been given the opportunity to lead Microsoft Australia,” she says.

As a CEO, leadership for Fellows is about authenticity and showing yourself for who you really are – not just who you are when you’re at work. “When I look back at the people I’ve worked for, the ones I admire most aren’t the ones who can give the best answers to the tricky questions, but the people who give the most honest answers.”

**Be assertive**

Being self-employed means Charlotte Vidor has never wrestled with the issues her colleagues in corporations have faced. But, she says, her work culture is a male dominated one. At just 152 centimetres tall, she often goes to functions and is the only women among 200 men – all of whom are 180 centimetres-plus. She believes women need to be more assertive in business. Women sit on one of the boards she is on, but when it comes to decision-making the men dominate.

Vidor attributes her progress in this tough environment to hard work, luck, the ability to see an opportunity and to listen to the ideas of the people she works with rather than trying to impose hers on them. “I find that most of the people I work with are often much brighter. I learn from them and the combination of listening and learning works well.”

**Exercising judgment**

Politics, as JFK said to his biographer after the Cuban missile crisis, is “a chance to exercise judgment on matters of importance and to use all of one’s faculties along lines of excellence”. Tanya Plibersek quotes JFK when explaining why she chose the public over the private sector: “I always hoped to leave the world a better place.”
Both Meredith Burgmann and Plibersek believe that targets (Labor women were behind the push that rules that the party’s candidates must be 40% female) have helped drive up numbers of women in politics. And both also believe impediments to women’s progress in business are mainly cultural.

“The poor performance of business [in hiring women] is largely due to the impulse to hire people that remind us of ourselves,” says Plibersek. “Male senior executives need to set targets for promoting talented women and look beyond their old boys’ networks when hiring.”

Following your passion
Don’t do something just because you think it will get you somewhere; do what you feel strongly about. That’s the career advice Burgmann offers young women who seek it.

“I’ve always worked – in my paid and voluntary work – on things I was passionate about,” she says. “I’ve also felt having lots of parts of my life was really useful. So if the media were attacking me – which they often did – I could retreat into family and friends. Or if I was being attacked politically I would go off and trawl around an Aboriginal art gallery.”

Plus, Burgmann’s passion for the Sydney Swans can cheer her up tremendously, no matter what else is happening.

“If you’ve got lots of parts of your life not all of it goes bad at the same time.”

MACQUARIE DAYS
What our panel say about their University experience

CATHERINE LIVINGSTONE
“Very enjoyable. It was new so it was still settling down in terms of the campus and staff and as a catchment for students. As a new university it was an environment that had a lot of energy and enthusiasm.”

MICHELE GARRA
“Great! Invigorating, shorter than expected. I had planned to complete the MBA but fell pregnant and had a full time job running Sony Pictures…”

TRACEY FELLOWS
“It was intensive, living at the Graduate School of Management, so not a real campus experience in the usual sense. But the intensive week was also great for learning, as well as really getting to know colleagues better.”

TANYA PLIBERSEK
“Terrific, though as a part-time student I didn’t get to enjoy the beautiful environment as much as I would have liked.”

CHARLOTTE VIDOR
“I found it very interesting because my last experience was at Sydney University many years back and I found Macquarie University much more egalitarian. I enjoyed studying there although I was a part-time student at night so I didn’t have much exposure to student life.”

MEREDITH BURGMANN
“I spent half my working life at Macquarie University. I’m deeply fond of it. When I was there it was the most feminised university in Australia, probably still is. We had the highest percentage of women on the academic staff in Australia, and it was a very, very nice place for women to work.”
Why is Sydneysider Laura Wilson a happy Macquarie University graduate? For one thing Wilson’s experience at the University helped her to land a “dream” job and make lasting friendships. For another, she recently won a Kindle DX wireless reading device and Medina accommodation voucher, simply by signing up to join the Macquarie University Alumni Web Community (AWC).

Macquarie Matters has offered an incentive prize to encourage alumni to join the AWC since the online community’s introduction in late 2009. This issue of your magazine is no exception: simply by visiting awc.mq.edu.au/alumni and signing up – if you haven’t already done so – you could win an Apple iPad.

But there’s a caveat: you need to become a member of the AWC before March 31, 2011 to go into the draw. This will be your last opportunity to win a prize by choosing to join the AWC. Why? Because Macquarie University will introduce an automatic opt-in for AWC membership (with a manual “opt out” option) in 2011. This means, all students graduating from 2011 onwards will automatically become AWC members and be assigned login details and passwords.

