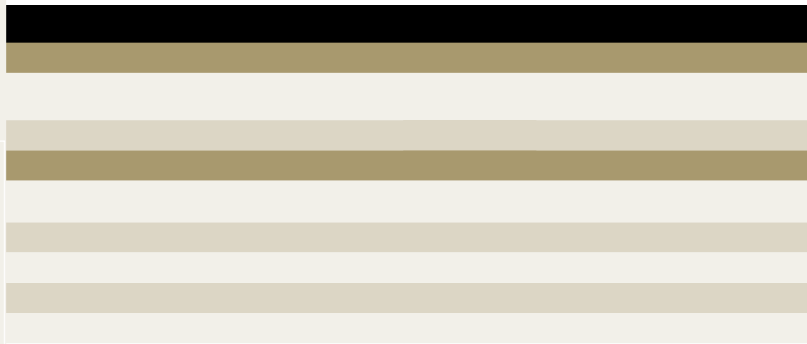


RY

truly global research powerhouse. UQ is a leading
local and international communities in many strategically
is also a pacesetter in research translated into commercial
disciplines, ranging from bioscience, nanotechnology and
humanities.



Research Block Grants

In 2016, UQ received \$176.6 million through the Australian Government's Research Block Grants, awarded on the basis of research performance. This placed UQ third nationally, behind the University of Melbourne and the University of Sydney.

The funding comprised:

- Joint Research Engagement (\$29.5 million)
- Joint Research Engagement Engineering Cadetships (\$0.5 million)
- Research Infrastructure Block Grant (\$29 million)
- Sustainable Research Excellence (\$25.8 million)
- Research Training Scheme (\$64.4 million)
- Australian Postgraduate Awards (\$25.4 million)
- International Postgraduate Research Scholarships (\$2 million).

UQ Internal Research Support Schemes

The University continued to invest heavily in human and physical research capacity through several internal research support schemes. These foster early career researchers, seed research initiatives, promote linkages and partnerships, and support collaborative infrastructure.

Internal research support schemes with funding commencing in 2016 included:

- UQ Development Fellowship, aimed at fostering promising early career researchers and retaining mid-career and senior academic staff of exceptional calibre
- UQ Career Advancement Initiative, supporting the development of highly competitive ARC Linkage Projects, ARC Industrial Transformation Research Hubs, ARC Industrial Transformation Training Centres, NHMRC Development Grants or NHMRC Partnerships for Better Health Grants by funding pilot research that will

- facilitate establishing new or emerging linkages with partner organisations
- UQ Career Advancement Initiative, to encourage research by new members of staff, provide limited seed funding as a means of generating external research support, and support high-quality projects of modest financial cost from early career researchers
- UQ Research Excellence Awards, recognising demonstrated excellence and promise of future success in research and the leadership potential of individual young researchers
- UQ Ochsner Scientific Collaborative Research, fostering transdisciplinary research between eligible investigators based in UQ's Ochsner Clinical School (New Orleans, US) and those in other UQ schools, institutes and centres
- UQ Major Equipment Acquisition Grants, supporting the acquisition of major research infrastructure and equipment items, particularly where access to similar equipment is limited and there is demonstrable collaborative gain through its use
- UQ Major Research Facilities, supporting existing major research facilities within UQ, promoting sound planning strategies for the replacement and upgrade of infrastructure and maintaining competitive advantage in research capability through greater utilisation of existing major research infrastructure within the University
- The UQ Advantage Office's Summer Research Placement supported more than 650 undergraduate students to gain valuable research experience alongside UQ academics.

UQ also participated in schemes administered by Universities Australia, including the Universities Australia - DAAD: Australia-Germany Joint Research Cooperation Scheme that fosters research collaboration of the highest quality between Australian and German researchers.

Prestigious fellowships and awards

The University's global research positioning was highlighted with the election of several new Fellows to Australia's learned academies in 2016. Five new Fellows of the Australian Academy of Health and Medical Sciences (AAHMS) are UQ academics, bringing the number of UQ Fellows of this new academy to 21. Five UQ staff were elected as Fellows of the Academy of the Social Sciences in Australia (ASSA), two were made Fellows of the Australian Academy of Science (AAS), two were elected to the Australian Academy of Technological Sciences and Engineering (ATSE), and two were elected to the Australian Academy of the Humanities (AAH).

