



**UNSW**  
SYDNEY

Australia's  
Global  
University

# Annual Report 2016

## Volume 1



# Our 2025 Commitment

**By 2025, UNSW will be Australia's Global University and a leading research-intensive and teaching-intensive university, delivering:**

**1. World-leading research** of the highest ethical standards and integrity, across the full spectrum of arts, built environment, business, design, law, social sciences, engineering, medicine and science.

**2. Research impact** through the generation of new knowledge applied to solve complex problems, deliver social benefits and drive economic prosperity, locally, nationally and globally.

**3. Exemplary education** for every student through integrating the most innovative developments in digital and face-to-face learning into novel solutions, to improve educational quality and the student experience.

**4. In-demand graduates** optimally prepared for the opportunities and challenges of the 21st century global workplace and motivated by a desire to make a positive impact on society.

**5. Equality of opportunity** for all our students, staff and the wider UNSW community, combined with a commitment to the active promotion of equality beyond the University.

**6. Thought leadership** harnessing UNSW's intellectual capacity to deliver expert contributions to lead and inform debate, policy making and global issues.

**7. A significant contribution to national and global prosperity** through innovative, transformative partnerships with community, industry, government and our alumni, facilitating the translation of research and education into economic and social benefits.

**8. Excellence in international education** leading the world in educating students from overseas, through our innovative and flexible educational platform, offering a truly global experience to all of our students.

**9. Partnerships** with other great institutions in Australia and across the globe, which share our ethos and can collaborate with us in achieving our strategic goals.

**10. Social justice** achievements built on UNSW's work with disadvantaged and marginalised communities in Australia, the Asia-Pacific and globally.





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***The University's 2016 Financial & Statutory Reports are in Volume 2.***

*Cover photo:* The UNSW Sydney campus. Photo: Bronwyn Barnett, Craven Images.

# Message from the Chancellor



This has been an important year for UNSW as we commence implementation of our 2025 Strategy. What we see today is a world-class institution growing stronger each year, with capital resources, research teams and teaching facilities that many other universities can only dream of having.

This year, I was again impressed by UNSW's strong standing in the world university rankings. Our 2025 strategy is bold, aiming to place an Australian university in the world's top 50. I believe (as I know our Vice-Chancellor, Professor Ian Jacobs does) that we can make it. The 2025 Strategy is fundamental to that goal, with the scale of investment involved – \$3 billion across the next eight years – unprecedented for an Australian university.

The University Council and I endorse the Strategy and strongly support it. Implementation will be carefully planned and phased over a number of years. It is a growth strategy – more than 60% of the extra investment will be on people and it's anticipated that by 2025 the overall UNSW workforce will have expanded by 8% from what it was at the beginning of the Strategy. I am proud to say that underlining all of the University's recruitment activities is an unwavering commitment to gender, equity and diversity.

As outlined in the 2025 Strategy, about half the funds required for implementation of the Strategy will be generated through new income from philanthropy, education, research awards and industry. The remaining funding will be sourced from reprioritising strategic and capital funds and through greater efficiencies in operational services.

UNSW had a great year of fundraising in 2016, raising more than \$40 million. This exceeded our target by \$3.5 million, and is the highest fundraising income we have received in a single year in the University's history – surpassing a previous high of \$35.3 million in 2014. Let me extend my sincere thanks to the more than 4,000 donors who generously supported us in 2016, including so many of our UNSW alumni.

Our long history of innovation and research aimed at practical outcomes continues to deliver rewards, both in research funding and in demand for student places.

It gives me immense pleasure to see how much UNSW is doing in regard to social justice, and tackling the vast range of problems facing our society and the world, and the collaborations being built with other leading institutions. This is what great universities are about.

UNSW Sydney is now a magnificent institution, dynamic and growing. We continue to expand and improve our campus and its facilities. This year we saw the opening of the new home of Australia's leading materials science and engineering research and innovation: the \$140m Hilmer Building, named in honour of former President and Vice-Chancellor Professor Fred Hilmer (2006-2015). Facilities like these help UNSW collaborate further with industry, business and government to develop innovative ideas that will not only improve society, but also boost Australia's economy.

These are exciting times as we begin to implement our plans, invest in people and build on our strong track record in teaching and research that has impact around the world. UNSW aims to set the standard of what a 21st century university can be.

I am immensely proud to be part of its transformation and I thank most sincerely the members of the University's Council, management, staff, alumni and other friends of the University for their enormous efforts and support across the year.

**Mr David Gonski AC**

A handwritten signature in black ink, appearing to read 'D Gonski', written in a cursive style.

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## Annual Report of The University of New South Wales

In accordance with the *Annual Reports (Statutory Bodies) Act 1984 (NSW)*, UNSW presents to the Honourable Robert Stokes MP, Minister for Education, the following report of its proceedings for the period 1 January to 31 December 2016.

**Professor Ian Jacobs**  
**President & Vice-Chancellor**

**Mr David Gonski AC**  
**Chancellor**

# Message from the President & Vice-Chancellor

It gives me great pleasure to present UNSW's Annual Report for 2016, my second as President and Vice-Chancellor.

This has been a year of important progress for the University. After a wide-ranging consultation in 2015, we completed the detailed planning of our 2025 Strategy and commenced implementation. The UNSW 2025 Strategy aims to position UNSW as Australia's Global University, among the world's top 50, improving and transforming lives through excellence in research, education and a commitment to advancing a just society. These objectives align with our mantra that a great university is above all else a 'Servant of Society', acting for the community, locally, nationally and globally.

We have commenced the process of mobilising and investing \$3 billion to ensure delivery of the Strategy. Among the initiatives being funded are: the recruitment of over 900 world-class researchers and PhD scholars; creation of new education-focused career pathways for academics; a new academic calendar, UNSW3+; a range of educational innovations including the digitisation of 600 courses; ambitious plans for equity, diversity and thought leadership; bold targets to increase our knowledge transfer for economic benefit; and steps to optimise our services.

We completed a series of ten outstanding appointments to the University Executive Team this year: Molecular biologist and UNSW Dean of Science, Merlin Crossley, as Deputy Vice-Chancellor (Education); Brian Boyle as Deputy Vice-Chancellor (Enterprise); Nicholas Fisk, a leading authority in developmental biology, as Deputy Vice-Chancellor (Research); Fiona Docherty to the role of Vice-President International, Marketing and Communications; Eileen Baldry, eminent criminologist as our first Academic Lead for Equity, Diversity and Inclusion; esteemed philosopher and bioethicist Susan Dodds as Dean of Arts & Social Sciences; leading marine biologist Emma Johnston as Dean of Science; distinguished constitutional lawyer George Williams as Dean of Law; leading architect and urban planner Helen Lochhead as Dean of Built Environment; and the important appointment of Reuben Bolt as Director of Nura Gili, the UNSW Indigenous Programs Unit. These and other high-level appointments will help drive our quest for excellence in the coming years.

2016 also saw outstanding results in research funding, further cementing our reputation as a leader in world-class research. A highlight was securing more than \$90m from the Australian Research Council for three national centres of excellence – in quantum computing, climate extremes and the ageing population – a tribute to the teams involved and a terrific endorsement of our globally focused research strategy.

2016 saw the launch in London of the PLuS Alliance, bringing together Arizona State University, King's College London and UNSW to align our academic cultures and global ambitions, and to undertake joint work on issues relating to health, social justice, sustainability and innovation. Over 60 PLuS Alliance Fellows were announced.

The UNSW Grand Challenges program was launched focusing on major issues facing humanity, under the direction of evolutionary biologist Rob Brooks. The first two Grand Challenges commenced with Matthew England overseeing



the Climate Change Grand Challenge and Jane McAdam leading the Grand Challenge on Refugees and Migrants. The program wrapped up the year with a memorable TED-style 'Unsomnia' event and the announcement of plans for the third Grand Challenge on Inequality.

A key aspect of our plans is for UNSW to be both research intensive and education intensive. We announced plans for our Scientia Educational Experience, including a new Education Academy, Education Focused roles for our leading teachers with clear career progression and promotion, investment in digital technology, and numerous steps to personalise the student experience. We continued to attract students with impressive ATAR scores and great potential. We increased our undergraduate offers after again attracting the largest percentage of NSW's top 500 students, with the biggest growth in demand across science, engineering and business, all up more than 10% year-on-year. A source of pride was our partnership with other universities to offer scholarships for refugees from Syria and Iraq on humanitarian visas. This year we also offered ten new scholarships for elite athletes.

The University continued its sound financial management and ended the year with a group operating result of \$53m. The operating result increased compared to 2015 due to substantial growth in course fee revenue particularly from international students. The operating result includes our investment to support delivery of the 2025 Strategy.

My thanks to all who have contributed to making 2016 such a successful and exciting year – our staff and students, those who take the responsibility of leadership roles across the University, our outstanding Council members and advisory committees, our alumni and numerous other supporters. As the year closed, global political events posed fascinating issues for the higher education sector. I am confident that the 2025 Strategy will position UNSW well to respond to these challenges and opportunities. I commend our Annual Report to you.

**Professor Ian Jacobs**

A handwritten signature in black ink that reads "Ian Jacobs". The signature is written in a cursive, slightly stylized font.



The Tyree Energy  
Technologies Building.  
Photo: Brett Boardman

# At a Glance



## About UNSW Sydney

Established in 1949 with a unique focus on the scientific, technological and professional disciplines, UNSW is a leading Australian university committed to making a difference through pioneering research and preparing the next generation of talented global citizens for career success.

UNSW has a proud tradition of sustained innovation, focusing on areas critical to our future – from climate change and renewable energies to lifesaving medical treatments and breakthrough technologies. In the social sciences, UNSW research informs policy and expert commentary in key issues facing society ranging from human rights and constitutional recognition of Indigenous Australians to public health and population ageing.

UNSW offers an extensive range of undergraduate, postgraduate and research programs. We attract talented students from all over Australia and around the world. Our more than 56,000 students come from 128 countries, making us one of Australia's most cosmopolitan universities. Our emphasis on quality continues to push up entry standards – in 2016 we again attracted the largest percentage of the State's top 500 school leavers.