Membership of the web community is open to all graduates. The University encourages alumni to use it to reach out and connect with each other and maintain lifelong friendships, to keep their profile up to date, to register for events and to network and generate business contacts.

Laura Wilson, who studied Arts/Law and graduated in 2009, is “very chuffed” with her accommodation prize – two nights’ stay free in a one-bedroom Medina apartment anywhere in Australia, and her Kindle. “In fact I’m reading Anna Karenina on it at the moment,” she says.

Wilson loved her Macquarie University experience. Its flexibility meant she could study the subjects she wanted and it “kept me engaged and loving uni the whole way through.”

“I studied law alongside philosophy – it was a great combination, and philosophy actually ended up being my favourite part of the degree,” she says.

Laura also embraced extra-curricular sport. She rowed for two years at Macquarie University and competed at university games twice, which was fun and challenging, she says. She was a member of the ski club, and met some of her now-closest friends skiing for the University.

“I recommend Macquarie University to anyone who asks because I had such a great time. My degree has helped me get my current job, too, in a roundabout way. I’m not practising law but working as an editor at Murdoch Books.”

For further information please visit the website, email us at alumni@mq.edu.au or call +61 2 9850 7310.
When Deidre Anderson first conceptualised the Macquarie University Sporting Hall of Fame Museum, she intended it to be more of a display than a place for interactive learning.

But as the project progressed, the museum has become more – much more – than a mere collection of memorabilia and photographs in a previously unused space beneath a stairwell. Today it is a means of connecting the University to past athletes, alumni and the broader community, and the first of its kind in Australia.

Launched in 2009 as part of the additions to the University’s sports complex, it has attracted great interest from current students and sporting representatives (the “Mac Warriors”). Moreover it’s allowing museum studies students to develop work experience on site and engaging visiting school children in practical ways.

“When school students visit, for example, they can learn about our sporting facilities and achievements, providing real community engagement,” says Anderson, Executive Director Campus Experience.

A place to engage

“The Sporting Hall of Fame celebrates the history of sport and acknowledges the service of great sports people at Macquarie University,” Anderson says. “It is a place for future students to engage in the history of the University before they become part of it themselves.”

How did the concept develop? When Anderson was Director of Sport and Recreation at Macquarie University back in 2007, she was compiling a dossier for sports awards she was responsible for, and realised there were great sports stories from 40 years of University history that deserved a wider audience. She realised, too, that all the sports clubs had historical material that wasn’t being properly cared for.

Almost all the creative elements of the facility came from her team, Anderson says. One fresh idea was to get a graduate student from the museum studies program to be the first curator. Another, from the administrative staff, was to reflect images off the ceiling of the museum space.

Ceiling projector

Visitors are now entranced by a ceiling projector video by cinematographer Lindley Joyner of competitive swimmers shot from underwater, giving viewers the impression they’re watching from the bottom of a pool. There are personal stories of accomplishments and inspirational moments penned by athletes themselves. Macquarie University chef Peter Brewty took many of the original photographs. “Everyone had a bit of a role,” says Anderson.

The current exhibition, Origins of Our Sporting Heritage, will be the beginning of a series chronicling the history of the University’s clubs.

“We’re planning to expand the museum physically and to set a program for the next two to five years,” explains Anderson. “There’ll be alternating themes, such as celebrating sports scholars, 40 years of history, and celebrating the University’s achievements at the Olympics and Commonwealth Games.”

Alumni who are still involved in the University’s sports clubs have been a huge support, Anderson adds. “They’ve been pivotal in helping to make the concept work.”

GET WITH THE PROGRAM

JOIN OUR FITNESS CENTRE

Alumni can take advantage of discounted membership rates at the Macquarie University Sport and Aquatic Centre, a fitness hub that can fulfil every fitness need, regardless of age or proficiency levels.

Membership gives you access to the health club (including free ongoing programming), 50-metre outdoor and 25-metre indoor heated pools, squash and badminton, as well as fitness, lifestyle, dance, cycle and martial arts classes.

To find out more please visit www.campuslife.mq.edu.au/musac or phone (02) 9850 7636.
“I still carry a picture of the Mount Lewis lemuroid possum with me,” says Professor Tim Flannery. “I do it to remind me of what we stand to lose even with a slight warming.”

For Tim Flannery, the plight of the lemuroid ringtail possum symbolises the struggle to which he is committed and for which he seeks the help of business. That’s why the acclaimed Australian scientist, explorer, conservationist and author always keeps a folded picture of the possum in his wallet.

The animal, which lives in high-altitude rainforest in far north Queensland, is unable to tolerate temperatures above 28° Celsius for more than a few hours. It was plentiful a few years ago; now it’s on the verge of extinction.

