Paying it forward

Education opens doors
“I was the first person in my family to finish school, let alone go to university.”

— Anthony Albanese (BEC ’85), Prime Minister of Australia
At the University of Sydney, we are committed to providing transformative education that is open to all. And in this edition of SAM, we celebrate just that, with current International Relations student and recent scholarship recipient Tushar Joshi gracing the front cover.

In this issue, you can also read about Diane Tippett (page 23), who has put herself through five university degrees with scholarship support, and is now a qualified solicitor and an award-winning member of our academic staff. We learn about students working alongside our researchers and hear the perspective of Leroy Fernando (page 19), a Bachelor of Arts student in our Gadigal Program, on the proposed Voice to Parliament.

Our program of student support can be traced back to the University’s formation (page 24), but we want to do more. A centrepiece of our 10-year strategy, Sydney in 2032, is the introduction this year of the MySydney Scholarship program. This will enable more students, who might not otherwise be able to attend university, to continue their education and attain their dream degree. We want to make our campuses more diverse and inclusive – more accessible to students of immense potential from across the state to come here, no matter their postcode, the school they went to or their family background. Already in Semester 1, 2023, we have been thrilled to welcome more than 640 MySydney Scholars to campus – a truly historic moment for the University.

We have much to celebrate this year, including the support of our generous donors. We are delighted to announce an extraordinary philanthropic gift from Maria Teresa Savio Hooke OAM. Her gift means that four students will receive scholarships to cover the cost of student accommodation, ensuring that they will be immersed in campus life and giving a home to these valued members of our vibrant learning community.

In September, we will host the Times Higher Education World Academic Summit 2023. This will provide us with an opportunity to engage with global thought leaders across the academic community, government and industry as we explore the theme ‘Collaborating for greatness in a multidisciplinary world’.

With our campuses now back to life, the University has a packed calendar of events for our alumni community throughout 2023, and we hope to welcome as many of you as possible back on campus. Make sure you keep your contact details up to date with the alumni office to receive exclusive invitations.

These are truly exciting times, and with so much activity happening across the University, we look forward to collaborating with our staff, students, alumni and donors to continue strengthening our global impact in the year ahead.
**HEALTH**

Supported teens more likely to develop internet addiction

Researchers have revealed surprising results, that teenagers who feel supported by their parents are more likely to develop problematic internet addictions. Close to 3,000 students from high schools in NSW and Queensland across four critical years of development from Years 8 to 11 took part in the study. Findings show that when they saw their parents as being relatively supportive, they reported more compulsive internet use in the following year, a dependency which can often cause withdrawal symptoms and disengagement from daily activities. The researchers speculate that parents who are perceived by their children as supportive may unwittingly not be providing the kinds of boundaries needed to manage young people’s internet use.

**MEDICAL RESEARCH**

Science ‘turns back time’ for heart attack survivors

The discovery of a method to ‘stretch out’ scar tissue left behind after a heart attack poses exciting possibilities for future treatment of heart damage. By injecting tropoelastin (the protein building block that gives human tissue its elasticity) into the heart’s wall in the days after a heart attack, the heart can show signs of muscle function similar to a healthy organ. Further tests by researchers found that tropoelastin reduces scar size and stabilises the heart by increasing its elastin content and decreasing the stiffness of the scar.

**TECHNOLOGY**

Smart glasses turning sight into sound

The NSW Government’s Tech Central fund has granted $1.4 million to the University of Sydney’s Human Augmentation Laboratory (HAL) to develop smart glasses for people who are blind or have low vision. These assistive glasses will provide access to an important part of life to those living with blindness by translating the user’s immediate surroundings into sound, helping them navigate new environments and identify objects without picking them up. The funding will boost researchers’ efforts to rapidly develop the augmented reality technology while working closely with other institutes such as World Access for the Blind and the Computational Intelligence and Brain Computer Interface Centre.
FROM DELHI TO DIPLOMACY
Growing up in a crowded, single-room house in a West Delhi slum community, Tushar Joshi did not envisage himself going to university, let alone pursuing postgraduate studies in international relations in Australia. Now, the Sydney Scholars India Equity Scholarship recipient is on a mission to transform the lives of others in his community.

When I found there was a centre where I could get peace and quiet, and support with books and coaching through Asha, what else did I need!”

Mentored by Asha’s founder and director, Dr Kiran Martin, Joshi went on to complete a history degree at the University of Delhi. Then, with Dr Martin’s encouragement, he applied for the India Equity Scholarship at the University of Sydney, worth up to $60,000 a year.

“I was over the moon when I received the offer letter to study in Australia. No-one from my family or village has ever studied this much – and at an international level,” Joshi says. “This was life-changing.”

Due to the pandemic, Joshi spent his first semester studying remotely from his family’s one-room house. At night he would study in the corner by lamplight, to avoid disturbing their sleep. The University also supported him with essentials for remote study, including a laptop and high-speed internet.

“My parents were very proud and excited to see their child studying at such a university as Sydney – this gave them hope that we will come out of the slum community.”

Joshi arrived in Sydney in December 2021. “I received such a warm welcome from the University,” he says. “I was taken to the Sydney Cricket Ground by someone named Shane,” Joshi raises his eyebrows at the coincidental significance of that name in the cricket world. “And the very first time I got to see a live cricket match, it was the Ashes Series!”

Settling into life in Sydney was not without its challenges. “What I like about living in Delhi is that everyone lives together. There is this concept of collectivism. If you have a problem, even at midnight, you call your neighbour, and they will be ready for you. This aspect of life was very noticeable and every night, when I sleep, I still dream of Delhi.”

Written by
Eleanor Whitworth

Photography by
Stefanie Zingsheim
and Bali AbhishekJoshi current student Tushar with him a strong value set. “Always remember to pay it forward,” is the advice he would give to future scholarship recipients. Joshi’s journey to Australia started in the Mayapuri slum, a community of around ten thousand people, when he was about to start Year 10.

“I was playing gili-danda (a traditional Indian game that requires two sticks and excellent hand-eye coordination) with my friends, when senior ambassadors from Asha approached to chat about their higher education program.”

The University of Sydney collaborates with Indian charity Asha Community Health and Development Society to deliver the Sydney Scholars India Equity Scholarship, which supports students from slum communities to undertake postgraduate coursework.

Up until this point, Joshi had assumed he would be a labourer like his father. With an average high school completion rate of around just 43 percent across India – even lower in Delhi’s slums – the challenges in pursuing an education are immense.

“We live next to one of Delhi’s biggest open drains, and my home is constantly full of flies and mosquitoes,” Joshi says. “There is also a train line with lots of people, and the noise is deafening. You cannot concentrate in a place like that.
During his master’s degree, Joshi says he gained access to a wide variety of viewpoints. “Studying international relations at the University of Sydney, you’re in a class with students from all around the world. And when you discuss some of the most pressing challenges the world is facing, and try to look at these issues from different perspectives, the people in the room bring a fresh perspective from their own country. This helps us develop critical thinking skills – I not only study international relations, I get a chance to practise international relations.”