The main UNSW campus is located on a 38 hectare site at Kensington, seven kilometres from the centre of Sydney. Other major campuses are Art & Design in Paddington and UNSW Canberra at the Australian Defence Force Academy.

## Australia's Global University

Our aspiration for the next decade is to establish UNSW as Australia's Global University, improving and transforming lives through excellence in research and education and a commitment to advancing a just society. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Ranked in the world's top 100 universities, UNSW is a founding member of the Group of Eight and the prestigious Universitas 21 international network. It is the only Australian member of the Global Alliance of Technological Universities and is also a member of the Association of Pacific Rim Universities and a partner in the groundbreaking PLuS Alliance with King's College London and Arizona State University.

### Values

In pursuing our vision and objectives, members of the UNSW community will demonstrate the following values:

**Partnership:** working in teams to best serve our communities.

**Integrity, transparency and ethical decision making:** inspiring openness, courage and trust.

**Respect:** listening and engaging with each other and our communities.

**#Among  
the Best**

UNSW is ranked  
in the world's top  
100 universities.

# 2016 Snapshot

(as at December 2016)



## Students

**56,085**

Total Students

**21,582**

Commencing Students

**282,000**

Alumni

**4,215**

Higher Degree Research Candidates

**39,399**

Local Students

**16,686**

International Students

## 2016 Financial Summary

	Consolidated	
	2016	2015
	\$'000	\$'000
Total revenue and income	<b>1,911,942</b>	1,761,317
Employee costs	<b>(1,003,663)</b>	(964,009)
Other expenses	<b>(761,931)</b>	(719,804)
Accounting result	<b>146,348</b>	77,504
Restricted for specific purposes:		
Philanthropic funds	<b>(30,977)</b>	(17,668)
Capital grants	<b>(9,513)</b>	(6,720)
Specific purpose grants	<b>(23,796)</b>	(24,382)
Non-core operating:		
Investment funds	<b>(29,431)</b>	(30,509)
Operating result	<b>52,631</b>	(1,775)



## Staff

**6,189**

Total Staff

5,687  
full-time  
equivalent

**1,097**  
Female

**1,723**  
Male

Academic Staff

**2,163**  
Female

**1,206**  
Male

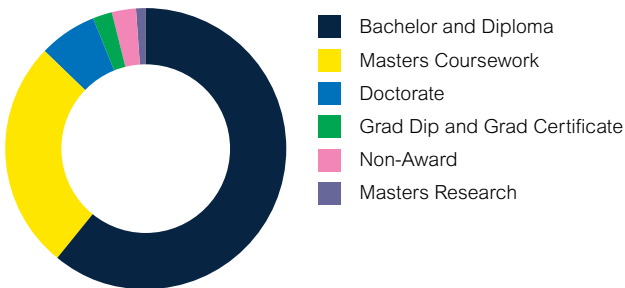
Professional Staff

## UNSW Sydney

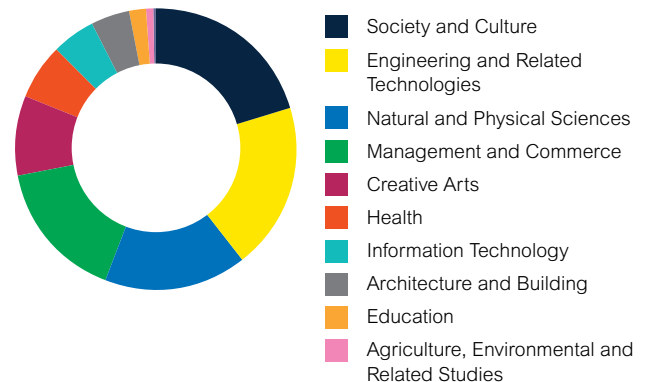
- » 8 faculties
- » 1 college
- » 47 schools
- » 125 UNSW and external centres and institutes
- » 18 on-campus colleges and affiliated student accommodation
- » 4,674 academic visitors, conjoins and adjuncts

*(47 full-time equivalent, calculated at 0.01 per visitor)*

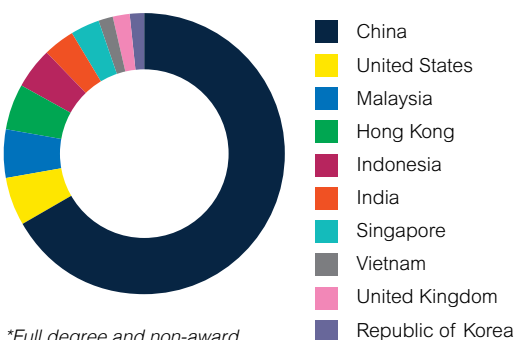
### Students by Level of Program:



### Student Load by Discipline:



### Top 10 Countries of Origin for International Students\*:



\*Full degree and non-award

# 2016 Snapshot

## 20 Subjects in World's Top 50

- » Accounting & Finance
- » Law
- » Psychology
- » Engineering (Civil & Structural)
- » Engineering (Mineral & Mining)
- » Architecture/Built Environment
- » Business & Management Studies
- » Environmental Sciences
- » Art & Design
- » Materials Science
- » Engineering (Chemical)
- » Engineering (Mechanical)
- » Computer Science & Info Systems
- » Economics & Econometrics
- » Social Policy
- » Communications & Media Studies
- » Engineering (Electrical)
- » Medicine
- » Geography
- » Education



## 49th in the World

- » UNSW is ranked 49th in the QS World University Rankings (2016), 78th in the THE World University rankings, and 134th in the Academic Ranking of World Universities.

## Best MBA

- » The Australian Graduate School of Management MBA program is recognised as one of the finest in the world by the 2016 *Financial Times* (UK) ranking of the top 100 global MBA programs.

## Research Excellence

- » UNSW researchers won the highest amount of Australian Research Council funding, including \$91 million for three national centres of excellence.

## Investment in excellence

UNSW is investing \$3 billion in priority areas of research excellence, teaching innovation, social engagement and global impact by 2025. (UNSW 2025 Strategy)

Biggest student start-up program in Australia, with 562 programs supported (since 2014).

## Most CEOs study at UNSW

More of Australia's top CEOs who lead ASX 200 companies studied at UNSW than any other university.

(Leading Company 2012)

## Founding partner ATP Innovations

World's no. 1 technology incubator (2014 International Business Innovation Association Incubator of the Year). (Spear's WealthInsight 2014)

## Most millionaires

UNSW again tops the list of Australian universities with the most millionaire graduates. (Spear's WealthInsight/Elite Traveller 2016)

## Most employable university

UNSW named 'Most Employable University' in the Top 100 Future Leaders Awards. (Grad Connection/AFR 2016)

Top performing easy access IP organisation, worldwide.

(UK 2015 report)

## Faculties

- » Arts & Social Sciences
- » Business School
- » Built Environment
- » Art & Design
- » Engineering
- » Law
- » Medicine
- » Science

## College

### » UNSW Canberra

Unique in Australia, UNSW Canberra at the Australian Defence Force Academy provides undergraduate education for officer cadets as well as postgraduate programs in arts, business, engineering, IT, management and science, which are open to all students.

## Global Elite

UNSW is a founding member of both the Group of Eight – a coalition of Australia's leading research-intensive universities – and the prestigious Universitas 21 international network. UNSW is the only Australian member of the Global Alliance of Technological Universities; is a member of the Association of Pacific Rim Universities; part of the PLuS Alliance; and a partner of Coursera, the largest provider of MOOCs in the world.



# 2016 in Review

## January

### Top students

UNSW increases undergraduate offers in response to unprecedented demand from school leavers, after again attracting the largest percentage of the State's top 500 students.

### World stage

Professor Sarah Kenderdine and Scientia Professor Jane McAdam join U2 front man Bono and politicians including Justin Trudeau and David Cameron at the World Economic Forum in Switzerland.

### Senior Australian of the Year

Senior Australian of the Year Associate Professor Gordian Fulde, Head of St Vincent's Hospital emergency department, leads a list of distinguished UNSW staff and alumni recognised in Australia Day honours.

### Climate science

A global temperature rise of 2°C could lead to some land masses experiencing warming extremes of up to 6°C, according to research published in *Nature*, led by ETH Zurich and including scientists from the UNSW-based ARC Centre of Excellence for Climate System Science.

## February

### Global reach

Arizona State University, King's College London and UNSW form the PLuS Alliance, an academic partnership to find research-led solutions to global challenges and expand access to world-class learning.

### New education chief

UNSW announces the appointment of molecular biologist and Dean of Science Professor Merlin Crossley as Deputy Vice-Chancellor (Education).

### Destination Hague

Law graduate Reyna Ge heads to The Hague after winning the prestigious Peter Nygh Hague Conference Internship from the Australian Institute of International Affairs and the International Law Association.

### Internet of Things

UNSW and Cisco Systems launch a new centre, Innovation Central Sydney, to bring the power of networking, artificial intelligence and sensor-laden drones to the farm gate.

### UNSW students 'most employable'

UNSW is awarded 'Most Employable University' in the Top 100 Future Leaders Awards, with 16 students making the list, the largest percentage of any university across the country.

## March

### Recruitment drive

UNSW launches a global drive to recruit up to 1,000 of the best researchers and PhD scholars as part of its 2025 Strategy.

### Disability support

Professor Julian Trollor, UNSW's Chair in Intellectual Disability Mental Health, and Pru Goward, Minister for Mental Health, launch a world-first manual to guide mental health professionals who work with people living with an intellectual disability.

### Expert advice

Vice-Chancellor Ian Jacobs is appointed to a panel of experts to assess research performance and better understand why Australia lags behind international competitors on commercialisation and industry engagement.

### Best online MBA

The prestigious *Financial Times* (UK) Online MBA Rankings 2016 lists AGSM @ UNSW Business School's innovative MBAX program as the 8th-best in the world, the only Australian business school listed.

### Dean reimagines Sydney

Professor Helen Lochhead, the new Dean of the Faculty of Built Environment, delivers the first 2016 Utzon Lecture focusing on the opportunities for reimagining Sydney's iconic harbour foreshores.

