Get Smart

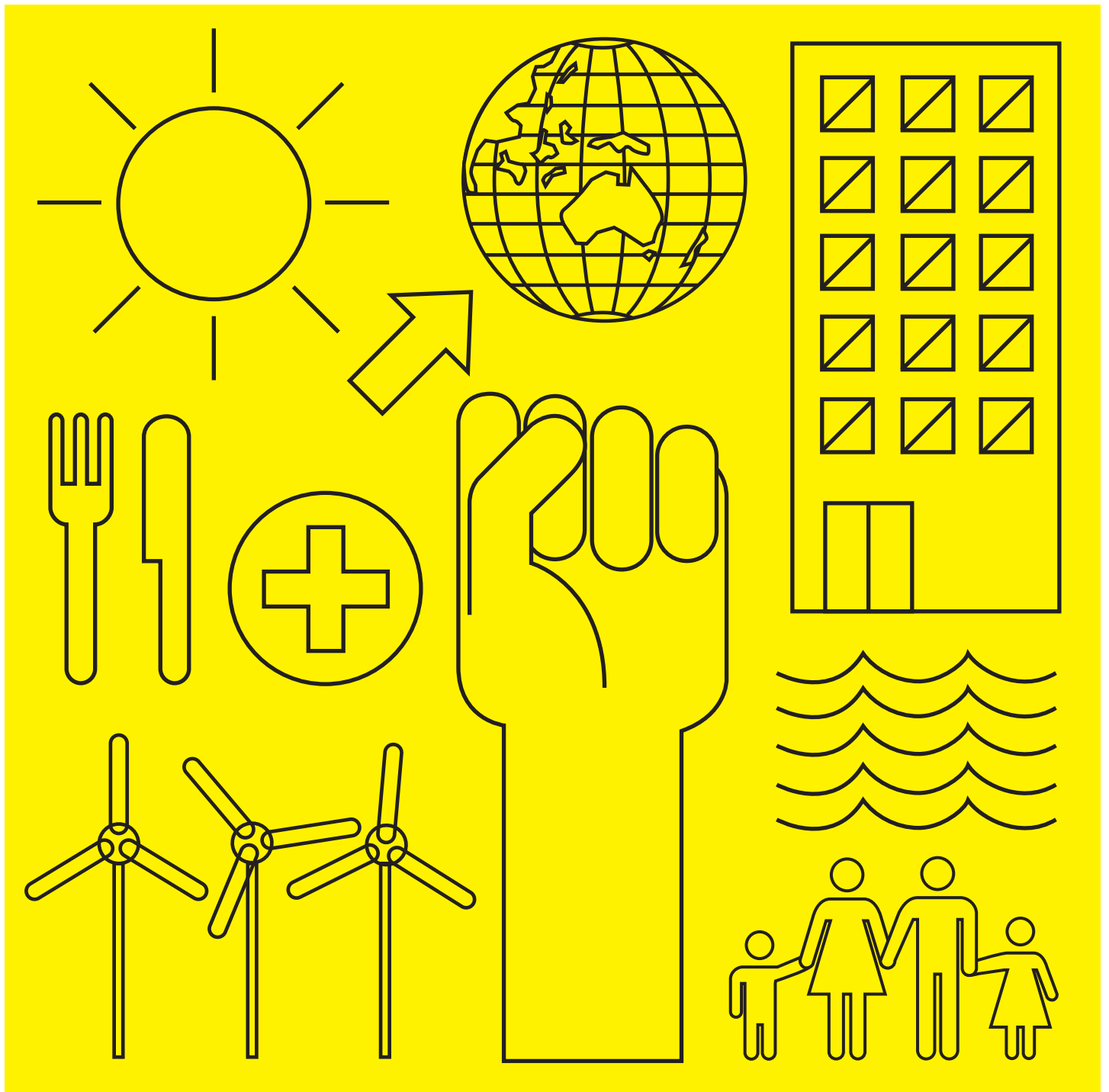## *Tackling the big issues*

INSIDE: FROM CLIMATE CHANGE TO NATIONAL SECURITY, HOUSING AFFORDABILITY TO MENTAL HEALTH. FINDING CLEVER SOLUTIONS FOR A BETTER FUTURE.

THINK OUTSIDE THE SQUARE
Postgraduate Study

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To find out more, visit the 2010 Postgrad Expo, a week-long spotlight on further study, commencing 27 September.

www.postgradexpo.unsw.edu.au

REFUGEES

AARON BARIL

Faculty of Law

The United Nations believes there are 10 million refugees globally, of which only 0.2% will be admitted to Australia.