More than 164 UQ staff (including honorary and adjunct appointments) and professors emeriti are Fellows of Australia's learned academies, which include AAS, AAHMS, ASSA, ATSE, and AAH. UQ excellence was further recognised with many staff securing a number of prestigious awards, including:

- Professor Katherine: Top-ranked Development Grant, 2016 NHMRC Research Excellence Awards
- Dr Nicola: 2016 Women in Technology Awards (Life Sciences/ICT Rising Star)
- Associate Professor Hannah: NHMRC 10 of the Best Research Projects 2015 (awarded 2016)
- Professor John: Marshall and Warren Award, 2016 NHMRC Research Excellence Awards
- Madeline: 2016 Women in Technology Awards (ICT Professional)
- Dr Barbara: 2016 Queensland Young Tall Poppy of the Year
- Associate Professor Gail: Australian Academy of Science 2016 Ruth Stephens Gani Medal
- Laura: 2016 Women in Technology Awards (PhD Career Start)
- Dr Afa, Associate Professor Maria and Dr Elsa: Women in Research Citation Awards
- Dr Hannah, Dr LK and Dr Susan: 2016 Queensland Young Tall Poppy Awards
- Professor OH: 2016 Banksia International Award
- Professor Mark: 2016 CSL Young Florey Medal
- Professor HP: Elected as Foreign Associate of the US National Academy of Sciences (NAS)
- Dr JP: Top-ranked RD Wright Career Development Fellowship - Level 1, 2016 NHMRC Research Excellence Awards, and Commonwealth Health Minister's Award for Excellence in Health and Medical Research for 2016
- Professor MS: Australian Academy of Technological Sciences and Engineering Clunies Ross Award
- Associate Professor KW: 2016 Prime Minister's Prizes for Science - Frank Fenner Prize for Life Scientist of the Year.

Other performance measures

Following on from the December 2015 Excellence in Research for Australia (ERA) assessment affirming the exceptional quality of research at UQ, the University began preparing for the ARC Research Engagement and Impact Assessment that will be piloted in 2017. The first full assessment and reporting will run in 2018 alongside the next ERA assessment.

Research ethics and integrity

The University ensures its researchers are conducting studies to the highest ethical and regulatory standards through continuous improvement of processes and procedures. Significant operational advances in ethics and integrity were achieved in 2016.

In human ethics, two new multidisciplinary Human Research Ethics Committees (HRECs) were established and registered with the National Health and Medical Research Council (NHMRC). In order to facilitate the timely review of applications, the committees met on an alternating fortnightly basis. In conjunction with the establishment of the new HRECs, the University participated in the beta-testing and subsequent implementation of the NHMRC's Human Research Ethics Application (HREA) to replace the National Ethics Application Form (NEAF). The application assists researchers in considering and addressing the principles of the *National Statement on Ethical Conduct in Human Research* and provides the information that HRECs require to review research proposals.

In recognition of the diverse locations UQ researchers conduct their work, both the Animal Ethics and Human Ethics Units implemented electronic submission procedures for applications, and established electronic review, modification and reporting processes for UQ's five Animal Ethics Committees and two Human Research Ethics Committees.

A new policy and procedure, *Research Misconduct - Research Higher Degree candidates* (PPL 4.20.10), was completed and implemented. Resources to help the University's researchers understand how to conduct research responsibly were also developed, including the review and revision of the Research Integrity website, which now provides detailed information—including extensive links to useful external resources as well as clear instructions on



Associate Professor Kerrie Wilson won the Prime Minister's Prizes for Science - Frank Fenner Prize for Life Scientist of the Year.

Dr Alize Ferrari, Queensland Centre for Mental Health; Associate Professor Margaret Mayfield, School of Biological Sciences and Director of the Ecology Centre; and Dr Eugenia Sampayo, School of Biological Sciences and ARC Centre of Excellence for Coral Reef Studies, won Women in Research Citation Awards for their influential work in public health and plant and marine ecology.