Joshi has sought out industry experience as well, with a six-week internship at the Australia–India Institute in Melbourne. “My long-cherished dream of working in the public and foreign policy domain was fulfilled!” He is also taking on leadership roles and contributing to the University community outside of class – and has been elected as student representative on the Faculty of Arts and Social Sciences subcommittee. “I chose to do this because of my experience as a scholarship student, knowing how valuable support is for students. I want to do something to provide future benefit for other students, to try and make a positive difference in students’ lives.”

Joshi says the benefit of these learning opportunities extends beyond his individual academic and professional development. “It is about all the people in my Delhi community,” he says. “I have one sibling, my sister. It’s a harsh reality but if I hadn’t come this far, if I hadn’t shown this to my parents, then what happens generally in my community is that girls get married at a very young age. Now, because of their experience with me, my parents’ opinion has changed. And now my sister is studying an undergraduate degree at Delhi University. Other families and friends see this too. That’s the importance of these kinds of scholarships.”

As the second recipient of the India Equity scholarship, Joshi was able to exchange ideas with and draw on the experience of the first recipient, Abhishek Handa, who completed his Master of Management in 2021. Now an associate project manager for a software company in India, Handa says the experience opened doors for him.

“My degree and work exposure in Australia gave me a sharper edge – without this, it would have taken me years to reach where I am today,” Handa says. “My family and I have now moved out of the slum community and rent a very nice apartment nearby. My parents are very happy that they no longer have to face challenges with water, electricity, noise and heat. I’m looking forward to giving them a good life, and would also like to help other students in their growth and development.”

Joshi says the scholarship creates other enduring outcomes. He points out that while democracies such as Australia and India interact in high-level political and strategic areas such as trade and security, it’s the people-to-people connections that Joshi has been able to forge during his time in Sydney and will take with him into his future.

By specialising in political economy, Joshi wants to make a difference in the lives of people, particularly children from low socioeconomic backgrounds. To achieve this, he would like to continue his studies to PhD level, and then pursue the practical application of international relations by working at the United Nations. “I believe this is where my dream to assist others can be fulfilled in an extended way.”

Joshi’s final piece of advice for future recipients of the Sydney Scholars India Equity Scholarship: “Stay true to your passions, and always remember the ways that people have helped you. This is the value I cherish, whether I’m in Delhi or Sydney – there are so many other people who need help.”
Dr Victoria Rawlings found joy in sports – now she wants to make that feeling accessible to every teenager in Australia. With a career ranging from professional Australian Rules football umpire to Senior Lecturer researching bullying in schools, Dr Rawlings’ game-changing insights are helping institutions to become more inclusive.
Many of us have a lightbulb moment when it comes to finding our vocation, but for Dr Victoria Rawlings (BEd (Hons) ’07, PhD (Education) ’13), the road has been more circuitous than linear. Partly this is because her career is so multifaceted. She is an academic, specialising in bullying behaviour; she’s worked with the Australian Football League to make the game more inclusive of women and girls; she was one of the country’s top female umpires for a time; and then there was stint as a high school physical education teacher.

“Sport has always been part of my identity,” Dr Rawlings says, “which is funny, as my parents aren’t sporty – and being English-born, they don’t have historical ties with Australian sport.”

At 11, Dr Rawlings began fencing – an unusual choice, she says now, thinking back – and went on to represent Australia in the Youth Olympic Games. At high school she added rowing, and cricket and soccer followed later in life. But it was in her first year of university that Dr Rawlings found the game she truly loved: Australian Rules football.

“It was a complete game changer for me. It was the most fun and social game that I had encountered.” But while she loved the sport, it did not love her back. “I was so bad at it, and kept breaking bones. I wanted to be involved but thought, this will kill me. So, I became an umpire.”

This is underselling it somewhat. Working with her coach, Dr Rawlings improved her fitness and skills to such a level that she became one of the country’s leading female umpires. She had just returned to Australia after a two-year research position in the United Kingdom when she was called on to umpire for the first season of the AFL Womens. This allowed her to contribute to the game that had brought her so much joy, and it would eventually bring her two worlds together.

In May this year, Dr Rawlings released her research report, Girls and women in Australian football umpiring: Understanding registration, participation and retention, outlining the need for change throughout the Australian Rules football community. Her research contributed to the AFL’s action plan to foster the development of women and girls throughout every level of the game and to also ensure that unacceptable behaviour is dealt with appropriately.

Dr Rawlings hung up her boots a few years ago, but remains a fan of the game and eager for it to modernise.

“Before I came to university, I really hadn’t found any queer people to interact with,” she says. “Playing AFL at the Uni gave me that. Not everyone was queer, of course, but a lot were, and it was a lovely, inclusive place to be.” Being part of a team, Dr Rawlings found camaraderie and support like never before. It is something she is keen to see replicated in sporting communities everywhere.

For the Sydney-born-and-raised lecturer, sport and schools are two sides of the same coin. She says both institutions
have the benefits and drawbacks of their heritage and history. Both have been welcoming to her, but she says that from her perspective as a young queer woman, she has been able to see ways in which they need to be changed and modernised.

“I had a really tough time at school myself – not due to the school or my friends, who were supportive – but I had difficulties coming to terms with my sexuality, simply due to the environment and the times,” Dr Rawlings says. “As an undergraduate at the University of Sydney, I became interested in school environments, youth cultures, sexuality and inclusivity. I was intrigued by what makes students happy – or not so happy.”

Supported by a Thomas and Mary Ethel Ewing Doctoral Scholarship, which was founded by a bequest in 1964, she explored the connection between gender, sexuality and bullying in her PhD thesis. Now a Senior Lecturer in the School of Education and Social Work, Dr Rawlings is continuing her partnership with school communities, with the support of an Australian Research Council Discovery Early Career Researcher Award.

Broadly, she says, her goal is to make “institutions be more open to everyone, not just a few.”

Dr Rawlings’ bullying research has seen her travel to several high schools across New South Wales and Victoria, where she embeds herself with students. It is, she says, illuminating.

“What I commonly find is that kids feel like they are being talked at, rather than to,” she says. “When it comes to challenging topics, like bullying, we need to include rather than judge. These kids know they need to be part of the solution. They don’t want to be part of the problem. But it is complex.”

Part of Dr Rawlings’ research has been exploring the ways language and communication impact behaviour – a neat intersection of theory affecting the real world.

“When you know the theory, you make better decisions,” she says. “For instance, at one of the schools I was working at, there was an event advertised on Facebook which promoted violence towards girls.