### Feminist milestone

To mark International Women's Day, NewSouth Books and the State Library of NSW launch a 40th anniversary new edition of Dr Anne Summers' best-selling feminist work, *Damned Whores and God's Police*.

## April

### New Dean

UNSW welcomes esteemed philosopher and bioethicist Professor Susan Dodds to the role of Dean of the Faculty of Arts & Social Sciences.

### Stem cell breakthrough

Stem cell therapies capable of regenerating any human tissue damaged by injury, disease or ageing could be available within a few years, following research led by UNSW Associate Professor John Pimanda and Dr Vashe Chandrakanthan.

### Pritzker honour

Australia's only winner of the "Nobel Prize" for architecture, UNSW Professor of Practice Glenn Murcutt, is appointed the next chairman of the Pritzker Architecture Prize jury.

### Million-dollar scholarship

Corporate advisory firm Luminis Partners commits \$1 million to launch a prestigious MBA scholarship program at UNSW.

## Closer ties

UNSW and the National Institute of Dramatic Art (NIDA) sign an agreement to strengthen ties to boost artistic collaborations and joint research projects across the two iconic educational institutions.

## Diversity champions

UNSW names five Equity, Diversity and Inclusion Champions to help the University achieve its 2025 Strategy aim to better reflect the demographics of the communities it serves.

## May

### Fine company

UNSW Professor Richard P Harvey joins scientific luminaries Einstein, Newton, Florey and Hawking as a Fellow of the Royal Society, the oldest continuously operating academy of science in the world.

### World record

A solar cell configuration developed by UNSW engineers pushes sunlight-to-electricity conversion efficiency to 34.5% – a new world record for unfocused sunlight and nudging closer to the theoretical limits for such a device.

### New research chief

UNSW announces the appointment of Professor Nicholas Fisk, a leading authority in the fields of developmental biology and maternal-fetal medicine, as Deputy Vice-Chancellor (Research).

### Quantum foresight

Scientia Professor Michelle Simmons is awarded a prestigious Foresight Institute Feynman Prize in Nanotechnology for her world-leading research in the fabrication of atomic-scale devices for quantum computing.

### Centre stage

The University celebrates its largest ever presence at Sydney's Vivid Festival with a kitsch "Love-O-Meter" designed by students taking centre stage as one of the Festival's most popular installations.

### Industry links

The federal government awards UNSW researchers \$7.6 million for 25 industry-linked research projects and \$3.8 million for a centre to transform Australia's high-performance manufacturing industry.

## June

### Queen's honour

Scientia Professor Richard Bryant, a world expert in the mental health of people affected by adversity and trauma, receives Australia's highest accolade, the Order of Australia (AC), in the Queen's birthday honours for his work in Indigenous and refugee mental health.

### Expert partners

UNSW's Kirby Institute partners with the Peter Doherty Institute for Infection and Immunity and Australia's leading experts in clinical,

laboratory and public health research in a new initiative to create the Australian Partnership for Preparedness Research on Infectious Diseases Emergencies.

## Cancer funds

UNSW researchers working to translate laboratory discoveries into viable cancer treatments receive \$16.6 million from The Cancer Institute NSW.

## World champions defend title

UNSW's robot soccer world champions fly to Germany to defend their title in the RoboCup World Championship.

## July

### New enterprise portfolio

UNSW announces the appointment of Professor Brian Boyle as Deputy Vice-Chancellor (Enterprise), a new portfolio driving the University's innovation agenda.

### The one to watch

Research publisher *Nature* names UNSW the top "Rising Star" in the Asia-Pacific for its increase in high-quality science publications.

### Grand challenges

UNSW announces the first three leaders of its "Grand Challenges" initiative to establish the University at the forefront of debate and policy responses to the biggest issues of our time.

### Premier opens materials hub

The new home of Australia's leading materials science and engineering research and innovation, the Hilmer Building, is officially opened by NSW Premier Mike Baird.

## August

### Torch shines

UNSW officially launches the \$100 million Torch Innovation Precinct, an initiative that will deliver a major boost to development funding for Australian research. The Precinct will be the first such partnership outside China.

### Students organise UNSW's first TEDx event

The University hosts TEDxUNSW, an inaugural event co-founded by three UNSW students Shariq Nabi, Angela Nguyen and Raymond Zeng.

### Fine fellow

UNSW climate change researcher Scientia Professor Matthew England is elected an American Geophysical Union Fellow, one of the highest international honours in the Earth Sciences.

### Smart sensors

The NSW government invests \$700,000 in a new Smart Sensing Network, a research group formed across UNSW and the University of Sydney.

## Uganda vision

President and Vice-Chancellor Ian Jacobs leads a UNSW delegation to Uganda's Gulu University to explore opportunities for collaboration.

## September

### Fossil find

Australian researchers including UNSW scientists find the world's oldest fossils in a remote area of Greenland, demonstrating that life emerged rapidly during the planet's early history.

### Millionaire club

UNSW again tops the list of Australian universities with the most millionaire graduates according to a global analysis commissioned by *Spear's Magazine* in conjunction with WealthInsight and *Elite Traveller*.

### Centres of excellence

UNSW is awarded \$91 million from the federal government for three national centres of excellence in quantum computing, climate change and the ageing population.

### Women of influence

Four UNSW academics are named in the AFR/Westpac 100 Women of Influence Awards for their contribution to diversity, innovation, public policy and global issues.

### Quantum investment

UNSW strikes a \$70 million deal to create a consortium of researchers, business, and the federal government to develop and commercialise technology that could lead to the world's first quantum computer in silicon.

### Tall poppies

Work by seven UNSW researchers is recognised in the prestigious 2016 Young Tall Poppies Awards (ACT/NSW).

## October

### Cyber guardian

Dr Gideon Creech from the Australian Centre for Cyber Security at UNSW Canberra becomes one of only 35 people in the world to achieve the title "Cyber Guardian", the highest information security qualification bestowed by the System Administration, Networking, and Security Institute.

### Turnbull joins FBE

Chief Commissioner of the Greater Sydney Commission, Lucy Turnbull, is appointed Adjunct Professor at the Faculty of Built Environment where she will share her skills with the next generation of city makers.

### Quantum pioneer

For her pioneering research in quantum physics, Scientia Professor Michelle Simmons is honoured with a €100,000 International L'Oréal-UNESCO For Women in Science Award.

## Physics honour

Engineer and physicist Professor Andrea Morello is named inaugural recipient of the Rolf Landauer and Charles H. Bennett Award in Quantum Computing by the American Physical Society, the world's leading organisation of physicists.

## Premier's prizes

UNSW researchers stand tall at the NSW Premier's Prizes for Science & Engineering, taking out awards in four of the nine categories.

## November

### ARC success

One hundred and twenty UNSW projects are awarded more than \$47.8 million in Australian Research Council funding.

### Emerging leader

Pro-Vice-Chancellor (Research) and incoming Dean of Science Professor Emma Johnston wins the Emerging Leader Award in *The Australian Financial Review* 2016 Higher Education Awards, for her scientific work, her public voice and her strength as a role model.

### Success at Harvard BIOMOD

A student-designed "DNA origami" nanostructure that can efficiently deliver drugs to cancer cells takes out the grand prize at Harvard University's annual biomolecular design competition.

### BBC spotlight

UNSW research expertise in marine ecology, materials science, mental health and nutrition is showcased in the inaugural BBC Future's World-Changing Ideas Summit in Sydney.

## December

### Funding for HIV trial

On World AIDS Day, UNSW's Kirby Institute is awarded a \$12 million grant from UNITAID to conduct a clinical trial to improve treatment options for people with HIV infection who experience treatment failure.

### New data degree

UNSW launches a three-year multidisciplinary degree, the Bachelor of Data Science and Decisions, to address the high demand for data scientists who can analyse complex datasets to make discoveries and gain business insights.

