A multidisciplinary vision realised

10 years of rethinking interrelated systems of health at the Charles Perkins Centre
Fisher Library's rooftop terrace in the '60s. Plans are now underway for its reopening after more than 30 years. University of Sydney Archives, 1960, C3 2245122.
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>University update</td>
<td>Welcome</td>
</tr>
<tr>
<td>03</td>
<td>Newsbites</td>
<td>Information</td>
</tr>
<tr>
<td>04</td>
<td>A multidisciplinary vision realised – Charles Perkins Centre</td>
<td>Multidisciplinary</td>
</tr>
<tr>
<td>08</td>
<td>Alumni census reveals story of Sydney</td>
<td>Community</td>
</tr>
<tr>
<td>11</td>
<td>Perspective shift – Professor Manjula Sharma</td>
<td>Insight</td>
</tr>
<tr>
<td>12</td>
<td>A remedy for life – Ruth Wilson</td>
<td>Community</td>
</tr>
<tr>
<td>15</td>
<td>Accentuate the positive – Dr Sean O’Connor</td>
<td>Psychology</td>
</tr>
<tr>
<td>18</td>
<td>Changing perspectives – Dr Michael Mossman</td>
<td>Architecture</td>
</tr>
<tr>
<td>21</td>
<td>120 years of women in law</td>
<td>Community</td>
</tr>
<tr>
<td>24</td>
<td>Timelines – Ada Evans and Marie Byles</td>
<td>Historical profile</td>
</tr>
<tr>
<td>26</td>
<td>Classnotes</td>
<td>Community</td>
</tr>
<tr>
<td>28</td>
<td>Just the facts</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>

**CONTENTS**

---

12 Jane Austen’s remedy for life

15 Thinking positive in disruptive times

21 Trailblazers and changemakers – 120 years of women in law
With the final quarter of 2022 upon us, we reflect on a year in which the University has continued to evolve in the face of ongoing global challenges – and welcome fresh opportunities that lie ahead in 2023.

Semester 2 has seen Open Day return to campus for the first time since 2019, and we were thrilled to see campus so busy and vibrant with this real-world experience. We’re committed to ensuring that students have the most engaging university experience possible, following the disruption of the pandemic. Face-to-face learning opportunities are our priority, but we are agile, offering remote support to those who need it.

As the political landscape experiences profound change, we welcome the opportunity to engage with the new federal government. We are immensely proud of all our alumni serving in the 47th parliament, none more so than Prime Minister Anthony Albanese (BEc ’85), the eighth prime minister to have graduated from Sydney. The University of Sydney has already been engaging with the current government on how we can bring deep, multidisciplinary expertise to some of the country’s most demanding issues, and we look forward to working together as an organisation and through our partnerships on a local, national and global scale, to seek solutions to the great global challenges of our times.

As we start work on a detailed action plan towards realising these aspirations, we welcome the NSW Government’s announcement of $143.3 million over four years towards the establishment of the Sydney Biomedical Accelerator. This first-of-its-kind Australian health and technology complex will fast-track real-world health outcomes and fundamentally improve the health of people in NSW, while helping to position the University as a global leader in biomedical research.

A further testament to the success of our partnerships, the Charles Perkins Centre celebrates its 10-year anniversary this year. Our world-leading researchers are in a unique position, whereby their multidisciplinary collaboration has made significant inroads in alleviating the burden of chronic illness.

We thank you for your unwavering support and generosity, which continue to enable us to be leaders in multi-faceted ways in the communities we serve, in Australia and around the world.
**NEWSBITES**

**NANOSCIENCE**

‘Superhero’ bone implant prevents rejection

New bone implants which reduce the chance of infection and implant failure rates have been developed by an international team led by the University of Sydney. In Australia, one-fifth of hip and knee replacements fail after 10 years. These new implants are enriched with a ‘smart’ combination of gallium (a highly antimicrobial chemical element) and defensin (a peptide), which combats infection. Together, they are like a ‘double punch’ against bacteria. These safer, more functional implants are estimated to reduce implant failure to below one percent. Next steps are to test them using appropriate animal models and to ensure that the implants promote bone formation and healing.

**ENVIRONMENT**

Home among the gum trees

Even a lone gum tree in a field can be a lifeline for koalas, which were declared endangered this year. Researchers in the School of Life and Environmental Sciences GPS-tracked 23 koalas on the Liverpool Plains in northwest NSW, to determine why, despite the dangers, they would travel from bushland to isolated trees. Eucalyptus trees on farms tend to have nitrogen-rich leaves, with fewer toxins. They found that koalas spent more time in these trees with high leaf nitrogen, as well as in large trees, which are vital to koala nutrition and shelter.

**AEROSPACE ENGINEERING**

Rocketry team goes off

Sydney’s USYD Rocketry Team are the 2022 winners of the prestigious Spaceport America Cup, held annually in New Mexico. Competing against 97 student teams from around the world, the Faculty of Engineering students won first place for the launch of their 30,000 feet commercial-off-the-shelf rocket, *Bluewren*, and first place for the design of space debris capture payload, *Callistemon*. They went on to win the overall competition, with judges commending the team for their sportsmanship, camaraderie, rocket launch and design. *Callistemon* was also praised as an innovative solution to the growing problem of space junk.
Ten years ago, when construction of the Charles Perkins Centre began, its mission was to fight the deadly illnesses of modern living – and its approach would disrupt the research establishment.
“Yes, these conditions are a product of our biology,” says Professor Stephen Simpson AC, who has been Academic Director of the CPC since its inception. “But they’re also about how our biology interacts with our modern environment – food systems and built environments, which then draw in the effects of politics, economics, ethical constructs, global relations.”

This idea of integrating disciplines challenged the more siloed thinking of other research organisations and university administrations – but 10 years later, the concept of ‘multidisciplinary research’ has gained international traction.

The centre’s conception gained early momentum from an original painting by Picasso, *Jeune Fille Endormie*, donated by an anonymous benefactor, with the caveat that proceeds from its sale be used for research. The $20.7 million raised allowed greater free flow of design ideas and a kickstart for research, including supporting the recruitment of four Professorial Chairs – the Leonard P Ullmann Professors.

Known as the ‘Picasso Professors’, they augmented more than a dozen other senior recruitments through various faculties, many appointed thanks to further significant gifts from generous donors. So began the CPC’s journey to find answers to the health problems that affect so many.

And the numbers are sobering: around 67 percent of adult Australians and one quarter of children have obesity or are classified as overweight, with an estimated 1.3 million affected by diabetes and 1.2 million with conditions related to heart, stroke or vascular disease.*

Two of the Leonard P Ullmann Chairs, Professors David James and Luigi Fontana and their teams, along with Diabetes NSW and ACT Chair, Associate Professor Samantha Hocking (MBBS ’99, MMed (ClinEpi) ’06), lead the study of the common biological systems that underlie ageing. These systems control the risk of many cardiometabolic and autoimmune diseases, and even the risk of poor outcomes from infectious diseases, like COVID-19.