The Mount Lewis possum is one of many reasons Tim Flannery and Macquarie University are delighted with the recent decision by electronics giant Panasonic to pledge $690,000 to fund environmental research.

The company was pleased that the University Council then appointed Tim Flannery as inaugural chair.

The funding represents the single largest environmental initiative to be undertaken by the company in Australia, says Panasonic Australia Managing Director Steve Rust. “There’s never been a more pressing need for cutting-edge environmental research and education,” Rust told Macquarie Matters.

“We aim to make the environment central to all our business activities and Macquarie University holds the same goal in that they want to work and improve environmental sustainability across Australia. Globally, a key Panasonic philosophy is that living in harmony with the environment is everyone’s responsibility.”

Panasonic’s support is hugely important, says Flannery, because it will help Macquarie University pursue new and important areas of research and public education.

“Research is essential to combating climate change because we don’t have all the answers yet. Strong partnerships with industry, the community and research organisations are vital as we continue to examine and communicate issues around climate change impact.”

Maintaining independence

The research will obviously continue to be independently pursued in accordance with Macquarie University’s Statement on Academic Freedom. As part of the agreement, the University will provide global Panasonic executives with briefings on green issues. For example, Flannery plans to present a white paper to its executives in Japan on emerging consumer attitudes towards environmental products.

What does the partnership mean in practical terms for Tim Flannery? He will be involved with Panasonic in trying to bring the best of sustainability innovation to the company and vice versa, he says.
"I look forward to trying to understand their business and what their ambitions are, and on the University’s side to stimulate interest around challenges that corporations face as they try to become more sustainable."

In Panasonic’s case this includes the challenge of meeting its goal in the Asia-Pacific of generating 80% of product sales from environmentally efficient products and reducing its CO2 emissions by 500,000 tonnes by March 2013.

Locally its green initiatives include introducing energy efficient products to Australia like neo-plasma VIERA televisions and partnering with the Australian Museum as inaugural principal scientific research sponsor. “We’ll work with the University locally to undertake research into how green issues influence consumers’ purchasing behaviours, with the goal of accelerating the adoption of sustainable products in the marketplace,” says Rust.

**More partnerships sought**

Meantime Macquarie University aims to encourage more corporations to partner with it by supporting professorial chairs to boost research and teaching in other areas.

The Macquarie University Concentrations of Research Excellence (COREs) – areas of research strength demonstrated to be world-class – are particularly well-suited to such partnerships, says Vice-Chancellor Steven Schwartz. They range from animal behaviour, astronomy and astrophysics to neuroscience, vascular sciences and surgery.

The COREs concept is based on California’s Stanford University ‘Steeple of Excellence,’ which are designed to identify research areas for which the University is renowned and attracting the best researchers to those areas. The Steeples become self-financing and generate their own momentum and sustained growth. COREs provide rich opportunities for corporations to engage productively with Macquarie University, and enquiries are welcomed.

To find out more, please visit: www.research.mq.edu.au/about/research@macquarie/cores or call Mark Williams on 9850 4269.
Macquarie University’s reputation as a research intensive university has received a major boost with an announcement that the University will receive $33.4 million from the Federal Government’s Australian Research Council (ARC) over the next seven years to fund two new research centres.

Head of Cognitive Science Professor Stephen Crain will lead the new ARC Centre of Excellence in Study of Cognition and its Disorders. This body will receive $21 million to undertake research into improving diagnosis and treatment of a range of cognitive disorders. While administered by Macquarie University, it will collaborate with other universities including Cambridge and Oxford.

Core-to-crust fluid systems
Geology Professor Sue O’Reilly, who has led the GEMOC National Key Centre in Macquarie’s Department of Earth and Planetary Sciences, will be Director of the new ARC Centre of Excellence for Core-to-Crust Fluid Systems. The Centre will receive $12.4 million to develop new frameworks for mineral and energy exploration. While administered by Macquarie University, it will collaborate with other universities nationally and internationally.

The announcement was greeted with excitement at Macquarie University, which will also be a partner organisation in two other approved proposals. These are the Centre of Excellence for Ultrahigh Bandwidth Devices for Optical Systems led by the University of Sydney, and the Centre of Excellence for Engineered Quantum Systems led by the University of Queensland.

The ARC Centres of Excellence scheme aims to develop Australia’s research excellence through collaborative research and by building Australia’s expertise in a range of research areas. (Collaborating and partner organisations include universities and institutes in Australia, China, Canada, the US, France and Germany.)