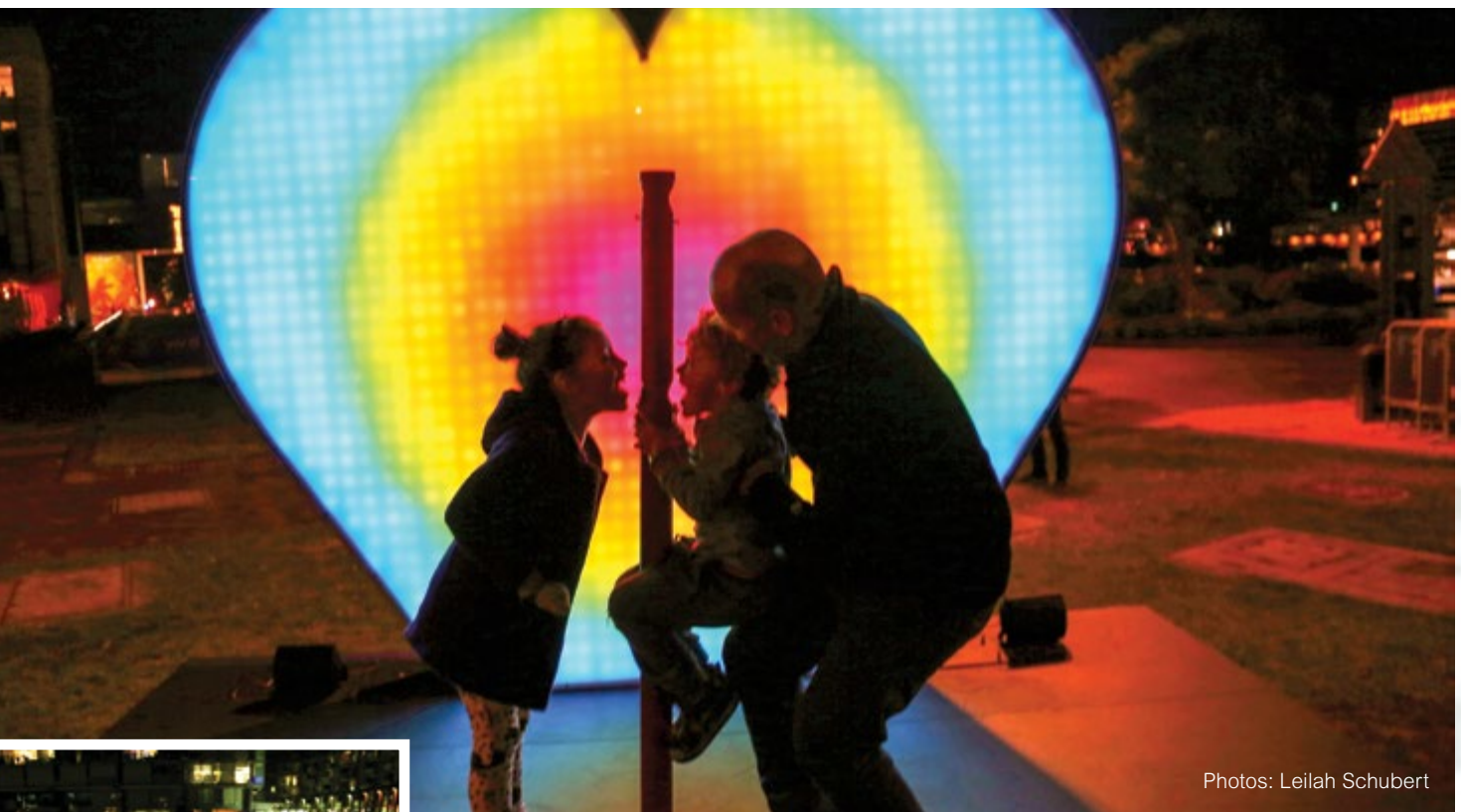
### Platypus project

Evidence that platypus populations are in decline across Australia sparks a UNSW-led research project to assess the iconic animal's conservation status.

### Kids make space history

UNSW alumna and entrepreneur Solange Cunin and her innovative start-up Quberider make space history when their payload is launched to the International Space Station containing science experiments designed by school students.

# Community Impact



Photos: Leilah Schubert



## To Sydney with love

At the heart of UNSW's involvement with Sydney's winter festival, Vivid, was a kitsch "Love-O-Meter" designed by students. The louder people shouted "I love you" into the microphone, the more the heart-shaped installation at Circular Quay lit up, making it a crowd favourite.

### #Cultural Heart


2016 marked our biggest involvement in Sydney's festival season, with a major presence at Vivid, the Writers' Festival, Film Festival and Sculpture by the Sea.

2016 marked UNSW's biggest involvement in Sydney's festival season. Staff and students took part in every one of the city's major cultural events, including Vivid, which attracts millions of visitors and transforms Sydney every winter with light installations and live music.

BA Design Honours student Edison Chen created the Love-O-Meter concept and collaborated with fellow UNSW Art & Design Honours student Nila Rezaei, UNSW Engineering graduates Nathan Adler and Sam Cassisi, and Media Arts/Computer Science Engineering students Tom Bremner and Jordan East, to bring the idea to reality. "I wanted the installation to be

carnavalesque," says Chen. "We were aiming for a sideshow alley meets Las Vegas wedding chapel aesthetic." Selena Griffith, Senior Lecturer and UNSW Engineering Scientia Experience Manager, who coordinated the project, said one of the main ideas was that love is open to everyone. "If their declaration is totally off the charts they're rewarded with a special animation," she explained.

Nila Rezaei (pictured left with Nathan Adler) also designed the *Exterminia* installation, a luminous sea creature-cum public bench that rippled with colour until people sat on it and the colours bleached to white. The idea, she says, was to encourage people to think about how they influence the marine world and events such as coral bleaching.



“It’s all been worth it, inspiring my two younger sisters and Indigenous kids from Yarrabah to follow their dreams and get an education.”

### Indigenous student follows her dreams

Growing up in Yarrabah, a remote Indigenous community in Far North Queensland, Destiny Kynuna decided she could make a difference in her community. Emboldened by her parents, the 21-year-old renal unit nurse was accepted into UNSW to study medicine, likely the first person from Yarrabah to train as a doctor. “I think I can make more change in my community by becoming a doctor,” she says. “My ultimate goal is to work in mental health.”

Destiny completed UNSW’s three-week intensive Pre-Medicine program, an alternative entry pathway for Indigenous students. “The Pre-

Medicine program has probably been the most intense thing I’ve ever done,” she admits. “But it’s all been worth it. Inspiring my two younger sisters and Indigenous kids from Yarrabah to follow their dreams and get an education is really rewarding.”

There are only about 260 Indigenous doctors in Australia. The UNSW Pre-Medicine Program aims to address Indigenous people’s lack of access to medical practitioners in their own communities. Considered for entry to the program are high-school students, current undergraduate and postgraduate students and mature-age students who best meet the selection criteria, including evidence of academic capability.

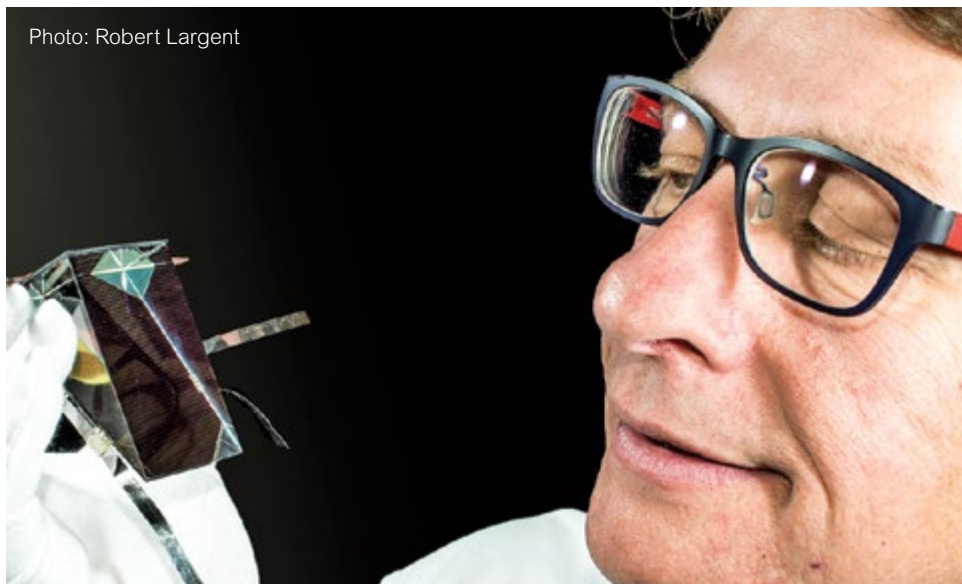
Photo: Leilah Schubert

### #Regional Outreach

UNSW will offer the State’s first rurally located medical degree program at Port Macquarie from 2017.

# Academic Excellence

Photo: Robert Largent



## Solar World Record:

Dr Mark Keevers (left) and his colleagues developed a solar cell configuration that pushed sunlight-to-electricity conversion efficiency to 34.5% – a record for unfocused sunlight and nudging closer to the theoretical limits for such a device. The research was supported by \$1.4m from ARENA. UNSW engineers also smashed the efficiency rating for perovskite, the hottest new material in solar cell design.

Our ambition is to be a research- and education-intensive university in the top 50 globally. We will increase our number of online learners by 50,000 within 10 years and we are investing \$75 million in creating more blended/online courses, and in harnessing cutting-edge technology to fuse the physical and digital campuses. We are rolling out our Scientia programs to attract and nurture the best and brightest researchers from around the world.

## 2016 highlights include:

### Research excellence

- » UNSW was placed 49th in the 2016 QS World University Rankings, and continued its steady march up the Times Higher Education World University Rankings, climbing four spots to 78th in the world. It also ranked 134 in the Academic Ranking of World Universities (ARWU) published by Shanghai Jiao Tong University, and was the only university in Australia to be named in the top 100 in the world in all seven engineering subjects.
- » UNSW was placed 136 in the world in the Nature Index Analysis, and was named a player to watch in Asia-Pacific for its high-quality science publications, scoring the largest increase in publications of any institution in the region between 2012 and 2015.

### Funding

- » UNSW was ranked fourth in the Go8 in NHMRC funding, securing \$60.6m in 2016. This included \$2.5m for a Centre for Research

Excellence in Population Health and a \$6.6m Program Grant to the Children's Cancer Institute.

- » In ARC funding, UNSW was awarded more than \$150m, \$50m more than any other institution. UNSW received \$91 million for three national centres of excellence in quantum computing, climate extremes and the ageing population, the only institution to receive multiple centres. We achieved the highest national and Go8 funding in the ARC Discovery program, with 88 projects totalling \$32.1m.
- » Total HERDC research income for 2015 decreased by \$23m over the previous year – from \$345m to \$322m, reflective of a sector-wide decrease in reportable income of \$20m. However, UNSW maintained its share of income at 9%.
- » Total Category 1 research income (Australian Competitive Research Grants) decreased by \$17m from \$159m to \$142m, again reflective of a sector-wide decrease in Category 1 funding of \$163m. UNSW maintained its

share of Category 1 income at 9%. Our Category 2 research income (other public sector research income) was \$95m in 2015, up from \$90m the previous year. Our Australian and international contract research income grew by \$3m to \$29m in 2015.

### Higher degree research

- » Higher degree research completions continued to increase and remained significantly higher than the Go8 average. High-quality international scholarship applications increased by 30% in 2016, and domestic applications increased by 5%.

### World-class recruitment

- » UNSW announced a global drive to recruit 290 world-class researchers and 700 PhD scholars over the next ten years under the Scientia Fellowship and PhD Scholarship schemes, part of the 2025 Strategy.



**\$150 million**

in ARC funding including \$32.1 million for 88 Discovery projects.

**49th**

in the QS World University Rankings.

**\$91 million**

for three ARC Centres of Research Excellence.

**\$70 million**

consortium created to commercialise quantum computing technology.

**\$60.6 million**

in NHMRC funding in 2016.

**4,215**

Higher Degree Research candidates.