Healthy ageing is a major focus of many CPC researchers and clinicians, including another of the Leonard P Ullmann Chairs, Professor Sharon Naismith, who works on healthy brain ageing with colleagues at the CPC and the Brain and Mind Centre.
In matters of the heart, the Cardiovascular Initiative, under Professor Gemma Figtree (BSc(Med Hons) ’98, MBBS ’00), and the CardioSleep Research Program, under Professor Peter Cistulli (PhD (Medicine) ’95), are exploring links between sleep-disordered breathing and three major cardiovascular diseases. Researchers such as Dr Mark Larance and Associate Professor Laurence Macia are using major core research facilities at the CPC to reveal the myriad functions and interactions of proteins, which are crucial as builders and maintainers of living organisms. Their work in proteomics is well-advanced, with the real promise of new medical insights and treatments attuned to the specific needs of individuals.

Emerging from all of this research is a truly integrated view that seeks to understand the intimate relationships between human biology and our environment – physical, social and natural. As Professor Jakelin Troy (BA (Hons) ’86), leader of the CPC Aboriginal and Torres Strait Islander Health theme notes, by considering individuals within an ecological context, the CPC strategy shares important characteristics with Indigenous knowledge systems.

Critical to the development of this understanding is the relationship between biology and the humanities. Research into the history and philosophy of science and medicine, led by Faculty of Social Sciences professors Paul Griffiths and donor-supported researcher Warwick Anderson, is also helping to throw light on the origins of our biology, health and the sociological context.

The CPC has also taken on less expected public health projects, like its successful association with national airline Qantas. Using modelling by the Faculty of Engineering, Qantas determined that a direct flight from Perth to London would be economically viable. But this would be ultra-long-haul flying and a passenger-experience rethink might be needed, so Qantas approached the CPC.

“We talked about everything that passengers experience on the ground and in the air, like jet lag, and how our understanding of circadian biology could mitigate it. All sorts of University of Sydney scientists contributed: sleep biologists, dietitians, nutritionists, people working in physics, physical activity, state of mind, industrial design, lighting engineering and more,” Simpson says.

“The Perth–London route has been a huge success, and we are now working with Qantas on the next big project – Project Sunrise, flying direct between London and Sydney and New York and Sydney.”

Another unexpected collaboration is the donor-funded Judy Harris Writer in Residence Fellowship at the Charles Perkins Centre, which was launched in 2016 with author Charlotte Wood. It provides the opportunity for writers to work with researchers and clinicians on creative projects related to issues that the CPC is dedicated to solving. Works arising from this fellowship include novels, essays and a play, with the highly sought-after residency currently held by renowned poet Professor Sarah Holland-Batt.

The aim of the CPC isn’t just to produce game-changing research but to produce consumable information that stimulates and informs public debate. The CPC’s Academic Director, Simpson is also a prodigious researcher, often working with his long-time colleague and another Leonard P Ullmann Chair, Professor David Raubenheimer, who leads the CPC’s nutrition theme. Together and separately, they have authored numerous books and papers, and their new theories of nutritional biology are helping to shape the debate around public health and nutrition.

It is clear to both Raubenheimer and Simpson, who are among the world’s...
foremost nutritional biologists, that the food industry has taken advantage of our natural hungers for protein, fat and sugar to sell us products that are great for their profits but degrade health. "If we can create a more balanced food environment, we’ll simultaneously ease the burden on the health system from a range of serious conditions and an unhealthily ageing population,” Raubenheimer says.

These ideas are, indeed, part of the national conversation, but some ideas are yet to fully break through – for example, the BABY1000 Project, which is funded by a generous alumna who left a gift in her will. Professor Adrienne Gordon (MPH (Hons) ’05, PhD (Medicine) ’12) is looking at the first 1000 days of a baby’s life, with a view to understanding lifelong health outcomes – research which will benefit the next generation. And she has an important insight for men who want to become fathers: their lifestyle choices affect the health of their child, long before conception.

Looking at the CPC building, you could say it isn’t just beautiful, it’s deep too. In fact, it reaches four floors underground, protecting highly sensitive technology from light, sound, temperature changes and vibration; technology for robotic surgery and next-generation biomedical imaging that will dramatically improve treatment options and patient outcomes.

The scope of what happens at the CPC expands wherever you look, much of it made possible by many donors giving their support. For example, Dr Barry Catchlove (MBBS ’66) AM’s gifts have helped to create the CPC’s dynamic early and mid-career researcher (EMCR) cohort, while the late author and educator Jennie Mackenzie has fostered early career researchers through her extraordinary philanthropy.

Every year, 20,000 students from across disciplines are taught within its walls, and community health is enhanced through the Charles Perkins Centre Royal Prince Alfred Hospital Clinic, which now sees 10,000 patients and clinical trial subjects a year. Beyond the building itself, there are CPC hubs at Nepean and Westmead and members in disciplines across the University and beyond in affiliated organisations.

“A lot has happened at the CPC over the ten years,” says Simpson with some understatement. “But the big thrill is bringing brilliant people together, seeing sparks, then gently blowing on the embers to see what might happen. That can be truly revelatory.”

*Source: Australian Institute of Health and Welfare.*
In 2022, alumni and supporters participated in a once-a-decade census to measure the impact of our 420,000-strong alumni network and to share their experiences, expectations and connection to the University. These results not only helped to shape the University’s future, through our Sydney in 2032 Strategy, but also provided us with the numbers to share the story of Sydney. The results reveal an alumni cohort who care about the community, understand the global impact of their work, and share our vision for life-changing research to address the world’s greatest challenges.

WHAT YOU TOLD US

EMPLOYMENT
The percentage of working alumni who are employed full time exceeds the national average*

- 77% FULL TIME
- 23% PART TIME

77% of alumni are working full time

*65% is the national average

ROLE OF THE UNIVERSITY
These are the roles our alumni would most like the University to play

- 27% Continue to conduct world-leading research
- 14% Have a leading voice and advocate for Aboriginal and Torres Strait Islander peoples
- 11% Reconnect alumni cohort

SCHOLARSHIPS
Our alumni have benefited from a wide range of scholarships

- 38% of alumni received a scholarship to support them during their time at University

*63% is the national average
GLOBAL IMPACT

Alumni influence is felt worldwide. They live and work across 200+ countries.

★ John Andrews, Australia’s first internationally recognised architect, designed the CN Tower in Toronto, Canada: the tallest concrete structure in the world.

★ Jacques Miller AC FRS discovered the function of the thymus, the last major organ of the human body whose function remained unknown.

