

Management of research and consultancy

In May 2020, a new suite of policies, procedures and processes was implemented to better manage risks relating to consultancies, secondary employment and internal work. This includes improved financial management of costing and pricing relating to research and consultancy activities. This policy framework complements work undertaken in 2018 and 2019 relating to contract research and grants financial management and the implementation of MyBalance, the research budget management system. This is also an important foundation for further improvements in the management of the research lifecycle through the implementation of a new research management system during 2020/2021.

| ▶ Related initiatives for 2.6 | |
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| 5.3 Research Management Business Transformation program | pg 34 |

2.7 Develop flexible models to effectively utilise the institution's intellectual property.

UniQuest

UQ was ranked number one within the Group of Eight universities in the 2020 Survey of Commercialisation Outcomes from Public Research (SCOPR) in measures for the amount of commercialisation revenue received, the number of active startups and the value of equity held by UniQuest in startups formed from UQ intellectual property (IP).

UQ's innovative technologies continued to attract significant global interest in 2020:

- Startup company Inflazome Ltd was acquired by multinational pharmaceutical company Roche in September in the largest deal for a spinout company from an Australian university, with an upfront payment of €380M (AU\$617M) plus additional development and regulatory milestone payments. Inflazome is developing potential treatments for a broad range of inflammatory diseases, including inflammatory bowel disease and Parkinson's disease, based on IP developed by UQ researchers in collaboration with Trinity College Dublin.
- Startup company Vaxxas will partner with the US Government to test its high-density microarray patch (HD-MAP) needle-free vaccine delivery technology for pandemic influenza, receiving \$30 million from the Biomedical Advanced Research and Development Authority. With the support of the Queensland Government, the company will establish a facility at Brisbane's Northshore Hamilton for the manufacture of products, ensuring that the UQ research continues to be developed in Brisbane. A long-term partnership with Merck & Co Inc has seen the global pharmaceutical company investing \$18 million in Vaxxas in a combination of equity funding and option fees.
- In the first 9 months of 2020, UQ's other startups attracted over \$27 million in investment to advance their technologies towards the market, bringing the cumulative total raised since 1984 to \$776 million.
- The Queensland Emory Drug Discovery Initiative, operated and managed by UniQuest, progressed its pipeline of drug discovery projects based on innovative UQ research, and was awarded competitive funding from the Medical Research Futures Fund to advance the projects in cancer and neurodegeneration to commercialisation.

JKTech

As the technology transfer company for the University's Sustainable Minerals Institute (SMI), JKTech supplies innovative products and services to the global resources industry – including specialist technical consulting in mining, geometallurgy and processing; laboratory services and analysis; professional development and technical training services; and test equipment and simulation software products.

During 2020, a key achievement was the integration of JKTech and SMI's Julius Kruttschnitt Mineral Research Centre (JKMRC) under one management structure. This approach will strengthen the mining value chain and will maintain the critical linkages between research and consulting in order to drive innovation and ensure that clients receive the benefits of new research and expertise in technology-based solutions.

Despite the challenges that materialised as a result of the COVID-19 travel restrictions, JKTech continued to engage with industry partners by providing services remotely as well as remaining connected with the more than 12,000 mining professionals who attended or viewed webinars produced by the combined JKTech, SMI, JKMRC group.

University of Queensland Press (UQP) Quentin Bryce Award

Established in association with UQ, UQP launched a new annual \$5,000 prize in February, the UQP Quentin Bryce Award. Bestowed on a book on UQP's list that celebrates women's lives or promotes gender equality, the inaugural winner was *Throat*, a poetry collection written by Ellen van Neervan.

Citizen science

To increase awareness of the Institute for Molecular Bioscience's scientific endeavours, work began in 2020 on the development of 2 apps: the *Cane toad challenge* and *Soils for science*. Both were launched for general community use during the year and have been widely taken up across the state.

| ▶ Related initiatives for 2.7 | |
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| 6.5 University of Queensland Press (UQP) | pg 38 |

Review of activities

3. Building engaged and strategic partnerships with a broad range of local and global networks

Engaging and collaborating with the community, industry, government and other research innovators is critical to UQ's capacity to meet the rapidly changing needs of society. We aim to enhance our approach to external engagement with a partnership framework, customer relationship management system, deeper international connections, diverse income sources and ongoing commercialisation interests.