## Inspiring teaching

- » The Scientia Education Academy was established to recognise outstanding educators, with 15 Scientia Education Fellows appointed to provide leadership, inspiration and vision in learning and teaching across the University.
- » UNSW Management Board approved a \$55m Inspired Learning Initiative business case to support teaching and learning excellence.
- » UNSW's premier outreach program ASPIRE was acknowledged with an Australian Rural Education Award, winning more than \$800,000 in National Priority Funding to develop five major projects.
- » The work of UNSW teaching staff to enhance student learning was recognised with three lecturers and a teaching team receiving citations for Outstanding Contributions to Student Learning in the Australian Government's 2016 Australian Awards for University Teaching. Dr Rebecca LeBard, Dr Leila Morsy and Dr Nalini Pather received individual citations, while LionsHeart Studios, Dr Alberto Motta and Dr Isabella Dobrescu were recognised as a team for their development of a video game 'Playconomics' that transformed their teaching of economics.

## UNSW3+

In late 2016, following an extensive consultation with students, staff and community leaders, Management Board decided to implement an alternative academic calendar in 2019.

The UNSW3+ calendar will have three ten-week teaching terms plus an optional five-week summer term and will offer students:

- » greater flexibility to spread their study load over the year
- » the ability to focus more on each course
- » more opportunities for embedding internships, volunteering and other activities into the UNSW experience
- » better alignment with international university calendars, facilitating more global experiences
- » a more vibrant campus life through more consistent use of facilities across the year.

The UNSW3+ calendar is also designed to:

- » reduce the stress associated with studying
- » reduce the pressure on classrooms, labs and facilities
- » provide opportunities for staff who would like to dedicate themselves more fully to teaching.

## Innovation

- » Professor Brian Boyle was appointed as Deputy Vice-Chancellor (Enterprise) to lead a new portfolio to drive the University's innovation agenda as a key part of the 2025 Strategy.
- » UNSW struck a \$70m deal with the federal government, Telstra and CBA, to create a consortium to commercialise world-leading technology that could lead to the first quantum computer in silicon.
- » The Sydney School of Entrepreneurship was established as a company by UNSW and other participating tertiary institutions, and a board and chief executive officer were appointed.

## Future leaders

- » Two young researchers, one working to reduce carbon emissions and the other promoting the design of sustainable and livable cities, were named UNSW winners of the coveted Westpac Future Leaders Scholarships. Gurinder Nagra, from Griffith in southern NSW, will study at UNSW Engineering, and Elise Wood will study in the Faculty of Built Environment.
- » In December, UNSW Arts/Law graduate Zulpha Styer was awarded a prestigious John Monash Scholarship, which will enable her to travel to the US to undertake a two-year Master of Public Policy.

# Research and Teaching Awards



Photo: Ben Cregan

## Major prizes awarded in 2016 include:

### L'Oréal-UNESCO For Women in Science Award in the Physical Sciences (Asia-Pacific)

Scientia Professor Michelle Simmons FTSE FAA, School of Physics/Centre of Excellence for Quantum Computation and Communication Technology

### American Physical Society Rolf Landauer and Charles H. Bennett Award in Quantum Computing (inaugural)

Professor Andrea Morello, School of Electrical Engineering and Telecommunications

### Foresight Institute Feynman Prize in Nanotechnology (Experimental)

Scientia Professor Michelle Simmons FTSE FAA, School of Physics/Centre of Excellence for Quantum Computation and Communication Technology

### Royal Society of Chemistry Faraday Medal

Scientia Professor Justin Gooding FRACI FRSC FAA, School of Chemistry

### Australian Academy of Science

#### David Craig Medal

Professor David Black AO FAA, School of Chemistry

### Royal Society of NSW

#### James Cook Medal

Scientia Professor David Cooper AO FAA FAHMS, Kirby Institute

#### Walter Burfitt Prize

Scientia Professor Justin Gooding FRACI FRSC FAA, School of Chemistry

#### Liversidge Lecture

Scientia Professor Justin Gooding FRACI FRSC FAA, School of Chemistry

#### Edgeworth David Medal

Dr Muireann Irish, Neuroscience Research Australia

### Premier's Prizes for Science & Engineering

#### Excellence in Biological Sciences (Ecology, environmental, agricultural and organismal)

Professor Mike Archer AM FAA, School of Biological, Earth and Environmental Sciences

#### Leadership in Innovation in NSW

Scientia Professor Helen Christensen FASSA FAHMS, Black Dog Institute

#### Excellence in Engineering and Information and Communications Technology

Scientia Professor Toby Walsh FAA, School of Computer Science & Engineering

#### NSW Early Career Researcher of the Year

Dr Muireann Irish, Neuroscience Research Australia

### Royal Australian Chemical Institute Awards

#### Physical Chemistry Lectureship

Dr William Donald, School of Chemistry

#### Peter W. Alexander Medal

Dr William Donald, School of Chemistry

#### Athel Beckwith Lectureship

Dr Vinh Nguyen, School of Chemistry

### Engineers Australia Professional Engineer of the Year

Scientia Professor Veena Sahajwalla FTSE HonFIEAust, SMaRT@UNSW

### Australian Financial Review Higher Education Award for Emerging Leader

Professor Emma Johnston FRSN, School of Biological, Earth and Environmental Sciences/ Pro-Vice-Chancellor (Research)

### Westpac 100 Women of Influence Awards

Professor Eileen Baldry, School of Social Sciences

Professor Julie Cogin, UNSW Business School

Professor Megan Davis, Faculty of Law

Conjoint Associate Professor Nadine Ezard, National Drug & Alcohol Research Centre

### John Yu Medal and Oration

Scientia Professor David Cooper AO FAA FAHMS, Kirby Institute

### **Cancer Institute NSW Professor Rob Sutherland AO Make a Difference Award**

Professor Minoti Apte OAM, Ingham  
Institute for Applied Medical Research

### **Dennis Leslie Mahoney Prize in Legal Theory**

Professor Martin Krygier FAHA,  
Faculty of Law

### **Women in Law Awards – Academic of the Year**

Dr Alexandra George, Faculty of Law

### **Australian Professional Society on Alcohol and Other Drugs Early Career Award**

Dr Louise Mewton, National Drug  
& Alcohol Research Centre

### **Tall Poppy Science Awards**

#### **ACT Young Tall Poppy Science Award**

Dr Gemma Carey, School of Business –  
UNSW Canberra

#### **NSW Young Tall Poppy Science Awards**

Dr Katherine Dafforn, School  
of Biological, Earth and  
Environmental Sciences

Dr Bronwyn Graham, School  
of Psychology

Associate Professor Jason Grebely,  
Kirby Institute

Dr Danielle Moreau,  
School of Mechanical and  
Manufacturing Engineering

Dr Robert Taylor, School of Mechanical  
and Manufacturing Engineering

Conjoint Senior Lecturer Joshua Ho,  
St Vincent's Clinical School

### **NSW Fresh Science**

Dr Katelyn Edge, School of Biological,  
Earth and Environmental Sciences

Dr Teagan Gale, School of Biological,  
Earth and Environmental Sciences

Dr Alex Patton, Graduate School  
of Biomedical Engineering

Dr Mark Polizzotto, Kirby Institute

Dr Jelena Rnjak-Kovacina, Graduate  
School of Biomedical Engineering

### **Fellowship of the Australian Academy of Science (AAS)**

Scientia Professor Justin Gooding  
FRACI FRSC FAA, School of Chemistry

Professor Fedor Sukochev FAA,  
School of Mathematics & Statistics

Scientia Professor Toby Walsh  
FAA, School of Computer Science  
& Engineering

### **Fellowship of Australian Academy of the Humanities (AHA)**

Professor Helen Groth FAHA, School  
of the Arts & Media

Professor Sandra Hale FAHA, School  
of Humanities & Languages

Professor Mina Roces FAHA, School  
of Humanities & Languages

Professor Martin Krygier FAHA, Faculty  
of Law

### **Fellowship of the Australian Academy of Health and Medical Sciences (AAHMS)**

Professor Richard Bryant AC FASSA  
FAHMS, School of Psychology

Professor Basil Donovan FAHMS,  
Kirby Institute

Professor Greg Dore FAHMS,  
Kirby Institute

Conjoint Professor Simon Gandevia  
FAA FAHMS, Neuroscience Research  
Australia

Professor Ian Harris FAHMS, South  
Western Sydney Clinical School

Professor Richard Harvey FAA FAHMS,  
Victor Chang Cardiac Research Institute

Conjoint Professor Rob Herbert  
FAHMS, Neuroscience Research  
Australia

Professor Maria Kavallaris FAHMS,  
Children's Cancer Institute

Professor Rodney Phillips FAHMS,  
Faculty of Medicine

Conjoint Professor Bill Rawlinson AM  
FAHMS, School of Medical Sciences

Conjoint Professor Roland Stocker  
FAHMS, Victor Chang Cardiac  
Research Institute

### **Fellowship of Academy of the Social Sciences in Australia (ASSA)**

Professor Louise Chappell FASSA,  
School of Social Sciences

Scientia Professor Louisa Degenhardt  
FASSA, National Drug & Alcohol  
Research Centre

Professor Richard Holden FASSA,  
School of Economics

Professor Andrew Martin FASSA,  
School of Education

Professor Jane McAdam FASSA,  
Faculty of Law

### **Fellowship of the Academy of Technological Sciences & Engineering (ATSE)**

Professor Gernot Heiser FTSE, School  
of Computer Science and Engineering

Professor Thorsten Trupke FTSE,  
School of Photovoltaic and Renewable  
Energy Engineering

Photo: Arunas Klupsas



### Packed Public Lectures:

Following news about the incarceration of Indigenous children in the Northern Territory, journalist and Wiradjuri man Stan Grant (left) used his UNSW Wallace Wurth Lecture to call for a national truth and reconciliation commission and a treaty with Indigenous Australians. In a second Wallace Wurth lecture for the year, one of the world's top mental health experts Dr Tom Insel warned that current rates of suicide signal a global health emergency.

We will take steps to achieve equity for students and staff. We will work closely with industry to ensure our research outcomes rapidly benefit society. We will lead debates on the grand challenges that face Australia and humankind.