★ Sydney Law School alumnus HV Evatt was the third president of the United Nations General Assembly and helped draft the UN Declaration of Human Rights.

★ One-third of all Australians awarded a Nobel Prize are University of Sydney staff and/or alumni.

INDUSTRIES

Alumni report working across a wide range of industries:

17% Education and training
10% Health care and social assistance
5% Finance, banking and insurance
5% IT, telecommunications and technology
20% Other

12% Medicine, health and community services
6% Professional, scientific and technical services
5% Government, admin, politics and defence
5% Business and consulting

5% Law and legal services
4% Charitable and non-profit organisations
4% Arts, cultural and entertainment services
3% Engineering and construction

ORGANISATIONS

Our alumni are entrepreneurs at heart:

14% are business owners
10% have founded a business

Learn more about the Alumni and Supporter Census results.

*Data based on approx 14,700 online responses to the Alumni and Supporter Census, as well as University records.
Our new 10-year strategy sets a vision for 2032 that is unashamedly aspirational. When people speak about the University of Sydney in 10 years’ time, we want it to be about the extraordinary power that our world-class research and teaching has to transform people’s lives, and about the pride it generates throughout our city, our state and our nation. Your views, ideas and ambitions have contributed greatly to realising what we want to be known for by 2032.

“By 2032, we want the University to be a globally oriented, truly world-class university, committed to achieving, sustaining and enabling excellence consistently across all our research and teaching.”

— Mark Scott AO
(BA ’84, DipEd ’84, MA’93, HonDLitt ’15), Vice-Chancellor and President

Our strategic aspirations

Building on the First Nations knowledge of these lands, we are Australia’s first university, Sydney’s University and a great global university.

OUR STUDENT-FOCUSED EDUCATION IS TRANSFORMATIONAL
We will be the best Australian university for teaching and learning. Our students will attest to the transformational impact a Sydney education has on their lives, whenever and wherever they learn.

OUR COMMUNITY THRIVES THROUGH DIVERSITY
Social equity is at the heart of our past and our future. Our community will be more diverse and inclusive, helping us all to shape a positive future. We are determined to play our part in overcoming educational disadvantage.

OUR RESEARCH IS EXCELLENT, TACKLES THE GREATEST CHALLENGES AND CONTRIBUTES TO THE COMMON GOOD
By 2032, our diverse and inclusive academic community will be renowned globally for discovering new knowledge and delivering solutions that benefit us all.

Where to next?
Each of these aspirations is backed by an action plan – to drive us into the next decade and beyond. These will focus our work across a series of three-year implementation periods over the next decade, providing regular opportunities for reflection on our progress.

• We will more than double our scholarship support for students from disadvantaged backgrounds.

• We will expand our education offerings in Western Sydney, providing new opportunities for skills development that progress our commitment to build a greater presence in this vibrant, diverse area at the heart of our city.

• We will create the Sydney Biomedical Accelerator. We will be a global leader in biomedical research, a place that attracts excellence and one that drives a new approach to research translation across the University.

• We will establish a Leadership Academy to support our emerging and future leaders.

The University looks forward to working with our alumni and supporters to realise this vision.

sydney.edu.au/strategy
Inspiring teachers to inspire students is Professor Manjula Sharma’s life work. As Director of the STEM Teacher Enrichment Academy, she is passionate about equipping teachers with the tools and the craft to enrich the teaching of science, technology, engineering and mathematics. A collaboration 15 years ago was pivotal in changing her thinking about how to achieve this.

My research is influenced by my students’ research interests: at certain junctures, I have chosen to travel down paths with them. They have made visible doors which I would not have noticed otherwise. Perhaps most notably, in 2007 I obtained a national STEM education grant with my PhD student, Derek Muller (PhD ’08), known for his educational science YouTube channel, Veritasium, which has 1.8 billion views. We wanted to explore how we could support teachers, rather than just students. The idea was that investing in and empowering teachers to increase their knowledge and resources has a cascade effect on generations of students.

We held after-school workshops for teachers to gain insights into best practice pedagogy and learning technologies, with activities linking back to the way science and mathematics are taught in the classroom. We circulated curriculum documents for teachers to annotate, had them participate in brainstorming sessions, and asked them to pilot and complete surveys. So, rather than just engaging the teaching ‘experts’ or leaders, we engaged a broader group of classroom teachers in this professional learning development. In short, busy and time-poor teachers diligently invested in the co-construction of meaningful and practical resources for the betterment of their peers and profession – helping them to make real and sustained change in their classrooms.

What struck me and fundamentally influenced my thinking was their nuanced world view around balancing student learning and teacher dexterity, as well as the fluidity and adaptability of the classroom environment. Immersing myself in the process was genuinely transformational and a privilege. Those teachers took a scholarly yet pragmatic approach to knowledge creation and transfer: the core business of education. They realised the significance of ‘evidence-based practice’ to their classroom teaching. I recall those conversations between this complex group of people: strategies to rise to the challenges of their profession and its practice, and moments of triumph to cherish.

The STEM Teacher Enrichment Academy deploys similar strategies of collaboration, so stepping in as Director is a natural fit. I have an affinity for deep, sustained professional learning experiences where teachers co-construct, implement and evaluate techniques and resources, leading to enduring changes in their practice, together with increased self-efficacy and confidence. This will stand us in good stead as we embark on our next year-long teacher development programs in Sydney and Lismore later this year.

My research is influenced by my students’ research interests: at certain junctures, I have chosen to travel down paths with them. They have made visible doors which I would not have noticed otherwise. Perhaps most notably, in 2007 I obtained a national STEM education grant with my PhD student, Derek Muller (PhD ’08), known for his educational science YouTube channel, Veritasium, which has 1.8 billion views. We wanted to explore how we could support teachers, rather than just students. The idea was that investing in and empowering teachers to increase their knowledge and resources has a cascade effect on generations of students.

We held after-school workshops for teachers to gain insights into best practice pedagogy and learning technologies, with activities linking back to the way science and mathematics are taught in the classroom. We circulated curriculum documents for teachers to annotate, had them participate in brainstorming sessions, and asked them to pilot and complete surveys. So, rather than just engaging the teaching ‘experts’ or leaders, we engaged a broader group of classroom teachers in this professional learning development. In short, busy and time-poor teachers diligently invested in the co-construction of meaningful and practical resources for the betterment of their peers and profession – helping them to make real and sustained change in their classrooms.

What struck me and fundamentally influenced my thinking was their nuanced world view around balancing student learning and teacher dexterity, as well as the fluidity and adaptability of the classroom environment. Immersing myself in the process was genuinely transformational and a privilege. Those teachers took a scholarly yet pragmatic approach to knowledge creation and transfer: the core business of education. They realised the significance of ‘evidence-based practice’ to their classroom teaching. I recall those conversations between this complex group of people: strategies to rise to the challenges of their profession and its practice, and moments of triumph to cherish.