Cognitive science
To that end, Professor Crain’s centre will advance theory and research in five areas of cognitive science: language, memory, person perception, belief formation and reading. Interdisciplinary research teams will tackle basic questions in cognitive science, as well the diagnosis and treatment of cognitive disorders like language impairment, dyslexia, autism, schizophrenia and Alzheimer’s, Crain says.

“It will immediately enhance Australia’s international reputation in cognitive science and has considerable potential impact for the health and social wellbeing of Australia,” Professor Crain told Macquarie Matters.

“No other research centre in Australia will have the level of combined expertise in theoretical cognitive psychology, cognitive neuroscience and neuropsychological assessment and rehabilitation that the centre will enjoy.”

Advances in geodynamics
Meantime Professor O’Reilly’s work will be based on fundamental advances in geochemistry and geodynamics and seek new understanding of fluid transport at lithosphere scales. As well as unravelling the 4.6-billion-year history of the planet we live on, it will deliver a new targeting framework to Australia’s mineral exploration industry.

The exchange of water and other fluids between the Earth’s surface and deep interior plays a crucial role in most of the planet’s systems, explains O’Reilly, including the crust on which we live, and the atmosphere and biosphere.

Until recently, a real understanding of the workings of the Earth’s deep plumbing system, from the surface to 3,000 kilometres in depth, has been tantalisingly out of reach, she says.

“We aim to integrate previously disparate fields – experimental and analytical geochemistry, petrophysics, geophysics and numerical and thermodynamical modelling – to reach a new level of understanding of Earth’s dynamics and fluid cycles.”

The fact that Macquarie University will host two of the 13 centres funded nationally is in keeping with its emerging reputation as a leading research university, says Deputy Vice-Chancellor (Research) Professor Jim Piper.

“ARC Centres of Excellence are prestigious hubs of expertise” says Piper. “To lead two and be a partner in two more is an acknowledgement of the strength we’re developing in research areas of national priority.”
The structure of plant tissue, how it varies from place to place and the effect these differences have on habitat are all part of the specialised field that fascinates Macquarie University evolutionary ecologist Professor Mark Westoby.

Mark Westoby is Professor in the Department of Biological Sciences at Macquarie University and leads the Genes to Geoscience Research Centre. His research interests lie in the fields of ecology and evolution, mainly of plants.

The aim of his project is to understand and predict the physiognomy and traits of vegetation from evolutionary principles, developing a better understanding about the architecture and ecology of vegetation and why it varies round the world.

The fellowship is well deserved, says Deputy Vice-Chancellor (Research) Professor Jim Piper. “Mark has been an outstanding contributor to research at Macquarie over a very long period. We’re delighted at this recognition of him and look forward to further internationally leading research from Mark and his team over the duration of the fellowship,” he says.

Westoby studied at the University of Edinburgh and Utah State University, and held a post doctoral fellowship at Cornell University, before moving to Macquarie University in 1990.
Parents and young children from disadvantaged backgrounds, the barriers they face in benefiting from early childhood services and the experiences of migrant families and their offspring are some of the current areas of study for Professor Jennifer Bowes and her colleagues.

Bowes is Professor at the Institute of Early Childhood and founding Director of the Children and Families Research Centre at Macquarie University. She has led two NSW government-funded childcare choices research projects – including one with Aboriginal families – among other projects. Her work will ultimately lead to better experiences and better tailoring of services for parents and children.

For example, one project planned for residents of women’s refuges and their young children aims to evaluate the benefits of providing access to the Parents as Teachers parent education program. (Parents as Teachers helps organisations and professionals work with parents during the critical early years of their children’s lives).

The project will compare outcomes for mothers and children before, during and after 12 months’ delivery of the program and then compare these with measures taken for families attending women’s refuges that don’t provide the program.

Preventing abuse and neglect

Another important project involves exploring ways to improve interventions for parents deemed to be “high-risk” (in relation to maltreatment of children) and thus help to prevent abuse and neglect.

This study, involving Bowes, Dr Frances Gibson and Dr Wayne Warburton and led by Dr Anne McMaugh, will provide data on outcomes for parents and their children who take part in an intensive parenting program. It aims to provide information about how to change behaviours to reduce the risk of children being maltreated.

Other projects being run through the Children and Families Research Centre include approaches to teaching gifted children in early childhood education (Dr Kerry Hodge), research into barriers to participation in early childhood services for families in disadvantaged communities (Dr Rebekah Grace), and two vital studies into helping kids suffering in emergency situations, such as the Haiti earthquake (Professor Jacqueline Hayden).

