



UNSW
SYDNEY

Australia's
Global
University

2025 Strategy

In Action

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From the Chancellor

UNSW's 2025 Strategy provides an ambitious and altruistic pathway to guide the University towards greater global impact and future success.

As a proud UNSW alumnus and Chancellor of this University for more than 12 years, I have never seen a more ambitious time in UNSW's history.

The 2025 Strategy and the program of initiatives it includes will set up UNSW to become Australia's Global University – excelling in research and teaching and with a reputation for social justice, thought leadership, and genuine global impact.

Most importantly, the Strategy will enable us as a university to make a real difference in the world, and through our teaching, research, and partnerships improve the lives of those around us.

Watching the development and now the implementation of the Strategy has been enormously satisfying. Following extensive consultation and a year after officially launching the Strategy, we have laid solid foundations for growth and begun building resilience into our systems so we can compete and thrive in the future.

We know that to achieve our vision, we need to continue to improve, to innovate, and to nurture our greatest asset – our people – as we continue this journey.

Undoubtedly, change can be difficult. But to 'remain as we are' was never an option. We are already experiencing the impact of changing student and employer expectations – and the potential of new technology is only just being understood across every aspect of the learning and research journey.

Meanwhile, in an era of budgetary constraint due to reduced government funding, universities that aspire to be global leaders will need to create their own growth and expansion initiatives, especially in the area of advanced research.

I am proud to see UNSW doing just that: forging new paths and creating new opportunities.

Importantly, we are not doing this in isolation. Today, no organisation can afford to work independently of the community it serves – especially not a university. I am pleased to see UNSW establishing vital new partnerships and alliances, both here and internationally. These collaborative initiatives will enable us to share new ideas, create new jobs, and generate economic growth for Australia and for the world.

During my time as Chancellor, I have watched UNSW evolve and adapt to its changing environment, continuing to improve year after year. I am proud of what this Strategy has already achieved and of the clear direction in which we are heading. I look forward to sharing the rest of the journey.



David Gonski AC
Chancellor, UNSW Sydney

From the President and Vice-Chancellor

I am delighted to introduce this update on UNSW's 2025 Strategy.

When we published the 2025 Strategy in October 2015, after nine months of extensive consultation with the UNSW community, we said it was unashamedly bold, ambitious, idealistic, and altruistic. After its publication, over 90% of our staff, when surveyed, said they were supportive or strongly supportive of what the Strategy aimed to achieve. Notwithstanding that result, there were some doubts about the feasibility of delivering and funding such ambitious goals. Those concerns were addressed in a detailed plan for implementing the Strategy and for generating the additional \$3 billion of funding required through to 2025.

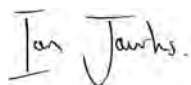
Implementation of the Strategy began in earnest towards the end of 2016. It has involved an extraordinary effort by our professional and academic staff in every Faculty, Centre, and Division. The scale and speed of change in 2017 was unprecedented and I realise how challenging this was for everyone. The outstanding work by the UNSW community, for which I am immensely grateful, has led to the progress outlined in this 2025 Strategy update.

Questioning the scope and ambition of our strategic aims was entirely reasonable. Could we really deliver research excellence that placed UNSW in the top 50 universities globally, while transforming our approach to teaching and learning? And could we do that at the same time as advancing equity and diversity, thought leadership,

knowledge transfer, and global development? I'm delighted to say that this update confirms the answer is a resounding 'yes'. I am more convinced than ever that each component of the Strategy strengthens the others and drives our overall progress. The question of whether we could make the changes needed to mobilise more than \$1 billion from our existing resources while also increasing our total revenue by the same amount has also been answered in the affirmative. After rigorous financial scrutiny, the UNSW Council has approved our plans for a \$3 billion investment in the 2025 Strategy.

We are now beginning to see the rewards of our effort, planning, and investment, and we will achieve much more over the next few years. Our focus will remain on using the outstanding expertise, energy, and infrastructure available to us at UNSW. Harnessing these resources will maximise our positive impact on the lives of people, not only in NSW and Australia, but in the global community. The concept of a global university striving to serve society is a powerful one and I cannot emphasise enough the enormous potential of universities to improve and transform lives. We will of course face challenges, both financial and practical, and there is no doubt that the role, efficiency, and effectiveness of universities in Australia is under serious scrutiny. At UNSW, we will stay true to the vision of the university as a servant of society and do our best to explain the critical importance of universities to Australia in the 21st century.

The progress described in this update covers research, education, innovation, thought leadership, social responsibility, international partnerships, and global developments. There are wonderful examples of both individual excellence and outstanding teamwork, and I am confident we are only witnessing the start of what will be an incredible new era for UNSW. Above all, I am tremendously proud that the successes we celebrate in this document are due to the same attributes that have seen UNSW succeed for almost 70 years – the tradition of collegiality and shared commitment by our students, staff, and alumni.



Professor Ian Jacobs
President and Vice-Chancellor, UNSW Sydney

Strategy at a Glance

The 2025 Strategy blueprint started from a belief that the grand challenges of the 21st century needed a fundamentally different approach to university thinking: the world's solutions could only be identified through more profound cross-disciplinary collaboration. In an increasingly interconnected world, UNSW needed to accelerate and deepen its proud global tradition and be even more forward-looking and outward-facing.

The powerhouse of ideas and initiatives in the Strategy were the result of wide-ranging consultation during 2015. It's an ambitious 10-year manifesto that leaves no part of the university experience untouched. The Strategy is underpinned by three key themes: academic excellence, social engagement, and global impact. It unashamedly aspires to position UNSW as a global leader of change and innovation, with an altruistic desire to transform the lives of people and communities.

This was not a document that was ever going to sit on a shelf. The overwhelming support for its aims are matched by the sweeping ambitions it details. Now, on the cusp of UNSW's 70th anniversary, it is moving apace, embraced by staff, students, and alumni, and government, community and industry partners. Abroad, on campus, and in our own Australian backyard, it is being translated from strategy into action.

A. Academic Excellence

We are delivering life-changing research, and shaping the future of higher education through our exemplary, student-led educational experience.

A1: Research quality

Our research environment produces outcomes competitive with any of the great universities worldwide, and our Scientia Fellowship career track fosters research excellence for tomorrow.

A2: Educational excellence

We are creating globally minded, in-demand graduates via our personalised, digitally integrated approach, outlined in the UNSW Scientia Educational Experience.

B. Social Engagement

We are leading the discussion on the greatest challenges of our time, translating our discoveries into social benefit and championing equality to create a more just society.

B1: A just society

Our equity, diversity, and inclusion programs advance global justice, enhancing access and promoting progression for students and staff of all backgrounds.

B2: Grand Challenges

We put society's major issues on the public agenda, harnessing our intellectual capability to facilitate important discussions through UNSW's Grand Challenges program.

B3: Knowledge exchange

Our close partnerships with industry and government enable our entrepreneurs and researchers to translate their innovations into applications for real-world impact.

C. Global Impact

Our education pathways are reaching more students worldwide. Our top-tier partnerships aid marginalised and disadvantaged communities across the globe.

C1: Internationally engaged education

Attracting more students from India, developing a new diploma pathway into Science and Engineering degrees, and investing record funding to help UNSW students spend time studying or working overseas during their degree are just some of the ways UNSW delivers a globalised student experience.

C2: Facilitating strategic partnerships

Deep partnerships with government, industry, and major universities expand our global footprint, fostering collaborations on important international issues.

C3: Contributing to disadvantaged and marginalised communities

Our new Institute for Global Development aims to improve lives by connecting the work of researchers and people who need solutions to issues in their community; and by forging strategic partnerships with universities and NGOs in places like Uganda, Myanmar, and the South Pacific, as well as Australia.

D. Enablers

To meet the challenge of achieving our Strategy, we are optimising our systems, processes, and environments, creating a safe, respectful culture for work and study.

D1: People and culture

Our renewed focus on succession planning, career progression, and performance promotes excellence, collaboration, innovation, respect, and diversity.

D2: Operational effectiveness

We have created efficiencies across our systems and processes, and secured new and diverse revenue sources in our quest to become Australia's Global University.

D3: World-class environments

Investing in cutting-edge physical and digital environments creates inspiring, accessible spaces that support the wellbeing of our staff and students.







Strategic Priorities

- A. Academic Excellence
- B. Social Engagement
- C. Global Impact
- D. Enablers



Academic Excellence

A1: Research quality - a world leader

Our direction to 2025

The world is experiencing unprecedented change. How will we develop the planet's resources, combat climate change, and control waste? How do we tackle our growing energy needs, population growth, and development? Will artificial intelligence and robots replace 70% of the jobs we do now? And what ethical compass will guide us in this uncharted world?

What's the future of medical technology, gene modification, and bio-artificial organs? As our population ages, how will we care for the elderly? How will we navigate human rights issues, forced migration, gender parity, and wealth distribution?

UNSW is dedicated to addressing these issues and more, harnessing disruptive approaches and drawing together diverse disciplines, teams, and institutions to undertake research that will change our world for the better.

We have set ourselves the goal of being among the leading research-intensive universities worldwide, known for innovative, pioneering research with a global impact.

Investing in current and future talent, a commitment to research that makes a difference, forging strong global partnerships, supporting our academics to tackle humanity's major challenges, and state-of-the-art infrastructure are just some of the ways we are already delivering on this.

Highlights

Brightest minds leading research

More than \$140 million has been invested so far in bringing outstanding researchers from around the world to UNSW – academics in the top 5% of their field and PhD candidates of exceptional potential. UNSW launched the SHARP and Scientia Initiatives, which offer unrivalled career development support for future research leaders through a combination of tenure-track, mentoring, and professional development. We have welcomed 250 world-class academics and outstanding PhD candidates who share our strategic ambition via these initiatives.

Re-imagining the future

UNSW's commitment to interdisciplinary research will continue to 2025 and beyond through our new UNSW Futures program, creating new institutes focussed on finding solutions to the issues of our age through innovation and collaboration.

Powerhouse partnerships delivering real impact

Our strong industry and government partnerships promote knowledge exchange and real-world impact. By establishing new research networks across diverse disciplines, we are making advances in health, space engineering, agriculture, the environment, and more.

Academics' outstanding contributions acknowledged globally

Since the launch of our 2025 Strategy in 2015, our academics have been recognised on the global stage for research that transforms people's lives, often leading the way in their discipline.

World-class infrastructure supporting world-changing research

New state-of-the-art technology platforms and facilities enable our researchers to realise their full potential. Our 7,000-strong research community will benefit from our \$250 million investment and commitments in research infrastructure over the past 24 months, with another \$200 million in the pipeline for delivery by 2025.

SHARP program

UNSW's new SHARP (Strategic Hire and Retention Pathways) program is investing almost \$900 million over 10 years to attract researchers within the top 5% of their field internationally to the University, and to create an environment where they can focus on outstanding research.

To date, more than 20 research 'superstars' have joined UNSW via this program across a broad range of disciplines including economics, social policy, sea-level science, oceanography, financial risk management, history, geography, energy, electricity, astrophysics, and solar power.

Transforming molecules into nano-machines



A leading chemist of our time, Nobel Laureate Professor Sir Fraser Stoddart, makes machines out of molecules that can be used for new materials and energy storage systems. Sir Stoddart

brings expertise in molecular nanotechnology, systems chemistry, and synthetic biology to UNSW from 2019. He was joint winner of the 2016 Nobel Prize for Chemistry. Sir Fraser will also teach undergraduate courses in chemistry.

Addition to our world-leading solar team

Associate Professor Ned Ekins-Daukes from Imperial College London is a solar photovoltaic researcher specialising in developing highly efficient devices for the real world. He aims to increase the efficiency of solar cells and is one of few people in the world to have helped implement >40% efficient device technologies (and briefly held the world record).



Challenging our understanding of population growth

A world-leading historian of modern imperialism and environmental history, Professor Alison Bashford radically recast our understanding of the

world's most famous book on population *An Essay on the Principle of Population*. She joins us from the University of Cambridge and has an interest in the history of gender and colonisation. Professor Bashford's research focuses on lessons of the past to provide new insights into current geoscience, demography, and population matters.

Influencing social policy in China



Associate Professor Bingqin Li has been instrumental in introducing international social policy research to China. She is an expert in China's development and the relationship of social and economic inequalities with social policy and

governance. Her research has a focus on urbanisation, the ageing society, and fast economic growth.

Google Maps for buildings

Geospatial scientist Professor Sisi Zlatanova, a leading expert in 3D mapping of public space, joined UNSW Built Environment from Delft University of Technology in the Netherlands to head a research centre that will produce 3D digital maps of Sydney's buildings and infrastructure. Working across disciplines, including city analytics, landscape architecture, and city planning, the Centre will advance the data of the city's buildings to the third dimension to improve accessibility, safety and emergency response procedures.



Planning energy flows of the future

A national authority on SMaRT Electricity Grids and power electronics, Professor Joe Dong translates world-leading energy

research for industry partners. His work on power-system planning and stability, renewable energy grid connection, big data analytics, and artificial intelligence and computational methods is adopted by industry partners such as Siemens, CISCO, Ausgrid, and Transgrid.

Gaming the markets

Internationally renowned experimenter and theorist Scientia Professor Jacob Goeree has influenced the design of major spectrum auctions worldwide. In the US, he co-designed and tested the 700MHz auction, where the government sells the right to transmit signals over specific spectrum bands, generating a record US\$19 billion in revenue. He is an authority on the interdisciplinary field of market design, combining game theory, computer science, and experimental economics. His designs have also supported the NSW fisheries industry, and pollution permits for the regional greenhouse gas initiative in the US.

Extreme value for risk management

A leading scholar in actuarial science and quantitative risk management, Professor Qihe Tang is an expert in statistics, assessing the probability of events that are more extreme than previously observed. He joins us from the University of Iowa, bringing his expertise in 'extreme value theory' to help the financial markets, developing tools for pricing catastrophe bonds and estimating credit portfolio losses.

Engineering advances transform defence

Professor Chun Hui Wang's research looks at advanced composites, safety-critical structures, and solid mechanics within defence and industry. He is working with Boeing to develop carbon wheels that are lighter, stronger, and more durable than alloy, resulting in reduced fuel consumption and increased aerodynamics. He has made significant contributions to research, teaching, and engineering practices both in Australia and overseas.

Boosting biomed and energy collaboration

Professor Liming Dai's groundbreaking work focuses on carbon nanomaterials for the development of biomedical tools such as diagnostic sensors, imaging agents, and drug/gene delivery systems. He brings expertise from Case Western Reserve University (CWRU) in the US and is establishing the UNSW-CWRU International Joint Laboratory to initiate and enhance collaboration with groups both in the US and China.



Reading the stars

Associate Professor Sarah Brough is a world-leading astrophysicist from the Australian Astronomical Observatory, and her research examines how galaxies change with time and under what conditions. She conducts surveys on rare 'mega-galaxies', thousands of times the size of the Milky Way, helping us understand how galaxies form and evolve.



Improving the health of users

Professor Tim Rhodes is a world-leading sociologist in addiction and health. His research focuses on the social aspects of access to care in relation to drug use, addiction, HIV, and Hepatitis C. He joins UNSW from UCL. His sector-leading program highlights the importance of 'implementation science', a key driver of global funding priorities in health research.

'Star' materials propel modern tech

Material Scientist and Engineer Professor Tom Wu explores the properties of new materials and their applications. He joins UNSW from King Abdullah University of Science and Technology in Saudi Arabia. His research focusses on a large family of compounds with crystal structures called perovskite and their applications, ranging from field transistors to lighting devices and solar cells.



Understanding the threat of rising sea levels

The world's leading expert in sea-level science, Professor John Church specialises in estimating and understanding global and regional sea-level rise. He played a major role in the Intergovernmental Panel on Climate Change and World Climate Research Programme. His research on sea-level rise caused by global warming includes vital discoveries about how the oceans regulate our climate system and respond to global warming.

UNSW Scientia Initiatives

In addition to attracting internationally established academics, UNSW is committed to developing the rising stars of research through its Scientia Initiatives, which we believe are setting the gold standard globally for academic career development.

The UNSW Scientia Fellowship program for early to mid-career researchers and the UNSW Scientia PhD Scholarship scheme provide recipients with generous financial packages and unprecedented career support, including professional development and mentorship to establish a lifelong community of outstanding researchers within the University.

Following a global recruitment drive reaching 150,000 people, we appointed more than 60 Scientia Fellows and more than 200 Scientia PhD Scholars. The goal is to reach more than 1,000 fellows and scholars by 2025.

Unparalleled investment in UNSW Scientia Fellows

- Continuing tenure-track in return for sustained research excellence
- Centrally supported career coach and mentor
- Planned time out for professional/personal reasons with guarantee of position held
- Leadership opportunities within 2025 initiatives across academic excellence, social engagement, and global impact

Groundbreaking UNSW Scientia PhD Scholarships

- \$40,000 a year stipend for four years
- Tuition fees covered for the four-year duration
- Coaching and mentorship through highly personalised leadership development plan
- Opportunities to participate in innovative research projects under the guidance of world-class supervisory teams
- Additional funding of up to \$40,000 to build career and establish international collaborations

UNSW Scientia Scheme supports our commitment to gender, equity, and diversity

62 UNSW Scientia Fellowships appointments

36 internal appointments

25 women in science, technology, engineering, maths and medicine (STEMM) disciplines*



3 Indigenous researchers*

10 international researchers

7 interdisciplinary researchers*

161 UNSW Scientia PhD Scholarships accepted (2018)

2 Indigenous scholars*

62 women in (STEMM) disciplines*



37 interdisciplinary scholars *

101 international scholars

*Key priority areas identified in the 2025 Strategy



UNSW is committed to investing in outstanding researchers at all stages of their careers and to facilitating the kinds of global connections that will cultivate the academics of the future. //

Professor Nicholas Fisk, Deputy Vice-Chancellor (Research)

New Scientia Fellows



Dr Jason Wu is a Senior Research Fellow at the Food Policy group at The George Institute for Global Health and a Conjoint Senior Lecturer at UNSW's Faculty of Medicine. His research focuses on discovering nutritional risk factors for cardiometabolic diseases including coronary heart disease, stroke, atrial fibrillation, and diabetes.



Dr Amanda Porter conducts research in the areas of policing and criminal justice, with a particular interest in night patrols, alternative policing, police culture, and police reform since the Royal Commission into Aboriginal Deaths in Custody. Dr Porter currently sits on the editorial board for the journals *Ngilya: Talk the Law*, *Journal of Indigenous Policy*, and *Australian and New Zealand Journal of Criminology*. She is of Brunga Yuin descent.