The STEM Teacher Enrichment Academy deploys similar strategies of collaboration, so stepping in as Director is a natural fit. I have an affinity for deep, sustained professional learning experiences where teachers co-construct, implement and evaluate techniques and resources, leading to enduring changes in their practice, together with increased self-efficacy and confidence. This will stand us in good stead as we embark on our next year-long teacher development programs in Sydney and Lismore later this year.
Author Ruth Wilson’s quest to ‘thoroughly understand her own heart’, as Jane Austen wrote in Emma, led her to study a PhD in her eighties and to pen a memoir which highlights a lifetime of lessons learnt from Austen’s novels.

“When Ruth Wilson enrolled at the University of Sydney in 1949, she was 16 and fresh from her home town of Griffith in regional New South Wales. Stepping onto the University campus, she says, was like opening up a whole new world. She would experience much the same feeling seven decades later, at age 88, completing her PhD here.

“Being at the University was a continuation of an intellectual awakening that had started with reading books in high school,” says Wilson. “But at university, I was hearing from people, from lecturers and friends, who just blew my mind open with ideas that took me someplace else, somewhere I’d never been before.”

Wilson is now 90 and has just released her first book, The Jane Austen Remedy, which developed out of her PhD thesis. A literary memoir, it examines the importance of Jane Austen’s work on Wilson’s own life, and the enormous curve it took in her sixties, when she was diagnosed with Ménière’s syndrome, which includes symptoms that mimic depression. After fifty years of marriage, Wilson had inherited some money unexpectedly and used it to purchase a home in the Southern Highlands. She began to spend weekends there, commuting to Sydney to be with her husband. Eventually, Wilson realised she wanted to be at her bolthole full time, and so began what she calls a “marriage vacation”. Rereading her favourite girlhood books, including Austen’s, Wilson began to reframe her own life through the mores and struggles of Austen’s characters, and realised her own life needed a touch more editing.

“Growing up, I think we were all given this sense that things would simply work out if you let them be,” says Wilson. “But there came a point where I desperately wanted to be alone, to have my own space, and to rediscover myself or to discover myself for the first time.”

Gender politics during Wilson’s time at university were fraught, to say the least. On the fringes of the Sydney Push (a group from the University known for its progressive and libertarian notions, which included members Clive James, Paddy McGuinness and Wilson’s short-term friend Lillian Roxon), Wilson saw a group that purported to push boundaries but, when it came to the sexes, was still deeply entrenched in normative ideals.

“I was invited to their parties a few times and I did deliberate whether to go … in the end I would have been too timid,” she says now. “Although seeing them around the campus, I had this feeling that the girls, despite their apparent sophistication and their banter, seemed to me to be hanging on the boys, like groupies. They weren’t any more independent in their thinking than I was, and I was a shrinking violet. In fact, I felt perhaps I was more confident than them because being part of that group was actually not important for me.”

It is just one of a series of experiences that Wilson describes as Austenian. “I was a bit like a Jane Austen observer,” she says. “I was really watching what was happening, seeing how those relationships played out, but I wasn’t interested in being part of it all myself.”

Written by Lauren Sams
Photography by Louise M Cooper
Collage by Fabio Dias
I joined the Jane Austen Society, I joined Friends of the Library. And it all made me start thinking more seriously about what reading is, and what it can offer us. I had this lightbulb moment of, ‘Why not do a PhD? Why not do some really serious research?’”

Wilson says that her time at Sydney, studying for her PhD, were the best years of her life. “Writing my own story felt so liberating,” she says. “I really discovered so much about myself that was always there, just under the surface. I’m 90, so I don’t have long left, but I do hope there is time to find out more.”

Returning to campus was a similarly eye-opening experience for Wilson as it was when she first arrived in 1949, when two friends “took me under their wing and explained all the jokes I didn’t understand at the University Revue”. This time, though, the world had changed markedly – and Wilson was ready for it.

“It was the most thrilling return,” she says. “I had all these wonderful memories, but there was so much that was different. The atmosphere was different. The faces on campus were different. There were unisex toilets. You knew, we used to sit around waiting for a boy to invite us into the Union dining room – no girls allowed. When I went back, there was this whole new sense of openness and independence, and women were absolutely everywhere. It was extraordinary.”

As for Wilson’s “marriage vacation”, it is over. She lives with her husband in Sydney and says that writing her memoir has taught her that she needed to experience life differently – as she did when she returned to university seventy years after receiving her first degree.

“When I was first married, there were lots of things that I didn’t understand – things that were never talked about. I was naive. I needed to grow into that life, that role – and then I needed to understand, for myself, that it was time for something differently. But I’ve never regretted the life I had. I wouldn’t have had the same wonderful children. I wouldn’t have had the lovely relationships I have with them, with my grandchildren, and even now with my great-grandchildren.” They are all, she says, “fantastic readers”. ●
Positive thinking is often promoted as the panacea of our times – with ideas around wellbeing and positivity flooding social media feeds and embedded in schools and corporate leadership programs. But can positive psychology really provide the solution to life’s challenges?
Mindfulness, gratitude and wellbeing are concepts which have experienced a boom in recent years. Even before the turbulent years of COVID-19, natural disasters and global conflict, people sought ‘new age’ solutions to navigate life’s challenges – in the quest to perform better and reach higher levels of inner harmony and happiness.

On the face of it, these ideas form part of ‘positive psychology’, a relatively new school of thought which features a shift from focusing on the clinical ‘problem’ to the promotion of wellbeing. But not everyone is positive about positive psychology. Some critics disapprove of its simplistic interpretations and aren’t convinced that its research findings are strong enough to move so quickly towards practical interventions.

“One of the things that I see a lot, in terms of the ‘Instagram application’ of positive psychology, is this idea around intentional thoughts and how we can just ‘manifest’ things into our lives,” says Dr Sean O’Connor, Director of the University of Sydney’s Coaching Psychology Unit. “The idea that if we just think positively we can manifest a Ferrari in the driveway or somehow drastically change our experience – it doesn’t work like that.”

Dr O’Connor applies positive psychology techniques to his work as a leadership and executive coach. At the University, his research focuses on coaching psychology, which seeks to extend wellbeing, performance and growth beyond the individual, into organisations and workplaces.

“Organisations have started to recognise over the last decade how important the fields of coaching and positive psychology are,” Dr O’Connor says. “They’re realising the significance of values and purpose, and their relationship to wellbeing and performance – and we’re seeing the integration of positive psychology and coaching principles into policy and practice.”

Dr O’Connor says his life had always pointed him, in some ways, towards psychology and coaching. He grew up in Western Sydney with his family, who supported over 200 foster kids, cared for by his parents from around the time he was 12 years old.