Aaron Baril, 31, is studying a Master of Laws part-time at UNSW while working at the Crown Solicitor's Office. In the future, he hopes to work for the United Nations High Commissioner for Refugees.

When Aaron moved to Australia from Canada eight years ago, he was struck by the media attention devoted to asylum seekers and refugees.

"Australia accepts a comparatively small number of refugees, yet there's a huge amount of political capital associated with them," he says.

On a per capita basis internationally, Australia ranks 68th in terms of the total number of refugees accepted annually, far below countries with fewer resources such as Kenya, Iran and Jordan.

The controversy surrounding refugees in Australia inspired Aaron to enrol in a Master of Laws at UNSW, where he is exploring his interest in refugee law, anti-terrorism law and European Union law.

He isn't quite sure where his studies will lead him, but says he'd love to work for the United Nations.

"It probably sounds trite but in addition to being happy and comfortable, I'd like to have a life that means something. Money drives some people, but I'd like to make a larger contribution than helping a company make $2 billion in revenue.

"I'd like to think everybody who goes into law wants to make a difference in some way. If you just want to make money, there are better ways to do it!" Aaron says.

"The intake of refugees is an issue that people get very worked up over in Australia, despite the fact the numbers are extremely low. It's a heavily politicised issue."

MENTAL HEALTH

BRONWYN GRAHAM

Faculty of Science

By 2020, the World Health Organisation predicts anxiety and depressive disorders will be the second most burdensome illnesses behind heart disease, affecting one in three people in their lifetime.

Bronwyn Graham combined a Master of Clinical Psychology with a PhD at the Faculty of Science at UNSW, and is now en route to continue her research at Harvard University in America.

Bronwyn might only be 25 years old, but she has already made a discovery that could revolutionise the way anxiety sufferers are treated.

She discovered that a neurotransmitter in the brain called 'fgf2' can improve memory function.

"This means we may be able to develop drugs that enhance memory formation, as opposed to prescribing drugs that simply mask the symptoms of anxiety by sedating people," Bronwyn says.

Her discovery is so revelatory that when she presented her findings at a conference in the United States, she was invited to undertake postdoctoral research at Harvard University, starting in 2011.

At Harvard, Bronwyn will investigate why women are twice as likely to develop anxiety as men.

"Anxiety is highly prevalent and it affects all levels of society, so it's an area of mental health where research can really make a difference. I find it incredibly stimulating and challenging," she says.

CLEAN ENERGY

VASILIOS GIOTIS

Faculty of Engineering

Only 30% of energy generated by fossil fuels is delivered to the end user – the rest is wasted or emitted as pollutants.

Vasilios Giotis, 40, launched Blue Green Engineering two months after finishing a Master of Engineering Science at UNSW in 2009.

Vasilios Giotis rides his bike to and from work every day to remind himself of the importance of living a sustainable lifestyle.

After completing a Master of Engineering Science last year, coupled with two Commerce courses, Vasilios gained the confidence to launch his own company in 2009.

"I believe it's a good time to do something positive for the planet – something practical, which results in an immediate change," he says.

"I was working as an engineer in the field of sustainability when I noticed many consultants didn't have the right information to advise their clients. I decided to go back to university to gain enough knowledge to set up my own business," he says.

"As soon as I graduated I set up Blue Green Engineering, which now employs 10 staff and is already profitable. I feel equipped to give answers and solutions that are grounded in science, whereas my competitors are still learning."

By helping other businesses to improve their energy efficiency, Vasilios hopes to encourage change from the bottom up.

"The government has been discussing an emissions trading scheme for a long time. In that time, thousands of solar systems have been installed in Australia. Yes, we need to do more. But there's a lot happening at ground level, and as a company that makes us feel good."

REGIONAL SECURITY

ZOE MOSES

UNSW@ADFA

Should governments respond to climate change, bird flu, SARS and people trafficking as security threats?

Zoe Moses, 28, is studying regional security issues as a PhD student at UNSW's Australian Defence Force Academy in Canberra.

In 2010, the United Nations Security Council declared the HIV/AIDS pandemic a potential security risk, sparking Zoe's curiosity.

"The definition of security has been changing since the end of the Cold War," says Zoe.

"But this was the first time the United Nations Security Council officially linked a health issue to global peace and security. Many governments are now debating the inclusion of issues such as healthcare, climate change and even organised crime as security risks," she says.

For her PhD, Zoe is researching the security risks of HIV/AIDS in Papua New Guinea, which has declared an HIV epidemic.