A Senior Research Fellow in UNSW's School of Photovoltaic and Renewable Energy Engineering, Dr Brett Hallam will continue his research into laser processing and defect engineering for silicon solar cells as part of his Scientia Fellowship. A focus of his current research is improving the fundamental understanding of hydrogen passivation mechanisms in silicon solar cells to overcome the negative impact of performance-limiting defects, work that was recognised with the NSW Premier's Award for Energy Innovation.



Dr Hazel Easthope is an Associate Professor and Scientia Fellow at the City Futures Research Centre at UNSW Built Environment. Her research focusses on the development, management, governance, and planning implications of private apartment buildings and estates, and the lived experiences of their residents. She has a particular interest in residential satisfaction and the intersections between mobility, identity, and home, and regularly consults with government, community, and peak body stakeholders.

UNSW Futures

The UNSW Futures initiative presents a bold framework for addressing humanity's major challenges through new innovative interdisciplinary and cross-faculty research institutes. UNSW will invest up to \$200 million in new and emerging areas that build on and link our existing strengths.

Announced in May 2017, this development will adopt innovative approaches to research to tackle the challenges of the 21st century, while enhancing UNSW's position as a big-picture, visionary university.

UNSW Futures will be driven by our research expertise and our quest for excellence, providing a powerful and exciting vehicle for our thought leadership, educational, global development, recruitment, and philanthropic agendas.

After a University-wide consultation process in 2017, it is anticipated that there will be up to 12 Futures Institutes, with up to six to be approved in the first round to begin in 2018.

Research partnerships

Our landmark partnerships lead knowledge exchange in Australia and globally.

The George Institute for Global Health

The partnership between UNSW and The George Institute will help shape the future of medical research. Founders and principal directors of The George Institute, Professors Stephen MacMahon and Robyn Norton, said: "UNSW and The George Institute are both world-leading organisations driven by a common purpose – to improve the lives of millions of people, not just here in Australia but around the world".

"Chronic diseases like heart attacks, stroke and diabetes are on the rise globally and we need solutions right now to tackle this growing epidemic," Professor MacMahon said. "Partnering with UNSW Sydney ensures we can deliver both affordable and accessible treatments and prevention programs that will make a difference, and especially to those living in low- and middle-income countries."

NSW Smart Sensing Network

With a NSW Government investment of \$700,000, the NSW Smart Sensing Network uses smart sensor technologies to tackle challenges in agriculture, health, the environment, transport, and industry. Co-led by UNSW Scientia Professor Justin Gooding and University of Sydney Professor Ben Eggleton, the Network brings together experts in chemistry, physics, nanotechnology, and ICT to work on cutting-edge smart sensors.

Flagship projects include investigating using ion-mobility mass spectrometers – used to screen for explosives at airports – in health and environmental applications, creating sensors to identify gas emissions in the resource industry, utilising optical sensors on smart phones to monitor people's vital signs, and using monitors to track native animals in the wild.

Australian Centre for Space Engineering Research

Australia's growing space sector has been boosted by UNSW Canberra's new Australian National Concurrent Design Facility, jointly funded by UNSW Canberra and the ACT Government, and supported by a partnership with French Space Agency CNES. An Australian first, the facility will develop space missions from start to finish.

UNSW's flagship space program, UNSW Canberra Space, was established with \$10 million in strategic funds and is now the leading space capability in Australia. In 2017, the program successfully launched into orbit its first cube satellite 'Buccaneer', the first of many Canberra missions.

UNSW Canberra also secured a \$10 million contract with the Royal Australian Air Force to build three spacecraft and carry out two space missions in 2018 and 2019. The partnership will develop new ways to enhance Australia's future defence space capability. The first low Earth orbit mission will lift off in early 2018.

UNSW Defence Research Institute

Launched in February 2018, the new UNSW Defence Research Institute will deliver world-class defence research to enhance Australia's security. Based at UNSW Canberra, the Institute will share knowledge across academia, government, and industry, as well as with global policy makers.

UNSW Canberra Rector, Professor Michael Frater, said: "UNSW excels in areas such as cyber security, space, systems engineering, artificial intelligence, logistics, hypersonics, defence-related public-sector management, and conflict studies. It's the natural home for Australia's largest university-driven defence research institute."



Research impact

Our 2025 Strategy is all about making a difference to our society. Since its launch in 2015, we have been proud to see many colleagues recognised by their peers nationally and internationally for their achievements.

Scientia Professor Michelle Simmons named 2018 Australian of the Year

Professor Simmons was honoured in recognition of her pioneering research and inspiring leadership in quantum computing. She aims to build a quantum computer powerful enough to solve problems in minutes that would otherwise take thousands of years.

As Director of the ARC Centre of Excellence for Quantum Computation and Communication Technology, she leads a team of more than 200 researchers across Australia, developing new technologies for quantum computing, information storage, and communications.

Professor Simmons has been awarded two ARC Federation Fellowships and currently holds a Laureate Fellowship. She received an international L'Oreal-UNESCO Woman in Science Award in 2017, a Foresight Institute Feynman Prize in Nanotechnology in 2016, for the new field of atomic electronics, which she created, and the Thomas Ranken Lyle Medal in 2015 for outstanding research in physics.

Scientia Professor Michelle Simmons with Dr Bent Weber in one of the UNSW quantum computing laboratories

Professor Andrea Morello

Received the inaugural Rolf Landauer and Charles H. Bennett Award in Quantum Computing in 2017 from the American Physical Society.

Associate Professor Lisa Alexander

Received the 2017/18 Outstanding Service Award from the World Meteorological Organisation Commission for Climatology.

Scientia Professor Ross Buckley and Professors Megan Davis, Eileen Baldry, and Rick Richardson

Appointed Fellows of the Academy of Social Sciences of Australia in 2017.

Scientia Professor Veena Sahajwalla

An engineer who invented an environmentally friendly process for recycling plastics and rubber tyres in electric arc furnace steelmaking, Professor Sahajwalla became the first woman to be awarded the Jubilee Chair & Professorship by the Indian Academy of Sciences for research on waste recycling in 2017.

Scientia Professor Justin Gooding

Awarded the Walter Burfitt Prize, the Archibald Liversidge Medal from the Royal Society of NSW, and the Eureka Prize for Outstanding Mentor to Young Researchers in 2017.

Scientia Professor Jane McAdam

An expert adviser to the UN High Commission for Refugees, Professor McAdam was honoured as one of Australia's Top 100 Women of Influence and received the 2017 Calouste Gulbenkian Prize for research on complex, legal challenges of forced migration.

Scientia Professor Henry Brodaty

Won the Ryman Prize for world-class research to enhance the quality of life for older people.

Associate Professor Rebecca Guy

Received the Elizabeth Blackburn Fellowship at the 2017 National Health and Medical Research Council Research Excellence Awards.

Scientia Professor Trevor McDougall

Received the 2017 NSW Premier's Prize for Excellence in Mathematics, Earth Sciences, Chemistry and Physics.

Dr Adeniyi Borire

Awarded the 2017 American Association of Neuromuscular and Electrodagnostic Medicine Golseth Young Investigator Award.

Scientia Professor David Waite

A specialist in environmental chemistry, Professor Waite was elected to the United States National Academy of Engineering in recognition of his distinguished contributions to engineering, specifically for his leadership in water treatment and environmental management.

Scientia Professor Matthew England

A physical oceanographer and climate scientist, Professor England studies what controls ocean currents and how these currents affect climate and climate variability. He was awarded the 2017 Tinker-Muse Prize for outstanding leadership on Antarctic science research and elected an American Geophysical Union Fellow in 2016.

Research infrastructure

UNSW is investing in research infrastructure to expand the scale and capability of our existing facilities and services. There is a strong focus on building collaborations through shared infrastructure and allocation schemes that target our strategic areas of research. The following are major initiatives.

Research Infrastructure Scheme

Via this internal competitive grant scheme, UNSW has committed \$116 million to 2025 to fund new and enhanced infrastructure across all our Faculties. The Scheme funded 80 projects at its launch in 2017 and will deliver a major increase in availability and support for high-end research infrastructure at UNSW.

Research Technology and High-Performance Computing

This initiative delivers major new shared capacity in research computing by leveraging the National Computing Infrastructure (NCI) supercomputing facility. In 2018, more than 100 million core-hours will be allocated to UNSW researchers. A new team is being established to support these services through to 2025.

Human Research Imaging Facility to open in 2018

This facility will be established in collaboration with Prince of Wales Hospital and Neuroscience Research Australia in 2018. The first phase of development focuses on magnetic resonance imaging (MRI) and provides UNSW and our research partners with access to cutting-edge equipment in an integrated clinical setting.

Cryo-Electron Microscope Facility

Due to open in 2018, this new facility for imaging medical, biological and soft matter samples is being developed in partnership with the Victor Chang Cardiac Research Institute (VCCRI). It will be located in the Hilmer Building and builds on UNSW and VCCRI imaging expertise.

Strategic Development of the Mark Wainwright Analytical Centre (MWAC)

MWAC is already one of the most mature and recognised shared infrastructure facilities in Australia. This project provides for the ongoing development and enhancement of this core facility, the shared equipment, and the associated expert support staff.

2016

Scientia Clinical Research Centre

November 2016

The first publicly funded, purpose-built early-phase clinical trials centre in NSW, the centre supports clinical trials for the development and evaluation of cancer therapies, heart disease, strokes, and a range of neuro-psychiatric disorders, to close the loop between cancer patients and cancer services.

Bright Building

November 2016

This world-class health care, medical research and state-of-the-art cancer treatment centre brings together elite researchers and clinicians for the rapid translation of scientific discoveries into clinical care.

UNSW continues to invest significantly in its academic and student communities, creating a world-class research and learning environment with a plan to spend \$3.5 billion on buildings, equipment and high-tech platforms by 2025.

Our facilities enable the delivery of globally relevant research in line with our aspiration to be ranked among the top 50 universities in the world. The development of the South East Light Rail to service the University and Randwick Health and Education Precinct, as well as ongoing campus redevelopment, ensures a vibrant research, student, and teaching hub.

After 2020, the Upper and Western Campus, Civil Engineering, and Chemical Sciences Buildings will be redeveloped.

2017

**Ramaciotti Centre for Genomics
May 2017**

New custom-designed facilities house the Centre, which is the largest university-based facility offering genomic services to academic and industry-based research groups Australia-wide. The Centre will accommodate a full suite of genomics technologies, equipment, and expertise to assist researchers to deliver internationally competitive genomic services.

2018

**Electrical Engineering Building Redevelopment
December 2018**

The Department of Planning and Environment has approved the refurbishment to provide upgraded classroom and research facilities for industry, school and community engagement, and a best practice research workplace that supports multidisciplinary collaboration and interaction.

**Biological Sciences Stage 2
January 2019**

Stage 2 of the Biomedical Precinct Extension, involving the refurbishment of the existing Biological Sciences Building, will deliver world-class facilities including undergraduate teaching laboratories and contemporary facilities for UNSW researchers undertaking biomedical and environmental research.

Light Rail

The new state-funded CBD and South East Light Rail will transform public transport in Sydney, extending services from Circular Quay to Randwick and Kingsford. The combined bus and light rail network, due to begin operating in 2019, will improve access to UNSW and health precincts.

**Science and Engineering Building
July 2019**

The nine-storey Science and Engineering Building is a new state-of-the-art research and teaching centre for the Schools of Chemical Engineering and Chemistry. It will also accommodate a new theatre complex for the School of the Arts and Media.

2020 to 2025

2019

**Randwick Health and Education
Precinct redevelopment**

The proposed redevelopment is supported by \$720 million in investment from NSW State Government, will transform Randwick Campus into one of Australia's leading providers of health and medical research services with one of the largest concentrations of clinical, scientific and academic minds in Australia.

\$1.2 billion

total research income

*Since 2015***\$2 billion**

total research expenditure

*Since 2015***45**

in QS World University Ranking

85

in Times Higher Education World University Rankings

133

in Academic Ranking of World Universities

*In 2017***1,956 PhD completions***From 2015 – Nov 2017***\$1.4 billion invested**

in 2025 Strategy research projects

Citation performance2.5% outputs in top 1%
18.2% outputs in top 10%*In 2016*

A2: Educational excellence - the UNSW Scientia Educational Experience

Our direction to 2025

UNSW empowers students to realise their potential through our distinctive personalised learning experience. Our ambition to be a leading learning and teaching university is driven by a desire to shape future generations of Australians. Recognising and rewarding high-quality teaching, integrating the best available educational technologies, and delivering an adaptable academic calendar form the foundation for achieving this across the 2025 Strategy.

Curiosity and innovation are built into the UNSW Scientia Educational Experience (SEE). Driven by the overarching premise of Inspiring Teachers and Students as Partners, the SEE achieves a seamless integration of physical and digital campuses, to maximise learning outcomes and capitalise on UNSW's unique strengths in curriculum design and delivery.

By developing strategic partnerships and adopting a flexible learning model, we are transforming the educational experience across curriculum design and delivery, program/course review processes, and our approaches to teaching and assessment in our coursework programs. This holistic learning experience delivers globally minded graduates capable of shaping and leading the international community.

Highlights

Developing a distinctive model of education in Australia

Through outstanding design, experimentation and continuous improvement, the SEE delivers an innovative and internationally relevant educational approach. With an emphasis on cross-disciplinary learning, smart use of technology, and a career focus, it blends the highest quality face-to-face teaching with digital education.

Building learning communities that help our students thrive

UNSW creates opportunities for students and staff to belong to communities of scholars, learners, global contacts, industry, and alumni through programs such as myFirst Year and UNSW Heroes, and via our learning precincts.

Empowering students and staff to influence the educational experience

We are introducing new ways for students and staff to provide feedback, and incorporating it into our programs through initiatives such as Students as Partners.

Enabling a personalised learning experience with UNSW3+

The flexibility of our new academic calendar UNSW3+ allows students to tailor their university experience, take advantage of industry and international opportunities, and achieve life study balance.

Nurturing a new generation of educators

Our new Education-Focussed roles foster and reward educational excellence, allowing academics to focus solely on teaching and be recognised for the vital contribution they make to student learning.

Harnessing technology to deliver a superior student experience

We are transforming the student experience by increasing our portfolio of online and blended courses, and developing a digitally enabled learning environment.

The Scientia Educational Experience

Launched in 2017, the Scientia Educational Experience optimises blended and digital learning, flexible degree structures, and work-integrated learning to deliver industry-ready graduates. Our programs are globally relevant, informed by the Australian context, and embedded with knowledge and understanding of Indigenous issues.

Working across four interconnected domains – Communities, Feedback and Dialogue, Inspired Learning through Inspiring Teaching, and Being Digital – we support our learning communities, promoting employer engagement, student entrepreneurship, and innovation to cultivate their future careers.

UNSW has historically attracted a large cohort of high-calibre students. In 2018, UNSW received first preferences from more than 50% of the top 500 students in NSW. Our holistic learning experience will ensure we continue to deliver globally minded graduates capable of shaping and leading the international community.

Learning communities

We are creating opportunities to belong and contribute to communities of scholars, learners, global contacts, industry and alumni for students and staff through the following programs.

myFirst Year program

Led by our new First Year Director, Professor Richard Buckland, the myFirst Year program aims to establish supportive learning communities from the moment students enrol at UNSW. To communicate the importance of first year to all our staff and share the experiences of our students, Professor Buckland has been filming a candid documentary following the highs and lows of first-year students, which had its debut screening in November 2017. This is the first of many innovative plans associated with this new portfolio.

Revolutionary learning precincts

Our new learning precincts provide dynamic spaces for our communities of learners supported by state-of-the-art technology. The Mathews and Goldstein Precincts are part of a campus-wide development plan to 2025. They are home to 18 active learning spaces, converted from traditional classrooms to combine interactive and collaborative student-led spaces that incorporate configurable, pod-style furniture, screen sharing capabilities, and high-speed Wi-Fi.

A further 38 spaces are proposed for the beginning of 2019 and plans for additional precincts on the Kensington campus are ongoing as part of a campus-wide development plan to 2025.

ELISE: a new induction module

A new induction module has been created, aimed at establishing respectful and inclusive communities. The module will welcome all new students to UNSW, promote UNSW's values and behaviours, and deliver essential information including highlighting matters of conduct and integrity.

UNSW Heroes program

The UNSW Heroes program supports the development of graduate capabilities of students as rigorous scholars, entrepreneurial leaders, lifelong learning professionals, and global citizens. Five hundred students have taken part to date.

With a \$5 million investment, this program allows UNSW students to have a direct role in improving the University by working on real projects that are implemented across the institution. It focuses on building learning communities that equip UNSW graduates with the skills to thrive in employment.

The program takes a 'Students as Partners' approach by offering internships, mentoring schemes and real-world work experiences within UNSW and the program's 20 partner organisations, further strengthening our links to industry leaders, including Adobe, Amazon Web Services, Ernst & Young, Johnson & Johnson, KPMG, Uber, and Woolworths.

The program is targeted to benefit 600 students a year by 2021.

Prioritising feedback and dialogue

The Scientia Educational Experience aims to provide students and staff opportunities to give and receive feedback on their experiences and performance to assess and evaluate programs, and encourage scholarly interaction.

myExperience survey

Launched in May 2017, this new feedback tool captures the student voice and helps improve the learning environment. Questions focus on the extent to which students feel part of a learning community, how inspired they are by the teaching, and the value of the course resources, including digital resources.

Students as Partners

The Students as Partners program involves students in all aspects of their education, from course and assessment design to decision making as part of governing committees, including the Academic Board. This enables students to be partners in the creation of knowledge and the development of teaching innovations.

A range of initiatives sees staff and members of the student organisation Arc working together to improve UNSW. Currently, hundreds of students are partnering with staff across UNSW, supported by a budget of more than \$500,000.

Learning analytics

Learning analytics are being introduced to many of our courses. Digital systems provide many opportunities to highlight the strengths and weaknesses of students at an individual level throughout their studies.



Opening up new opportunities through UNSW3+

UNSW is pioneering the new academic calendar UNSW3+ from 2019. UNSW3+ is based on the US quarter system used by leading institutions such as Stanford, University of Chicago, Northwestern, and UCLA.

Consisting of three 10-week terms with an optional five-week summer term, the new calendar will spread student workloads more evenly across the year. Students will study three rather than four courses per session, with a normal load of eight courses remaining.