“One of the things that I built up from quite a young age of thinking about how other people were thinking,” Dr O’Connor says. “Because the foster kids came from such diverse backgrounds and experiences, some of them quite shocking and very different from my own, and this led me to think a lot about other people’s experiences and the relation to who they were becoming.”

He did an undergraduate degree in psychology, then worked in various leadership roles across government and business, before backpacking and working in the UK. While there, he heard about a new Coaching Psychology Unit being set up at the University of Sydney. Spearheaded by alumni, the late Professor Anthony Grant (BA Hons ’97) and Dr Michael Cavanagh (BA Hons ’97), it was the first of its kind worldwide when it was set up 22 years ago. Dr O’Connor applied and was among the University’s early cohorts for its Master of Science in Coaching Psychology.

“The University of Sydney really set the foundations for what coaching is today,” Dr O’Connor says. “Before that, it was a fly-by-the-seat-of-your-pants industry. Tony and Michael produced some of the early research to support it as an evidence-based approach to leadership development, emerging from a psychological evidence base.”

Dr O’Connor coined the term ‘the coaching ripple effect’, after his PhD research found a significant increase in the psychological wellbeing of employees and the attainment of their goals in organisations where leaders had participated in coaching psychology methods. He is now the Coaching Psychology Unit’s Director himself, a position he has held for nearly three years.

He warns, however, that the popularity of positive psychology has taken some approaches way beyond the science. “We often discover interesting aspects through research, then this gets exaggerated beyond the evidenced claims. Most solutions and change require time and effort, and not all strategies widely promoted have a strong evidence base.”
“There’s also a whole area of study around ‘flow’ – the idea that when we engage in certain activities, in which our level skill meets the challenge required, we can lose a sense of time. This tends to impact our performance and wellbeing positively, and there are techniques that you can try, to have more flow in your experiences.”

Positive affirmations can also support self-efficacy and wellbeing. “Some research shows that affirmations can increase self-confidence and lead to improvement in performance, but it’s not simply about manifesting your desires and the universe delivering,” Dr O’Connor says. “In some cases, for those low in self-efficacy or confidence, positive affirmations can actually be more harmful and work in the opposite direction.”

With the COVID-19 pandemic reshaping the workplace landscape, Dr O’Connor is now in the early stages of research exploring the connection of employees to their workplace, how it affects their identity and how working from home has changed this.

“We’re focused on how we help leaders adapt to flexible workforces, how we can help them to view working flexibly, not just as a problem to be solved but as an innovative way to look at what our sense of self means in that environment. Then we can start to help people identify what performance and wellbeing look like in this new form of working, and perhaps even finding higher levels of satisfaction and engagement.

“It’s going to require quite a lot of adaptation and innovation to transform workplaces and to support leaders and employees in the new way of thinking,” Dr O’Connor says.

“In this field, we need to think about how we can best be critical of new research, so we can give a clear message as academics around what we support and what can be helpful. There’s a lot we can do at both individual and group levels, and leadership coaching – supported by evidence-based positive psychology – is one very strong approach that could benefit individuals, workplaces, organisations and society more broadly.”

Dr O’Connor says that connecting with nature is one idea that does have substantial scientific support. “One of the techniques I often use with business executives is to ask, ‘What do you do in your break?’ If you want to think more strategically, you need to refresh your attention. Get out into the green space, walk through a park. We’ve seen that change of place and space, through connecting with nature, can help reduce stress, reset attentional capacity and provide an opportunity to envisage the bigger picture.”

His current research involves exploring the psychology of ‘place in space’, and he has engaged in an industry partnership with the International Tower Sydney at Barangaroo. His team is researching how the physical environment and sense of community can impact wellbeing and performance. “We’re asking questions like, ‘Does the work environment support autonomy and competence? Does it allow people to use their strengths? Does it allow people to connect with others?'”

Dr O’Connor notes that research also indicates that goal-setting can increase people’s wellbeing and chances of reaching their goals. “However, often, we inadvertently set what’s called ‘avoidant goals’ which actually increases your attention towards the very thing you might be trying to avoid, increasing the likelihood of failure,” he says. “It’s best to focus on the thing you want to move towards, versus the thing you’re trying to get away from. Evidence supports that if we think about positive emotions and look more towards possibilities, rather than problems, we can support performance and wellbeing.”

“Organisations have started to recognise over the last decade how important the fields of coaching and positive psychology are.”

— Dr Sean O’Connor
Embracing First Nations ways of thinking about Country is key to the future of architecture in Australia, says Dr Michael Mossman. Associate Dean Indigenous in the Sydney School of Architecture, Design and Planning, Dr Mossman is bringing fresh perspectives to the profession and the next generation of architecture students.

**Changing perspectives**

Written by Cassandra Hill
Photography by Louise M Cooper

Dr Michael Mossman (PhD (Architecture) ’16) wants to evolve the way we think about architectural design and the built environment – by embedding First Nations understandings of Country.

“Country is the realm that surrounds us all – it’s everywhere, it’s always part of us – and everyone has a different understanding of it. It’s infinite and always evolving,” Dr Mossman says. “Architecture is very much about connecting to place, and connecting into surrounding contexts and communities. As an architect, I say that we can all listen to and embrace the qualities of Country and First Nations cultures to enrich the way we practise.”

Dr Mossman, who was awarded the University of Sydney's 2022 Sister Alison Bush Medal for contribution to Indigenous community, is the only First Nations architecture graduate in Australia with a PhD. A Kuku Yalanji man, born and raised in Cairns on Yidinji Country, he is a registered architect and Associate Dean Indigenous, working on Gadigal Land, at the University of Sydney's School of Architecture, Design and Planning.


“The ‘third space’ is the interaction and translation of information between cultures – it’s how you can take a different angle on what has been communicated by our colonial frameworks. This idea was interesting to me – if you think of a Venn diagram which has the colony as the Western system in one circle and the Indigenous system in another circle, and then merge those two circles together, then the negative space in between is the ‘third space’. It’s also about the appreciation of the nuances of those spaces, and the tensions and harmonies of how we operate as individuals between these two perspectives.”

“So, in practice, we can add that nuance to how design professionals can understand what it means to connect to place. Framing thinking in this way can create change and allow the profession to engage with cultural differences, ideological positions, cultures, communities, individuals, and living and non-living entities that are always part of Country.”

Dr Mossman’s parents instilled in him a strong sense of connection to place from a young age, and he says he was also intrigued by his father’s work in the building industry. “I was interested in how you could create places and have an impact on how people lived. He was involved in the surveying profession, so his job was intrinsically connected to place, and he would travel around North Queensland.”