"When you start framing healthcare as a security issue it changes the way we respond to a problem. It also brings a lot of different actors into the picture, from healthcare providers to people traffickers who might force children into prostitution," she says.

When Zoe embarked on her PhD, she had no idea where it would take her.

"I think I went into postgraduate study to avoid making a serious life choice, but of course doing a PhD is a serious life choice. It really does force you to clarify what interests you," she says.

Thanks to her study, Zoe now has a clear career goal in mind and hopes to secure an overseas posting with the Australian Federal Police's International Deployment Group.

HOUSING AFFORDABILITY

BORIS TO

Faculty of Built Environment

If Sydney is to reach its target of building 25,000 extra homes each year, many of the city's heritage buildings must be converted into affordable apartments and homes.

Boris To, 22, is studying a Master of Architecture while working part-time at Cox Richardson Architects. He was a University medallist last year and is the recipient of the J M Freeland Award for Excellence in Conservation in the Built Environment.

Boris believes the gentrification of heritage buildings could worsen the shortage of affordable housing in Sydney.

"Often when heritage sites are upgraded, property prices increase and the people who were displaced can't afford to move back in. Conservation of heritage sites is meant for the good of the public but paradoxically they often become exclusive to wealthy people. It's a serious issue in metropolitan Sydney."

Boris hopes to prove that heritage buildings can be redesigned in a style that does not exclude middle and lower income earners from enjoying them.

"I would like to demonstrate that 'good conservation' can happen. It doesn't have to lead to the destruction of our social fabric. In fact, it can do the opposite," he says.

After completing his Master of Architecture, Boris intends to enrol in a Master of Urban Design and Development.

"I'd love to inspire others through my designs and be a catalyst for change. You need a Master of Architecture to be a registered architect, but qualifications aren't the only reason I enjoy postgraduate study. Life is a learning process, so I believe everyone should strive to procure knowledge and use their skills to benefit society."

FOOD INEQUITY

PRUE SHAW

Faculty of Arts & Social Sciences

Why do some countries have a surplus of food, while others don't have enough clean drinking water?

Prue Shaw, 29, a teacher at Loreto Kirribilli, has just completed a Master of Educational Leadership at UNSW's Faculty of Arts & Social Sciences.

The world produces enough food to feed each person more than 2000 calories per day. Yet, according to the Food and Agriculture Organisation, more than one billion people are undernourished.

As a teacher, Prue believes it's important to raise awareness of issues surrounding food and nutrition so students understand why some nations struggle with obesity while others suffer from starvation.

"Food technology is a subject I did at school and thoroughly enjoyed. I discovered I had a passion for educating others on topics such as nutrition, food distribution and new food product development," says Prue.

She says many developing communities lack the resources to produce enough food, or are too poor to afford food at global market prices. That explains why up to 80% of food produced globally is consumed by the world's richest 20%.

In 2008, Prue enrolled part-time in a Master of Educational Leadership at UNSW to further her teaching career. "I felt ready to undertake a little more study and learning. I had an idea in the back of my head that one day I'd like to be a subject coordinator or perhaps even a school principal, and I decided the best way to achieve that was through postgraduate study."

Prue studied how effective leaders can help set the vision, direction and goals within schools, and how to listen more effectively to colleagues, students and parents.

"My course has developed my understanding of the qualities it takes to be a leader, and I'm learning skills I can integrate in the classroom on a daily basis. I've loved postgraduate study, I'd definitely recommend it to others."

ART AS PERSUASION ✊

BELEM LETT

COFA

Do artists have the power to alter people's perceptions, inspire change and raise awareness of a world in flux?

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Last month, Belem Lett, 23, was awarded the Brett Whiteley Travelling Art Scholarship, winning $25,000 to fund a three-month residency in Paris. He is currently studying a Master of Fine Arts at the College of Fine Arts (COFA).

Belem believes artists have a responsibility to help others make sense of the world around them.

"I don't see my drawings as political, but my interests and concerns are evident in my work. I think it's important to encourage people to be aware of the spaces around them and reflect on how they impact upon us."

Belem says there's a disconnect between the way landscapes are idealised and how they actually look. His artworks are highly abstract, yet they remind us not to take landscapes – real or remembered – for granted.

"For a long time I've been interested in landscapes within European paintings, and how these compare to the way we remember and experience landscapes in

the natural world," says Belem, who grew up in Nambucca Heads but moved to Sydney to study at the COFA in 2006.

He exhibited his first artwork at the age of seven, and is now well on the path to becoming a professional artist, having just won the prestigious Whiteley Scholarship.