“Boys were emboldened by the event to kick girls in the head – something that started tentatively around lunchtime, then escalated,” Dr Rawlings recalls “On the way home, a girl was waiting for the bus when boys kicked her, and continued to beat her when she was lying on the ground. Students later told me, ‘Well, that’s what boys are like,’ and, ‘She kind of deserved it.’ Or, ‘It was just a joke.’”

For Dr Rawlings, who is “obsessed” with language, it was a clarion call for change. “This told us so much about how this devastating event came to be. The way people spoke about that event showed that there were expectations around how boys behave, that girls have to ‘do’ their gender and sexuality in a certain way to avoid violence, and that there is pressure to laugh this off. If they had said, ‘This is unacceptable, we won’t stand for this,’ they would have been socially outcast. Even teachers said, ‘It’s not bullying, it’s only happened once.’ There is so much to unpack there – but also so much hope to change things.”

When it comes to progress, Dr Rawlings is upbeat.

“I talk to students who say, ‘I don’t know how I’ve survived this place.’ But as we go into the schools and start those conversations, things really do change.” It is not seismic, she says – or not yet anyway. But day by day, conversations are opening up and being modified. Dr Rawlings has noticed a gap between how teens want to be and how they are – and this, she says, is the sweet spot. Figuring out how to capitalise on this desire to change will be her key to success, even if it is a slow process.

“In a country of over 25 million people, it doesn’t sound like a lot to change the behaviour of one classroom, but it is real-world, demonstrable change that has impacts on other behaviour, other conversations. We will see the impact.”

---

**GIRLS’ AND WOMEN’S PARTICIPATION IN AFL**

Recent data shows significant, rapid growth in the participation of girls and women playing Australian Rules football. In 2017 alone, there was a 76% increase from 2016 in the number of female teams competing around Australia, which indicates that it is becoming more gender-inclusive. However, this transformation is not reflected in the recruitment or participation of women as umpires.
Nicola Salmond’s first thought was that the small ulcer inside her mouth was caused by her wisdom teeth. Her wisdom teeth were removed. The ulcer stayed. Then, a biopsy revealed that the ulcer was, in fact, a squamous cell carcinoma. Cancer. Specifically, a mouth cancer that is aggressive and can be life threatening.

“People think they’re invincible, right?” says Salmond, a warm and straight-talking person, obviously still disquieted by the memory of the diagnosis. “I’ve never been fitter than I am now in my 40s. Yet there was this thing in my mouth. No symptoms at first, just this thing.”

Determined to stay in the lives of her three young daughters, Salmond joined in the search for a surgeon with the skills to help her. Professor Jonathan Clark (MBiostat ’12) came up early as one of the best in the field of head and neck surgery. Appointed a Member of the Order of Australia in 2019, Professor Clark is one of a team of highly regarded surgeons at Chris O’Brien Lifehouse in Camperdown, which performs the highest volume of complex head and neck cancer surgery in Australia. Highly skilled in removing tumours affecting the mouth, throat, face, salivary glands and thyroid, he also had parallel skills in facial reconstruction.

They house the parts we need to see, hear, eat and breathe. Our heads and necks are machines for living but also subject to cancers that can destroy it all. Cures were once almost as bad as the diseases. New technology has changed all that.
This would prove vital when it was found that removing Salmond’s cancer would mean taking out part of her jaw that held five teeth. Across the world, this is considered highly specialised and complex surgery. In fact, when SAM spoke to Professor Clark online at around 8pm, he was in his office, looking tired, having come straight from an operation.

“A quick operation might take six hours. But the slow ones can go for up to 18 hours. This one was slow,” he says. An affable though reserved speaker, Professor Clark admits to being less than extroverted; his favourite pastime is fishing. “Head and neck surgery is complex, but that’s one of the things that attracted me to it. It’s like working on a highway that crams in everything that goes from your brain to the rest of your body.”

In recent years there has been a rise in mouth cancer, particularly among young Australian women with none of the usual risk factors, like Salmond. With the causes of this as yet unknown, Professor Clark is seeing a new group of patients needing specialised treatment.

Historically, the surgical techniques that were used could leave people terribly disfigured, with difficulty eating, drinking, even breathing. Social isolation, unemployment and depression were common outcomes. The reality for surgeons in the past though was that a lot of what they did was highly informed guesswork.

Salmond was fortunate in the sense that her cancer occurred at a time when the treatment of head and neck cancers has made significant, technology-driven advances, like digital surgical planning.

In the same way that a modern building is tested using an engineering simulation before it is built, digital planning uses CT scans to create a ‘digital twin’ of the patient to which various surgical approaches can be applied, with an algorithm predicting outcomes – good and bad. This allows surgeons the incredible luxury of a pre-operation rehearsal.

The technology is transformative and continues to evolve. Currently, the surgeon instructs a design engineer who inputs information into a workstation. A virtual reality-based version of this idea is being developed where the surgeon has direct input and manipulates the information themselves in real time.

Professor Clark is helping drive these advances through his role as the first Lang Walker Family Foundation Chair in Head and Neck Cancer Reconstructive Surgery at the University of Sydney, in collaboration with Chris O’Brien Lifehouse. The foundation – created by noted property developer Lang Walker – gave $3.9 million to create the Chair and help bring new technologies to the fore in Professor Clark’s field.

“I spoke to Lang about our research and the vision we have for it,” says Professor Clark. “I think it was our move into the technology side of things that really captured his interest. He’s a builder, after all, so he loves the idea of making things that help patients.”

One of the drivers of the ‘making’ is 3D printing. Previously, if a patient needed a bespoke prosthetic, it would have been ordered from overseas at great expense. Allowing that many of Professor Clark’s patients don’t have huge financial resources to draw on – and that dental work is generally not covered by public health funding – cost is a significant issue.

“People have had to mortgage their houses,” says Professor Clark, who is dedicated to advancing ideals of equity in his work. “If you have breast cancer, your reconstruction or prosthesis is covered. With mouth cancers, there is no dental cover.”

An example is the jaw stretcher. It sounds torturous, but after jaw surgery and radiology, it is common for scar tissue to build up and cause the patient’s jaw to lock. The stretcher is used to keep the jaw flexible, but it is currently prohibitively
expensive and slow to arrive in Australia—typically taking around six weeks.

Thanks to 3D printing, Professor Clark and his team are now prototyping their own jaw-stretching device. You can sense real excitement in Clark, as he talks about the improved future this promises.

“3D printing lets us look at new ideas and investigate them quickly, right here,” he says. “It’s made us very nimble. I work with an amazing team that were able to prototype the jaw stretcher and focus on refining it for our patients’ needs.

“It’s been amazing. Hundreds of patients use this device already, and we think it has huge potential impact.”