## 2016 highlights include:

### Gender equity and diversity

The University took important steps towards fulfilling its 2025 Strategy commitments to equality of opportunity and social justice.

- » A portfolio of Pro-Vice-Chancellor (Indigenous) was announced at the first meeting of the Equity, Diversity and Inclusion Board. Five Diversity Champions were appointed, and an advisory network of staff and student volunteers established to help identify key issues.
- » The University invited Professor Robert Wood, a leading expert on unconscious bias, diversity and leadership from the AGSM, to deliver training on unconscious bias and inclusive leadership for UNSW senior staff.
- » UNSW formed a team to develop and deliver prevention and response training for students and staff under the Respect. Now. Always. campaign to prevent sexual assault and harassment.

### SAGE Athena SWAN

- » In July, Pro-Vice-Chancellor (Research Training) and Dean of Graduate Research, Laura Poole-Warren, hosted the SAGE Athena SWAN Sydney Regional Networking meeting. There was a special focus on academic leadership and a presentation on UNSW's Academic Women in Leadership program.

### Thought leadership and grand challenges

- » In December, the third UNSW Grand Challenge theme – Inequality – was announced, providing a platform to showcase the depth of UNSW thought leadership in this area. The University held its Unsomnia event to launch the Grand Challenges program and hosted a discussion about the University's path to carbon neutrality. Chaired by Scientia Professor Matthew England, the event brought together senior management, representatives from the Student Representative Council, and climate change researchers.
- » A coalition of 17 prominent leaders, chaired by UNSW, presented the federal government with a blueprint to drive a national transition to clean energy. The move came as UNSW

implemented a new investment strategy to become a leader in adopting environmental, social and governance principles.

### Public events and cultural partnerships

- » Delivering UNSW's 2016 Gandhi Oration in March, award-winning journalist Peter Greste told a packed audience the media was being used by governments and extremists in a war of competing world views.
- » Prominent barrister Bret Walker SC used his 2016 Hal Wootten Lecture in August to urge lawyers not to be afraid to take part in public debate for fear of jeopardising judicial appointments.
- » In the first of the 2016 flagship 'So What?' lectures held by the Faculty of Arts & Social Sciences in March, UNSW Professor Lyn Craig said policy makers were still ignoring unpaid work and time devoted to care. The series included an address by Professor Vanessa Lemm, Head of School of Humanities and Languages, on the so-called post-human era; and a lecture by Phil Scraton, Professor of Criminology at

**1,800**

events delivered.

## Energy policy

UNSW delivers action plan to federal government to move Australia to clean energy.

**1 billion**

people engaged via media partnerships.

## Community

Award-winning journalist Peter Greste delivers 2016 Gandhi Oration.

## Sport

UNSW crowned overall Australian University Snow Games champions.

**14**

members of UNSW community compete in the Rio Olympics.

Queen's University, Belfast, on the 1989 Hillsborough Stadium football disaster.

- » Built Environment Dean Professor Helen Lochhead kicked off the 2016 Utzon Lecture series in March with an address about Sydney's enduring resilience as a place of beauty. Other lectures in the series included one by UNSW inaugural Judith Neilson Chair in Architecture, David Sanderson, on making cities resilient in the face of unprecedented migration, and UNSW Built Environment's Associate Professor Oya Demirelek on how new technology can increase happiness.
- » UNSW continued its mission to discover Australia's next generation of science communicators, in partnership with ABC Radio National (RN), selecting six brilliant young minds for the 2016 Top 5 Under 40 media residencies at RN.
- » UNSW donor, alumnus and retired member of staff Dr Richard Willgoss helped develop a student choral prize for each of UNSW's two choirs. He also offered the 2016 Willgoss Choral Composition Prize, a national competition for a new composition written for UNSW's chamber choir, the Burgundian Consort.

## Community engagement

- » UNSW strengthened its partnership with Souths Cares, a community not-for-profit public benevolent institution, by looking to secure education and employment at UNSW for disadvantaged and marginalised youth and their families.
- » As Sydney FC's major partner in the 2016 AFC Champions League, UNSW supported the Sky Blues campaign against Asia's top football teams.
- » UNSW's School of Psychiatry launched the inaugural Australian Mental Health Prize, the first prize of its kind at a national level to acknowledge individuals who make outstanding contributions to the promotion of mental health.
- » In February, UNSW partnered with other NSW universities to offer scholarships for refugees on a humanitarian visa.

## Knowledge exchange and innovation

- » The Faculty of Arts & Social Sciences launched two innovative online courses aimed at disability workers and advocates.
- » UNSW showcased the best and brightest of its innovators and start-ups at a major summit in San Francisco, which included alumnus and Atlassian co-founder Scott Farquhar, who discussed how to internationalise Australian start-ups and innovations; while UNSW Scientia Professor Michelle Simmons highlighted her UNSW teams' race to build the first quantum computer in silicon.

## Media reach

- » In 2016, UNSW engaged around 1 billion people via media partnerships, including with Fairfax (13 million), ABC Radio National (70 million) and Xinhua (900 million). UNSW TV's YouTube account continued to lead the sector, attracting 40,000 subscribers. More than 500,000 people were following UNSW on Facebook, the most of any Australian university. There were also 33,400 Twitter followers on the University's main account, and 14,000 Twitter followers on the UNSW Newsroom account. Almost 200,000 followers were engaging with the university on LinkedIn.

# Grand Challenges



## #Focus

Every two years, three new Grand Challenges will be chosen.

## Sleepless in Sydney at the inaugural UNSOMNIA event

Killer robots, disaster recovery, youth depression, climate change and rising inequality were among the pressing global issues tackled at UNSOMNIA, an event to launch UNSW's Grand Challenges program.

UNSW experts were asked "What keeps you up at night" and invited on stage to offer their solutions to some of the 21st century's most complex issues. The Grand Challenges program is a central part of

UNSW's 2025 Strategy to help solve the biggest issues of our time.

The program will include activities around up to six important global themes.



## Addressing the biggest issues facing humanity

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UNSW announced the first three of its Grand Challenges, an initiative to establish the University at the forefront of debate and policy development on the world's greatest challenges.

The program is an important element of the UNSW 2025 Strategy and will champion the critical place of universities in public engagement and in leading open and informed debate.

The academics leading the Challenges were selected from the University's highest category of professor, Scientia, and are global leaders in their fields.

As Academic Lead for the program as a whole, Scientia Professor Robert Brooks

(centre) will be responsible for the program and will work with the University community to generate ideas.

Scientia Professor Matthew England (left) will oversee the Climate Change Grand Challenge and Scientia Professor Jane McAdam was appointed to lead Refugees and Migrants.

Plans were also unveiled in 2016 for a third Grand Challenge: Inequality.





## China Collaboration:

The official launch of the Torch Innovation Precinct at UNSW represented a significant boost for Australian research funding that will advance both the national innovation agenda and Australia's bilateral relationship with China. The precinct will facilitate unprecedented collaboration between UNSW-led Australian research teams and major Chinese companies with the capacity, capital and market access needed to translate Australian research breakthroughs into new products, processes and services.

We will expand our global educational reach using innovative technologies and delivery models. We will develop high-profile and strategic research and education partnerships with international universities. We will expand our efforts to improve the lives of marginalised and disadvantaged communities in Australia, the Asia-Pacific and globally.

## 2016 highlights include:

### Focus on India

- » UNSW launched a major drive, the "Diya Initiative" (Diya means 'light' in Hindi), with India's higher education sector, to engage with as many as 100,000 Indian students over the next ten years using online and blended learning and classroom teaching to deliver degrees on an unprecedented scale. The plan will be supported by UNSW's investment in education technology and through partnerships spread across India's higher education sector.
- » UNSW appointed India's former Consul-General to Sydney Mr Amit Dasgupta as inaugural India Country Director.
- » UNSW is also teaming with the Indian government on a range of other educational initiatives, including becoming the first international university to sign up to the India MOOC platform SWAYAM.
- » In November, UNSW and Tata Consultancy Services (TCS) announced an agreement to pursue technology research collaborations.

- The memorandum of understanding will enable the University and TCS – part of the Tata group, India's largest industrial conglomerate – to work together in areas of common interest such as machine learning, virtual reality, robotics, data analytics and cloud computing.
- » Also in November, UNSW launched a public health degree in India to strengthen the country's capacity to respond to major health challenges. The partnership with Medvarsity – Apollo Hospitals' e-learning venture – will see a new Master of Public Health (International) program offered in a fully online mode in India for the first time.
- » Four UNSW students were chosen as Pollinate Energy Fellows to travel to India to help bring light and sustainable products to some of the country's poorest communities.

### Global alliances and focused partnerships

- » In February, Arizona State University, King's College London and UNSW announced the formation of the PLuS Alliance, a new partnership to help find research-led solutions to global challenges and expand

- access to world-class learning. The PLuS Alliance will undertake cross-border research to address significant issues related to health, social justice, sustainability and innovation. The research will be supported with a suite of related learning programs to be delivered online. Also announced were more than 60 inaugural PLuS Alliance Fellows from across the three universities.
- » In November, UNSW hosted the executive committee meeting for the PLuS Alliance at which 28 additional Fellows were appointed.
- » The PLuS Alliance successfully launched an Online Course Exchange initiative under the Global Learning Network, a program to advance UNSW's goal to become Australia's leading educator of international students.
- » UNSW hosted the 2016 APRU Global Health Program Workshop in September. The event, held for the first time in Australia, was attended by over 150 health practitioners and academics from Public Health and Community Medicine.



**400**

students receive \$1.1m in grants from New Colombo Plan.

## Global health

UNSW hosts the 2016 APRU Global Health Program Workshop.

## Thought leaders

UNSW academics attend world's most influential leaders' meeting in Switzerland.

## Partnerships

Discussions begin with universities in Uganda, Myanmar and South Pacific about building capacity.

## PLuS Alliance

Historic partnership to fund research-led solutions to global challenges.

**100,000**

Indian students to be engaged over 10 years.