UNSW3+ allows students to tailor their learning experience to achieve a life study balance and take advantage of international and industry opportunities, such as internships. Going on exchange overseas will be easier, particularly through our alignment with Northern Hemisphere university calendars.

Planning for the transition is well advanced with thousands of courses revised or being refreshed, representing perhaps the biggest overhaul of the curriculum in our history. It will create a more vibrant campus life through greater optimisation of our facilities all year round.

Engineering her way to the 2020 Olympics

For students like judo athlete and engineering enthusiast Heidi Wright, the flexibility of UNSW3+ will prove invaluable. With her sights set on the Tokyo 2020 Olympics, she must balance her studies with intensive training.

With the biggest judo club in the country and scholarships for both Women in Engineering and Elite Athletes, UNSW was an easy choice for Heidi, as one of our many driven students. The adaptability of UNSW3+ will allow her to engage with our diverse student opportunities while pursuing her Olympic dream. So far, her degree has taken her to Canada on exchange, and Nepal to teach. In 2018, she will undertake her second exchange to the Technical University of Munich to train with the Bavarian judo team, one of the best in the world.

Fostering inspired teaching

Teaching excellence is central to the Scientia Educational Experience. At UNSW, our emphasis on education-focussed careers allows our academics to deliver programs aligned to graduate capabilities and linked to industry with opportunities for work-integrated learning.

Education-Focussed roles

Reflecting the true importance of education to society is a key aspect of the Strategy, with UNSW committed to seeing 25% of our academic staff recognised as specialists in education by 2025.

UNSW has appointed more than 200 academics to our new Education-Focussed roles to foster and reward educational excellence. This gives talented and passionate teachers the chance to focus on teaching, course design, and assessment to provide a world-class learning experience for our students.

The promotion guidelines have been rewritten to ensure that excellent teachers can now be promoted to professor. Two new grant schemes have been provided to this community for professional development and creating innovative courses and teaching strategies.

“Educational excellence is essential, both to attracting the very best and brightest students and to producing the finest graduates and alumni. Between those two focal points – the start and completion of the education process – the reputation of UNSW rests fundamentally on the quality of its teaching.”

Professor Ian Jacobs, President and Vice-Chancellor

The Scientia Education Investment Fund

With a \$13.9 million investment to 2025, the Investment Fund will help Faculties and Schools develop innovative educational offerings. From 61 grant applications received in 2017, 18 inaugural grants were awarded to the value of \$1.5 million, including funding for the development of a fully online Graduate Diploma in Psychology, and for UNSW Canberra to develop an assessment framework for online cyber security courses to maximise student engagement.

Scientia Education Academy

A community of our most accomplished teachers, the Academy provides leadership in teaching, harnessing their drive, enthusiasm and expertise to enhance teaching excellence across UNSW.

Established in October 2016, it fosters communities for teaching improvement, provides feedback mechanisms and examples of being digital in teaching.

The 33 Scientia Education Fellows appointed to date will help position UNSW as a leader for student experience and outcomes by enhancing the profile and quality of teaching, including innovation in curriculum design and delivery, and online education.

UNSW Inspiring Teacher Award

Sponsored by KPMG, the UNSW Inspiring Teacher Award is based on student feedback. In 2017, it was presented to Dr Daniel Mansfield from the School of Mathematics and Statistics.

Peer Review of Teaching

Peer Review of Teaching is a valuable complement to student surveys and an opportunity to recognise and reward great teaching and to share best practice. Trained and highly experienced teachers offer peer review assessments to staff seeking feedback, promotion or awards for excellence in teaching.



Director of First Year Experience and Scientia Education Fellow Professor Richard Buckland was one of the first academics to accept a new Education Focussed role. Professor Buckland is passionate about education and about his students.

“Being a teacher is a privilege and a joy. I’ve taught more than 10,000 students over my 20 years at UNSW and yet I’m continually delighted and humbled by how remarkable they are. They are smart, kind and far wiser than young adults are often portrayed. I’m proud UNSW cares so much about them and is working so hard to develop a culture of students as equally valued members of the university community.”

Being Digital

UNSW is developing digital learning and teaching environments and content, integrating new virtual spaces, and engaging with the online global community as part of the Scientia Educational Experience. We are harnessing technology to enhance the student experience.

Dynamic program delivery through the Inspired Learning Initiative

With a five-year investment of \$55.56 million, the Inspired Learning Initiative is to our knowledge the biggest single investment in providing state-of-the-art digital support for learning in the sector. It is transforming the way we deliver our education at UNSW across a series of focussed projects, with \$5.81 million spent to date. These include the following projects.

Uplift in online and blended course design and delivery

Over the next five years, we will redesign 600 courses for fully online and blended delivery, plus additional resources for online course development, online assessment and feedback, and media production.

In 2017, 23 Educational Developers were appointed to our new Multidisciplinary Course Design Teams to expedite course redesigns. There are 30 course redesigns underway, with 41 in the planning stage. Our investment in media and recording studios in the Goodsell Building has supported this.

The Hon. Adrian Piccoli on the panel of Education and Equality: Unfinished Business, a Gonski Institute event in 2017

myAccess

This new virtual service gives students access to course-specific applications anywhere, anytime from any device with an internet connection, emulating their on-campus experience in computer-based laboratories. myAccess is now available to all coursework students (previously first-year students only).

World-leading design centre and film studio coming to UNSW

With a \$9.1 million investment by 2025, the UNSW Design X Centre will provide UNSW students with real-world practical skills in creativity, design, and innovation with a strong theoretical basis. Its innovative approach to design education and research will prepare students for the rapidly evolving workplace. Recruitment for a director has begun.

The Multi-Media Centre M2C

The Multi-Media Centre M2C is a cutting-edge film studio that can be used for generating video material for student learning.



A new institute: The Gonski Institute for Education

“Every child should have access to the best possible education, regardless of where they live, the income of their family or the school they attend.”

David Gonski AC, Chancellor of UNSW

The UNSW Gonski Institute for Education is committed to improving the educational performance of all Australian children. The Institute will focus on increasing access to all levels of education and social mobility, particularly for disadvantaged students, students with disabilities, and students from rural and remote Australia.

With strategic funding of \$3 million, the Institute will bring together scholars, policy-makers and practitioners to conduct research and provide educational leadership and policy advice. Under the directorship of the Hon. Adrian Piccoli, former Minister for Education in NSW, it will contribute to improving the academic and wellbeing outcomes of students in Australia, ranging from early childhood through school to vocational education and training and higher education. The recent recruitment of Finland's expert on education policy Professor Pasi Sahlberg will help to ensure this cohesive view of education throughout life.



Social Engagement

B1: A just society

Our direction to 2025

UNSW is striving to become an international exemplar in equity, diversity and inclusion, embracing cultural diversity, and ensuring our staff and students can realise their potential regardless of background. Introducing leadership to influence debate, policy, and practice, and developing our staff and student equity programs, are all advancing our strategic goals.

With more than 55,000 students from more than 120 countries, UNSW promotes an inclusive culture across the University. We value and support our diverse community of students, scholars, and staff, and showcase respect for Indigenous knowledge.

To bring a renewed focus to issues around the workplace, Indigenous and disadvantaged students, and gender equity, UNSW appointed Professor Eileen Baldry as our inaugural Deputy Vice-Chancellor (Inclusion and Diversity) in 2017, the first such senior appointment in Australia. Professor Baldry will oversee extensive initiatives for equity outcomes alongside the UNSW Equity, Diversity and Inclusion Board established in 2016.

Professor Baldry is joined by five senior UNSW Diversity Champions representing Gender, Cultural Diversity, LGBTIQ inclusion, People with Disability, and Flexible Work and Leave to foster a supportive culture across the University. With strategic funding of \$18 million, UNSW is positioned to attain the ambitious inclusion and diversity objectives of the 2025 Strategy.

Highlights

Advancing gender equity at UNSW

UNSW has set a goal to achieve 40% female representation at senior academic levels D and E and 50% at senior professional staff level 10+ by 2025. Initiatives, including the rollout of unconscious bias training and participation in the Athena SWAN pilot in Australia, which addresses the under-representation of women in STEMM disciplines, will help us achieve this target.

Promoting a safe and respectful community at UNSW

Universities Australia's Respect. Now. Always. campaign alongside the Human Rights Commission's research into sexual harassment and assault on campuses has resulted in UNSW's first action plan to prevent sexual misconduct. It aims to improve reporting processes and support, including a new University reporting portal and first responder training.

Our activity has been further informed by Professor Andrea Durbach's *On Safe Ground* report, a comprehensive road map to address the normalisation of sexual assault and harassment on university campuses.

New UNSW institutes and partnerships lead on issues of social justice

The new Disability Innovation Institute and Australian Human Rights Institute will contribute to a wider debate, fostering new thinking around seemingly intractable issues through interdisciplinary co-operation.

Comprehensive Indigenous program opens up opportunities at UNSW

Professor Megan Davis has been appointed as UNSW's first Pro Vice-Chancellor (Indigenous) to lead a progressive Indigenous program across the University. Initiatives such as the Indigenous Education Plan, the Indigenous Workforce Plan, and the Indigenous Research Strategy will drive parity targets for recruitment, retention, and completion of Indigenous students, and recruitment of Indigenous academic and professional staff.

Gender equity

UNSW has set targets of 40% female representation at senior academic level D and E and 50% at senior professional staff level 10+ by 2025. This will significantly increase our Level D and E female academic staff from 29% currently.

We have also rolled out unconscious bias training to 275 members of our leadership team to address gender equity in strategy and decision-making. We are improving our promotion processes to include ROPE – Research Opportunity Performance Evidence – as defined by the Australian Research Council.

Athena SWAN program

An inaugural member of the Athena SWAN Charter in Australia, UNSW is participating in a pilot program addressing the under-representation of women in the STEM disciplines.

The pilot is modelled on the highly successful UK Athena SWAN Charter established in 2005. The two-year pilot from 2016–2018 evaluates institutions on their gender policies and practices.

In March 2017, UNSW surveyed academic and professional staff to generate data to support Athena SWAN and other gender equity initiatives. The results demonstrated a solid foundation for addressing gender bias at the University.

More than 1,400 people participated (23% of all staff), with a majority noting they were proud to work at UNSW. Areas of strength included management support for gender equity and diversity, visibility of female role models, UNSW's firm stance against sex-based harassment, and the provision of clear promotion procedures and policies.

Areas for improvement included ensuring the prevention of gender-based discrimination, proactive support for staff in promotion and career development, and improved communication of provisions available to staff with caring responsibilities, including flexible work arrangements.

Additional gender equity support programs

UNSW's suite of gender equity initiatives includes our Academic and Professional Women in Leadership development programs, Women in Research Network, Career Advancement Fund and Vice-Chancellor's Childcare Support program.

Ensuring a safe campus

In August 2017, the Director of the Australian Human Rights Centre, Professor Andrea Durbach launched *On Safe Ground*, a road map for universities seeking to eliminate and respond to sexual harassment on campus. The guide is an Australian first. Its 18 recommendations include establishing nationwide policies led by students, holistic support services on campus, prevention programs, and a national taskforce to implement these.

"It is important to recognise that the issue of prevalence in relation to sexual assault at universities is not the whole story. Rather, it is the institutional barriers to reporting and the overall culture surrounding the issue of university sexual assault and harassment that need to be addressed."

Professor Andrea Durbach

Together with our close involvement with Universities Australia's Respect. Now. Always. campaign (led by President and Vice-Chancellor Professor Ian Jacobs as lead Vice-Chancellor for equity and diversity for Universities Australia), and our response to the Human Rights Commission research on sexual harassment and assault on campuses, this report has formed the basis for our first action plan to address these issues.

Driving local and global collaboration on social justice issues

PLoS Alliance

The PLoS Alliance (Phoenix, London and Sydney) is a partnership between three leading international universities – Arizona State University, King's College London, and UNSW Sydney – to enable research-led solutions to global challenges and expand access to world-class learning.

Launched in February 2016, the Alliance explores opportunities for research and teaching collaboration among its academic community. PLoS Alliance Fellows are dedicated to working across borders in pursuit of excellence in informed urbanisation, environmental sustainability, global health and wellbeing, social and distributive justice, and technology and innovation. Five UNSW researchers have been appointed in the first cohort.

As one of the core themes of the PLoS Alliance's research and learning, the Social Justice program efforts include a focus on poverty eradication, the promotion of full employment and decent work, gender equity, and access to social wellbeing and justice for all.

In July 2017, the Alliance also hosted the International Forum on Inequality in Sydney. The Forum fostered interdisciplinary discussion on the context of the four PLoS Alliance themes of sustainability, global health, social justice, and technology and innovation.

SPHERE (Maridula Budiyari Gumal)

The Sydney Partnership for Health, Education, Research and Enterprise (SPHERE) is a \$20 million partnership launched in March 2017 between 14 leaders in health, education, and medical research in NSW. The partnership aims to fast track potentially lifesaving research into real outcomes, and address health challenges including cancer treatment, mental health, diabetes, and childhood illnesses.

Professor Ian Jacobs, President and Vice-Chancellor of UNSW and inaugural Chair of SPHERE, said: "It currently takes 17 years on average to commute positive research and laboratory findings into actual practices that will benefit patients. That is too long".

In recognition of its importance to Aboriginal health in NSW, SPHERE was given an Indigenous name Maridulu Budiyari Gumal, which means 'working together to promote better health and wellbeing' in the language of the Dharug people.

Australian Laureate and PLoS Alliance Fellow Scientia Professor Veena Sahajwalla was awarded the inaugural PLoS Alliance prize for research innovation in recycling toxic waste materials
Photo credit: Tamara Dean



Driving policy and practice for greater social justice



Australian Human Rights Institute

The Australian Human Rights Institute will bring together experts from different disciplines across UNSW to find solutions to human rights challenges. The Institute is focused on three priority areas – human rights in business, human rights in health, and gender justice.

Led by Professor Louise Chappell, it will work in partnership with government, industry, and the community to give its research real-world impact.

Being interdisciplinary means the Institute will benefit from a broad exchange of ideas as it seeks solutions for communities in Australia and the Asia-Pacific. For example, how could UNSW expertise in renewable energy be applied to aid people in conflict zones? And how could the Internet of Things, which has the potential to increase threats to privacy and security, be harnessed to get help and support to women facing domestic violence?

The Institute is about joining the dots between theory and practice in new and meaningful ways. It aims to grow the next generation of human rights experts with a program of mentorship.

Emerging scholars will be linked with existing experts in the academic field as well as human rights organisations to allow scholars to better identify problems in the field and create solutions.

As the Institute works towards becoming known as the leading centre for human rights research in the Asia-Pacific, it will welcome rights defenders from the region to UNSW, to share their experiences from the front line.



Disability Innovation Institute

The UN Convention on the Rights of Persons with Disabilities obliges all governments to respond in innovative ways to achieve the full participation of people with disability in society. The Disability Innovation Institute at UNSW (DIIU) will conduct interdisciplinary research and education in partnership with people with disability.

With \$11.3 million in 2025 funding, the DIIU is distinctive in its combination of disability studies with STEMM and HASS (Humanities, Law, Business, Arts and Social Sciences) research and education, as well as its inclusive operation and governance.

The Institute will position UNSW as a global leader in scholarship of accessible and inclusive working, living and learning environments, as well as generating innovative technologies and creating inclusive laws, policies, markets, services and communities.



Commitment to a UNSW Indigenous Strategy

UNSW's Indigenous Strategy, led by UNSW's first Pro Vice-Chancellor (Indigenous), Professor Megan Davis, aims to lift Indigenous participation in education and increase Indigenous workforce representation.

The Strategy has three key themes with two of these already at an advanced stage of development, with consultation underway with key UNSW representatives.

Workforce Plan

A UNSW Indigenous Workforce Plan aims to achieve parity targets for recruitment, retention and promotion of Indigenous staff in academic and non-academic positions. Consultation between the faculties of Medicine, Arts and Social Sciences, and Law, and an Indigenous Workforce Advisory Committee - comprising members from Human Resources, Graduate Research School, representative Deans, representative General Managers and External Relations - has been undertaken.

Education Plan

An Indigenous Education Plan is undergoing development with Nura Gili staff. The plan includes targets for increased recruitment, retention, and graduation of Indigenous students.

Research Strategy

Linked to the workforce and education plans, the Indigenous Research Strategy is underpinned by a philosophy of 'Grow Our Own', to align with the expectation that we are developing and supporting Indigenous researchers to lead Indigenous research. The time frame to develop the UNSW Indigenous Strategy in its entirety is March 2018.

Developing Indigenous career pathways

Through UNSW's Indigenous Workforce Plan, we will create and sustain a culturally inclusive and sensitive workplace to enable Indigenous staff to grow, thrive, and reach their full potential. Working with Faculties and Divisions, positions that would benefit from employing an Indigenous person will be identified at all levels across UNSW for both professional and academic appointments, and meaningful targets within each faculty and division will be set.

By establishing sustained partnerships with Indigenous networks and communities, employment opportunities will be widely communicated, promoting our initiatives to develop and retain Indigenous staff including UNSW's annual career planning process, flexible leadership, and mentor programs.

Building our academic and research workforce will be prioritised through programs that provide opportunities for Indigenous student interns to find ongoing positions at UNSW, identifying postgraduate research projects for students to undertake a PhD, and ensuring appropriate supervisors are allocated to support Indigenous researchers.

Enhancing educational experience for Indigenous students

Investment in promoting the Indigenous cultural competency of students and staff is underway. A further \$6 million in funding has been approved for Nura Gili to increase its Student Services Team, and expand its successful Winter School program for Indigenous high school students in Years 10 to 12.

The Faculty of Art and Design has launched the new Bowen Bungaree Aboriginal and Torres Strait Islander Residency Program, which provides tailored support for Indigenous artists and designers to undertake ambitious projects, and a new equity award for talented students. The equity award is named in honour of Indigenous Elder in Residence and Yuwaalaraay man Vic Chapman PSM.

Developing research talent

We are creating a supportive community for Indigenous scholars to progress to both PhD and post-doc levels of study, with at least five UNSW Scientia Indigenous PhD scholarships available each year for Indigenous research candidates. Four Indigenous Scientia PhD Scholarships have been awarded to date.

Cultivating Indigenous entrepreneurs

The Walan Mayinygu Indigenous Entrepreneurship Pop Up Hub Program delivers business masterclasses, practical workshops, and networking opportunities to Aboriginal and Torres Strait Islander people and businesses. It was first run in Dubbo and Albury in 2017, with plans to expand to Port Macquarie and Lismore in 2018.