Many of these cutting-edge biomedical innovations are the result of a new multidisciplinary research partnership between the Faculty of Medicine and Health and the Faculty of Engineering—specifically, the School of Aerospace, Mechanical and Mechatronic Engineering. This is where PhD student, Ben Ferguson, and ARC Future Fellow Professor Qing Li, are designing the next generation of reconstruction devices—specifically 3D-printed scaffold-based implants.

While Clark shaped a piece of bone from Salmond’s hip to replace her damaged area of jawbone, University engineers like Ferguson and Professor Li are exploring how 3D printing can provide an implant that is perfectly tailored to that patient’s body.

“The 3D printing will create precise bone implants made of ceramic or polymer,” says Ferguson. “They will facilitate the regeneration of the surrounding tissue, then eventually the scaffold will dissolve away, leaving brand new, living tissue in its place.”

Now a couple of years on from her operation, Salmond is amazed that Clark was able to do such a dramatic piece of surgery on her face, and that his work is now almost invisible.

“All I remember is being really emotional after it,” she says. “The thing is, you’ve been strong for so long, and for your kids. And then you wake up and find [the cancer] is gone—well, there’s just this overwhelming sense of release.”

A key outcome of PhD student Ben Ferguson and Professor Qing Li’s research is the development of an innovative digital surgical planning tool.

“This tool will rapidly simulate implant designs in the computer so we can predict their performance in vivo. We combine this with decision-making algorithms to guide surgeons in selecting an optimal design, tailored to that individual patient,” Ferguson says.

The Lang Walker Family Foundation also provides funding that enables Ferguson to complete this pioneering research.

“As biomedical engineers, we find partnering with Professor Clark highly beneficial in developing these surgical solutions. By working to develop these tools with him, we hope that eventually they could be used by surgeons all around the world,” Ferguson says.

“I am very fortunate to have had the opportunity of this funding and other scholarship awards which have made it possible to complete my PhD.” Ferguson will submit his doctoral research in 2023.
When Professor Yane Svetiev arrived in Australia as a teenager from the former Yugoslavia, he wasn’t sure how long he would stay. Two years later, with a perfect HSC score of 100, he was awarded a scholarship (the first of many) to the University of Sydney. So began a career in the law which has taken him around the world and back again.

Taking a worldview

Written by Lauren Sams
Photography by Stefanie Zingsheim

Fifteen-year-old Yane Svetiev left his home in Skopje (now in North Macedonia) with his family in 1991, amid escalating tensions in the former Yugoslavia, unsure of what lay ahead in Australia.

“There was a sense of disbelief among people around me at the news of tanks rolling out, and the potential for serious conflict in the region,” he says. “There was a referendum for Macedonia’s independence, and we left shortly after that. I remember that a three-month moratorium on the initial war in Slovenia ended on the day we left on one of the last flights of Yugoslav Airlines.”

Even so, he felt a sense of adventure, rather than danger. He had always had an inquiring mind – even as a preschooler, at nap time he could be found conversing with the cook in the kitchen of his kindergarten, rather than sleeping like the other children.

“I was not really sure that the move to Australia was permanent. So it felt like a new experience, not necessarily like I was leaving behind my existing life.”

Fast-forward to 2023 and Professor Svetiev’s inquiring mind has taken him around the world via various academic appointments, from the University of Sydney to Columbia and Brooklyn Law School in New York, Bocconi University and the European University Institute in Italy. He has also been a visiting professor in Germany, Spain, Brazil and Israel. He worked as a lawyer in New York, after receiving his doctorate from Columbia Law School. Oh, and he speaks English, Macedonian, Italian, Serbo-Croatian and French.

For a kid who didn’t have a valid passport for some years, after the old Yugoslavia ceased to exist, it’s been quite a journey.

“I never thought I would end up in law, because I wasn’t sure that I would be any good at it – particularly [as] someone who had English as a second language,” Professor Svetiev says.

Although he had started learning English at age seven, he found that to converse and study in another language was not so easy. However, after a brief stint at an intensive learning centre, he slotted into the New South Wales public education system. When he received a mark of 100 in his Higher School Certificate, he decided to study a Bachelor of Economics and Bachelor of Laws – but only after he seriously contemplated returning to his country of birth.

“I had a longing to go back, so I flew to Europe and thought maybe I would study in Macedonia. Then I realised that the effects of the war were all around, including border closures and sanctions. My friends thought I was silly to want to leave Australia.

“So I came back to study at the University of Sydney, where I felt much more socially embedded and connected.
with people than in high school. It was clear that this is where I was going to be for some time.”

Recently promoted to the role of Professor at the University, with a Chair in Market Regulation and Private Law, as well as being the Associate Dean (Research Education), he is currently researching the use of peer review in financial regulation in Australia with colleague, Associate Professor Andrew Edgar (PhD ’07), through an Australian Research Council Discovery grant.

“It is a somewhat unusual mechanism where decisions, rules and regulations in Australian financial regulation are reviewed by committees of officials or experts from other countries. You might ask, ‘Why are foreign committees telling us what we should be doing?’ Actually, when different countries are pursuing similar and difficult objectives, like financial stability, it’s not so unusual for our regulators to look at what others are doing.

“It’s important that we’re aware of where our financial regulation framework comes from, so that we can make more deliberate and considered choices about how and why we draw on the experiences of other countries.”

When SAM talks to Professor Svetiev, he has just returned from Europe where he has ongoing links and collaborations, including co-authoring a book on using private law to regulate markets. He says the transnational dimension to his work reflects both his personal background and the evolution of his research.

“What I have observed is that there are so many similarities in how we regulate markets that I could teach a class in the US, in Europe or in Australia without much problem, even if law is often seen to be national.”

Although most of his work has been in academia, among his career highlights Professor Svetiev includes his work as a litigation associate in New York, and his time as an associate to the Hon. Michael Kirby (BA ’59, LLB ’62, BEc ’66, LLM ’67), then a justice of the High Court of Australia.

“These experiences gave me a reality check about what you can and can’t do through law and the courts. They also inspired me to go back and continue with research in law. But the exposure to other fields, like economics, means that I maintain an interdisciplinary perspective in my work.”

During his undergraduate studies, he had an almost accidental success in attracting scholarships. Initially, he was awarded an Australian Government scholarship and an E Trenchard Miller Scholarship, based on his school results. Throughout his studies, he was awarded Commonwealth Bank scholarships for Economics and Econometrics, the George and Matilda Harris Scholarship for Law, and various prizes. “I’m pretty sure that I didn’t apply for any scholarships,” Professor Svetiev says. “It was partly because I just didn’t know what was out there and partly because I didn’t think I would be entitled to any.”

He did, however, apply for a Travelling Scholarship to help him to go on an exchange semester to Cornell Law School, which opened new doors for him in the United States.