3.1 Build a centralised resource to support, develop and manage significant partnerships guided by a clear partnership framework.

UQ Industry Partnerships Framework

The UQ Industry Partnerships Framework seeks to support engagement with industry partners external to UQ, with the aim of deriving and delivering maximum impact across research, commercialisation, innovation, teaching and learning, and engagement. The term 'industry' applies to an expanding range of external partners including private industry, industry associations, not-for-profits, foundations, and many other sectors of the economy.

The framework is intended to support all UQ units to facilitate successful engagement with UQ's industry partners, with an emphasis on strategic-level partnerships earmarked for central coordination. It aims to ensure industry-partner interactions are approached in a coordinated, timely and responsive manner, thus cultivating mutually beneficial relationships in support of the University's objectives to pursue 'partnered innovation' and 'collaborative partnerships to connect and co-create', as outlined in the *UQ Strategic Plan 2018-2021*. Despite some delays due to pandemic-related budget restrictions, the framework and responsibilities were further clarified during 2020, and development of reporting mechanisms commenced.

Research partnership model

The research partnership model has been very successful in supporting UQ to lift its performance in securing industry funding. During 2020, considerable work was undertaken to build capacity, particularly in security industry research income. Innovation brokers were recruited and these roles located within the Global Change Institute, and the staggered recruitment of key staff to support the research partnerships contract administration model was completed. Work will continue during 2021.

IBM@UQ Centre of Excellence and Innovation

In September, IBM announced the launch of a new collaboration with UQ to address data challenges impacting health, manufacturing and environmental research. Tackling issues associated with significant growth in the amount of data being collected, organised and stored for research purposes, the Centre will also provide a range of new data storage and computer hardware platforms to UQ's Research Computing Centre for experimentation and evaluation.

| Key performance indicators Partnerships | | | | | | | |
|--|------|------|------|-------------------|------|-------------------|--|
| Rank first in Australia for attracting research income from industry | | | | | | | |
| UQ research income¹ | | | | | | | |
| | 2014 | 2015 | 2016 | 2017 ⁴ | 2018 | 2019 | |
| UQ's national rank on research income from industry | 1 | 2 | 2 | 1 | 2 | 2 | |
| An increase in the proportion of our publications that are co-authored with external international or industry partners | | | | | | | |
| UQ publications with external co-authors² | | | | | | | |
| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 ³ | |
| UQ's rank within the Go8 for the percentage of publications with an international co-author | 4 | 6 | 6 | 4 | 3 | 3 | |
| UQ's rank within the Go8 for the percentage of publications with a non-academic co-author | 5 | 5 | 5 | 5 | 5 | 7 | |

¹ Industry includes research income from the following sources: non-Commonwealth schemes, rural R&D, Australian and international organisations, and Cooperative Research Centre (CRC) R&D income received from non-government sources.
² Source: Incites Dataset within *Web of Science* and is based on a single full year only; the document types included in this metric are Article, Review or Note.
³ Figures for 2019 are preliminary. Data will be finalised in mid-2021.
⁴ Change in previously reported figures due to change in methodology.

| ▶ Related initiatives for 3.1 | |
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| 1.4 Science Precinct | pg 21 |
| 2.2 Global Change Institute | pg 24 |
| 2.6 UQRDM | pg 25 |

3.2 Strengthen and grow international research collaborations to ensure we leverage the breadth of our research to make significant contributions to global research activity.

In 2019, UQ researchers published 11,262 papers, with 6,380 (57 per cent) having an international co-author – the top 10 source countries being the US, UK, China, Germany, Canada, France, the Netherlands, New Zealand, Spain and Japan.

International research partnerships

In 2020, UQ ensured that our partnership with the Indian Institute of Technology, Delhi (IITD) was strongly supported from a research and industry partnership perspective. To this end, UQ explored industry partnerships with companies and organisations including RenewPower, Infosys, Wipro, Bosch, TCS and Boeing, and with funding bodies like the Indian Department of Biotechnology and Indian Council of Social Science Research. Advanced-stage funding has been proposed to all. UQ also nurtured flagship partnerships with the University of Exeter, Technical University Munich (TUM) and Wenzhou Medical University.