One of the key streams is the Walan Mayinygu Youth Program designed and delivered by Rebecca Harcourt, Indigenous Business Education Program Manager, from

UNSW Business School with co-facilitation with Indigenous entrepreneur Liam Ridgeway and two of our UNSW Indigenous Business students, Ashley Finegan and Shaun Wright. The Program engages Indigenous students from Years 5 to 12 in the world of entrepreneurship through creative workshops. The program culminates with small groups pitching their ideas to Indigenous entrepreneurs and industry leaders.

Souths Cares Collaboration

Souths Cares is a community organisation created by the Rabbitohs in 2006, and has partnered with UNSW to achieve outcomes in Indigenous employment, diversity, and equity, using innovative models and programs.

As an independent, not-for-profit public benevolent institution, Souths Cares focuses on disadvantaged and marginalised youth and their families, with a focus on education, employment, and health and wellbeing services. It has an extensive record of delivering age- and culture-appropriate education messages to schools across Greater Sydney and regional NSW.

Working extensively with the Aboriginal community of South Sydney, South Cares acknowledges the Traditional Owners of the land, Elders past and present, and the importance of young people to the future of our communities.





Supporting Indigenous executive leaders

In April 2017, the AGSM together with Reconciliation Australia and 10 of its Elevate Reconciliation Action Plan partners, launched the Emerging Indigenous Executive Leaders Program to break the Indigenous 'glass ceiling' and bring more Indigenous Australians into the C-suite.

The nine-month program focusses on executive learning modules on strategic thinking, leadership and identity, innovation, personal effectiveness, and communicating with influence. Participants graduate with credit points equating to two subjects in AGSM's Executive MBA or Online MBAX.

"Indigenous executives have an important role to play in framing policy. This program demonstrates real commitment on the part of participants to create groundbreaking leadership opportunities for Indigenous Australians, opportunities which can in turn serve Indigenous communities and Indigenous business."

Glen Brennan, a Gomeroi man and inaugural program participant, and NAB Head of Indigenous Business Development/State Director Victoria - Government, Education and Community Banking

B2: Leading the debate on Grand Challenges

Our direction to 2025

To inform, engage, and inspire through thought leadership and debate are central to our 2025 Strategy. UNSW champions the critical role of universities in leading public discussion to influence policy and practice on the biggest challenges facing today's global citizens.

Our Grand Challenges program aims to identify, explore, and address key issues facing humanity, from major contemporary to future challenges. We stimulate international knowledge exchange through our partnerships with government and non-government organisations, community leaders, industry, and global organisations.

UNSW declared Climate Change, Refugees and Migration, Inequality, and Living with 21st Century Technology as the first four challenges that we would address through a series of activities and events.

As Academic Lead, Scientia Professor of Evolutionary Biology Rob Brooks is responsible for the direction of the program.

Over the past two years, the program has completed more than 50 cross-faculty projects, workshops, and events, attracting more than 7,500 attendees, as well as student engagement initiatives across all four challenges.

Discussion papers, government submissions, and blueprints were produced on behalf of the Climate Change, Inequality, and Living with 21st Century Technology challenges.

Highlights

Internationally renowned UNSW researchers take the lead

Led by five Academic Leads, our Grand Challenges team has facilitated critical discussions and raised awareness on the groundbreaking research and excellent initiatives undertaken by UNSW academics, staff, and students.

UNSW to be the world's first solar-powered university

A new solar energy agreement between UNSW, Maoneng Australia, and Origin Energy will enable us to achieve carbon neutrality on energy use by 2020. All our campus energy needs will be supplied from photovoltaic solar, making us the first university worldwide to be completely energy carbon neutral. This agreement is a powerful reflection of our commitment to dramatically reducing our environmental footprint under the Climate Change Grand Challenge.

Launching a new energy blueprint

Inspired by the Grand Challenge on Climate Change, the Australian Conservation Foundation and UNSW assembled 17 leaders to draw up a national plan for transitioning Australia to clean energy, in line with Paris Agreement targets.

Nurturing creative networks to support social progress

To promote the arts and encourage cultural collaboration across the local community, UNSW launched the Sydney Culture Network in 2017. We have also hosted large-scale events such as the Big Anxiety Festival and Science Week @ the Opera House to engage new audiences and stimulate vital discussion.

Delivering inspiring events through the Centre for Ideas

In 2017, UNSW established the Centre for Ideas, a \$30 million initiative that facilitates public conversations on important issues that matter to society through talks, festivals, and events. The Centre's Director, Ann Mossop, is the former Head of Talks and Ideas at Sydney Opera House, where she was co-curator of the Festival of Dangerous Ideas and All About Women.

Grand Challenges program

"UNSW's Grand Challenges program is designed to lead open, informed public debate about the biggest challenges of our time – and to promote ideas, discussions, research, and the development of policy that can contribute to solutions."

Scientia Professor Rob Brooks, Academic Lead for the program

The program brings together UNSW scholars and renowned global thought leaders in a public event format. It is about broadening the questions we ask, and building more collaborative projects to provide multi faceted policy responses to pressing issues. Currently, the program is focussing on Climate Change, Refugees and Migration, Inequality, and Living with 21st Century Technology.

Past speakers include UN Special Rapporteur Philip Alston, US climatologist Michael E Mann, former adviser to the Obama Administration Professor Christina Romer, and Nobel Laureate José Ramos-Horta.

UNSOMNIA – the Grand Challenges Showcase Events

Both UNSOMNIA and UNSOMNIA 2.017 were sell out events. We asked UNSW academics: 'What keeps you up at night?' and 'What do we need to change?' in 2016 and 2017 respectively. Speakers at the inaugural event included Professor Helen Christensen promoting an online mental health prevention program, Professor Toby Walsh proposing why robots should never be allowed to kill, Professor David Sanderson illustrating better ways to provide disaster relief, and Scientia Professor Jane McAdam on preparing countries for disasters, climate change, and mass migration. In 2017, topics covered included sex, humility, the power of the sun, travelling to outer space, travelling to inner space, poverty, and refugees.



Our first four Challenges



Climate Change

"Avoiding dangerous climate change requires a rapid but fair transition to a new decarbonised global economy. While we have many of the required technologies to succeed at this, time is running out."

Scientia Professor Matthew England, Academic Lead

Led by Professor England, an expert on the physics of the oceans and their role in climate variability and climate change, our first Grand Challenge has put climate change on the public agenda through initiatives including a panel discussion at the Sydney Opera House, facilitated by ABC presenter Emma Alberici, and a 12-week student program aimed at finding real-world solutions to problems for social good. In late 2017, the Climate Change Blueprints were launched, describing the challenges and opportunities facing society in the areas of energy transitions, climate change, air pollution and health in Australia, and justice and climate change.



Refugees and Migrants

"As well as the legal questions in regard to forced migration, how do we respond to the psychological challenges of displacement, and how do we build better shelters and more resilient communities, for example? And what about the economic benefits of migration?"

Scientia Professor Jane McAdam, Academic Lead

Professor McAdam is the founding director of the Kaldor Centre for International Refugee Law, a leading international research hub, and is leading the discussion on refugees and migrants through major events such as the Inaugural Refugee Alternatives Conference, hosted by UNSW in March 2017. UNSW has also welcomed international experts on refugees and migrants as part of a public lecture series, including Nobel Laureate José Ramos-Horta, who spoke about the challenges raised

by the plight of refugees, and Dr François Gemenne, a world authority on climate change and disaster-related migration.

Inequality



"Inequality is the challenge of our time. Some of the most important achievements of the post-World War II era – multilateral institutions, free trade, quasi-open borders – are all under threat because people feel that their fundamental economic needs aren't being addressed."

Professor Rosalind Dixon, Academic Co-Lead

The Grand Challenge on Inequality was launched in early 2017 with a series of public panels inviting journalists, commentators, politicians, and researchers to discuss issues of inequality and to generate collaborative ideas across sustainability, global health, social justice, and technology and innovation. The third Grand Challenge is jointly led by Professor Dixon, one of the leading comparative constitutional scholars of her generation, and Professor and PLuS Alliance Fellow Richard Holden, one of Australia's leading economic researchers with a skill for unravelling complex economic issues. In August 2017, Professors Dixon and Holden published a report proposing a government Social Emergency Lending Scheme as an alternative to private 'payday lending'.



Living with 21st Century Technology

"Everything is affected by technological change – new tools change how we act in the world, how important decisions are made, and what can be accomplished. We have no choice but to live in the 21st century, but we can come together to consider the kinds of technologies that will shape the environments in which we live."

Associate Professor Lyria Bennett Moses, Academic Lead

Launched in August 2017, our latest Grand Challenge is led by Associate Professor Bennet Moses, a pioneer in developing a general theory of law and technology that provides practical insights into how and when the law should respond to technical change. Living with 21st Century Technology will address the hotly discussed issues of artificial intelligence, cyber security, the biosecurity implications of new technologies, and the mental health implications of our increasingly digital world. It will ask how these technologies will change the way we live, think, and die. What newer technologies should we be watching, discussing, and debating?



50+ Grand Challenges
events and projects



7,500 people
registered for
events



50% gender equity
for invited speakers

Leading on climate change

UNSW to become carbon neutral by 2020

UNSW has signed a solar energy agreement that will help us achieve carbon neutrality on energy use by 2020. The 15-year tripartite solar power agreement – a world first in the university sector – sees UNSW partner with Maoneng Australia and Origin Energy in a Solar PV Corporate Power Purchase Agreement, and provides a model for renewable energy procurement.

From 2019, we will purchase our annual energy requirement from Maoneng's Sunraysia Solar Farm in south-western NSW. Construction of the Sunraysia Solar Farm, including a Visitors Centre and Weather Monitoring System that UNSW staff and students can access for data sharing, research, and case study purposes, will begin in 2018.

UNSW has played a lead role in developing and implementing solar technology across the world. Our researchers, in particular Scientia Professors Martin Green and the late Professor Stuart Wenham, and their teams, have been instrumental in ensuring solar energy is affordable and accessible to all. Their research will now be used to provide UNSW with a renewable source of emissions-free energy. The agreement furthers our commitment to climate change identified as UNSW's first Grand Challenge.

New energy blueprint for Australia

In April 2016, 17 prominent energy leaders from business, academia, and the community established a Leadership Forum on Energy Transition for Australia. An initiative of the Australian Conservation Foundation, the forum was hosted by UNSW as part of our Climate Change Grand Challenge.

Chaired by President and Vice-Chancellor Professor Ian Jacobs, this influential group of non-partisan partners recognised the dangers and disruptions to Australia associated with global warming. They produced a road map for a rapid transition to clean energy. Drawn up in line with the Paris Agreement targets, the national plan was delivered to the federal government in November 2016, with eight action points to achieve carbon neutrality. Members of the forum include Mr Geoffrey Cousins AM, President, Australian Conservation Foundation; Dame Quentin Bryce AD CVO, former Governor-General of Australia; Mr Andrew Vesey, CEO AGL Energy; Mr Mark Burrows AO, global investment banking and capital markets expert; and Ms Indira Naidoo, Journalist, TV presenter and author.

UNSW has also implemented a new climate-change investment strategy that adopts environmental, social and governance principles. The strategy reflects global commitments made under the Paris Agreement and UNSW's world-leading climate change research promoting a just transition to a carbon-neutral future.

Fostering creativity and public engagement

Through our 2025 Strategy, UNSW is building new networks to promote enhanced cultural community engagement.

Sydney Culture Network

Led by UNSW, the Sydney Culture Network links 24 galleries, libraries, and museums to boost artistic, educational and research collaborations, and public engagement. It includes Sydney's peak cultural institutions: the Art Gallery of NSW, Carriageworks, the Museum of Contemporary Art (MCA), and National Institute of Dramatic Arts (NIDA).

Set to launch in mid-2018, the Network integrates the arts, heritage, academic, business, government, and technology sectors. It will bring new cultural offerings to the public and build opportunities for creation, programming, research, and data sharing. It will also simplify the ways in which visitors move between museums and cultural spaces to open up collections and archives.

"The Sydney Culture Network is about connecting the dots of culture across the city," says Professor Ross Harley, Dean of UNSW Art and Design. "The more we can work together, the better our understanding of the audiences we serve."

The Big Anxiety Festival

The Big Anxiety Festival brought together artists, scientists, and communities to tackle the major anxieties of our time. From mood experiments

to awkward conversations, video installations to virtual reality, it explored the state of mental health in the 21st century at 60 events from September to November 2017.

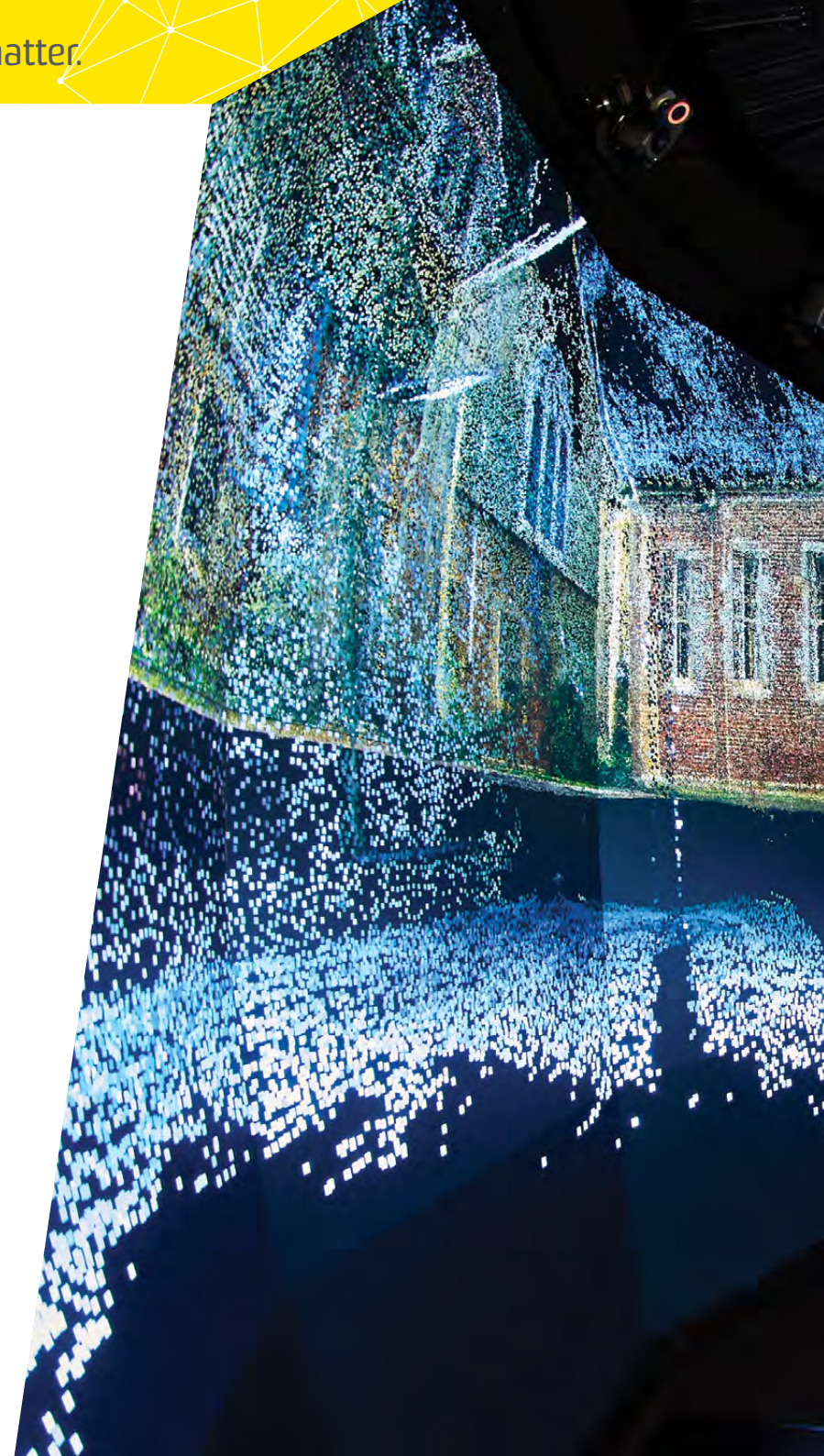
With more than 140,000 people attending across greater Sydney, it was the largest mental health arts festival in the world. A radically new kind of arts experience, every project was an open conversation designed to promote curiosity, awareness, and action.

The Festival was presented in association with the UNSW-affiliated Black Dog Institute and more than 25 partners in the cultural, government, charity, education and health sectors. It is hoped that a second festival will be held in 2019.

Women on Mars for Science Week

Part of the Sydney Science Festival in August 2017, this event gave female high school students the opportunity to meet female scientists who have explored everything from the deepest oceans to the outer reaches of the universe. Events held at the Sydney Opera House were streamed online to encourage participation from high school students across Australia.

Students heard from two NASA scientists and leading female experts in marine science, astronomy, geology, and space exploration, including UNSW Dean of Science Professor Emma Johnston.





New Centre for Ideas

Launched in 2017, the Centre for Ideas is UNSW's new platform to champion the critical place of universities in leading open and informed debate.

By developing a program of top-tier events, talks and festivals that drive strong media coverage and digital engagement, the Centre will be a key part of supporting the 2025 Strategy call for UNSW to be a leader in promoting informed discussion, debate, and policy formulation.

The Centre will host high-profile international speakers for featured and flagship events including:

- An Ideas Festival
- TEDx Women
- Global thought leaders
- Vice-Chancellor's think tanks

The Centre for Ideas is under the directorship of Ms Mossop.

"The University has an ambitious agenda to expand its leadership of important discussions that shape our thinking. Through our events, like those discussing Grand Challenges, we can highlight some of the issues that matter most and contribute to the public conversation."

Ann Mossop, Director, Centre for Ideas

B3: Knowledge exchange for social progress and economic prosperity

Our direction to 2025

UNSW will be recognised globally as a leading university for innovation, entrepreneurship and knowledge exchange, leveraging our engagement with government, industry, and community to advance social progress and economic prosperity.

The bedding down of innovation and entrepreneurship within our research and education culture, our fostering of the startup journey, and our innovation precincts promote knowledge exchange in line with the 2025 Strategy.

We foster an innovative and entrepreneurial environment for students, staff, and alumni. Our flexible approach to research and collaboration delivers sound, socially just, and sustainable solutions to real-world problems.

Formed in August 2016 by Deputy Vice-Chancellor Professor Brian Boyle, the Division of Enterprise provides a platform capability for UNSW researchers and students in industry and government engagement and entrepreneurship.