The Ochsner Clinical School in New Orleans, US, one of UQ's partners in fostering transdisciplinary research between investigators.



Fostering research leaders

Professional development

The University delivered a broad range of training and development opportunities to researchers in 2016.

Professional development programs targeted at early career researchers (ECRs) were again delivered in 2016, such as the *Research Communication Development* series, a suite of workshops to foster effective and engaging research communication skills, and the ECR Development Program, based on the Go8 Future Research Leaders program and designed to give ECRs the skills to establish and support excellent research management and leadership practice. A second iteration of *Masterclasses in Scientific Writing and Publishing*, presented and coordinated by Nature Publishing, were held at the University, offering targeted workshops to ECRs identified as future research leaders.

Further training and development opportunities to establish best practice in research management and support researcher engagement in industry and commercialisation activities were delivered by UniQuest, Staff Development, the Library, the UQ Graduate School, and external

UQ-developed Perkii drinks are now sold in outlets across the country, including Woolworths.

Uniseed

An early-stage investment fund, Uniseed commercialises intellectual property at UQ, the Universities of Melbourne, New South Wales and Sydney, and the CSIRO.

To date, Uniseed has invested \$20.8 million into 24 UQ start-up companies and facilitated start-up formations at UQ more often than any other investor (around one-third of UQ start-ups formed since 2000). Uniseed's investment has secured commitments of more than \$340 million of external funding to UQ start-ups from grants and other investment capital.

In 2016, Uniseed made further cash distributions to UQ from milestone payments relating to successfully exited start-up companies, including UQ start-up company Spinifex Pharmaceuticals, which is based on the work of Professor Maree Smith, and was acquired by Novartis International AG in 2015 for US\$1 billion; and Hatchtech Pty Ltd, which was awarded the Australian Venture Capital Association's Best Early Stage Deal of the Year for its head lice treatment deal with Dr Reddy's Laboratories in India, worth US\$200 million.

Much of the investment received by UQ companies has flowed back to the University through targeted research contracts, with UQ receiving more in research funding to university laboratories than it has contributed to the fund. Research supported by Uniseed companies has led to more than 300 publications that have been collectively cited more than 4000 times.

UQ companies supported by Uniseed include:

- P P L , which raised \$4 million in 2016 to support the release of its low-calorie probiotic fruit juice and water-based drink
- P G P L , which was formed to commercialise an encapsulation technology based on the work of P B B a a , raising \$400,000 from Uniseed and Brisbane Angels
- H a , which is developing hydrogen storage equipment based on the work of P A Da and A c a P Ka N a

- Q-S a P L , which raised further funds from Uniseed and the Medical Research Commercialisation Fund (MRCF) to continue work with leading serum tube manufacturers for improved blood collection (based on the work of D Pa Ma c, P Ma La , E P J D J AM and D G c D)

- N P a , which continues to work with Syngenta (oghs13 euoM-013Manisee.2319 uM4u7 (eGn1Masci)U/T1 Tf()Tj/TiLan1 Tf(T1 Tiser423.ducthan 400(-)CF) t)13 (036pr)23 eGn1Manisee.19 U/T17 (eGn1Masci1Map1 1 Tf1 (ork)nds fr)23.1 (om sed on the

cha* [(P)]TN

Pion1an Tchange/earchin Vre72(ork wigt)]TvtJT* [oicthan 4[h Sn TfscieuM P 1aise23wborns2 biesdo not* h Sets20(dustr)21(y)23(2016)23 (chdis (2)41 ar) human eaEfoichinn * [(Pr)21 e 5rrisatgn(036cauoM)]TJ /healthay1 (y)2sci

yor us yetse23(er.1 (y)2(p ualumni03 (chr)2milu -um 10/T1_ch2pogr)21 esfabwithvTJ]TJ* [(Piuccthan 4[T03 ((P UQa) *)]T.1 (y)2(dem3ngicchseap 2. CBEHbwilf (ed))m/maseaert (eGn1Mion .7