Dr Mossman says the changes taking place around him in Cairns as he grew up were also a formative influence, as the place transformed from a sleepy regional town to a thriving city. Indigenous cultural tourism grew along with it. He says despite the continual presence of racism, it provided opportunities to promote and celebrate the proud and enduring qualities of Far North Queensland cultures and the importance of Country.
“As an architect, I say that we can all listen to and embrace the qualities of Country and First Nations cultures to enrich the way we practise.”

— Dr Michael Mossman
“With that transformation, it was interesting to see how the visibility of culture led to an increased number of people pursuing tertiary education. My generation was the first to attend university in my family. Reflecting on it now, that transformation opened up opportunities for First Nations communities to express culture and reach out to career options that weren’t present before that.”

Dr Mossman was always good at graphic drawing at school, so he decided to study architecture at the University of Canberra, as a family member was living there. After graduating, he moved to Sydney in 2002, starting work at the NSW Government Architect’s Office.

During his 15 years there, he delivered a raft of successful and award-winning public infrastructure projects. His co-design of the Winanga-Li Aboriginal Child and Family Centre in Gunnedah was also selected for exhibition in the world’s most prestigious architecture event in 2021, the Venice Architecture Biennale.

Dr Mossman has also had an influence on the industry, through his work with the Australian Institute of Architects. As a member of its First Nations Cultural Reference Panel, he has helped to revise professional accreditation standards, working to embed meaningful content that is critical for engagement between Country and First Nations culture and the architectural profession.

As a lecturer and researcher at the University of Sydney since 2016 – and Associate Dean Indigenous for the past year – Dr Mossman has facilitated processes around the Indigenisation of curriculum within the School of Architecture, Design and Planning. He has run a studio project on Country, with architecture students invited to the Yarrabah community in Far North Queensland, where Dr Mossman has family links. Students worked with community leaders and their local cultural practices to create affordable and sustainable housing designs.

“Communities have unique knowledge systems that students need to be conscious of, as they embed culture into the architectural process. This way they get a real understanding of the process of engaging with Country, the community and the underlying social issues which impact design.”

Dr Mossman says that although the architecture profession has started to incorporate these concepts during phases of a project, they are not always intrinsic from its inception.

“There’s interest and excitement about including this thinking, but it often comes along after the project has started,” Dr Mossman says. “While it is a compromise, it means the conversation starts. It’s a learning process and everyone engaging with these frameworks will learn something that they can apply to the next project, embedding it from the beginning.”

He says these ideas are also gaining momentum as architects start to follow guidelines such as the University of Sydney’s Walanga Design Principles. Dr Mossman says these principles “embed the conversation in projects from the outset and at multiple levels. It’s an invitation for all participants in the process to embrace the enriching qualities of Country and First Nations cultures and communities to ensure that it’s implemented in a meaningful way. The Darlington and Camperdown campuses have transformed in positive ways to make First Nations understandings of place more clear for all in their day-to-day lives.”

Dr Mossman hopes his current student cohort will go out into the world with greater understanding of the place of Country and culture in design – to share with older generations of architects and those to come.

“It’s about the advocacy, the conversations, and being open to continual learning and how they can then influence the decisions that are made,” Dr Mossman says.

“They will be setting up their own practices in 15 to 20 years, so I hope they can transfer that into professional practice and lean back on what they’ve learned at university and really drive the decisions and design of the future.”

“Communities have unique knowledge systems that students need to be conscious of, as they embed culture into the architectural process.”

— Dr Michael Mossman
Since Ada Evans became the first woman in Australia to graduate in law 120 years ago, many other trailblazing women at the University of Sydney have followed in her footsteps. Our alumnae are notable not only for their extraordinary professional achievements but also for their efforts to challenge gender stereotypes and progress diversity and inclusion. In 2022, we celebrate all our women of law – from those who paved the way to the changemakers of the future.
GEORGIA DAWSON has worked at some of the world’s leading law firms, but it was a legal aid role early in her career that changed everything for her. “Vietnam was shifting to a more open economy, and I was selected to advise on a legal education and law reform project,” says Dawson. “It was so invigorating, to be in this completely different culture, trying to navigate the system. I was energised by it.”

It was an energy that permeated Dawson’s career trajectory. While she worked at Herbert Smith Freehills in Sydney after graduation from the University of Sydney (BA ’98, LLB ’00), following her stint in Vietnam, Dawson heeded the call of foreign adventure, and has now worked in London, Hong Kong and Singapore.

“I love travelling and experiencing new cultures, seeing people live their lives in different ways,” says Dawson. After Vietnam, she completed a Master of Philosophy in International Relations at the University of Cambridge, then joined Freshfields Bruckhaus Deringer in London, where she is now Senior Partner, which makes her one of the most prominent Australian lawyers in the world. She is the first woman to take up the post.

Dawson comes from a family of lawyers – her father is a solicitor, as is one of her siblings. But her decision to go into the profession was led more by a sense of opportunism than anything else. “I honestly didn’t know what I wanted to do after high school,” says Dawson. “I did a few sessions with my careers advisor, and she thought I’d suit the law. I thought, even if I don’t love it, it’s a good, broad degree.”

It turned out that Dawson did love it, characterising her time at university as “the best of the best”.

As a leader now, Dawson is keen to use her position to ensure that the legal profession, not always known for its friendliness to women, becomes more welcoming. “I’ve been incredibly fortunate in my own career, to learn from incredibly successful female partners.”

— Georgia Dawson

“I’ve been incredibly fortunate in my own career, to learn from incredibly successful female partners.”

GEORGIA DAWSON

Georgia Dawson is now a leader herself, championing diversity in the legal profession.

Archive photo: Marie Byles, University of Sydney Archives G3 224 1634
NORA TAKRITI doesn’t come from a family of lawyers. “My parents are refugees. They fled war-torn Iraq with nothing but the clothes on their backs to build a new home in Australia.” If those beginnings sound inauspicious, they were formative; in fact, it was the stories Takriti was exposed to from a young age that pushed her to pursue the law.

“I was always hearing family members tell stories about injustice, repressive regimes, and the failure of legal institutions back in the homeland. I started to wonder how the law could be used to both destroy and balance the scales of justice. It didn’t make sense to me.”

It is this question that has driven Takriti to her law and arts degree. She chose the University of Sydney in particular, she says, on seeing its “manicured lawns and famous Quadrangle”.

“I wanted to know, how many other people have walked along the same path before me? What layers of stories, history and experiences are hiding behind these walls?” Takriti entered the University through the E12 Early Offer and Scholarship Scheme. “On my application, I wrote that I am not afraid to challenge or be challenged in my pursuit for justice. That outlook still resonates with me today.”

Her studies at Sydney have seen Takriti collaborate on various projects with Sydney University Law Society (SULS), including a domestic violence panel discussion, a juvenile justice mentoring scheme, and a social media campaign to elevate diverse voices during COVID-19 lockdowns. She has also volunteered at the Welfare Rights Centre and worked as a legal research assistant on campus.