We have also consolidated existing support across the University in a new Knowledge Exchange Team, under the leadership of Warwick Dawson. Mr Dawson brings more than 20 years' experience of building strategic partnerships, both nationally and internationally.

The team has been further enhanced by the successful recruitment of experienced industry professionals with extensive networks.

Highlights

Nurturing tomorrow's entrepreneurs to advance social progress

We are dedicated to developing successful entrepreneurs, assisting them throughout the journey from initial exploration to execution and expansion of the business. With an investment of \$11.65 million, our portfolio promotes discovery, innovation, impact, education, and thought leadership through programs such as Global Founders, exploring access to Asian markets, and the New Wave, our first female entrepreneurship program.

More than 100 startups a year graduate from UNSW programs. In addition to building the greatest number of startups, we aspire to deliver some of the most impactful and profound innovations in the world.

Knowledge exchange for the 21st century

UNSW is on track to double knowledge exchange within five years. We are achieving this through strategic relationships with industry, including Growth Centres, government and community organisations, and training, and by recognising researchers for their increased engagement with partners.

Supporting our innovation ecosystem through UNSW Precincts

UNSW is investing in the development of our infrastructure to support entrepreneurship and innovation. The UNSW-Torch partnership is one of our 2025 Strategy investments, building a research contract pipeline of more than \$110 million with over 30 Chinese companies. This has enabled us to develop incubators and joint laboratories across campus in energy, materials, environment, and health.

Entrepreneurship and innovation

In June 2017, Dr Elizabeth Eastland was appointed UNSW Director of Entrepreneurship to build UNSW's reputation as an international innovator. A visionary of innovation and an original thinker, Dr Eastland founded and led the University of Wollongong's globally recognised innovation accelerator iAccelerate. She has shaped CSIRO's innovation strategy and delivered Australia's first national deep-tech accelerator.

With an investment of \$11.65 million in 2025 Strategy funding, UNSW provides students and staff with support for entrepreneurial activities, and access to strategic partners within the entrepreneurial ecosystem. More than 100 startups per year grow out of UNSW's coordinated programs. The following are among our successful programs.

Global Founders

Global Founders programs such as Startup China help student entrepreneurs understand and access China's rapidly growing innovation and venture capital ecosystems.

Startup China is an entrepreneurial support program featuring international tours, competitions, skills based workshops, cultural mentorships, and facilitated introductions to venture capitalists and prospective investors. The program is designed to leverage the development of the Torch Innovation Precinct.

FounderLab

Launched in 2016, FounderLab is the world's first on-campus product development team for startup founders, helping students and graduates with entrepreneurial ideas create a working prototype of their products.

Participants build a minimum viable product, run testing, gain user feedback, and undertake product development, and have access to a technical co-founder search service.

Founder10x Accelerator

Founder10x identifies 10 high-impact UNSW student/alumni startups for participation in a 10-week program of mentoring and funding. The program includes masterclasses hosted by Silicon Valley-based startups, access to UNSW's network of founders, alumni and mentors, and \$20,000 in seed funding.

New Wave Founders

In 2016, UNSW Capital W and Women in Engineering came together to launch New Wave Founders. New Wave Founders aims to address the gender gap in entrepreneurship through support programs for women in the startup space.

The initiative connects students with a network of mentors, facilitates speaking events tailored for female entrepreneurs, and hosts a two-week pre-accelerator competition to help participants develop their ideas into viable startups.

"It's an incredibly exciting time to be alive if you are a female looking to pursue an entrepreneurial career. The New Wave provides a safe and supportive environment that enables female students to connect to industry mentors and work towards developing their own startup ideas."

Gloria Lo, aspiring UNSW female student entrepreneur



Knowledge exchange

Knowledge exchange is our pathway to ensure that our UNSW research makes a difference to society. Knowledge exchange occurs in many forms, from consultancy to commercialisation.

UNSW's 2025 Strategy has invested \$39.7 million to boost resources supporting research staff in the business of knowledge exchange. The resources help staff improve skills in engaging with business, industry, and government, as well as seeking opportunities and understanding users' needs in priority industry sectors.

At UNSW, two-thirds of our knowledge exchange occurs via the research-intensive channels of research contracts and research collaboration, where our know-how is shared with industry to accelerate adoption and translation.

Our engagement activity, as monitored by knowledge exchange revenue, has already increased by more than 20% from 2015. Our partnerships through Silicon Quantum Computing, the Randwick Health and Education Precinct, Torch, and the SMaRT Centres for e-Waste are just some of our major strategic initiatives in knowledge exchange and impact.

Establishing Australia's first quantum company

Australia's first quantum computing company, Silicon Quantum Computing Pty Ltd, will be hosted at UNSW through an investment of \$83 million from CBA, Telstra, UNSW, and the NSW and federal governments.

Led by Scientia Professor Michelle Simmons, Silicon Quantum Computing will advance the development and commercialisation of UNSW's world-leading quantum computing technology, leading the international push to build the first practical quantum computer.

A working quantum computer has the potential to transform the information economy and create the industries of the future, tackling otherwise intractable problems that even supercomputers cannot solve.

Applications include software design, machine learning, scheduling and logistical planning, financial analysis, stock market modelling, software and hardware verification, climate modelling, rapid drug design and testing, and early disease detection and prevention.

Tracking social impact

UNSW is engaged in measuring, tracking, and on reporting Australia's social progress through a new platform for the Centre for Social Impact called Amplify Social Impact. The platform, backed with \$3.2 million in 2025 funding, is an innovative, world-first solution that aims to help address complex social problems by tracking where funding and initiatives are making a difference.

Australia's Social Pulse is a report by Amplify Social Impact that provides rigorous, accessible, ongoing measurements of the nation's social progress. Building on existing Australian social statistics, it measures changes over time in key social indicators across a range of domains such as education, employment, health, and disability, and compares these to investment in the social purpose sector.



UNSW Precincts

At UNSW, we believe infrastructure development is a crucial aspect of an innovation ecosystem. The 2025 Strategy advances our capacity for knowledge exchange and research through developing our new UNSW Precincts.



Randwick Health and Education

Supported by \$720 million in investment from the NSW Government, the Randwick Health and Education Precinct will create a uniquely integrated hospital-university campus, linking cutting-edge research at UNSW with local healthcare services.

The new precinct will create a seamless campus from UNSW to Randwick Hospital, creating a hub that includes health, research, education, and teaching facilities. This physical and working integration between UNSW and the hospital will place the University at the forefront of health research and education, attracting outstanding clinicians and academics to drive better healthcare and research, and yield economic benefits for the community. Work will begin in 2020.



The Torch Innovation Precinct

The Torch Innovation Precinct at UNSW will generate more than \$1 billion of investment to develop a globally connected science and technology precinct funding research into biotechnology, advanced materials. It will support renewable energy, and other technologies supporting up to 3,000 jobs and create economic impact from research.

It is inspired by the Chinese Ministry of Science and Technology's China Torch Program, which oversees more than 150 high-tech zones across China, driving

innovation, urbanisation, and economic growth that accounts for more than 13% of GDP in the world's second-largest economy's. The partnership with UNSW represents the first Torch-branded precinct outside.

The Torch initiative is developing an entire ecosystem of student internships, startup competitions, and accelerated R&D partnerships with industry, which is linked to the world's emerging innovation superpower.

Since we signed a memorandum of understanding (MoU) - witnessed by the Australian and Chinese Prime Ministers in 2016 - our strategic partnership has already created a contract pipeline of more than \$90 million with over 30 Chinese companies at the heart of China's innovation system.

Recent Torch developments

- Conducted a successful Torch Innovation Week at UNSW in August 2016
- Announced \$9.5 million partnership with Yixing Environmental Protection High Technology Industry Development Zone, focusing on environment protection and sustainability
- Awarded \$15 million in ARENA grants and an additional \$5.2 million from industry partners to develop solar photovoltaics technologies with Torch partners in December 2017
- Set up two joint venture companies in China to jointly commercialise research and incubate technology with industry partners
- Conducted the iGlobal Australia China Innovation and Entrepreneurship Competition in Shanghai



SMaRT Centres for e-Waste

With \$1.79 million in strategic seed funding, the UNSW SMaRT Centres for e-Waste and green manufacturing aims to establish a pilot scale micro-factory at UNSW to showcase our breakthrough processes that safely transform toxic electronic waste (e-waste) into high-value materials for reuse.

This cost-effective Australian solution to a rapidly growing national and global burden promises to help unlock the considerable wealth of resources embedded in e-waste, while simultaneously overcoming the challenges of toxicity and the often prohibitively high costs of conventional industrial-scale recycling.

The program is already attracting the interest and support of industry and government as part of a scheme to develop a statewide network of micro-factories that would generate jobs, reduce waste, and boost the economy.



Science of Innovation Lab

The Science of Innovation Lab draws together scientists and entrepreneurs, working with startups and corporates to find the most effective ways to innovate. Supported by \$5.4 million in strategic funding, its research focuses on the intersection of innovation, psychology, and neuroscience.

The hands-on empirical lab focuses on scientifically mapping the DNA of innovation by creating new tools to scientifically measure dimensions of the human mind, which are critical for effective innovation, such as intuition, creativity, resilience, and lateral thinking.

A photograph of two young women dancing in a park. The woman on the left is wearing a bright green long-sleeved shirt and purple pants, with a purple sash tied around her waist. She has her hair in a braid. The woman on the right is wearing a black dress with gold polka dots and a gold hem. She has long dark hair and is wearing gold jewelry. They are holding hands and smiling. In the background, there are many people walking on a paved path, and trees line the path. A large yellow and blue geometric shape is in the top left corner.

Global Impact

Dancers in a Bollywood flash mob during the India
Illuminated Festival in October 2017

C1: Internationally engaged education

Our direction to 2025

Aspiring to be Australia's leading university for international education, UNSW delivers extensive global opportunities through our partnerships and borderless approach to the student experience.

We embrace the strength of our multicultural community of learners, and ensure our curricula reflects today's complex and interconnected world.

Our students and academics have access to transformative study and research opportunities through our international partnerships, promoting language skills, and connecting international alumni and students. These networks and experiences ensure our students stand out in the global marketplace.

We have one of the largest outbound student mobility programs in the country. In 2016, more than 23% of our graduates benefited from studying or working overseas as part of their degree, 8% above the national average. UNSW has set the ambitious target of increasing this to 33% by 2025.

Our student community also contributes to our global outlook – more than one in three UNSW students is from one of more than 120 countries. Linked to government initiatives, our international student numbers have experienced record growth, making up 40% (17,000 students) of our total student community in 2017.

Highlights

Globalising our student experience

UNSW leverages international alliances, networks, and consortium with partners across the globe to provide unparalleled international experiences for our students. Through these networks we offer a substantial portfolio of overseas opportunities to enhance our student experience, spanning the Indo-Pacific region and the developing world. We are leading the sector in securing government funding for student mobility through the New Colombo Plan and Endeavour Mobility Grants.

Our alliance with Arizona State University and Kings College London will also assist us in achieving our goal of becoming Australia's leading educator of international students. We are enhancing our online international delivery through access to the PLuS Alliance Online Course Exchange.

Our innovative new STEMM Diploma

In 2017, UNSW launched a new diploma establishing new pathways for international students to enter the second year of UNSW degrees in engineering and science. By combining academic bridging programs with immersive English language instruction and our industry-connected STEMM curriculum, this diploma will prepare international students for the innovation economies of tomorrow.

Attracting the brightest students from India

In 2016, UNSW appointed an Indian former Consul General to Australia, Amit Dasgupta, as the inaugural Director of the UNSW Delhi office. The office focusses on helping more Indian students study at UNSW. More than 650 students have enrolled to date, with a target of 2,000 by 2025.

By developing our on-campus and online partnerships in India, we are providing accessible, blended learning, and building our global student community.

Globalising our student experience

UNSW is a recognised leader in global education, ranked number 14 of the world's most international universities by Times Higher Education in 2017. We offer transformative student experiences through international opportunities and work-integrated learning.

Expanding our Indo-Pacific links

The emergence of rising economies in the Indo-Pacific places a renewed impetus on universities to cultivate people-to-people links, and promote the importance of cross-cultural competence between young people and Australia's future strategic trade and investment partners across the region.

Increasing student mobility is central to our five-year China Strategy. We lead the Group of Eight universities and the sector for the highest percentage of students pursuing programs with China. The following are initiatives at UNSW.

Pivot to Asia

We are expanding our portfolio of mobility programs across the region through teams in China, Indonesia, and India, sourcing exchange placements, internships, and study tours.

Focus on China

This suite of opportunities will increase student mobility to China. Key initiatives include:

- Our VIP agreement with Shanghai Jiao Tong University for the exchange of 80 students annually
- Internship agreements with eight Torch companies, providing industrial training placements for STEM students

- The China Ambassadors Program, supporting 30 students on short-term programs annually
- The iGlobal Australia China Innovation and Entrepreneurship Competition, showcasing UNSW's startup teams as part of the Torch Innovation Precinct

Experiences in the Developing World

Part of the Institute for Global Development, this portfolio of major programs expands student opportunities to contribute to projects in the developing world. Initiatives include Summer School projects for Engineering and International Studies students at Gulu University in Uganda, the Social Entrepreneurship Program in Palau, solar-lighting installations for slum dwellers in India via a UNSW-initiated startup in India, and Engineering for Development projects in Nepal, Cambodia, and the South Pacific.

New Colombo Plan and Endeavour Mobility Grants

UNSW is ranked first in the country for securing the most government funding from flagship Commonwealth mobility programs such as the New Colombo Plan and the Endeavour Mobility Grants Scheme, attracting \$1.2 million in 2016 and \$2.8 million in 2017. This major external funding source will extend our international student opportunities, in line with our global impact agenda.

The New Colombo Plan aims to lift Australian knowledge of the Indo-Pacific area by supporting Australian undergraduates to study and undertake internships across the region. The Endeavour Mobility Grants encourage Australian students to immerse themselves in the academic and social cultures of other countries.

More than 40 individual faculty-led programs will be offered in specific countries in 2018, including Cambodia, China, Fiji, Hong Kong, India, Indonesia, Japan, Malaysia, Myanmar, Nepal, Palau, Samoa, Singapore, South Korea, Sri Lanka, Taiwan, and Thailand.

Online course exchange through PLuS Alliance

In addition to opening up global opportunities for research collaboration, the PLuS Alliance linking Phoenix, London, and Sydney will enhance our online curriculum. Students enrolled at Arizona State University, King's College London, and UNSW can undertake undergraduate or postgraduate study in the PLuS Alliance Online Course Exchange program.

Since the inception of the Alliance in 2016, UNSW has participated in programs from the Faculties of Medicine, Science, and Engineering, and a new Bachelor of International Public Health was launched in October 2017 – the first fully online degree from UNSW developed with the support of the PLuS Alliance.

The PLuS Alliance Student Council has been established, and executive education, pre-university MOOCs (massive open online courses), and an engineering joint venture are also in development.

New international pathways

The delivery of a strong international curriculum is enshrined in the UNSW Scientia Educational Experience. Our borderless approach to education will ensure UNSW becomes the leading educator of international students in Australia.

UNSW is already the university of choice for an increasing number of international students, due to the quality of our programs and our progressive pathways. Our approval rating in the International Student Barometer survey is more than 90% (2015-2016).

New UNSW STEM Diploma

Specifically tailored to international students, the UNSW Diploma degree programs in Science and Engineering act as a bridge to undergraduate study at UNSW.

Completion of the Diploma programs guarantee international students entry into the second year of the requisite UNSW undergraduate degree, bypassing first year. Students graduate with both a Diploma and a Bachelor's degree in the time it takes to complete an undergraduate degree.

UNSW India Office

To support our growing ties with India across research, education, and knowledge exchange, we established the UNSW India Office in Delhi. Under the directorship of Mr Dasgupta, the Office will forge strategic partnerships with industry and educational organisations in India.

Advancing our India Strategy

In November 2016 and April 2017, UNSW President and Vice-Chancellor Professor Ian Jacobs met key Indian government officials to strengthen our existing relationships within the region.

Since then, we have partnered with India's Smart Cities agenda to provide expertise on low-carbon living, built environment, materials science, computer science, and engineering, and with Tata Consulting Services to explore collaborations in virtual reality, robotics, and machine learning.

UNSW has also signed a number of MoUs with Indian partners, including the Indian Institute of Technology Ropar, the Centre for Environmental Planning and Technology, Thapar University, and Narsee Munjee Institute of Management Studies.

UNSW delegation to India

In 2017, Pro Vice-Chancellor, International, Laurie Pearcey led a two-week delegation focussed on building education, student recruitment, research, and knowledge exchange links. The delegation included Faculty Associate Deans, International, as well as more than 25 researchers working across global health, energy and environment, smart cities, and social entrepreneurship.

The delegation met a range of partners, including the Tata group, the Energy and Resources Institute, the Indian Institute of Technology, the Indian Institute of Chemical Technology, the LV Prasad Eye Institute, the George Institute for Global Health, and a range of startups in science parks across South India.

A new major agreement was signed between UNSW and the State Government of Maharashtra, which focusses on building capacity in Maharashtra's education system via PhD scholarships and student exchanges.



Rutuja Dandgaral accepting her Future of Change Scholarship at the India Illuminated festival

C2: Partnerships that facilitate our Strategy

Our direction to 2025

UNSW has begun forging deep partnerships with a select number of major universities across the world to enhance our global impact, international positioning, and ability to address contemporary challenges.

By contributing to research, learning and teaching, and engagement, these strategic partnerships will assist us in expanding our expertise and reach, continuing our history of strong relationships with Europe, North America, and China, as well as establishing new relationships with India and the Asia-Pacific.

Such partnerships are instrumental in translating our research into real-world impact. They ensure our students can access the latest methodologies, international opportunities, and cutting-edge technology. Our research community benefits from knowledge exchange with our capacity-building partnerships in the Asia-Pacific, Africa, the US, and Europe.

We have established a new Global Partnerships Team, led by Pro Vice-Chancellor Laurie Pearcey, which embraces collaboration across international affairs and global education. Through a coordinated approach to partnerships and resources, we are generating a global footprint unrivalled among Australian universities. In addition to our Global Challenges program, we share ideas and foster collaboration through the PLuS Alliance, the Torch Initiative, and other strategic partnerships.

Driven to be Australia's Global University, we are strengthening our connections to India, forecast as Asia's next superpower, and identifying opportunities for future research partnerships with academia, industry, and government.