Next year, he's planning a sabbatical from COFA to soak up the art and culture of Europe during a three-month residency at the Cité Internationale des Arts in Paris, which has welcomed 15,000 artists since it opened in 1965.

"I like the fact that artists can ask people to look at things in a different way and raise awareness of issues of the moment."

MATERNAL AND CHILD MORTALITY 👪

TELMA DE OLIVEIRA

UNSW Medicine

Of the 38 million babies born every year in South Asia, 1.4 million die within one month of birth.

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Telma De Oliveira, 35, is a general practitioner who hopes to improve mortality rates for mothers and children under five in Timor-Leste. She is studying a Master of International Public Health and Health Management at UNSW.

As a doctor, Telma witnessed first-hand the causes of mortality in mothers and children.

"Timor-Leste's health system had to be built from zero when we gained independence from Indonesia in 2002," says Telma.

"There are only a few healthcare facilities servicing more than a million people, which means that many women must walk at least two hours to receive pre- or post-natal care," she says.

Telma believes a lack of knowledge, education, medical supplies and trained midwives is keeping maternal and child mortality rates in Timor-Leste worryingly high.

Telma was working for the World Health Organisation in Timor-Leste when she decided she'd like to study at UNSW, and applied for a scholarship with AusAID.

"My goal is one day to work for the Ministry of Health in Timor-Leste. There are many challenges, but I feel happy with what is happening in my country – we still have a long way to go, but we have seen a huge improvement in the health sector since 2002."

"As a clinician I can only focus on my patients, but as a public health officer I can bring attention to health issues affecting the wider population by influencing policy makers and health officials."

SOCIAL CHANGE ☼

SHANIL SAMARAKOON

Australian School of Business

Trillions of dollars have been spent on foreign aid in recent decades, yet many developing communities continue to live in poverty. Is there a better solution?

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Shanil Samarakoon, 25, established the not-for-profit Empower after graduating from a Master of Commerce at UNSW. He is Sydney's 2010 Social Entrepreneur of the Year.

In remote areas of Malawi, villagers might spend two hours collecting firewood per day and five hours walking for water.

Shanil believes basic technologies like solar-powered lanterns or bio-gas stoves will free up communities from mundane tasks, giving them more spare time to launch their own business ventures.

"Lack of infrastructure is a huge issue in developing communities and capital is often lent at very high interest rates, which traps people in a debt cycle," says Shanil.

He discovered his passion for social enterprise while studying at UNSW. "I had always thought about working in the social sector but I never had the courage to see if I could make it my full-time gig," he says.

The knowledge he acquired gave him the confidence to set up Empower two years ago with two co-founders and 14 volunteers.

Through Empower, he hopes to give developing communities access to sustainable technologies, affordable micro-finance and education services for entrepreneurs.

"Our business model is very much about partnering with local communities to help them be change-makers in their own lives. That's ultimately far more empowering than becoming reliant on foreign aid," says Shanil.

"Empower aims to help communities become self-reliant, independent, confident and takes them out of a system that's reliant on aid. We do have a business ethos, we just happen to work for a social cause."

TAKING UP THE CHALLENGE

At some point, the students featured in these pages have stood exactly where you are – wondering whether to do further study and where that study might lead.

Why not come and meet the people who can help you make the right decision.

Starting on 27 September, UNSW is running a week-long Postgrad Expo. You'll be able to attend faculty events, talk to potential supervisors and explore the many ways you can broaden your knowledge, improve your industry connections and walk away with a world-class degree.

Check the back cover for dates and times.

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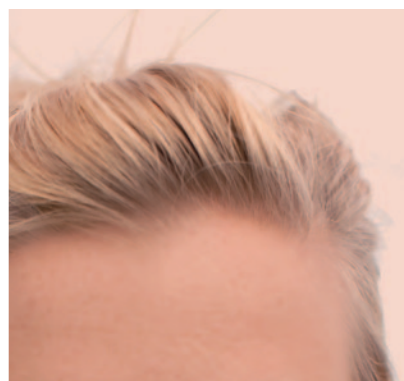
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- ☑ Learn Spanish
- ☑ Work for a charity
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Event information sessions:

Mon 27th	Arts and Social Sciences
	Law (UNSW CBD Campus)
Tue 28th	Australian School of Business
	Built Environment / COFA
	Engineering / Science
	Graduate Research School
	Lowy Cancer Research Centre
	UNSW@ADFA (Canberra National Convention Centre)
Thur 30th	Law (UNSW CBD Campus)

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