Takriti also thrust herself into campus life as the Law School’s women’s officer, “a huge highlight”.

“My goal was to advocate on behalf of female law students and to facilitate meaningful opportunities that would empower their professional and personal growth.” That goal was met in mentoring programs with law firm King & Wood Mallesons, and through a law conference with Clayton Utz, with the proceeds going to the Women’s and Girls’ Emergency Centre. “These events really contributed to instilling a genuine sisterhood within the Law School. I think that’s really important.

“Crossing paths with so many incredible women in law and celebrating their achievements has been a genuine highlight.”

Over the course of her degree, Takriti has come back to the notion of justice time and again. “Watching the Me Too movement gain steam in Australia, as Chanel Contos, Brittany Higgins and Grace Tame spoke out about their experiences with sexual assault, for example, has made me aware that gender-based injustice continues to prevail, in spite of legislative reform – which is quite ironic when the power of the legal system is embodied in Lady Justice,” says Takriti.

She isn’t sure what she’ll do after graduating in 2024 – she’s keeping an open mind for now – but Takriti is firm on one thing: that the law matters and must be upheld with compassion.

“The law permeates every aspect of our lives, from the air that we breathe to the food that we eat. A lot of the time we forget that the law is more than just robes and wigs. It’s a human response to the world around us. Learning about the law can shock us out of our cocoons of comfort; it has done that for me.”

“"I wanted to know, how many other people have walked along the same path before me?"”

— Nora Takriti
“My grandfather erected a notice at the door of his church,” wrote Marie Byles in her unpublished memoir: ‘‘Jews, infidels, heretics – all are welcome’. The term heretic was one of pride in our family, not shame.”

It’s a telling anecdote of a true pioneer. While not a heretic herself, Byles was a trailblazer who cared not for convention or established rules, who became the first female solicitor in New South Wales, after completing her degree in law at the University of Sydney. It was a significant moment in history – and one that was only possible because of the work of another revolutionary and Sydney graduate, Ada Evans.

The stories of these two women overlap and intertwine – indeed, Byles’s life and career would have been markedly different without Evans’s influence, and without Byles, Evans’s legacy would not have been so remarkable.

Evans, born in England in 1872, was Australia’s first female law graduate. After completing a Bachelor of Arts at the University of Sydney in 1895, Evans returned to the University four years later, at her mother’s urging, to study law. She was the first woman to enrol in the degree, and legend has it that her application was only successful because the then-Dean was away at the time and unable to thwart the attempt.

While Evans was the first woman to graduate with a law degree in Australia in 1902, she was not the first to practise the law in NSW: that honour went to Marie Byles. When Evans graduated, women
were in fact not permitted to practise law. It was an injustice Evans worked for the next two decades to overcome. Marie Byles was the recipient of Evans’s campaigning efforts. A rabble-rouser from the very beginning, Byles’s life was almost too bombastic to be believed. After winning a scholarship to the University, she graduated with a degree in arts in 1921, followed by law in 1924. She was the first woman admitted as a solicitor in New South Wales, a feat only managed due to the diligence and persistence of Evans. When Byles established her own practice in 1929 – the first woman in New South Wales to do so – she quickly became known not just for her sharp legal mind but for her nifty organisational skills, with a reputation for speedily processing matters. She also gained a reputation for taking on female clients, assisting them with divorce settlements at a time when divorce was still rare and stigmatised.

For her part, Evans never practised law. She applied twice to the New South Wales Bar and was rejected twice. She applied to the English Bar, also unsuccessfully. Finally, after her efforts to overturn the ban on women working in the law came to fruition, Evans successfully applied to the New South Wales Bar – the third time, it seemed, was the charm. But on graduating, even though Evans was made several lucrative offers of employment, she declined. A visionary to the last, Evans was concerned that it had been too long since she had studied the law, and worried that being the first woman to practise in her state might be detrimental to her sex.

Byles, by contrast, was a polymath renaissance woman, never too far from adventure. A keen traveller, she climbed mountains – literally, this time – across Norway, Canada and England, and was an early Western visitor to modern China. There, she discovered an affinity for Buddhism, and returned to Australia eager for more people to know about it. A conservationist, she campaigned for land rights and led bushwalking expeditions. Byles frequently contributed to newspapers, including *The Australian Women’s Mirror*, where she opined on legal issues affecting her female readers, including a memorable imploration to keep their names upon marriage.

Largely forgotten to history, Ada Evans and Marie Byles have had an influence and impact that they might find difficult to believe, over one hundred years after their lives converged through their connection to the University of Sydney’s Law School. For the generations of women who have come after them – consciously or not – they made the law possible, and penetrable.

**Written by Lauren Sams**

Source: Australian Dictionary of Biography and University of Sydney references.
give.sydney.edu.au/adaevans
CLASSNOTES

MARGARET GUIDER
MEd '93
Guider taught in two local schools before taking a 10-year break to get married and raise a family. After returning to teaching, where she was supervising teachers who were fresh from university, she enrolled in a Master of Education to build on her Teachers’ Certificate. When she moved to Forster years later, her love of learning led her to work for a local community college and Mission Australia as an English tutor, while an interest in family history inspired her to spend 20 years as a library genealogy volunteer. Now, Guider’s priorities are keeping physically and mentally active. An engaged member of her community, she is Chair of her local Community Health Advisory Committee and has recently planned a successful local forum on the topic of ageing at home.

REBECCA MATTISON
PhD (Science) ’20
Mattison graduated with a PhD during the 2020 lockdown, and returned to her home town, Perth, to work in analytical chemistry laboratories. Soon after, she received an exclusive two-year postdoctoral position at pharmaceutical and life sciences company Bayer, and relocated to Germany. In a collaboration with the Australian Grains Research and Development Corporation, she works alongside renowned researchers (and, coincidentally, a fellow alumna and friend). She synthesises new molecules that have the potential to become herbicides, and tackles key challenges facing modern agriculture. Despite the challenges of moving overseas and establishing her research career in the midst of the pandemic, Mattison is enjoying working in an area she’s passionate about on the other side of the world.

DR REGENT LEE
MSurg ’08
As a vascular surgeon, Lee describes the opportunity to complete his master’s degree under the supervision of Professor John Fletcher and Dr Heather Medbury as setting a strong foundation for a clinical academic career path. This path has seen Lee pursue a DPhil (PhD) in Cardiovascular Medicine at the University of Oxford. A current recipient of a Future Leaders’ Fellowship, the most prestigious research fellowship awarded by the UK Research and Innovation Council, Lee is developing precision medicine strategies for patients with vascular diseases, such as abdominal aortic aneurysms, while remaining clinically active as a vascular surgeon. His innovations have led to multiple patents and a University of Oxford spin-out company, AlSentia, of which he is co-founder and Chief Medical Officer.