Another, led by Dr Maria Amigo, is examining the experiences of migrant families and teachers as newly arrived children aged five to eight start primary school in New South Wales.

“The main aim of the Children and Families Research Centre is to meet the need for information about best ways to support children and their families in Australia,” explains Bowes.

“We need more Australian data about children’s development in families and other settings so we can base policy on relevant, high-quality research information.”

People and organisations who would like to contribute to our early childhood programs may contact Professor Jennifer Bowes on 02 9850 9844, Mark Williams on 02 9850 4269, or visit www.iec.mq.edu.au/research/cfrc/index.htm
A selection of recently published books by Macquarie staff and alumni

637 Gorillas on the Run – and other feats, facts and astonishing stats
John S Croucher

The long-standing Number Crunch newspaper column in The Age and Sydney Morning Herald is a weekly bite of diverse, fascinating stats and facts. This compendium is the second in a series of books that bring together the best of the facts, feats and stats discovered by the author over years of compiling the column. It includes a fresh new suite of cartoons by Roger Harvey. (“637 Gorillas” refers to the largest number of people running in gorilla suits in one race.)

John Croucher is Professor of Management at the Macquarie Graduate School of Management.

Woodslane Press

Honeybees and Locusts
Gayle C. Avery and Harald Bergsteiner

Honeybees and locusts represent creation and destruction. The bees build sustainable communities and ecosystems; locusts don’t. Avery and Bergsteiner use these insects to contrast two dominant leadership philosophies. Research and practice show that organisational honeybee behaviour leads to more sustainable and profitable long-term results; locust behaviour doesn’t.

Gayle Avery and Harald Bergsteiner are, respectively, Professor of Management and Adjunct Professor at the Macquarie Graduate School of Management.

Allen & Unwin

The Criminal Trial in Law and Discourse
Tyrone Kirchengast

The criminal trial is a transgressive institution of social justice and discursive power, the author says. This book examines how the modern criminal trial is the result of competing discourses of justice, from human rights to state law and order, “that allows for the consideration of key stakeholder interests, specifically those of victims, defendants, police, communities and the state.”

Tyrone Kirchengast, a graduate of Macquarie University, is a Senior Lecturer at the Faculty of Law, The University of New South Wales.

Palgrave Macmillan

Here on Earth: an Argument for Hope
Tim Flannery

Tim Flannery’s latest book charts the history of life on our planet. Here on Earth, which draws its points of departure from Darwin and Wallace, Lovelock and Dawkins, is an exploration of evolution and sustainability. Our success as a species has had disastrous effects on many of the Earth’s ecosystems and could lead to our downfall, Flannery says. But equally, he argues, we are equipped as never before to explore our true relationship with the planet on which our biological, economic and cultural futures depend, and the human race will be moved to act to save itself from a climatic catastrophe.

Tim Flannery is the Panasonic Chair in Environmental Sustainability.

Text Publishing

Have you been published recently? Macquarie Matters invites alumni and staff to let us know about any recently authored books for upcoming InPrint.

Contact us at: macquarie.matters@mq.edu.au
On behalf of the Macquarie University community we would like to thank all our generous donors this year. You have extended important financial assistance to students and are helping us to build a culture of philanthropy at Macquarie.
Advance with us

There are now more than 124,000 Macquarie alumni in more than 100 countries across the world.

The Macquarie community is growing larger and stronger and an increasing number of our alumni and friends are choosing to actively participate in the life of the University. This was recently demonstrated by the generous support of our university-wide equity scholarships appeal. This appeal has so far raised over $80,000 towards helping students in need and is a terrific example of how our alumni can make a difference.

Our alumni and friends are also finding other ways to significantly support and partner with Macquarie. We are especially grateful to those who have chosen to support Macquarie by leaving something to the University in their wills. Others are actively working with Macquarie by funding research, hosting our students as interns, employing our graduates or providing scholarships. Our many volunteers also contribute by giving us their valuable time – as volunteers at graduations, as members of faculty Advisory Boards, and as mentors to our students.

Looking further ahead, Macquarie University celebrates its 50th Anniversary in 2014. In the lead-up to this very significant milestone in the University’s history, we hope to reconnect with alumni we may have lost contact with, so we can involve as many as possible in our celebrations.

Please encourage any Macquarie University alumni you may know to provide us with their current contact details by updating their profiles on our Alumni Web Community (awc.mq.edu.au/alumni).

In the meantime, if you would like to explore the ways in which you or your business can support or partner with Macquarie, please do not hesitate to email me (mark.p.williams@mq.edu.au).

I look forward to hearing from you.

Mark Williams
Director
Institutional Advancement