He says his career wouldn’t have been possible without them. “When you’ve just arrived in the country, you face great uncertainty and you’re happy to just be allowed to continue your studies,” Professor Svetiev says. “But when somebody recognises what you’ve achieved, I think the joy is double – it’s very uplifting.”

His career has now led him back to Australia. “When I first went away, I thought it would be for a short time. I ended up in New York and then Europe for a total of 15 years. I didn’t think that I would come back to Australia. However, I was always reminded of something Michael Kirby said to me, that I should find a way to give back to the country that offered many opportunities to me.

“When I was offered the position at the University of Sydney, I thought this was an opportunity to see if I can apply what I’ve learnt and share my experiences.”

Professor Svetiev says that he again feels socially embedded in the place where he is living and working. “I really like mentoring researchers and creating opportunities for their future contribution, wherever it may be. It’s a real passion of mine.”

---

**Professor Yane Svetiev**

**DEGREE**
BEc (Hons) ’99, LLB (Hons) ’02

**MOST PRECIOUS POSSESSION**
Letters and postcards from when we used to send them; I still buy postcards in the hope of sending them to someone

**CURRENTLY READING**
Together: The Rituals, Pleasures And Politics Of Co-Operation
By Richard Sennett

**QUALITY YOU MOST VALUE IN OTHERS**
Empathy and integrity, which I think often go together: to act with integrity you must be able to step into the shoes of others

**HIDDEN TALENT**
Cooking – which I only discovered in my late 20s while living in New York, where everyone tends to go to restaurants

---

*Back to top*
Six years ago, more than 250 First Nations leaders signed off on the Uluru Statement from the Heart, calling for a Voice to Parliament to be enshrined in the Constitution. Prime Minister Anthony Albanese (BEC ’85) has now committed to a referendum – but why does the Voice matter, what might it achieve and where could it lead? We share three perspectives.
What is the Voice to Parliament?

Australians will be asked to vote “Yes” or “No” to the following question:

“A proposed law: to alter the Constitution to recognise the First Peoples of Australia by establishing an Aboriginal and Torres Strait Islander Voice. Do you approve this proposed alteration?”

The Uluru Statement from the Heart calls for an advisory body, a ‘Voice to Parliament’, to be established to guide Parliament on laws and policies that affect First Nations peoples, including health, economic, social issues and Native Title. Unlike the Senate and House of Representatives, it would not have a decision-making role, nor the power to veto legislation or government decisions. Various models of ‘the Voice’ have been put forward, with a specific model to be finalised by Parliament, with community input, after the referendum.

Source: Sydney Law School

What might be the impact?

Lisa: We have crises all around us: climate change, food and water insecurity. We’re saying we can help. Aboriginal people have been here for 60,000 to 80,000 years, that means that people were doing something right on this continent since the very beginning. There has been little desire for more recent Australians to learn from us about this place. The Voice will structurally lead to greater involvement of Aboriginal people and better use of long-held knowledges so that we can deal with our next significant challenges, to help future generations.

Teela: We currently don’t have a mechanism in our democracy for First Nations input into laws and policies that affect us. So this is about ensuring that there is a mechanism for First Nations participation that is sustainable beyond political cycles. If it’s guaranteed in the nation’s document, then it’s not at the whim of the government of the day. The people will have mandated that it exists and that it’s guaranteed in the Constitution.

Leroy: It’s important that First Nations lead the way in solving issues for our communities, like housing and health care. Participation from the beginning will help fix mismanagement and social issues and stop programs failing. It will help to do things the right way, it changes that societal perspective on First Nations engagement. The Voice would allow us to engage and find solutions to these problems from a First Nations perspective.
What are the challenges?

**Lisa:** The Voice hasn’t just appeared out of the clear, blue sky; it’s been a pragmatic discussion across Australia by thousands of people over decades. But without all people getting behind it, it will put these discussions and work back decades, and the challenges before us won’t have the benefit of the opportunities the Voice brings. We don’t need to know all the details yet – we need to trust those involved with shaping the Voice and agree to the principles, and then we can proceed.

**Teela:** It’s crucial that the public conversation is based on facts, not misinformation and hypotheticals. Part of campaigning is really to educate the public about the purpose of a referendum. There’s already lot of detail about the Voice, but people need to understand they’re voting on the principle, not the details – that will come later, in legislation. People often ask about the risks of a referendum, but the greatest risk is not giving this a shot. The status quo is killing us; the gap is not closing. We need all Australians to step up, educate themselves and embrace this moment. We cannot let this referendum fail, or we will forever be a nation that has lost its heart.

**Leroy:** I think Australians want to know the detail of what they’re committing to. I’m a bit concerned about the vagueness – we want to know what we’re getting in this deal. We want a Voice that is impartial, unbiased. I think that a constitutionally enshrined body should allow information to be translated in a way that can be seen, heard and read by all – acting like a bridge for legislators, policymakers, social service work providers – a way for the public to get the full, accurate picture about First Nations people.

What’s next – beyond the referendum?

**Lisa:** I’d like to see dedicated seats in Parliament. I think this will also give people permission to be more proactive – I’d like to see Aboriginal languages on street signs, children singing the national anthem in the language of the nation that school is on, to truly know the story of the land. It’s time to move forward.

**Teela:** This is an invitation to peace, to heal the wounds of our past. The next step is the Makarrata Commission to enable agreement-making between governments and First Nations, and truth-telling about our history.

**Leroy:** I want to see people heal. I want black deaths in custody to stop, our kids to be healthy, in school, getting university degrees. I want us to be able to work, to have financial independence, and sustainability – and to not need programs that help us. I just want to see us thriving and as equals to everyone else.

---

**Teela Reid**
First Nations Lawyer in Residence, Sydney Law School; involved in the constitutional dialogues underpinning Uluru Statement from the Heart

“Voting in the referendum is about words – the change that you put into the Constitution. Parliament needs to decide on detailed legislation later. We don’t want things frozen into the Constitution that might be hard to change in future – there needs to be flexibility.”

Professor Emerita Anne Twomey, constitutional law expert, University of Sydney
The composition of a lifetime
Soprano, composer and educator Professor Deborah Cheetham Fraillon AO FAHA is a driving force in classical music in Australia. A champion of First Nations musicians, she is embracing her appointment as the Elizabeth Todd Chair of Vocal Studies, returning to Sydney Conservatorium of Music 37 years after her graduation.

“Can’t remember a time when music wasn’t part of my life,” Professor Cheetham Fraillon says. “My adoptive parents were members of the local Baptist church, and music was central to each and every service.”

Professor Cheetham Fraillon is a member of the Stolen Generations. Although she didn’t get to know her Aboriginal family until she was in her thirties, they were also musical, including her uncle, renowned Australian singer and musician Jimmy Little.