Global Development Impact Plan

UQ has one of the leading university development groups working across Africa, South and West Asia, South-East Asia and the Pacific. Providing development expertise and program management leadership, UQ International Development (UQID) builds the capacity of people, organisations and governments to achieve key development goals. In 2020, work progressed on the development of a whole-of-UQ Global Development Impact Plan, which will seek to expand the University's work in the development sector, to promote our expertise, and to profile our impact. The Plan will ensure a One UQ approach to engaging with development projects and ensure that we can leverage the capabilities across UQ and collectively advance UQ's activities and reputation in the international development space.

► Related initiatives for 3.2

| | |
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| 2.4 Research partnerships | pg 24 |
| 4.1 Indigenous engagement | pg 29 |
| 6.1 International students | pg 37 |
| 6.3 Enhancing capability | pg 37 |

3.3 Develop a University-wide and consistent approach to external and internal messaging and representation.

Brand refresh project

In late 2018, UQ launched a new brand to modernise its identity, support best practice principles and bring greater consistency across the organisation, which had historically been dominated by a proliferation of sub-brands, many of which bore no resemblance to the parent organisation. In line with the *UQ Strategic Plan 2018–2021*, the brand refresh adopted a One UQ approach, to convey the University's brand and tone of voice in a consistent, compelling and contemporary way to all stakeholders. A significant program of work was completed throughout 2019, requiring whole-of-enterprise engagement. 2020 saw the continued rollout of the masterbrand across the University, with a focus on providing individual units and controlled entities (UQ Sport and UQ Health Care) with bespoke rebranding assistance, and integrating brand-compliant templates with digital asset management tools.

Rankings strategy

A Rankings Strategy Steering Group was established in 2020 to develop a strategy to support UQ's aspiration to remain a top-ranking global university. Three pillars of work were identified: Governance and leadership (Organisational design and expertise); Reputation enhancement; and Academic performance. While the work associated with the development of the strategy will continue into 2021, a number of key reputation enhancement initiatives have already been introduced to ensure UQ's position in the key global rankings are either sustained or improved in the interim.

Communication, marketing and student recruitment review

A review of how the communication, marketing and recruitment functions could better strategically support UQ's priorities was delayed in the first half of 2020, but recommenced in the last quarter of the year with workstreams established and stakeholder engagement underway.

► Related initiative for 3.3

| | |
|----------------|-------|
| 3.4 CX program | pg 28 |
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3.4 Improve the management of future-student enquiries and communications with key partners, alumni and the broader community.

Customer Experience (CX) program

The multi-year CX program involves a suite of initiatives designed to enhance UQ's digital and CX capability. The Future Students stream is well advanced, including delivery of a new Future Student website and support extended to include higher degree by research and postgraduate coursework offerings. The Customer Relationship Management (CRM) implementation was delayed due to COVID-19 and budget constraints; however, work resumed at the end of 2020 with procurement for an implementation partner underway.

Domestic future student marketing and recruitment strategy

A whole of UQ integrated marketing and recruitment strategy was implemented in 2019 to address the smaller cohort of Queensland year 12 students entering university in 2020. This initiative was designed to drive an increase in market share among Queensland school leavers, with a focus on maximising enrolments. The Semester 1, 2020 domestic intake was strong, with UQ achieving a 2 per cent increase in market share among undergraduate Queensland school leavers with entry scores in the range considered for UQ programs. Semester 2 admissions also increased, although this was a much smaller intake for UQ due to limited program offerings. It must be acknowledged that this is in part due to counter-cyclical demand due to the pandemic and associated economic recession, but early indicators suggest this impact will continue into 2021.