### New Colombo Plan

- » Up to 400 UNSW students received more than \$1.1m in grants under the Australian Government's New Colombo Plan to study in 12 countries in the Indo-Pacific region including Vietnam, Myanmar, Samoa and India. Fifteen UNSW projects were approved under the New Colombo Plan program, while five outstanding UNSW students were named New Colombo Plan Scholars to study in Indo-Pacific locations including Pakistan and Papua New Guinea for the first time.

### Global development

- » The Institute for Global Development continued to take shape, as capacity building partnerships were established with universities in Uganda, Myanmar and the South Pacific. The institute will be an umbrella for knowledge exchange, international partnerships and national programs that affect marginalised and disadvantaged communities. The President and Vice-Chancellor visited Uganda in August where an MOU was signed with Makerere University to support the training of optometry undergraduate students. The delegation also visited Gulu University where discussions focused on creating a student summer school, a mobile health clinic, a conflict resurgences/governing peace project and a

project focusing on transformative programs for academic staff. UNSW also received the first PhD students from Yangon Technological University in Myanmar as part of a significant partnership in engineering.

### Focus on collaboration

- » In January, UNSW professors Sarah Kenderdine and Jane McAdam joined U2 front man Bono and politicians including Justin Trudeau and David Cameron at a meeting of the world's most influential leaders, at the World Economic Forum in Switzerland.
- » In November, UNHCR's Assistant High Commissioner for Protection, Volker Türk, launched UNSW's Grand Challenge on Refugees and Migrants with a rare public address.
- » Also in November, the conference "Literacy: What works and why?" brought together leading international and Australian academics and practitioners in the field to examine two major areas of literacy learning – acquisition and development – and explore current problems and issues.
- » Institute for Economics and Peace founder, Steve Killelea, presented the findings of the latest Global Terrorism Index and took part in a panel discussion at UNSW, *Unlocking the Global Terrorism Index*. The aims of the public forum were to understand the global

impact of terrorism, gain insight into terrorist trends and drivers, and assess their implications for Australia and our wider region.

- » UN Special Rapporteur on the Human Rights of Migrants, François Crépeau, shared insights from his long-anticipated mission to Australia when he spoke at the Andrew & Renata Kaldor Centre for International Refugee Law Annual Conference. The centre's valuable work will continue for at least five more years after its patrons agreed to increase their financial commitment.

# Enabling Delivery of Our Strategy



## **New Biological Sciences Building:**

A major construction milestone was reached in September on the UNSW Biological Sciences Building, with construction contractor Multiplex “topping out” the new \$125 million addition to the campus. Located on Botany Street, the project spans 21,730 square metres and includes a new nine-storey addition that complements the existing building. The project will also feature a new atrium and upgrade of the surrounding landscape.

The 2025 Strategy is a bold and ambitious plan that will require us to navigate one of the most exciting and transformational agendas of any university, anywhere. With implementation underway, we are focusing on developing new sustainable income sources, building robust performance metrics to measure our success and strengthening our framework to support our staff and students.

## **2016 highlights include:**

### **People and culture**

- » Significant work in developing a new performance framework for UNSW occurred during the year. A set of draft performance expectations for teaching and research staff, as well as teaching-focused and research-focused roles was developed with the Heads of Schools and Deans.
- » UNSW's enviable reputation in early childhood education and care was boosted by outstanding results achieved by the final two child care centres to go through the Australian Children's Education and Care Quality Authority assessment and ratings process. Owl's House and Tigger's Honey Pot 'exceeded' the National Quality Standard, joining our other Early Years service, Kanga's House, on this rating.

### **2025 Strategy Office**

- » A 2025 Strategy Office was established to coordinate the 2025 Strategy and new governance arrangements were put in place to bring appropriate oversight and rigour to 2025 Strategy activity, including the establishment of a Planning and Assurance Board. Significant effort occurred over 2016 in detailed design of initiatives for the 2025 Strategy so they could move to implementation. This process was overseen by the 2025 Strategy Office and largely completed in August 2016, with a focus on initiatives generating funding. The program of work for the 2025 Strategy is large, comprising 61 initiatives, within 18 portfolios and five sponsor work streams that relate to academic, student, global, social and enablers, all of which were reviewed and approved by the Management Board to proceed to implementation.

### **Risk management**

- » With a new Director appointed to Risk Management in February, efforts were undertaken to improve

the level of risk maturity across UNSW; establishing a framework for Risk Management through profiling among faculties and divisions, and reporting to the Risk Committee.

- » A UNSW-wide Business Continuity Plan was reviewed with efforts ongoing to improve our preparedness for returning to normal operations after a disruption.

### **Fundraising**

- » UNSW raised more than \$40m in 2016, exceeding our target by \$3.5m. It was the highest fundraising income received in a single year in the University's history, surpassing a previous record of \$35.3m in 2014. Over 4,000 donors generously supported the University.
- » We gratefully received a bequest from the estate of the late Stephen Kenneth Hesketh of the Woolley House. The house was designed by influential Australian architect Ken Woolley in 1962 as his family residence. The house was later sold to the Hesketh family who acted as its custodians.

**\$40 million**

A record in fundraising income, the highest received in a single year.

**\$681,000**

in Alumni donations and pledges from the annual telephone appeal.

**4,000**

donors give to the university.

**Transport**

Construction starts on Light Rail at Anzac Parade and University Mall.

**\$542 million**

budget for new buildings.

**Child care**

Early Years' child-care services rated 'outstanding'.

- » The 2016 President and Vice-Chancellor's Annual Alumni Telephone Appeal was a great success, with about \$681,000 raised in gifts and pledges by 1,545 alumni. The telephone appeal will be expanded and more annual giving opportunities created in 2017.

## Alumni

- » The University continued to work with alumni and community members in events such as the Town and Gown Dinner, the Wallace Wurth Lectures, Meet the CEO events, the Utzon Lecture Series, "So What" lectures and Young Alumni Drinks.
- » A philanthropist novelist, a business leader, a mental health educator and an Australian cricketer were among the high achievers recognised at UNSW's 2016 Alumni Awards. The awards celebrate the success and leadership of ten of the University's most distinguished graduates.

## World-class environments

- » The state-of-the-art Hilmer building was opened in July and is now home to the School of Materials Science and Engineering. Designed by Grimshaw Architects, with input from HDR, Inc. the building was constructed by Brookfield Multiplex for \$143m. The flexible environments will help UNSW achieve a world-class environment for research and educational excellence, as envisioned in the 2025 Strategy.
- » UNSW Council approved the final budget for new buildings totalling \$542.4m, including the Roundhouse Rejuvenation (\$33.8m); Science Engineering (\$210m); Hilmer fitout (\$31m); Electrical Engineering (\$104m); Stage 2 of the Biological Sciences building (\$130m); and the Cliffbrook residential campus (\$33.6m).
- » The UNSW Roundhouse was closed for extensive renovation. The character and history of the space will be retained but there will be significant internal and external upgrades. Work is expected to finish in 2018.
- » The UNSW Bookshop at the Kensington campus won the Campus Bookshop of the Year Award from the Australian Publishers Association, the third time in five years. The award came after UNSW Press's

publishing and sales division NewSouth Books was named Best Small Publisher at the 2016 Australian Book Industry Awards.

## IT LaunchPad

- » UNSW opened the IT LaunchPad, a collaboration and co-design space on level 14 of the Library, accelerating cross-stakeholder discussions and supporting highly technical design activities.

## Light Rail

- » Works continued on the CBD and South East Light Rail with construction commencing on Anzac Parade and University Mall. The Light Rail will provide sustainable and reliable transport from the city to UNSW's Kensington campus. From 2019, services will run every eight minutes to and from Randwick and Kingsford between 7am and 7pm.

# Governance



Strong and effective governance and management have set clear strategic goals for the University, underpinning our success and positioning us into the future.

## UNSW Council

The University is governed by a Council of 15 members led by the Chancellor under the *University of New South Wales Act 1989* ("The Act"). Members represent the interests of the University and the community, contributing expertise in a range of areas, including finance, commercial activities, law, governance and management, and planning and development.

The Council has Finance, Audit, Risk, Nominations and Remuneration, 2025 Strategy and Honorary Degrees committees.

The Council is able to draw on additional specialised expertise by appointing external members to its committees. Council and Council committee members serve the University on a voluntary basis. Further information on Council, its membership and committees is available on the UNSW website.

## Official Members (as at 31 December 2016)

### Ex-Officio

#### Chancellor

**Mr David M. Gonski**

AC BCom, LLB UNSW, FAICD (Life), FCPA

#### President and Vice-Chancellor

**Professor Ian Jacobs**

BA, MA Cam MBBS UCL MD London FRCOG

#### President, Academic Board

**Professor Prem Ramburuth**

BA DipEd South Africa, MEd Sydney, EdD UNSW, Licentiate RAM, London, GradDip TESOL South Australia, MAICD

## Ministerial appointments

### Pro-Chancellor

**Mr Brian Long FCA**

### Deputy Chancellor

**Ms Jillian S. Segal**

AM BA LLB UNSW, LLM Harvard, FAICD

### Elected members

**Mr Aaron Magner**

BEC Macquarie, MEM LLM UNSW

**Professor Kristy Muir**

BA Hons, PhD, GAICD

**Mr Michael Murdocca**

**Scientia Professor John Piggott**

BA Sydney, MSc PhD London, FASSA

**Ms Jantapond Purintanawut**

BEng (KU)



## UNSW Foundation Limited Board of Directors

*Mr Richard Alcock*  
*Mr Robert Cameron AO*  
*Mr Mark Dorney*  
*Dr Holly Forsyth*  
*Dr Daniel Gauchat*  
*Mr David Gonski AC (Chair)*  
*Mr Nicholas Gray*  
*Dr Catherine Harris AO PSM*  
*Professor Ian Jacobs*  
*Mr Grant King*  
*Dr Wallace King AO (Deputy Chair)*  
*Ms Christine McNamee Liddy AO*  
*Dr Peter Edward Mason AM*  
*Mr Bruce Morgan*  
*Mr Timothy Olsen*  
*Mr Simon Poidevin OAM*  
*Professor Laura Poole-Warren*  
*Mr Julian Reynolds*  
*Ms Jillian Segal AM*  
*Dr Emery Severin*  
*Mr Shane Simpson AM*  
*Dr Colin Sutton*  
*Emeritus Professor Alec Tzannes AM*  
*Ms Nicola Wakefield Evans*  
*Mr Albert Yue-Ling Wong*