Highlights

Engaging with global issues through PLuS Alliance collaborations

In addition to expanding access to world-class education, the PLuS Alliance enables research-led solutions to global challenges. To date, it has granted seed funding to 15 projects focussed on the four core PLuS Alliance themes of sustainability, global health, social justice, and technology and innovation.

Torch initiative facilitates high-impact research partnerships

The Torch initiative has given rise to numerous strategic partnerships with China since its inception in 2016. It translates UNSW discoveries into commercial applications via a \$90 million contract pipeline with Chinese companies and industries.

Developing relationships with industry and education in India

Expanding our engagement with industry, education, and government in India is a key element of the Global Impact pillar of the 2025 Strategy. In tandem with establishing the UNSW India Office, UNSW is making a series of targeted and highly strategic investments in developing transformative partnerships.

Through initiatives such as our research delegation to India in November 2017, we aim to make new connections and strengthen existing research relationships. This helps to showcase UNSW's capabilities to prospective Indian partners, especially in the research areas of smart cities, energy, water, climate, health, and social enterprise sectors.

PLuS Alliance research collaboration

Top-tier researchers in the PLuS Alliance are collaborating internationally, and delivering interdisciplinary solutions. Integrating the research talent from across the three PLuS Alliance universities provides a competitive advantage in these fields, with \$4.2 million in strategic funds released to date to support 15 projects.

The Alliance focusses on four core themes around which research and learning has the greatest impact and influence: global sustainability, global health, social justice, and technology and innovation.

Since its launch in 2016, the PLuS Alliance has:

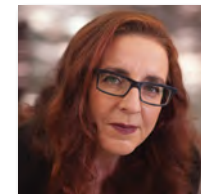
- Appointed 116 PLuS Alliance Fellows, 38 of whom are from UNSW
- Held six symposiums in three continents
- Stewarded more than 80 collaborative meetings between the three universities
- Appointed a Managing Director, Paul Ramadge, and Advisory Board, and developed/implemented its Strategic Plan 2018–20
- Launched the PLuS Alliance Prize (US\$50,000) to highlight innovation in research and education that:
 - Addresses a globally significant issue
 - Makes a direct and positive impact
 - Helps/has the potential to help communities globally



Sustainability project: River impact research

Professor Richard Kingsford
Professor Fleur Johns
Global River Basin Connections.

This project embraces the multidimensionality of fresh water as a grand challenge that explores institutional, social, and ecological dimensions. It will build up interdisciplinary expertise on sustainability challenges in global river basins for enhanced scientific understanding, enabling cooperation and adaptive management opportunities in river basin governance. This expertise will inform solutions through improvements in regulation, management, engineering, governance, ecological sustainability, and public health.



Social justice project: Hepatitis C research

Professor Carla Treloar
Development of a patient-reported experience/outcome measure for treatment among injecting drug users.

This project brings together researchers from Kings College London (KCL) and UNSW, including a peer researcher, to develop a measure of patient experience in Hepatitis C treatment for people who inject drugs. This work builds on expertise developed in KCL in a collaborative project of international significance.



Sustainability project: Urbanisation research

Professor Chris Pettit
Informed Urbanisation: understanding the housing–transport nexus.

This project seeks to answer fundamental questions on informed urbanisation (changes in land cover and land use occurring through deliberate decision-making), using integrated data, mathematical models, context information, and visualisation. It will provide seed funding to develop an interdisciplinary, cross-institutional research program incorporating both senior and early-career academics on three continents. In the longer term, it aims to support the development of shared short-course/training materials to educate policymakers on ways informed urbanisation can offer sustainable solutions.



Global health project: Bird influenza research

Professor Raina MacIntyre
Identifying risk factor of human-to-human transmissible form of highly pathogenic avian influenza H5N1.

This collaboration will identify risk factors associated with genetic mutations of an efficient human-to-human transmissible form of the HPAI H5N1 virus. Using a comprehensive computer modelling approach, it will discern the factors, such as livestock practices, vaccination strategies, and geographic areas, that are most likely to lead to the genetic mutations known to support human-to-human transmissibility. The findings will assist health and agriculture agencies in implementing strategies to reduce the likelihood of global transmission.

Partnering with China through the Torch Initiative

Since signing the MoU in 2016, the UNSW-Torch Initiative has generated a significant research contract pipeline of almost \$110 million. The partnership has made connections with more than 30 Chinese companies with UNSW playing an important role in China's emerging innovation system.

A broader ecosystem is taking shape around the Torch partnership, including China-based internships, startup space, and research centres. The shared financial and social rewards for Australia, China, and people across the globe span technology in health, energy, and environmental protection. The following are recent collaborations.

Next-gen touchscreens developed through Torch partnership

Robust, super-sensitive and cost-effective touchscreens are being developed in a partnership between UNSW and Chinese company WeTouch. WeTouch produces medium- to large-scale touchscreens for the retail, finance, gaming, health, and automotive industries. Its clients include Siemens, Schneider Electric, and Canon. Led by Dr Danyang Wang, Dr Dewei Chu, and Professor Sean Li of the UNSW School of Materials Science and Engineering, the partnership will develop new piezoelectric-based screens that are multi-touch capable and energy efficient.

Knowledge exchange on youth with complex needs

In April 2017, senior delegates from several Chinese social policy institutes, including members of the Development Research Centre of the State Council and Chinese Academy of Social Sciences, visited UNSW. Arranged by Associate Professor Bingqin Li their visit to the Social Policy Research Centre provided an opportunity to explore ways of developing innovative social policy around the Torch Initiative, and identifying potential partnerships with these two high-profile Chinese think tanks.

\$10 million to create climate-resistant cables

In August 2016, UNSW and the Hangzhou Cable Co. opened a joint material sciences laboratory in a partnership that will cut power costs and greenhouse gas emissions by improving electricity transmission. The \$10 million lab will develop a prototype of the new graphene-based cable technology that overcomes persistent electricity leakage that plagues conventional power cables and grids. This will deliver significant savings in electricity. The new technology was invented by a UNSW research team led by materials scientist Professor Sean Li.

Study abroad and knowledge exchange

UNSW's scholarship portfolio includes more than \$800,000 in outbound mobility funding to support students interested in undertaking an exchange in developing countries such as Cambodia, Fiji, India, Indonesia, Nepal, New Caledonia, Sri Lanka, Myanmar, Samoa, Tanzania, Uganda, Vanuatu, and Vietnam, as part of their degree program.

For example, the Endeavour Scholarships will provide funding for 10 students to study a short course in Uganda in 2018, with \$2,500 each to go towards study and travel expenses.

Global South Fellowship

In 2017, the Faculty of Arts and Social Sciences launched the Global South Fellowship which funds a full-time academic from a less developed region to visit UNSW for six months. Institutions in developing regions typically lack the resources necessary for academics to engage in international exchange. The annual fellowship supports researchers whose expertise leads to social or policy impact.

The inaugural Fellow, Dr Babere Chacha, a Senior Lecturer in African History in the Department of Public Affairs and Environmental Studies at Laikipia University in Kenya, visited UNSW in 2017. Dr Chacha has worked closely with the United Nations Office of the High Commissioner for

Visiting Global South Fellow Dr Babere Chacha
from Laikipia University, Kenya

Human Rights in Nairobi to introduce human rights as a core course at Laikipia University, and spearheaded the launch of the police science program there.

During his fellowship, he collaborated with UNSW's School of Social Sciences on research events and seminars, presenting on Kenya's socio-political climate, engaged in learning and teaching, and drafted a manuscript on Kenya's history of politically motivated murders and assassinations.

A key aim of his visit was to build links with UNSW staff, laying the groundwork for a collegiate relationship with his home institution.



Strengthening ties to India through innovation

In a celebratory event, Indian Prime Minister Narendra Modi was gifted a replica of Mahatma Gandhi's iconic spectacles, made entirely from waste using breakthrough recycling technology developed at UNSW.

The spectacles were presented by Prime Minister Malcolm Turnbull as a tribute to Mr Modi's Clean India initiative, aimed at improving lives by delivering public hygiene and better waste management through innovation, sustainability and advanced manufacturing.

Scientia Professor Veena Sahajawalla and her team at UNSW's Centre for Sustainable Materials Research and Technology created the spectacles using world-first sustainable micro-factory technology, which recycles toxic e-waste plastics into plastic filaments for 3D printers.

E-waste is the fastest growing waste stream in the world and current recycling methods are expensive and inadequate, and processing of e-waste in countries like India exposes poor communities to serious health and environmental risks. As 3D printed filament is currently produced only from non-renewable raw materials, this groundbreaking solution reduces pressure on natural resources while cleaning up a toxic global waste problem. The technology holds the potential to benefit entire communities in India, embedding micro factories at the source of waste while creating new jobs.

"This remarkable innovation is at the heart of what some of India's greatest 21st century thinkers have come to describe as Gandhian engineering and innovation."

Laurie Pearcey, UNSW Pro Vice-Chancellor, International

Inaugural UNSW Business School Practicum in Mumbai

In June 2017, more than 70 UNSW Business School students travelled to Mumbai to experience life and work in India, increasing higher education connections between Australia and India.

Delivered in partnership with Tata Consultancy Services, the three-week program immersed students in the Indian business and cultural environment with work placements at Tata, a startup called Flexiloans, and UNSW's India Office.

C3: Our contribution to disadvantaged and marginalised communities

Our direction to 2025

Our commitment to working in partnership with disadvantaged and marginalised communities to support improved social, health, and economic wellbeing will foster more equitable and just societies. This has been a tradition at UNSW and we are continuing to invest in the delivery of sustainable solutions to help address global development challenges and inequalities.

A key focus of UNSW's work is the further development of local capacity in communities of greatest need. We aim to achieve this through cultivating deep partnerships with a network of universities across the Asia-Pacific and Africa to facilitate the exchange of knowledge, expertise, and resources in research, education, and practice. This targeted and long-term program will provide experiences for UNSW staff and students and collaborating institutions to work in partnership with communities, government agencies, universities, and other organisations to further the achievement of locally identified development goals.

This goal is the focus of the new UNSW Institute for Global Development. There are three pillars to its work:

- Knowledge exchange: contributing to building capacity and creating sustainable solutions to a range of issues affecting disadvantaged and marginalised communities
- Overseas partnerships: connecting UNSW with a network of universities and organisations, addressing disadvantage through education, research and practical initiatives; initially focusing on three geographies (South Pacific, Myanmar, and Uganda)
- Australian partnerships: creating educational opportunities and applying research to help reduce the socio-economic gap of disadvantaged citizens in our own country

In total, \$50 million has been committed to our Global Development agenda, with almost \$14 million in strategic funding committed to projects.

Highlights

Institute for Global Development

The Institute for Global Development (IGD) will deploy our knowledge, strengths, and infrastructure to develop relationships with partner communities in Africa and the Asia-Pacific. We have begun capacity-building partnerships with Gulu and Makerere Universities in Uganda and with the University of Medicine 2 and Yangon Technological University in Myanmar.

Seed funding to support new projects

The IGD is seed funding 14 projects in Uganda, Myanmar, the South Pacific, and Australia in areas as diverse as academic leadership training, community health screening, implementation of green energy solutions for rural villages, and community waste recycling.

Progressive new partnerships developed in Australia

UNSW is committed to realising critical development impact in Australia as well as globally. Through a formal partnership with the Australian Council of Social Service (ACOSS), research on poverty and inequality in Australia will directly influence policy and practice development in the sector. Similarly, a collaboration with the Dharriwaa Elders Group in Walgett, NSW, will support social and economic transformation for the local community via a community development model developed by UNSW researchers.

Institute for Global Development Leads appointed

Underpinned by cross-faculty support and \$50 million in strategic funding to 2025, the Institute's program draws on more than 250 UNSW research projects around the world in public health care, climate science, energy and water, AIDS/HIV, post-conflict trauma, migration, and other fields. UNSW's strengths in sustainability, engineering, and health are also of key value in developing countries.

In 2017 Academic Leads were appointed for the Institute for Global Development. A small professional support team is being recruited in 2018 and there is a process to secure a world-leading development and research expert as the Institute's Academic Director.

Executive Chair

Michael Rose AM was appointed Executive Chair of the Advisory Board in mid-2017. A lawyer and former Chief Executive Partner of Allens law firm, Mr Rose is the Chairman of several government, arts, and not-for-profit organisations, and has particular experience in Indigenous affairs and international development activities. Mr Rose was recognised in 2016 as a Member of the Order of Australia for services to Indigenous communities and the legal profession.

Academic Lead, Uganda

Professor Prem Ramburuth, UNSW Business School
Professor Ramburuth is immediate past President of the UNSW Academic Board and a Professor in International Business, focussing on research and teaching in Cross-Cultural and Global Management in Business and Higher Education. She is the UNSW representative on the Australia Africa Universities Network (AAUN) and AAUN attendee of the African Research Universities Alliance (ARUA).

Academic Leads, Myanmar

Dr Melissa Crouch, UNSW Law

Dr Crouch has been working as a constitutional law expert and adviser in Myanmar for nearly 10 years. She is currently the Team Leader and Myanmar Law Expert for the Asian Development Bank project, Strengthening Law, Regulation, and the Legal Profession for a Better Investment Climate in Myanmar.

Dr Morten Pedersen, UNSW Canberra

A Senior Lecturer in International and Political Studies, Dr Pedersen has been engaged with Myanmar for more than 20 years. As project leader for the International Crisis Group between 2001 and 2006, he delivered a series of policy reports that significantly improved humanitarian aid to Myanmar.

Academic Leads, South Pacific

Professor Heather Worth, UNSW Medicine
Professor Worth is Head of the International HIV Research Group in the School of Public Health and Community Medicine and has carried out more than 20 research and capacity-building projects in the Pacific in the past 15 years.

Associate Professor Daniel Robinson, UNSW Arts and Social Sciences

Associate Professor Robinson's research focuses on nature and knowledge. He has a particular interest in the environmental and social implications and negotiation politics of multilateral, regional, and bilateral trade rules.

Academic Lead, Australia

Professor Eileen Baldry, UNSW Arts and Social Sciences

Professor Baldry is Deputy Vice-Chancellor Inclusion and Diversity, and Professor of Criminology, and her research and publications focus on social justice, including mental health and cognitive disability in the criminal justice system; Indigenous justice; Indigenous social work; community development and social housing; and disability services.

Seed funding to support new collaborations

The Institute for Global Development is committed to supporting the implementation of the findings of UNSW research in developing communities. Seed funding has been made across 14 projects in the hope that partners will see the potential of our work and collaborate to scale up these initiatives in the future. The following are examples of our work.

Partnerships in Uganda

UNSW has committed significant development resources to support a young institution, Gulu University, in post-conflict Uganda develop its role in the community, training community and academic leaders of the future. Gulu's aim to is become Uganda's leading sustainable city. UNSW signed an MoU with Gulu University in May 2016 that includes development programs for academic staff, student exchange opportunities, and visiting research fellowships in areas such as mental health, justice, renewable energy, and infectious diseases. Through the partnership, four UNSW initiatives have been launched to transform health, leadership development, communities, and student experiences in this region, plagued by decades of civil war.

Academic Development

Led by Professor Prem Ramburuth, UNSW, and Professor Christine Oryema, Gulu University, the Academic Development project identifies the opportunity in the partnership between UNSW and Gulu University to enhance academic learning and teaching through professional development. The project aims to develop an understanding of academic career pathways, improve generic teaching skills, improve research skills, and provide academic mentoring opportunities. In 2017, the lead faculty members from Gulu University undertook the

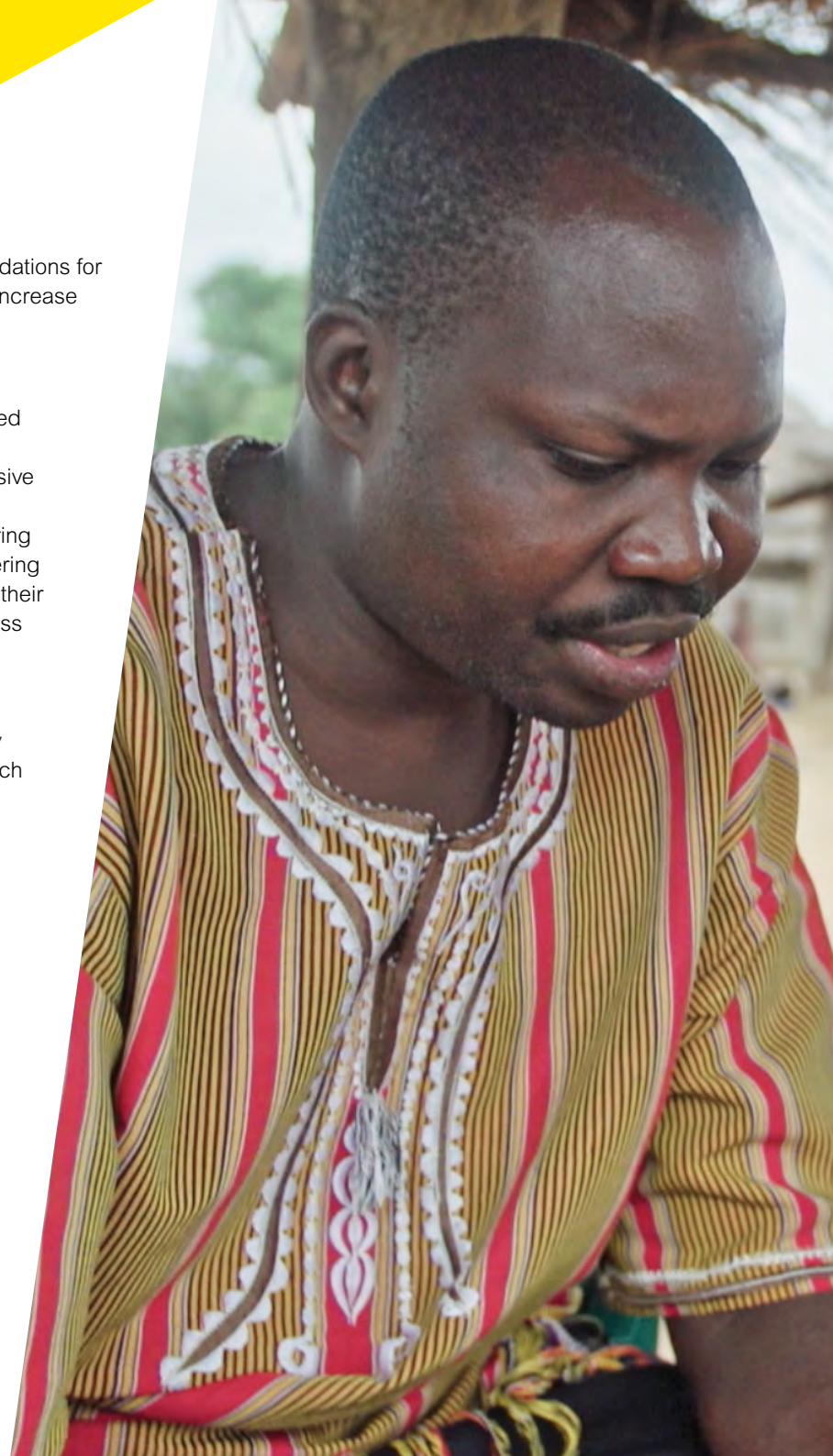
UNSW-designed 'Beginning to Teach' and 'Foundations for University Learning and Teaching' programs to increase their capacity in teaching design and delivery.