“In the end, I went to the Sydney Conservatorium of Music because my music teacher again intervened,” she says. “So I applied but, being first in my family to go to university, I didn’t know what to expect, and when all my friends received offers, I realised that for some reason I hadn’t even been notified of my audition. I rang up and they asked me to come in during the summer holidays. There was a train strike, so I threw my sheet music in my backpack and rode my motorbike in from Sydney’s southern suburbs in 36-degree heat in my leathers. I emerged for the audition in a sweat – but played remarkably well – and luckily, I passed!”

“This was life-changing, all those details are burnt not only into my memory, but also into the fabric of who I am as a person.”

She was there on a high school excursion. Her music teacher at Penshurst Girls High, Jennifer King (Dip Music ‘69), who is still a dear friend, had nurtured her singing talent - and convinced her parents that she should pursue piano lessons. At the same time, she took up the flute when the school orchestra was handing out instruments from the music cupboard.

“I fell in love with opera that night. How could I not? Here was the greatest soprano the world had ever known, in the glorious Kristian Fredriksen belle époque production, and I just thought, ‘Where has this been all my life?’”

From that point, she harboured the desire to be an opera singer, although she had no idea how that might come about.

“By this time, my adoptive family were working-class people and there was no expectation that I would finish Year 12, let alone be the first in my family to head off to university.”

Professor Cheetham Fraillon’s distinguished career has since taken her across the country and around the world. A Yorta Yorta/Yuin soprano and composer who specialises in chamber, orchestral, choral and operatic music, working with First Nations traditional languages and narratives, her compositions are in high demand by Australia’s major ensembles.

Her recent major commissions include works for The Australian Ballet (The Hum 2023), Sydney Symphony Orchestra (Ghost Light 2022), the Melbourne Symphony Orchestra (Baparrippa 2022). She also founded the Short Black Opera company, and in 2014 was appointed an Officer of the Order of Australia. The Sir Bernard Heinz Memorial Award and Helpmann JC Williamson Lifetime Achievement Award are amongst a multitude of accolades.
**BRENDA GIFFORD, COMPOSING WOMEN PROGRAM**

Brenda Gifford is a 2023 graduating student from the Master of Music (Composition) at the Sydney Conservatorium of Music. An accomplished classical composer, saxophonist and pianist, the Yuin woman was awarded one of four places for postgraduate research students in the 2020-2021 Composing Women program.

“It is a great honour to return to Australia’s most prestigious conservatorium as the inaugural Elizabeth Todd Chair of Vocal Studies,” Professor Cheetham Fraillon says. “Ms Todd was a revered singing teacher, and I had the great good fortune to sing for her on a number of occasions when I was a student in Sydney.”

The Chair is funded by a generous bequest from the late Elizabeth Todd OAM (Dip Music ‘42), a graduate of the Sydney Conservatorium and lecturer in singing from 1948 until her retirement as Senior Lecturer in 1985.

Dean of the Sydney Conservatorium of Music Professor Anna Reid (BMus (Perf) ‘87) is thrilled to welcome to the University an artist of Professor Cheetham Fraillon’s calibre and experience.

“Professor Deborah Cheetham Fraillon is the single most outstanding Indigenous classical music artist that Australia has produced. She has the ability to transcend musical and cultural boundaries to create music, and education, that will inspire our current generation of musical artists,” Professor Reid says.

Professor Cheetham Fraillon’s performance practice and work as a composer will also form the basis of her research, with a focus on the use of First Nations languages in classical music, and particularly on her Woven Song series of chamber music.

“My aim is to strengthen knowledge and understanding of the true purpose of music as central to our way of being. The opportunity to mentor the next generation of musicians and help shape their cultural connection and approach to a life in music is a privilege, and one I will relish during my tenure,” says Professor Cheetham Fraillon.

“We celebrate the oldest, longest continuing music practice in the world on this continent. Whilst my early training was steeped in the world of Western composition and repertoire, I have found the true strength of my identity through the fusion of that tradition with my Yorta Yorta cultural practice. It is this way of knowing and being that I will share with colleagues and students during my time at Sydney Conservatorium of Music.”

“SBO set out to confront the fact that there were no Indigenous players in any of our state orchestras. Working with the professional relationships that I’ve formed during my career, we are beginning to see significant changes already, particularly in Victoria where the Melbourne Symphony Orchestra has partnered with Short Black Opera to create meaningful development and mentoring programs.”

Returning to her alma mater 37 years after graduating – now as Professor of Practice (Vocal Studies) – Professor Cheetham Fraillon is looking forward to contributing to the development of Sydney Conservatorium’s next generation of musicians.

Professor Cheetham Fraillon’s performance practice and work as a composer will also form the basis of her research, with a focus on the use of First Nations languages in classical music, and particularly on her Woven Song series of chamber music.

“My aim is to strengthen knowledge and understanding of the true purpose of music as central to our way of being. The opportunity to mentor the next generation of musicians and help shape their cultural connection and approach to a life in music is a privilege, and one I will relish during my tenure,” says Professor Cheetham Fraillon.

“We celebrate the oldest, longest continuing music practice in the world on this continent. Whilst my early training was steeped in the world of Western composition and repertoire, I have found the true strength of my identity through the fusion of that tradition with my Yorta Yorta cultural practice. It is this way of knowing and being that I will share with colleagues and students during my time at Sydney Conservatorium of Music.”

“SBO set out to confront the fact that there were no Indigenous players in any of our state orchestras. Working with the professional relationships that I’ve formed during my career, we are beginning to see significant changes already, particularly in Victoria where the Melbourne Symphony Orchestra has partnered with Short Black Opera to create meaningful development and mentoring programs.”

Returning to her alma mater 37 years after graduating – now as Professor of Practice (Vocal Studies) – Professor Cheetham Fraillon is looking forward to contributing to the development of Sydney Conservatorium’s next generation of musicians.
INSIGHT

PERSPECTIVE SHIFT

Through sheer grit, and with the support of scholarships, Diane Tippett (MPACS ’20, GDLP ’21) put herself through five university degrees. With a challenging early life, she’d thought education was beyond her reach. Now, the 2022 Wentworth Medal winner and PhD student (Peace and Conflict Studies) is a sessional academic, works part time at the Federal Court of Australia, and is a qualified NSW Supreme Court solicitor.

To be euphemistic, I had quite the turbulent upbringing. Growing up in rural South Australia, my school attendance was sporadic, with a difficult home life and sometimes homelessness. I left home at 16, making the most gut-wrenching decision to have no further contact with my family, to chase safety and freedom. Refusing to let me give up on my education, my school counsellor and teachers offered me refuge to complete high school. I graduated as dux of my school, and was accepted into both medicine and law school at the University of Adelaide, with a Principal’s Scholarship. It was at this point that I began to imagine a career and life beyond anything I had encountered as examples growing up.