Review of activities

4. Committing to activities that attract, support and retain a diverse and inclusive community of high-achieving staff and students

UQ owes its growing global reputation and successes to the strengths and achievements of all staff and students, and attracting people from a broad mix of backgrounds ensures a wide variety of perspectives and experiences. In 2020, UQ continued to address the barriers facing women in academia, people from culturally and linguistically diverse backgrounds, Aboriginal and Torres Strait Islander peoples, people with disability, members of the LGBTIAQ+ community, and students from disadvantaged and remote backgrounds.

Key performance indicators Diverse community

Improved engagement and commitment among staff to the University's purpose

| Passion/engagement index ¹ | 2011 | 2015 | 2019 |
|---------------------------------------|------|------|------|
| Per cent of staff who agree | 76.0 | 74.0 | 77.0 |

Achievement of an institutional bronze award in the Athena SWAN charter

► Also see page 42

| Per cent of senior staff who are women | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|------|------|------|------|------|
| Per cent of HEW10+ professionals who are women | 47.0 | 50.7 | 47.8 | 49.4 | 46.4 |
| Per cent of Level D academics who are women | 34.4 | 34.0 | 35.4 | 34.6 | 35.6 |
| Per cent of Level E and above academics who are women | 19.5 | 21.1 | 22.4 | 24.4 | 26.6 |

An increase in the percentage of students who come from low socio-economic or regional/remote backgrounds

| UQ students from low socio-economic and regional or remote backgrounds | 2017 | 2018 | 2019 |
|---|------|------|------|
| Per cent of UQ students from a low socio-economic background (based on first address – Australian Bureau of Statistics: Statistical Area Level 1) | 11.5 | 11.1 | 10.7 |
| Per cent of UQ students from a regional or remote background (based on first address – Australian Statistical Geography Standard) | 17.6 | 17.5 | 17.4 |

An increase in the representation of Aboriginal and/or Torres Strait Islander students within UQ

| UQ Aboriginal and Torres Strait Islander enrolments ² | 2015 | 2016 | 2017 | 2018 | 2019 ³ | 2020 ² |
|--|------|------|------|------|-------------------|-------------------|
| Participation ratio of domestic students who identify as Aboriginal and/or Torres Strait Islander ³ | 0.25 | 0.27 | 0.28 | 0.30 | 0.31 | 0.32 |
| Success ratio of domestic students who identify as Aboriginal and/or Torres Strait Islander ⁴ | 0.92 | 0.92 | 0.92 | 0.91 | 0.92 | n/a |

¹ Source: *The Voice* survey – latest figures available.

² Figures for 2020 are preliminary. Data will be finalised in mid-2021.

³ Per cent of UQ domestic students who identify as Aboriginal and/or Torres Strait Islander as a ratio against the concentration of Aboriginal and/or Torres Strait Islanders in the state.

⁴ Success rate of UQ domestic students who identify as Aboriginal and/or Torres Strait Islander as a ratio against the success rate of other UQ domestic students.

⁵ Figures updated that were previously preliminary.

4.1 Develop and implement a Reconciliation Action Plan (RAP) that ensures UQ builds respectful relationships and opportunities between Aboriginal and Torres Strait Islander peoples and the broader Australian community.

UQ's RAP (Innovate) was launched in late 2018 and the years since have been spent delivering on the commitments made.

Indigenous engagement

During 2020, the focus for UQ's (Innovate) RAP shifted to greater engagement with those areas of the UQ community responsible for ensuring the completion of actions and deliverables within assigned timeframes. A Reconciliation Action Plan Overview Committee (RAPOC) was established and began meeting monthly. Work also started on UQ's first formal cycle of reporting to Reconciliation Australia, although the 'National Barometer' reporting was deferred until 2021. The Office of the Pro-Vice-Chancellor (Indigenous Engagement) (PVC(IE)) commenced work with Governance and Risk to develop an entry in the Policy and Procedures Library around Indigenous protocols; and an Indigenising Curriculum Working Party was established as a subcommittee of the Teaching and Learning Committee to support the project. Planning also commenced towards the next iteration of UQ's RAP, due to be implemented in 2023.

Working in partnership with the Office of the PVC(IE), the Graduate School continued to fund the Aboriginal and Torres Strait Islander Scholarship, seeing further growth in the cohort to reach 42 (up from 12 in 2017).