Student Summer School

Led by Associate Professor Julian Cox and hosted by Gulu University's Faculty of Agriculture and Environment, the Summer School was an immersive experience for students from UNSW and Gulu University. The activity was piloted with Engineering and Agriculture students with 10 UNSW Engineering students travelling to Uganda to work alongside their Gulu University colleagues looking at agribusiness innovations for farmers in the community.

Conflict Resurgence and the Governance of Peace

As part of its own strategic plan, Gulu University identified a need to work with its community, which has suffered through many years of conflict. The Conflict Resurgence and the Governance of Peace (CRGP) project is a collaborative research, outreach and innovative intervention, led by Gulu University and supported by UNSW through the leadership of Associate Professor Anne Bartlett. Academic staff from both Arts and Social Sciences and Business led 21 UNSW undergraduate students to Uganda to participate in a fieldwork school at the Gulu University's Institute of Peace and Strategic Studies, experiencing first-hand the challenges faced by post-conflict communities.





Transformative Community Engagement in Health

Gulu University has identified the opportunity to conduct health clinics in remote communities, deploying its students and academics to complement health practitioners working on the ground, as well as collect data to inform its public health research. Gulu University requested the collaborative support of UNSW to deliver its first community outreach mobile health clinic program, which also serves as a research hub.

In 2017, a team of staff and students from UNSW, led by the Faculty of Medicine's Professor Robyn Richmond, undertook cervical cancer screening and provided training for local health professionals, as well as undertaking a joint research survey with Gulu into issues of women's health and domestic violence.

In addition to our engagement with Gulu University, the Brien Holden Vision Institute, supported by the Faculty of Science, collaborated with Makerere University in Uganda to develop the first Undergraduate Optometry program in Uganda, training eye health professionals to respond to treatable defects in vision among the local population. To date, we have enrolled 75 students in four successful cohorts.

"There are so many public health problems because of years of insurgencies. The women and children have been the casualties, but we are hopeful that the Transforming Community Health Project will lead to a positive impact and improved health of women living in northern Uganda."

Professor Robyn Richmond, UNSW Medicine

Partnerships in South Pacific

The Institute supports seven seed-funded projects across the South Pacific in areas including renewable and sustainable energy, clinical management of infectious diseases, tropical diseases, clean geothermal power, transformation of waste plastics, sustainable infrastructure, poverty reduction, and wellbeing. The following are key initiatives.

Renewable energy for Vanuatu

In tandem with The University of the South Pacific, Dr Iain MacGill, Joint Director of the UNSW Centre for Energy and Environmental Markets, and Dr Anna Bruce, Senior Lecturer at the UNSW School of Photovoltaic and Renewable Energy Engineering, will run student courses and oversee research projects that focus on providing sustainable energy solutions for remote communities. The partnership will develop a joint program to deliver affordable renewable energy solutions for the Pacific Islands with a focus on capacity building and collaborative learning.

Sustainable housing for the poor in the Pacific Islands

With the aim of improving local infrastructure and housing conditions for Pacific Island communities, Dr Sarath Mataraarachchi and his team from Faculty of Built Environment will partner with public officials to develop community capacity to plan, deliver, and maintain sustainable infrastructure and housing.

Dr Mataraarachchi and the team will establish local repair and fix teams, run training programs and maintain follow-up support to build, maintain or retrofit new and existing housing and infrastructure, aimed at improving their quality of life.

Supporting community projects on Tanna Island

UNSW's Australian Centre for Advanced Photovoltaics has been providing solar power to medical clinics and schools in unelectrified rural areas on Tanna Island, Vanuatu, over the past 10 years. Led by the Centre's COO, Dr Richard Corkish, UNSW student teams install and repair solar power and hydropower systems for dispensaries, schools, and local villages.

In January 2018, Dr Corkish led seven undergraduate students to Vanuatu to continue the critical work. They installed new solar lighting and phone charging in three aid posts and a school, and made repairs in some dispensaries and other community facilities.

This opportunity provided an enriching experience for students and much-needed aid for local communities, strengthening existing relationships with industry and government departments.





Partnerships in Myanmar

As Myanmar transitions to a democracy, UNSW is working with local institutions on projects to advance constitutional reform and modernise research, education, and medical treatment methods. The Institute for Global Development has seed funded three projects within these fields to further the impact of UNSW's research. In addition to these activities, we have worked on the following key initiatives.

UNSW Kirby Institute | University of Medicine 2 Partnership

The Kirby Institute is collaborating with Myanmar's University of Medicine 2 (UM2) on the clinical management of infectious diseases in Yangon. Launched in June 2017, the partnership aims to build research capacity with an emphasis on HIV, tuberculosis, and malaria. The research is expected to inform local public health policy as well as national, regional, and international management guidelines for these diseases.

Myanmar faces considerable health challenges. The World Health Organization has identified it as one of 13 countries in the world with the most serious tuberculosis. It is estimated that 222,000 people in Myanmar are HIV-positive, with only half receiving antiretroviral treatment. In 2015, there were more than 240,000 cases of malaria, and anti-malarial drug resistance is increasing.

In addition to improving the quality of medical education at UM2, the partnership will also deliver a leadership development program and a joint laboratory, due for completion in early 2018.

"It is our responsibility to take the clinical lessons we've learned in Australia and share them with those in our region."

Scientia Professor David Cooper, Director of the Kirby Institute

UNSW Law | Australia Myanmar Institute

The Australia Myanmar Institute aims to enhance sustainable, multi-sectoral, applied research and partnerships between Australia and Myanmar to advance social and public welfare in both countries. The Institute hosts a biannual conference to facilitate international education institutions, government and non-governmental organisations, and businesses partnering with Myanmar counterparts to strengthen research and public policy, and its implementation in Myanmar. In 2017, five UNSW academics attended the conference, which focussed on Progress towards Myanmar's Sustainable Development Goals in Yangon.

Myanmar Engineering Council | Mandalay Technical University | UNSW Engineering

In partnership with the Myanmar Engineering Council, UNSW Engineering has been advising Mandalay Technical University (MTU) on its first engineering accreditation. In October 2017, UNSW Engineering academics presented workshops for more than 50 evaluators, offering guidance and feedback on the accreditation process, and recommendations to improve future quality control. UNSW also provided constructive feedback to MTU on its Engineering programs.

This partnership follows UNSW Engineering's long-term support for Yangon Technological University, which has seen academics collaborate on curriculum design, professional development, and the donation of computers for a new student lab. More recently, work has focussed on accreditation of degrees. Myanmar's engineers and universities are slowly re-engaging with the global community, as the country undergoes many rapid changes. In addition to strengthening ties with the Council, government, and industry in Myanmar, this partnership also resulted in UNSW hosting our first two faculty-supported Institute of Global Development PhD scholars.

Partnerships in Australia

UNSW is committed to realising critical development impact in Australia, as well as globally. The social justice aspirations and rights of all Australians are a specific and critical priority for UNSW. In addition to our portfolio of Indigenous programs, we are also working in partnership with local community groups to address disadvantage and marginalisation of many Australian communities.

Partnership with the Australian Council of Social Service

In late 2017, UNSW and the Australian Council of Social Service (ACOSS) signed a partnership agreement to tackle inequality and poverty in Australia using their combined strengths in research, policy, and advocacy.

The partnership will draw in a number of NGOs and other community-based organisations working to address inequality and poverty. This agreement is built on a five-year working relationship between UNSW's Social Policy Research Centre (SPRC) and ACOSS, which saw the production of a series of biannual reports titled *Poverty in Australia* and *Inequality in Australia*. These reports analysed Australian Bureau of Statistics data on income and other salient information to provide the most authoritative reports on inequality and poverty in Australia.

The new partnership will extend the analysis and reports to include health, law and justice, housing and other key areas of Australian society. These will contribute to a greater understanding of who is affected, as well as provide a means to monitor progress and increase visibility, develop appropriate responses, and influence government policy.

'Yuwaya Ngarra-li': the UNSW partnership with the Dharriwaa Elders Group, Walgett

The Dharriwaa Elders Group and UNSW are partnering to improve the wellbeing, social, built and physical environment and life pathways of Aboriginal people in Walgett through collaboration with government, philanthropic and community organisations on evidence-based initiatives, research and capacity building. The partnership, called 'Yuwaya Ngarra-li', has grown out of a longstanding research relationship between the Dharriwaa Elders Group and UNSW, led by Professor Eileen Baldry. It is based on a strong foundation of mutual trust and respect, and our combined understanding of how to generate sustainable and systemic change in the local community.

In 2018, the partnership will focus on young Aboriginal people at risk of contact with the criminal justice system, as well as solar energy, water management, and education, training and employment opportunities for Aboriginal people in Walgett. Community, philanthropic, and government collaborators are also supporting the partnership.

Matraville Education Partnership

The UNSW Matraville Education Partnership creates Australia's first high school-based university centre aimed at tackling academic and social disadvantage. Matraville Sports High School has one of the highest concentrations of Indigenous students of any Sydney high school, as well as many students from non English-speaking backgrounds.

Through the Partnership, around 70 pre-service teachers are based at the school for extended periods throughout each semester. The student teachers actively address academic and social disadvantage by leading in-school and after-school enrichment programs, including in drama, music, science, and gifted education.

The Partnership is also fostering stronger relationships between schools and the Indigenous community through initiatives such as the Culture, Community, and Curriculum Project, a collaboration with the Eastern Suburbs Local Aboriginal Education Consultative Group. Launched in 2016 within the Little Bay Community of Schools, the Project invites members of the Indigenous community into local classrooms to share their knowledge and experience to cultivate greater understanding of Aboriginal perspectives and culture. It also aims to build and develop leadership capacity among the local Aboriginal community, giving them greater voice and agency in their children's schooling.

ASPIRE UNSW's outreach program

Built on an evidence-based approach that emphasises early and sustained engagement, ASPIRE encourages students from low SES backgrounds to interact with the university environment through workshops, residential stays, and visits to campus. To date, the program has reached 50,000 students, and is now involved with 56 primary and secondary schools in regional and metropolitan areas. In 2017, the ASPIRE Regional Program was supported by \$800,000 in government funding, for the following special projects:

- 'Uni in a Ute' gives Year 11 students in regional/remote areas the tools they need to reach university, including practical study skills and ways to overcome the barriers associated with where they live
- 'Mind the Gap' investigates whether current initiatives to widen participation in Australian universities are addressing the attainment gap for low SES students in regional/remote schools
- 'Power of Perception' identifies key elements that shape low SES students' aspirations and perceptions regarding access to university and their impact on student progression
- 'Beyond Borders' examines the effectiveness of embedding recent university graduates as outreach project officers in regional/remote schools
- 'Click on Mentors' provides an online mentoring program for regional/remote high school students

"ASPIRE exposes rural students to ideas and experiences they might not have otherwise had, forces them to challenge their own expectations and assumptions, and gives them an opportunity to interact with education and learning, locally and globally. From a public education perspective, this is what it's all about, enriching the lives of young people to contribute to society. This is a platform that may well be life-changing, simply by opening eyes to new possibilities."

Neal Reed, Principal of participating ASPIRE school Gilgandra High School in Western NSW



UNSW Medicine student Amy Coopes with one of her young patients in Laramba, a remote outpost in the Northern Territory



Enablers

D1: People and culture

Our direction to 2025

Enabling our staff and students to reach their full potential is essential to the 2025 Strategy. We are dedicated to creating a supportive culture that embraces change and continuous improvement, and promotes pride in UNSW's vision, values, and achievements. The development of our new performance framework, professional development tools, and succession planning are the means to nurturing the UNSW community and achieving our 2025 goals.

Over the past two years, we have embedded the UNSW Behaviours within existing Human Resources processes and development activities, such as recruitment, recognition, onboarding, performance, and promotion. We support our leaders and teams to articulate this positive working culture across campus and beyond.

We are working to attract and retain the best academic, research, and professional talent around the world to help us achieve our strategic goals. We are constantly improving our employee benefits and streamlining our recruitment and onboarding processes. Our renewed focus on building and sustaining talent for the future through proactive succession planning and career development programs supports our leadership pipeline.

Re-engineering UNSW for the future is a key platform of the 2025 Strategy, and our people and culture form a crucial element of this. By leveraging new skills and capabilities across every aspect of university life, we support our staff, and honour and build on nearly 70 years of commitment to academic excellence, research endeavour, and global outreach.

Highlights

Nurturing and developing our staff community

UNSW is committed to developing the leadership capacity of our staff and providing career pathways that reward excellence. Our new performance framework, myCareer, identifies development opportunities, and facilitates discussion around career aspirations and performance. Paired with our suite of staff development tools, it enables greater academic and professional career progression.

Fostering a University-wide culture through the UNSW Behaviours

The new UNSW Behaviours define how we can best work together. The five Behaviours – Demonstrates Excellence, Builds Collaboration, Displays Respect, Embraces Diversity, and Drives Innovation – encourage pride in UNSW's vision, values, and achievements. Staff demonstrating these Behaviours are recognised through the UNSW President's Awards.

Building capacity through succession planning

We have invested in strategic recruitment and appointments to strengthen our expertise across academic and professional spheres. We are dedicated to enhancing our offering at UNSW to attract the best and brightest through initiatives like our career development programs and staff study subsidy.

Supporting our community

UNSW is investing more than \$100 million in its staff, students, and systems in pursuit of operational excellence. We are offering more shared services, efficient processes, and defined career paths for our academic and professional staff. To support this change, we are investing in targeted staff development tools and a new performance framework.

myCareer performance framework

myCareer promotes positive, collaborative and future-focussed conversations that empower staff to lead fulfilling careers. It provides guidance and structure for employees and leaders to discuss expectations, career aspirations, development options, and performance feedback.

In 2017, this framework was introduced to all UNSW staff. All leaders and staff are being trained in the process to ensure a consistent, supportive, and high-quality experience.

Extend – academic career framework

Progressing in academia requires outcomes in scholarly research, education and leadership, and engagement. The Extend career framework is an online career resource to help staff and research students identify and access development opportunities and support to suit their current academic, research, or research administration career stage. Alongside these research-intensive pathways, the launch of our Education-Focussed roles identifies career progression for academics passionate about teaching.

UNSW Behaviours in action

UNSW Behaviours fosters a culture of excellence at the University. In 2017, five key behaviours were selected and communicated across the University via the recruitment and myCareer processes, Spotlight Sessions through the UNSW Professional program, and the University Leadership Forum.

Inaugural President's Awards


The President's Awards recognise staff who demonstrate the UNSW Behaviours through their contribution and outstanding achievements. The UNSW community came together to celebrate colleagues who embody innovation, excellence, respect, diversity, and collaboration, as well as a People's Choice Award at the inaugural Award ceremony in December 2017.


121
nominations
received


76%
individuals


37%
male


1,100↑
votes received for
People's Choice


24%
teams


63%
female



Embraces Diversity

Values individual differences and contributions of all people and promotes inclusion.



UNSW Behaviours



Drives Innovation

Thinks creatively and develops new ways of thinking. Initiates and embraces change.



Builds Collaboration

Works effectively within and across teams. Builds relationships with internal and external stakeholders to deliver on outcomes.



Displays Respect

Treats others with dignity and empathy. Communicates with integrity and openness.



Demonstrates Excellence

Delivers high performance and demonstrates service excellence.

Talent acquisition and staff development

We have bolstered the University's expertise with a number of impressive appointments since the launch of the 2025 Strategy. These include:

- UNSW's first female Deputy Vice-Chancellor, Professor Eileen Baldry as Deputy Vice-Chancellor (Inclusion and Diversity)
- UNSW's first Pro Vice-Chancellor (Indigenous), Professor Megan Davis
- Dr Elizabeth Eastland as Director Entrepreneurship in the Division of Enterprise
- The Hon. Adrian Piccoli, previously NSW Minister of Education, appointed as a Professor of Practice and Director of the Gonski Institute for Education

Staff study subsidy

UNSW offers staff members opportunities to further their education and grow their careers, as well as strengthening employee benefit offerings to ensure the university can retain and attract the very best talent.

In 2017, UNSW launched the staff tuition fee subsidy initiative for eligible staff to receive a discount of 40% on tuition fees for courses and degrees offered at UNSW.



Professor Megan Davis, Pro Vice-Chancellor (Indigenous)

In March 2017, Professor Megan Davis was appointed as UNSW's first Pro Vice-Chancellor (Indigenous). The role was created to ensure UNSW delivers on its agenda for Indigenous students, and nurtures Aboriginal and Torres Strait Islander scholars.

Professor Davis, a Cobble Cobble Aboriginal woman from the Barrungam nation in south-west Queensland, is one of Australia's most highly regarded lawyers, specialising in public law and public international law. She began the role in June 2017 after fulfilling her obligation in leading the Referendum Council Aboriginal Constitutional Dialogue.

Professor Davis is a Fellow of the Australian Academy of Law. Her research work is targeted at law reform in the areas of constitutional law and violence against Aboriginal women. She has spent the past decade leading the Indigenous Law Centre and publishing the *Indigenous Law Bulletin* and the *Australian Indigenous Law Review*.

Professor Davis served as an expert member of the United Nations Permanent Forum on Indigenous Peoples for six years, including as Chair and focal point for UN Women. She is an Acting Commissioner of the NSW Land and Environment Court, a member of the NSW Sentencing Council, and has served as a member of the Prime Minister's Expert Panel on the Recognition of Aboriginal and Torres Strait Islander Peoples in the Constitution.