BRUCE MOIR
BA ’67
After more than 35 years in filmmaking, Moir knows a thing or two about moving people with moving images. He discontinued his honours year in 1968 to take an opportunity as a film production assistant and never looked back. Throughout his career, he produced dozens of educational films, documentaries and short dramas, winning various awards along the way, including a 1988 Gold Logie for most popular miniseries, *The Shiralee*. In 1989, he took on the role of Executive Producer for Film Australia, and was promoted to CEO shortly after. Stepping down after almost a decade, Moir served another seven years in consulting roles, which included six on the Australian Film Commission.
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

JESSICA IRVINE
BEC (Hons) ’03
Irvine is a leading economics journalist, personal finance expert and bestselling author. As a senior economics writer and columnist at The Sydney Morning Herald and The Age, she has devoted her career to sharing her opinion on economic issues and chronicling her own personal finance and investing journey through her Instagram @moneywithjess. Her start in journalism came soon after graduation, when her professor encouraged her to interview for a cadetship at the SMH. These days, Irvine is the author of two weekly columns for Nine and also publishes a weekly e-newsletter, Money with Jess. Her latest book, Money with Jess: Your Ultimate Guide to Household Budgeting, was released earlier this year. Her money mantra is simple: “Spend less than you earn; invest the rest.”

ISAAC HONOR
BA, BCom ’17
After eight years working in finance and consulting, Honor co-founded AusAir, a high-tech filtration mask company, with fellow commerce classmates – his brother, Elias, and friend, Jack. Their first product was the AirFlex Mask, which filters over 99% of PM0.1 (ultra-fine particles), with botanically infused filters. In 2018, Honor and his team won the prestigious Sydney Genesis prize and today they have over 60,000 customers in more than 80 countries. In 2021, he led a study with the NSW Ministry of Health to design commercially compostable surgical respirators and masks, which he plans to release in late 2022. This year he is recognised as one of the top entrepreneurs in Asia, featuring in Forbes 30 Under 30 Class of 22, and will be returning to the Sydney Genesis program, this time as a mentor.

BARRY DUBOVSKY
B Int S ’07
Dubovskv is the Chief Operating Officer at MultiChoice Connected Video, a sub-Saharan African video entertainment company that rivals Netflix, Amazon Prime and Disney+. After starting his career in strategy and consulting for Deloitte and Telstra, he took on the challenge of leading the multinational media and entertainment group to grow their market share of pay TV households across Africa. Currently based in Dubai, Dubovsky regularly travels to South Africa, Nigeria and Kenya to stay in tune with the African market. He says the unique challenges of growing a streaming service in developing countries makes his role extremely exhilarating and rewarding.

VALERIE HOOGSTAD AM
BA ’63
Hoogstad says she has seen Australian society undergo significant transformation, having commenced her University studies in 1960, when the landscape for women was changing. Through paid employment and volunteering, she has supported and upskilled people from all walks of life. This has included mentoring former prisoners. When she found that many were illiterate, with limited materials to help them learn, Hoogstad wrote a series of textbooks to fill the gap. Later hired as a lecturer at the University of Technology, Sydney (UTS) and the Australian Catholic University (ACU), she saw the introduction of international students to Australia, and went on to become ACU’s Director of International Students. A lifelong volunteer who currently serves on several boards, Hoogstad was named a Member of the Order of Australia earlier this year.
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 PREVENTING WILDFIRES**
Wildfires differ from ordinary, seasonal fires – they are uncontrollable. Australia’s Black Summer bushfires are an example of this. My research, as a co-author of a United Nations Environment Programme report, indicates that wildfires will grow by 50 percent globally by the end of the century. With the current La Niña weather system and wetter conditions allowing plant life to flourish, followed by drought, there will be more fuel, and Australia is likely to see yet more bushfires.

Many actions can help to reduce this risk, including learning from Indigenous knowledges, stronger international cooperation and greater spending and involvement by governments and communities in planning and prevention.

**Professor Elaine Baker**
Baker became interested in geology as a kid with a rock collection, managing to turn her interest in the natural world into a career. A researcher in the School of Geosciences, Baker is the University’s inaugural UNESCO Chair in Marine Science and the Director of the GRID-Arendal office, a collaborating centre of the UN Environment Programme, and has worked at the University of Sydney for over 30 years.

**ON HEALTHY LIFESTYLES**
Many common chronic diseases, such as heart disease, diabetes and cancer, are largely preventable. Unhealthy behaviours, challenging life circumstances and harmful environments could expose individuals to heightened risk of chronic diseases and early death. My research concerns the complex relationships across these structural and lifestyle risk factors, so that we can develop and implement public health and clinical guidelines to improve population health and inform and advocate for policy changes. Currently, I am particularly looking at how to engage different decision makers to develop policies across multiple sectors, as well as interventions to promote an active lifestyle in Australia.

**Associate Professor Melody Ding**
Ding is passionate about preventing chronic disease and promoting an active, healthy, sustainable lifestyle. Many of her studies have contributed to informing the public about healthy living. She is an epidemiologist and population behavioural scientist at the Charles Perkins Centre and the Faculty of Medicine and Health.

**Professor Nathan Lo**
Lo became interested in termites and other weird organisms in the mid-90s and has been studying their DNA ever since. He is an evolutionary biologist in the School of Life and Environmental Sciences, focusing on genome evolution, molecular ecology, and phylogenetics of arthropods. He has published over 150 scientific papers, which have been cited over 9000 times.

**ON HOMEOWNER HEADACHES**
All-female termite colonies which we discovered in Japan are potentially bad news for Australian homeowners. Drywood termites don’t require moist conditions to burrow into wood and can be difficult to eradicate. With postdoctoral researcher Dr Toshihisa Yashiro, I discovered that these colonies most likely developed when females from one lineage mated with males from another, as they moved from a smaller island to mainland Japan by boat last century. Their offspring are likely to be more robust, can clone themselves and don’t require a male to procreate. Our research highlights the importance of ensuring that these more damaging termites are not allowed to establish themselves in Australia.

**Professor Nathan Lo**
Lo became interested in termites and other weird organisms in the mid-90s and has been studying their DNA ever since. He is an evolutionary biologist in the School of Life and Environmental Sciences, focusing on genome evolution, molecular ecology, and phylogenetics of arthropods. He has published over 150 scientific papers, which have been cited over 9000 times.
Fisher Library – then and now. Its rooftop terrace will soon be redeveloped for students and the University community to enjoy. University of Sydney Archives, 1960, G3 224 0094
Leadership for raising your sights, for making an impact, for all of us, for good.

sydney.edu.au/leadership