I began working as a teenager to be able to support myself. However, part-time minimum-wage jobs and student support payments are insufficient to cover the cost of living plus educational expenses. Thus, with an absolute resoluteness to pursue tertiary education, the first year of my undergraduate studies heralded the beginning of my successful spree of applying for merit and equity scholarships.

A decade after my tertiary education journey began, I’m grateful to have received a significant number of scholarships, particularly for postgraduate education, given that student support payments are unavailable for this. This includes being awarded a federal government Research Training Program Stipend to complete my PhD, a highly competitive prize awarded to Australian citizens of the highest exceptional research potential.

Now, in addition to having been admitted as a solicitor to the NSW Supreme Court, working part time at the Federal Court and teaching law at the University, I’m working on my PhD on political identity in Afghanistan during Soviet and American interventions, and the implications for peacebuilding. Winning the merit-based 2022 Wentworth Medal has provided me with the funds to be able to present on my doctoral research on identity-based conflicts and peacebuilding at the School of Oriental and African Studies at the University of London, and pursue additional doctoral fieldwork throughout Central Asia and the Middle East.

Scholarships have been transformative for my education and my life. They have allowed me to pursue my dream of becoming a ‘pracademic’ – a peacebuilder, researcher and educator. The importance of scholarships in facilitating access to educational opportunities for people from non-traditional backgrounds and to ending intergenerational cycles of disadvantage cannot be overstated. Providing opportunities for such cohorts not only rewards dedication, passion and hard work, but also inherently allows for the expansion of knowledge – enhancing our ability to grapple with issues of national and global significance in unique ways.

Photography by Stefanie Zingsheim

Discover how you can help to open doors for more students to reach their potential.
Charles Badham, the University of Sydney’s second Professor of Classics, believed that the University should be equitable for all. His journey in pursuit of equity was a colourful one, which involved travelling to country areas, seeking donors to support student bursaries; and even revolutionary ideas around remote learning and evening classes.

When Reverend Charles Badham took up his position of Professor of Classics and Logic at the University of Sydney in 1867, academic scholarships were already available to students. However, those who lived in rural areas were often unable to afford accommodation and living expenses in Sydney, even if they had been granted a scholarship.

During 1875 and 1876, Rev Professor Badham travelled throughout the colonies and held public meetings, calling for donors to support bursaries for country students. His aim was to open up access to a university education, particularly for those students who had been denied the possibility of attending, due to geographical distance, financial or personal circumstances.

“This University is not only for those who have private means or professional connections to start them; it is founded for the people,” he reiterated over the years.

Although he did his best to encourage people in rural areas to do what he saw as their civic duty, early bursaries at the University were in fact established by donors in Sydney.

The first bursary was endowed by Mrs Isabella Alexander in 1874, with £1000 in honour of her late husband, Maurice Alexander, who had arrived in Sydney at the age of 14 “without a shilling in his pocket”. He went on to become a respected businessman and Member of the NSW Legislative Assembly for Goulburn for 12 years.

In 1881, merchant banker and politician, Thomas Walker, became the first to provide bursaries for women, with Mary Elizabeth Brown and Isola Florence Thompson commencing their studies the next year. They were also the first women to graduate from the University of Sydney three years later.

Brown was often at the top of her class in Classics, Mathematics, Natural Science, and Chemistry. After graduating, she became a teacher at Brisbane Girls Grammar School. When her sister died, leaving seven children (the youngest only one week old), she helped to care for them. In 1908, she followed her missionary father back to England, helping him to write his autobiography. Thompson also became a teacher, employed by Sydney Girls High School. In addition, she continued her studies at the University, graduating with a Master of Arts in 1887, the first woman to achieve this higher degree.

Rev Professor Badham’s interest in supporting the welfare of students who were unable to attend lectures also led to him to implement a form of remote learning. “My scheme of education by post,” as he called it, which saw him correcting exercises in Greek, Latin, German and French.

Just before he died, he wrote to The Sydney Morning Herald, suggesting that the University should hold evening lectures for those who were unable to attend during the day. This proposal was then accepted by the University Senate and implemented not long after his death in February 1884.

By that time, 14 bursaries had been established and around 30 students had benefitted, in just over eight years.

Charles Badham’s hope was that others would carry on what he had started – and around 150 years later, his work remains the foundation for the University of Sydney’s commitment to make its education available to all.

Written by Cassandra Hill
Source: Roderic Campbell, “The modest hospitality of a scholar”: Badham and the first bursaries, Record (University Archives journal), 2005
Australian Dictionary of Biography

Mary Elizabeth Brown (BA 1885) in academic dress. Courtesy of the University of Sydney archives, G3 224 1349.
SALLY COLGAN
BVSc ’90, Grad Dip Vet Clin Stud ’92
With a career spanning three continents, Sally started out in equine practice, becoming a Diplomate of the American College of Veterinary Surgeons and specialising in equine surgery, before moving her focus to research. In 2002, she established a contract veterinary research company. Sally has published in peer-reviewed journals in veterinary surgery, animal welfare and veterinary pharmacology. She was a director, then CEO, of Vets Beyond Borders, a veterinary charity focusing on supporting animal welfare and public health programs around the world. Sally is a director of the Australian Veterinary Association and a member of several animal ethics committees, and she continues to pursue avenues to advocate for animal health and welfare in the veterinary sector.

PROFESSOR CHARLES MACKENZIE
BVSc ’71, PhD (Veterinary Sciences) ’76, DVSc ’17
Charles’ genesis as a global leader in animal and human health research began with a BVSc, a PhD, and then a DVSc for work on parasitic infections. Together with researching host responses to parasites, he has assisted in demystifying human health impacts of a major chemical accident in India, understanding a disease killing bats in the US, and improving donkey health in Africa. His primary activity has been to assist in the control of ‘river blindness’ and ‘elephantiasis’ in Tanzania, Sudan, Ecuador, Yemen and India. He is currently chair of the Global Alliance for Lymphatic Filariasis, and on the national advisory committees of four African countries. He was recently presented with the Wolfensohn Award in New York for his contributions towards the control of disabling diseases.

NOEL JEFFS
MCW ’17
Poet and writer Noel grew up a stone’s throw from the ocean in Gippsland, Victoria. Noel’s story began at the University of Melbourne, where he received a scholarship to study geography and philosophy, and then followed a vocational calling to become ordained. He trained at St Barnabas College in Adelaide, before heading to the UK to study a Master of Arts in the Psychology of Therapy and Counselling at Antioch College, an affiliate of the University of Ohio, and volunteer as a psychotherapist at the Royal London Hospital. After further travel, he returned to Australia and completed a Master of Creative Writing at the University of Sydney. Now Noel enjoys exploring his passion for postmodern poetry, baking and volunteering.