Professor Eileen Baldry (front) with four of the five new Diversity Champions (L-R), Professor Warwick Dawson, Professor Laura Poole-Warren, Professor Vanessa Lemm and Professor Andrew Lynch (absent Professor Mark Willcox).
Photo credit: Quentin Jones

D2: Operational effectiveness and sustainability

Our direction to 2025

Delivering excellence in research, education, and global engagement requires world-class support services. In pursuit of operational effectiveness, UNSW continually seeks to maximise efficiencies, prioritise expenditure on strategic opportunities, and ensure we remain adaptable to fast-moving changes in the sector.

Across each faculty and division, every school and student experience, and in the way UNSW delivers teaching, and collaborates with international governments and businesses, we are radically improving and reshaping our performance and productivity to be fit for future challenges.

We have invested more than \$100 million in process and system changes to strengthen our services across campus.

UNSW is building effective change-management capability to promote peak service delivery and productivity. This ability to provide agile and flexible responses to change, while ensuring effective mitigation of strategic and operational risks and compliance with legal and ethical requirements, is key to enabling us to achieve our strategic goals.

Highlights

Operational excellence achieved through our shared services model

In the past two years, we have made changes to the structure and delivery models of many of our portfolios within the University to improve the student and staff experience, and to ensure a quality service standard. By moving from a decentralised to a highly effective shared services model, UNSW is driving efficiencies that contribute to a sustainable revenue pipeline.

Moving towards single enterprise-wide systems

We are implementing University-wide systems across a range of service areas to increase consistency and productivity. Through the launch of Office 365, our new student relationship management and HR assistance systems, we will streamline our processes allowing us to utilise our resources more constructively.

Maintaining assurance for the 2025 Strategy

Delivering excellence in research, education, and global engagement requires world-class support services. We are radically improving and reshaping our performance and productivity to be fit for the future challenges that the 2025 Strategy presents, and have established the University Program Office (UPO) and UNSW Performance and Planning (UPP) scorecard metrics to keep our Strategy on track.

Building a culture of philanthropy at UNSW

We are fostering a culture of giving at the University, encouraging more alumni and friends to support UNSW. The UNSW Division of Philanthropy has overseen significant philanthropic support over the past two years, contributing to the diversity of our revenue sources.

Operational excellence

Through ongoing engagement and consultation with staff, the service experience for staff and students is being transformed to maximise efficiencies, deliver cost savings, and repurpose expenditure for strategic opportunities. This follows a review of 15 service areas across the University, identifying key strengths and challenges.

Over the past two years, the delivery models in Finance, IT, External Relations, Estate Management, Human Resources, and across every Faculty have been revised to incorporate a shared service model. The new model aims to provide consistent support and effective organisational structures, as well as efficient and simple systems and processes. It will increase capability in critical areas, create clear roles and job level alignment, and allow for effective governance.

For UNSW staff, this means:

- Clearer career pathways for career progression
- Transparent position classifications
- Greater knowledge sharing, targeted capability development, and enhanced leadership skills
- A work culture focussed on high performance, customer service, and continuous improvement
- Greater expertise through professional support
- Simplified processes and systems
- Better self-service capability
- The ability to leverage expert shared services
- Dedicated Faculty support to ensure distinct Faculty and School requirements are appropriately addressed

For UNSW students, this means:

- Enhanced 24/7 online self-service functionality
- Centralised support for all face-to-face student services
- Tailored advice to meet student needs
- Consistent messaging and communications
- Simplified efficient processes
- Greater self-directed and digital engagement

University-wide systems

To make the University more efficient and accessible to staff, students, and the public, we have implemented a series of solutions that service our communities to standardise, simplify, and automate processes.

This includes the launch of Office 365 to better collaborate across campus, a new student Customer Relationship Management system, and the HR Help @ UNSW program to centralise and streamline HR inquiries.

Insight CRM – UNSW/student relationships

Insight CRM is a University-wide system that allows staff to track and manage student relationships across recruitment, marketing, and student services from our first interaction with a prospective student right up to graduation and beyond. In 2016 and 2017, the system was rolled out to our central administration and recruitment teams.

Office 365 – digital collaboration services

UNSW upgraded to Microsoft Office 365 in early 2017. The Office 365 platform opens up new ways to collaborate across the University and with our partners.

HR Help @ UNSW

Launched in May 2017, HR Help @ UNSW is a shared service function for Human Resources, currently in operation within the Divisions and the Faculty of Medicine. This team will manage all generalist HR processing and requests via phone, email, and through a new online HR general request form, improving the efficiency, consistency, and flexibility of the professional services provided by our HR team.

Position management capabilities will launch in 2018, capturing data to allow position tracking and visibility of vacancies to simplify recruitment processes.



Processes and frameworks to support our Strategy

UNSW is building effective change management and reporting capabilities to facilitate the constant appraisal of our services and structures to promote peak productivity. The University Program Office (UPO) and UNSW's Planning and Performance (UPP) scorecard metrics ensure our projects deliver maximum benefit.

University Program Office

To accommodate the extensive work program to support the initiatives within the 2025 Strategy, the UPO was established in 2016. The UPO provides support, assurance, performance monitoring, and risk management of the overall program against planned and realised benefits for all major projects across UNSW. This includes delivery of frameworks, tools, and processes to support faculties and business units in planning, delivering, and completion of projects to deliver the maximum benefit to UNSW and its stakeholders.

UNSW planning and performance

To align our overall strategic goals with the operational goals and plans of each Faculty and Division, UPP has developed a formal University-wide performance management framework and planning cycle. A suite of formal institutional scorecards presents comprehensive business metrics across a set of 20 Council KPIs, developed through a rigorous process of consultation. Scorecard metrics are reported to Council, and inform the annual program of formal planning, review, monitoring and reporting processes, and meetings for Faculties, Divisions and the Management Board.

Fostering philanthropy at UNSW

Philanthropy is key to the success of the 2025 Strategy. Our Division of Philanthropy has built a centralised, world-class philanthropic team to work with individuals, corporations, and foundations to raise philanthropic donations for the University's highest priorities.

The team also leverages the power of alumni and friends around the world to support UNSW's objectives, provide opportunities to meaningfully engage with the University, and build philanthropic capacity for the long term.

The Division has already made significant progress in its mission to build a culture of giving within the University. Over the past two years, we have received a series of major gifts and bequests from alumni and friends of the University including:

- The Paul Ramsay Foundation's, \$12.23 million for the Healthy Lifestyle and Climate Schools
- An anonymous \$6 million bequest to support research in Alternative Dispute Resolution in the Faculty of Law
- Singapore Advisory Council member, Dr Fong Fui Wong, donated \$1.5 million (\$1 million for an entrepreneurship accelerator fund and \$500,000 for the Roundhouse)
- The Origin Foundation's, \$1.3 million for Grant King Indigenous Scholarships
- The Glendonbrook Foundation (UK) donated \$1.25 million for the Accelerating Evaluation of Emerging Approaches to Anal Cancer Screening and Prevention
- \$1 million for the Gail Kelly Global Leaders Scholarship
- The President and Vice-Chancellor's Appeal raised \$855,330 from 1,102 alumni donors over a 12-week period in 2017

The Division has built a talented team that will drive a culture of philanthropy. We have further developed and created new engagement opportunities for alumni and friends to engage with UNSW. These include:

- The launch of UNSW's first University-wide digital alumni newsletter, *Alumni Express*
- Improvements to the graduation experience, with follow-up engagement for young alumni
- The launch of the Learn@Lunch series, which brings lectures by UNSW's most prominent academics to the CBD in a 'no frills' classroom style
- The trial of a new digital platform for alumni-to-student, and alumni-to-alumni career advice and networking



Judith Neilson Chair in Contemporary Art

In March 2017, the founder of Sydney's White Rabbit Gallery, Judith Neilson AM, made her second major donation to UNSW, with a gift of \$6 million to establish The Judith Neilson Chair in Contemporary Art. The White Rabbit Gallery has become a global magnet for lovers of and specialists in contemporary Chinese art, and the Professorial Chair will work between UNSW Art & Design and the White Rabbit Gallery to expand study of contemporary Chinese art in a global and historic context.

In 2015, Ms Neilson funded the \$10 million Judith Neilson Chair in Architecture to research the design of affordable housing for people displaced by natural disasters, geopolitical conflicts, and economic and environmental factors.

Ms Neilson's visionary gift in creating this new professorial chair will support UNSW's mission to build enduring, reciprocal partnerships between China and Australia, encompassing culture, education, research, and innovation.

"The funding of the Chair in Contemporary Art is a transformative act of philanthropy and a timely contribution to cultural scholarship. It is imperative that UNSW and Australia contribute to research and dialogue in contemporary Chinese culture internationally. Judith's visionary and generous gift ensures UNSW Art & Design students, staff, and wider communities can participate in these important conversations."

Professor Ross Harley, Dean, UNSW Art & Design

D3: World-class environments

Our direction to 2025

Delivering a rewarding, holistic experience for students, staff, and the wider community is integral to the 2025 Strategy. We are integrating our physical and digital campuses to create world-class environments attuned to our communities' needs.

Our physical campuses with their learning and working spaces are designed to support wellbeing. Safety, social engagement, accessibility, and collaboration stand at the centre of our campus redevelopment. Our contemporary state-of-the-art facilities and vibrant learning precincts promote opportunities for diverse engagement with students, staff, alumni, our partners, and the general public.

Our focus on wellbeing is also reflected in our new Sports Strategy and our family friendly campus environment. We promote a positive work life balance through our focus on workplace wellbeing, our new academic calendar, and our lively student experience. Our digital focus allows students and staff to benefit from the latest advances in technology, promoting efficiency and information flow with applications like Uni-Verse.

Highlights

Investing in vibrant new spaces on campus

We are developing our campus to incorporate new learning precincts that transform the educational experience. New interactive spaces in the Red Centre, Law Library, Business School, and more will engage our students in collaborative learning, while the refurbished Roundhouse and Library Lawn Forecourt, the upgrade of the hospitality offerings, and the redevelopment of the Mathews Pavilion contribute to a dynamic campus life.

Increasing accessibility to learning in today's changing world

Our innovations in the digital space offer flexible and personalised learning solutions, allowing us to enhance learning and reach greater numbers of students around the globe. In addition to improving learning and assessment outcomes, digital solutions promote optimal and effective program delivery.

Offering a holistic wellbeing experience for students and staff

UNSW promotes a family friendly environment, supporting staff on campus through the UNSW Early Years Childcare. Initiatives like the 2025 Sports Strategy, alongside our targeted community and charity partnerships, enhance the student and staff experience.



Campus redevelopment

Our University-wide redevelopment plan will transform learning on campus through the staged delivery of innovative new precincts. Supported with \$45 million in strategic funding, our Learning Environments initiatives will see a series of student-centric learning spaces unveiled in 2018 and beyond, providing personalised and flexible education to UNSW students.

Quadrangle/Business School Precinct

This Precinct introduces new interactive and collaborative spaces to facilitate group work with configurable furniture and educational technologies that flip the classroom to improve learning and teaching. It will also enable pedestrian flow between the two buildings. Stage One is due for delivery in early 2018.

Tyree Energy Technologies Building

This upgrade of existing lecture theatres and computer labs will create interactive learning spaces with configurable pod-style seating and technological capabilities such as screen-sharing, whiteboards, and access to cloud-based virtualising applications. For delivery in 2019, these multipurpose spaces will support laboratory teaching, collaborative learning, and other pedagogical approaches.

The Red Centre

The ground and mezzanine floors will be reimaged to create a series of purpose-designed, student-led spaces, including zones for scholarly and collaborative learning, an amphitheatre, and exhibition space for Built Environment student projects. The Red Centre's central location and proximity to student-led amenities makes it an ideal site for a project of this nature. For completion early 2018.

Law Library

In July 2017, existing computer labs were upgraded to interactive learning spaces with embedded pod-style desks, device ports, screen-sharing capabilities, high-speed Wi-Fi, and access to a range of cloud-based applications.

Goodsell Building

Part of the Inspired Learning Initiative, this upgrade introduced two new recording studios, a control room and a visitors' area to the ground floor of the Goodsell Building in December 2017. The studios enable the prerecording of lectures and discussions, the creation of supplementary digital content to support new modes of learning, and the delivery of fully online and blended courses in line with our focus on digitising UNSW curricula.

The Roundhouse

Iconic heart of UNSW social scene reopens

Following an extensive \$32 million refurbishment, the Roundhouse reopened for O-Week in February 2018, showcasing an imported French acoustic ceiling with statement skylight, a circular lighting truss for striking event production, and Australian spotted gum accents throughout. The venue features four major spaces: student lounges, a main events space, the bar and bistro, and function and meeting rooms.

For more than 50 years, the Roundhouse has been the centrepiece of student life at UNSW, hosting sold-out parties and music gigs, including Green Day, Flo Rida, S Club 7, and actors Channing Tatum and Jonah Hill for a special screening of 21 Jump Street in 2012. It has created many memories among members of the UNSW community, and will no doubt create many more for generations of students to come.

Work on the public domain surrounding the Roundhouse will coincide with the completion of the Light Rail on Anzac Parade, increasing its accessibility. Its opening alongside the refurbishment of the Library Lawn Forecourt, new hospitality offerings such as Penny Lane Café and Bar, and the redevelopment of Mathews Pavilions for visiting exhibitions, adds colour to UNSW student life.

Digital solutions

Digital solutions across our staff and student service systems are designed to meet individual needs, be readily accessible, and provide effective advice and assistance.

Digital learning solutions

The Scientia Educational Experience sees traditional learning methods supported or replaced by effective digital resources, creating new opportunities for engaging students with the global community.

The Inspired Learning Initiative ensures our programs are future-focussed. The integration of digital media and technology, redesign of courses, and our active and student-led learning spaces all elevate the student experience and promote workplace readiness.

Digital Assessment System

Digital assessments provide innovative solutions for assessing students' knowledge and skills, including personal assessments. Their capacity to capture finer analytical insight into students' performance allows for more detailed, informative feedback.

Uni-verse App

As part of our digital suite of student services, we launched Uni-verse, UNSW's official app in early 2017. Uni-verse provides students with a single source of information and access to their personalised services. Customisable widgets include individual, interactive class and exam timetables, access to course content via Moodle, 24/7 library access, and real-time notifications from the President and Vice-Chancellor.

Health and wellbeing

UNSW supports the wellbeing of our students and staff through our policies, procedures, strategy, and leadership. We promote flexible working arrangements and a family friendly environment, providing health and childcare services on campus, and we are putting in place programs to support the mental health and resilience of our students and staff.

UNSW early years child care and health service

On-campus childcare service Tigger's Honeypot received outstanding results in a recent assessment by the Australian Children's Education and Care Quality Authority in November 2017. The UNSW Health Services footprint has also increased to offer a wider range of medical services.

UNSW Sports Strategy

In March 2017, we launched our Sports Strategy to deliver a superior and inclusive university sports experience. The Strategy will help students achieve their potential by offering a holistic approach to education, and integrate local and international student communities.

With more than \$7 million in 2025 investment, it aims to increase participation, drive equity, and support excellence with a high-performance program. It will also encourage community building with charity, disadvantaged youth and community groups continuing our relationships with Football United, Matraville Sports High School, and Souths Cares.

Upcoming initiatives include a new infrastructure grant for female-specific sports equipment/programs and 10 new scholarships for outstanding student talent as part of a partnership with Sport NSW to develop a 'Women's Agenda' for elite sport.





UNSW partnership with NSW Waratahs

A new partnership between UNSW and the NSW Waratahs will deliver access to elite athlete resources and high-performance facilities for the University and the wider community. The partnership builds on the University's longstanding relationship with the Waratahs, through UNSW's Aspire outreach, Nura Gili Indigenous, and elite athlete programs.

The Waratahs will relocate their head office and training facilities from Allianz Stadium to UNSW's David Phillips Sports Complex, with the construction of a world-class NSW rugby centre of excellence pitched to commence in 2019. The centre will become a high-performance hub for the NSW Waratahs, National Rugby Championship and NSW Rugby teams.

The partnership will facilitate community and player opportunities for UNSW students and the general public, as well as aid access to the Waratahs coaching staff and gym for the UNSW Rugby Club.

It will also create opportunities for shared engagement with charity, youth, and community groups. The move to David Phillips Sports Field will allow the Waratahs to reconnect with the community, with the new facilities more accessible to members, supporters, and community partners.

"Sport is central to the UNSW student experience, from our elite athlete scholarships to our social and competitive sports teams. It plays an important role in fostering our student and alumni communities. UNSW is proud to partner with the Waratahs, NSW's premier elite rugby union team. Their focus on excellence and strong community engagement aligns with UNSW's strategic goals. We look forward to working together to grow the game of rugby union in NSW."

Professor Ian Jacobs, UNSW President and Vice-Chancellor

2025 Strategy in Numbers

4 Institutes launched in 2017



Gonski Institute
for Education

\$3M

investment to 2025



Disability Innovation
Institute

\$11.3M

investment to 2025



Institute for
Global Development

\$13.72M

investment to 2025



Australian Human
Rights Institute

\$13M

investment to 2025

\$250M

in research
infrastructure

Since 2015

17+

new networks and
alliances launched

\$1.2BN

in research income

Since 2015

Silicon Quantum Computing Pty Ltd
established in 2017

\$83M

invested by CBA, Telstra, and UNSW



45

in QS World
University Ranking

85

in Times Higher
Education World
University Rankings

In 2017

20%

growth in knowledge
exchange revenue
in 2017

200

academics appointed to
Education-Focussed roles

60

Scientia Fellows
appointed

176

Scientia PhD Scholarship
offers

Randwick Health and Education
Precinct works to begin in 2019

\$720M

investment from NSW
state government



Inaugural member of Athena
SWAN Charter -
*addressing under-representation
of women in STEMM*



38 out of 116 PLuS
Alliance Fellows
are from UNSW



4 Grand Challenges
launched



Indigenous Strategy
completed by Mar 2018



100+ courses
*being digitised across campus –
target of 600 by 2019*

275

members of UNSW
leadership team completed
Unconscious Bias Training

\$11.65M

invested in startups
by 2025



Centre for Ideas
established 2017

\$4M

in Endeavour Mobility/
New Colombo Plan grants
in 2016-2017

UNSW in numbers

56,085

total students*

16,686

international students*

39,399

domestic students*

6,189

staff*

293,145

alumni

23

subjects in world's top 50*

**QS World University Rankings 2017*

3rd

'Most Employable University' in Australia

**2018 QS Graduate Employability Rankings*

4,489

donors give to the University



2025.unsw.edu.au

If you have been inspired to connect or collaborate with UNSW, please
contact strategy2025@unsw.edu.au

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SYDNEY

Australia's
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2025 Strategy

In Action

2015 – 2017