**Board membership at 31 December 2016**

### Members appointed by Council

#### Pro-Chancellor

##### ***Dr Jennifer Alexander***

MB BS MCom MHP UNSW, FRACMA  
FAFPHM FAICD

##### ***Ms Maxine Brenner***

BA LLB UNSW

##### ***Mr Nicholas Carney***

BCom LLB UNSW, MAICD

##### ***Mr Matthew Grounds***

BCom LLB UNSW

##### ***Mr Warwick Negus***

BBus UTS, MComm UNSW, SF Fin

### Former members

The following people were Council members from the beginning of the year until they completed their terms of office on 30 June 2016:

##### ***Associate Professor Dorottya Fabian***

BMus (Hons) Liszt Ferenc Academy  
of Music Budapest, MMus PhD  
UNSW, FAHA

##### ***Mr Ben Heenan***

##### ***Ms Emma Lovell***

BE (Hons) Chemical  
Engineering UNSW

### Academic Board

The Academic Board is the principal academic body of the University. Comprising up to 60 members, the Board advises the Vice-Chancellor and Council on matters relating to teaching, scholarship and research, and takes decisions on delegation from Council.

### Management

The Vice-Chancellor is the Principal Executive Officer of the University and is responsible for the overall direction of corporate planning, budget activities and external relations. Under the Council, the Vice-Chancellor manages and supervises the administrative, financial and other activities of the University. Reporting to the Vice-Chancellor are the Management Board, eight Faculty Deans and the Rector of UNSW Canberra, who have significant delegated authority in relation to their areas.

## Management Board (as at 31 December 2016)

### President and Vice-Chancellor

**Professor Ian Jacobs**

BA MA Cam MBBS UCL MD London  
FRCOG

### Senior Deputy Vice-Chancellor

**Professor Les Field AM**

BSc PhD DSc Syd, FAA FRACI

### Deputy Vice-Chancellor (Education)

**Professor Merlin Crossley**

BSc (Hons) Melb, DPhil Oxon

### Deputy Vice-Chancellor (Enterprise)

**Professor Brian Boyle**

BSc (Hons) Edinburgh, PhD Durham

### Deputy Vice-Chancellor (Research)

**Professor Nicholas Fisk**

MBBS Syd, PhD UCL, MBA Imperial

### Academic Lead for Equity, Diversity and Inclusion

**Professor Eileen Baldry**

BA DipEd MWP PhD

### Vice-President and Chief of Staff

**Mr Peter Noble**

MBA Leeds

### Vice-President, Finance and Operations

**Mr Andrew Walters**

BCom UKZN BAccSci (Hons) South  
Africa CA

### Vice-President, International, Marketing and Communications

**Ms Fiona Docherty**

MA Glasgow

## Senior Officers

### Pro-Vice-Chancellor (Education)

**Professor Geoffrey Crisp**

PhD ANU

### Pro-Vice-Chancellor (Research)

**Professor Emma Johnston**

PhD Melbourne

### Pro-Vice-Chancellor (Research Infrastructure)

**Associate Professor Grainne Moran**

BSc PhD NUI Galway

### Pro-Vice-Chancellor (Research Training)

**Professor Laura Poole-Warren**

BSc (Hons) PhD UNSW

### President, Academic Board

**Professor Prem Ramburuth**

BA DipEd South Africa, MEd  
Syd, EdD UNSW, Licentiate RAM,  
London, GradDipEd, TESOL South  
Australia, MAICD

## Leadership

### Vice-President, Campus Life and Community Engagement

**Mr Neil Morris**

BA N'cle NSW, TGM INSEAD

### Vice-President, Human Resources

**Mr David Ward**

BA (Hons) MCom UNSW

### Vice-President, Philanthropy

**Mr Jon Paparsenos**

BA New Jersey

### Vice-President, Advancement

**Ms Jennie Lang**

BA BEd (Dist.) MEd N'cle NSW

## Executive Team

The key advisory body for the Vice-Chancellor meets fortnightly and comprises the Management Board, Deans, Senior Officers and members of the leadership team.

## Deans

### Art & Design

**Professor Ross Harley**

BA (Hons) Griffith, MA DCA UTS

### Arts & Social Sciences

**Professor Susan Dodds**

BA Toronto, PhD La Trobe

### Built Environment

**Professor Helen Lochhead**

BScArch (Hons) BArch(Hons) Syd  
MS(Arch+UD) Columbia DipHorticulture

### Business School

**Professor Chris Styles**

BCom (Hons) UWA, PhD London  
Business School

### Engineering

**Professor Mark Hoffman**

BMechEng (Hons) PhD Syd, MBT UNSW

### Law

**Scientia Professor George Williams AO**

BEC LLB (Hons) Macq, LLM UNSW,  
PhD ANU

### Medicine

**Professor Rodney Phillips**

FMedSci MA Oxon MD Melb FRCP  
FRACP

### Science

**Professor Peter Lovibond  
(Acting)**

BSc (Psych) PhD, MSc (Clin Psych)  
UNSW

### UNSW Canberra

**Professor Michael Frater (Rector)**

BSc BE Syd, MEd UNSW, PhD ANU,  
MIEEE FIEAust

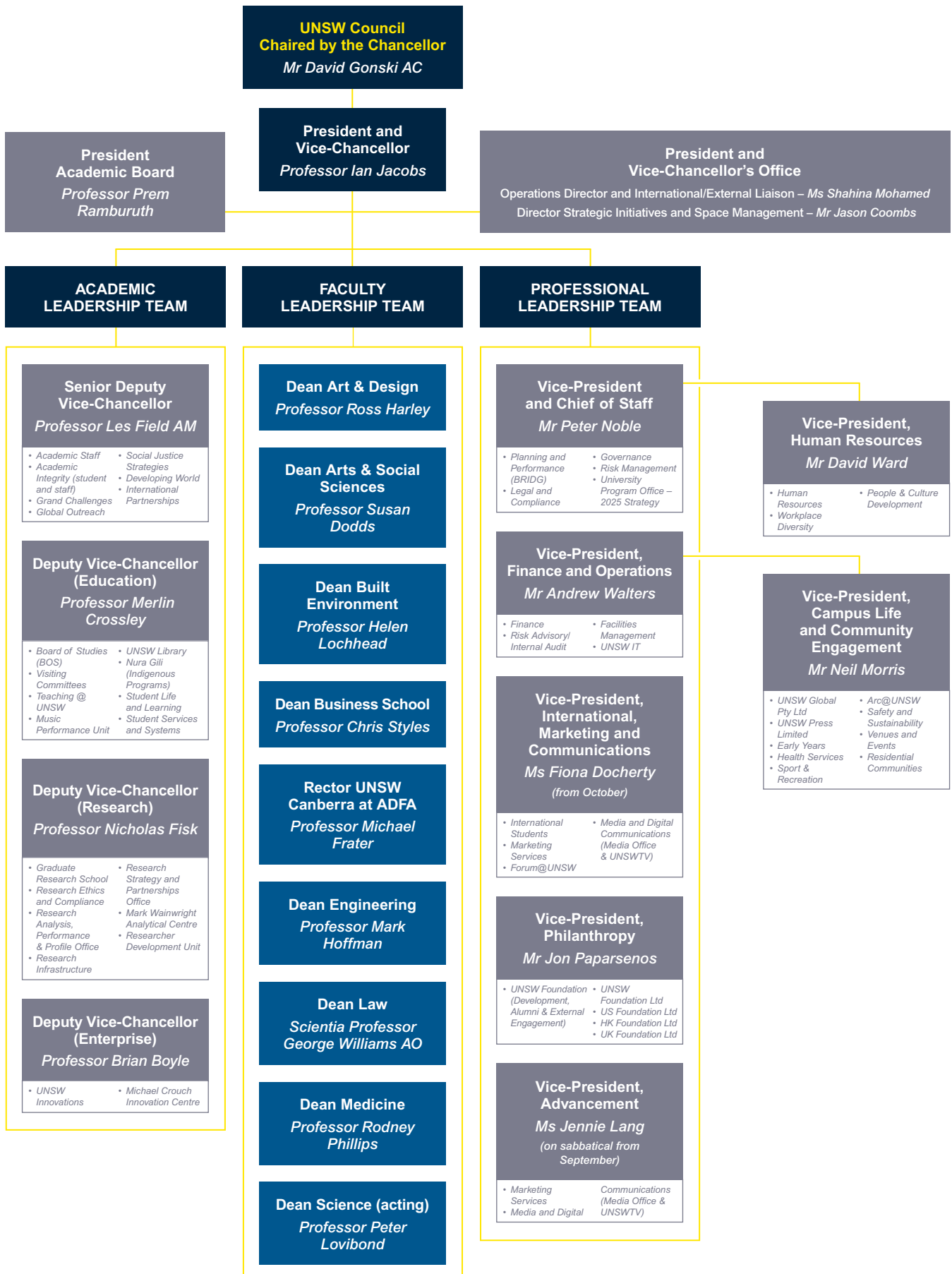
## Senior Management Appointments

In November 2016, the Vice-Chancellor announced the following appointment:

- » Professor Emma Johnston, Pro-Vice-Chancellor (Research) will become Dean of the Faculty of Science, commencing 1 May 2017.

# UNSW Executive Team Organisation Chart

(as at December 2016)



**UNSW Sydney**

NSW 2052  
Tel +61 2 9385 1000  
unsw.edu.au

**Hours of business**

Switchboard: Monday – Friday, 9am – 5pm  
Many departments of the University operate beyond standard business hours.

**This report is available online at [annualreport.unsw.edu.au](http://annualreport.unsw.edu.au)**

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