ASHLEY KALAGIAN BLUNT
MCS ’12
Ashley is an author, globetrotter, award-winning speaker, moderator and creative writing tutor. After moving from her snowy Canadian home to scorching-hot Sydney, she completed a Master of Cultural Studies and postgraduate writing studies and began teaching creative writing courses. Her debut book, My Name is Revenge, was shortlisted for the 2019 Woollahra Digital Literary Awards and was a finalist in the 2018 Carmel Bird Digital Literary Awards. She then published her memoir, How to be Australian, which tells the tale of her drastic sea change, life Down Under, and losing her wedding rings on a trip to Bondi Beach. Ashley has recently released her third book, Dark Mode, a psychological thriller exploring the reality of the dark web.
More stories of alumni at work around the world. We love hearing what our alumni are doing. Help us keep track by updating your details at sydney.edu.au/alumni/update-details

SIMON LIU
BCom LLB '22
Even before Simon graduated, he was already travelling the world to provide on-the-ground humanitarian assistance to those in need. He first flew to Iraq, where he began challenging his own preconceived notions and helping those living in devastation. His final leg in Syria convinced him he needed to support the vulnerable and encouraged him to apply for a job at the United Nations in local development finance, where he improved the efficacy of humanitarian responses in African countries. Soon after he developed Building Memori, a website that publishes his insider perspective on current world issues. On the site, he documented his three-month expedition to war-torn Ukraine where he travelled the frontlines, volunteered as a teacher and helped rebuild homes. Simon continues to spread awareness about the world he sees with his own eyes.

DR TONY SCHIEMER
MBBS '13 MIntPH '14
Tony’s aviation career began in an unusual way. Starting as an engineer in the navy, he made the change to medicine following graduation. His career accelerated after completing medical school when he started work as an Australian Defence Force aviation doctor and gained his commercial pilot licence in his spare time. Tony continued to provide specialist consultancy services to the ADF, and then started flying professionally as a flight instructor. Since then, he has moved around Australia to further this side of his career and spent time as a charter pilot across Australia. He still trains and coaches aspiring pilots, works remotely in medical research for the Royal Australian Air Force, and will shortly commence a dual role as both a doctor and pilot for a major airline.

CHRISTOPHER NOEL
BEC '71
Christopher played an integral part in evolving the University’s sports industry into what it is today. He joined the University Boat Club in 1968, rowed his way to club president, and then onto the Board of Sydney University Sport. Working with SU Sport CEO Greg Harris, Noel played a key role in transforming Sydney University Sport and Fitness into a leading university sports body. Simultaneously, he transformed the Boat Club into one of the most successful rowing programs in the country. Christopher has been recognised for his contribution to sport and rowing with an Honorary Fellowship of the University, an Order of Australia Medal, and Honorary Life Membership of Sydney Uni Sport and Fitness and Rowing New South Wales.

PETA WILLIAMS
BMu '79
Peta’s Bachelor of Music kickstarted her advantageous 40-year career contributing to government and non-government sectors through working in arts management for Musica Viva Australia and Sydney Philharmonia Choirs, and in arts funding for the NSW Ministry for the Arts and the Australia Council for the Arts. She transitioned to a career in music therapy and then the community services sector at Nordoff-Robbins Music Therapy, the Lower Mountains Neighbourhood Centre and Belong Blue Mountains. She has now set up her own management consulting firm – a lifeline for managers in the arts and community sectors seeking Peta’s qualified perspective.
JUST THE FACTS

Dealing with vast amounts of information is just another day at the office for University researchers and academics. Here, three researchers each explain an idea at the centre of their current work.

ON SEA URCHINS
We are all aware of the devastating impacts of climate change on our marine ecosystems, with bleak prospects for many animals. However, it is not doom and gloom for all species! My research into sea urchins inhabiting bubbling vents off the coast of Ischia, an island in Italy, has uncovered that these critters are remarkably tolerant to carbon dioxide–rich water, a proxy for climate change–induced acidic oceans. Coupled with their ability to withstand a large temperature range, the sea urchin is likely to thrive under climate change and continue spreading throughout the Mediterranean Sea. With ocean warming also facilitating expansion of the long-spined sea urchin in Australia, the proper management of sea urchin populations is a pertinent issue across the globe.

Dr Shawna Foo

Fascinated by animals surviving in unexpected environments, Dr Shawna Foo (BSc (Adv) (Hons) '10, PhD '16) is an Australian Research Council Discovery Early Researcher Award (ARC DECRA) recipient and Westpac Research Fellow. She investigates factors that increase the resilience of marine ecosystems to climate change.

ON FOOD AND THE MIND
We all experience urges and impulses, such as snacking on too much junk food while in lockdown. Impulse control can be difficult but is an important hallmark of healthy behaviour. Repeated failures of impulse control are associated with a range of psychopathologies including obsessive compulsive disorder, attention deficit hyperactivity disorder, and various addiction disorders. By using brain stimulation and imaging techniques, such as transcranial magnetic stimulation and electroencephalography, I am working towards uncovering the way our mind works when we are able to stop successfully, as well as why we fail to stop.

Dr Dominic Tran

Dr Dominic Tran conducts research in behavioural and cognitive neuroscience, with expertise in learning, memory and cognition. He investigates the relationship between brain and behaviour and is interested in understanding how our past experiences shape our beliefs, actions and habits.

ON DYING STARS
We have created the first map of our galaxy’s ancient dead stars. Our chart has revealed a cosmic cemetery that stretches three times the height of the Milky Way – mostly made up of black holes and neutron stars. These manifest when massive stars, which are more than eight times larger than our Sun, exhaust their fuel and spontaneously collapse. Until now, these corpses, which were flung in every direction by the supernova that created them, had slipped beyond the sight of astronomers. By carefully recreating their full life cycle, we were able to find exactly where they lie. Now that we know where to look, we’re developing technologies to hunt for more, so that we may better understand gravity at its extremes. It’s widely known that our current theory of gravity is incomplete, so what better place to look for answers than objects where gravity is strong enough to warp reality?

David Sweeney

David Sweeney (BSc (Advanced) (Hons) '20) is a PhD student and study co-author (with Professor Peter Tuthill). He hopes that through global collaboration, astronomers will be able to identify and locate these black holes and neutron stars by the end of his PhD.
“Having the scholarship makes things a lot easier for my family and takes the financial pressure off me.”

— Abdullah Tasnim, MySydney Scholarship 2023 recipient
Dr Charles Perkins AO (BA ’66) dedicated his life to achieving justice for Aboriginal and Torres Strait Islander people. His legacy of leadership lives on, making Australia a better and fairer place.

What do you want your legacy to be?

sydney.edu.au/bequests
+61 2 8019 7964