

### An improvement in graduate employment outcomes

According to the 2021 QILT Graduate Outcomes Survey, UQ domestic undergraduates achieved a full-time employment rate of 71.4 per cent 4 months after graduation, compared with 69.2 per cent across all other universities. Three years after graduation the full-time employment rate for UQ's domestic undergraduates was 92.3 per cent in 2021, the highest result in Queensland (Graduate Outcomes Survey – Longitudinal, 2021).

Between 2018 and 2021, UQ invested almost \$12 million in employability initiatives such as Career Development Learning (CDL) and Work Integrated Learning (WIL) services through SEED. This ensured relevant experiential learning, industry connections, and other opportunities including career preparation workshops and careers fairs for more than 10,500 students, which continued in 2021.

### Supporting achievements and initiatives

- The Faculty of Medicine completed the major review of its Doctor of Medicine program.
- Employability Week was held in March, which involved a series of workshops, career advice and mentoring sessions, plus networking functions.
- The Student-Staff Partnerships initiative continued to be popular, attracting 421 student partners and 317 staff partners engagements in Projects, and 150 student engagements in representation activities and other student opportunities, capturing 842 student voices.
- The Program Architecture 2 project focused on postgraduate coursework offerings in 2021 to help streamline program structures and embed more flexibility in program delivery. The Business, Economics and Law Faculty also used this opportunity to embed Career Development Learning across all master's programs, extending the work already completed at undergraduate level in earlier years.
- Enrolments in the integrated Bachelor of Engineering (Honours)/Master of Engineering continued to grow. This program incorporates a significant industry-embedded project that enables students to investigate and find solutions to authentic, real-world industry problems. Overwhelmingly positive feedback from industry partners and students confirmed the need to maintain these industry-based experiences, even as the cohort grows.

### General activities enabling the transformation of our student experience through a flexible, integrated and partnered learning experience

- UQ Library continued to support online and on-campus teaching and learning, reinventing existing services and delivering new ones. Use of digital resources in 2021 was up from the previous year, with over 18 million resources accessed and 7,075,301 searches performed. Laptop loans continued to be popular, with 590 loans. Work continued on the Aboriginal and Torres Strait Islander initiatives to create a referencing guide, and a cultural audit of these is currently underway. Six open textbooks were published, with another 15 in development, and online modules aimed at developing students' digital, media and information capabilities continued to be developed and are widely viewed.
- Staff and students in the School of Chemical Engineering gradually began occupying the 11-storey Andrew N. Liveris building, which provides innovative learning spaces for users.
- UQLife activities reverted from the mostly online offerings of 2020 to a mix of online and on-site weekly events, experiences and programs designed to keep students engaged. More discipline-based activities and opportunities for the UQ and broader Brisbane communities to connect were delivered. Major events included the BLOOM festival, NAIDOC Festival, the new Deadly Noize music connect, and the Ibis Film Festival.
- Several networking events were held in India and China to enhance the UQ student experience for offshore students.
- The UQ Art Museum commissioned a major Indigenous artwork with the installation of Jennifer Herd's *In defence*, as part of the proppaNOW exhibition held from February.
- UQ participated in the National Student Safety Survey, formerly known as the *Respect. Now. Always.* survey.
- The recommendations of the *Review of student disciplinary policy and processes including in relation to the management of sexual misconduct complaints at The University of Queensland* were fully implemented in preparation for 2022.
- A new Student Code of Conduct was released to replace the former Student Charter.
- The pilot of Inspira was completed and the Teaching and Learning Committee approved it for use as a UQ-wide eAssessment system.
- The fourth UQ Chief Student Entrepreneur was appointed in 2021.

New programs approved in 2021
<b>Masters</b>
Arts in Translation and Interpreting
Bioinformatics
Chemical Engineering (Professional)
Civil Engineering (Professional)
Electrical Engineering (Professional)
Food Science and Technology Research Extensive
Leadership and Innovation
Materials and Manufacturing Engineering (Professional)
Mechanical Engineering (Professional)
Occupational Hygiene
Occupational Hygiene / Occupational Health and Safety Science
Software Engineering (Professional)
Urban Water Engineering (Professional)
<b>Graduate Diplomas</b>
Agribusiness
Agricultural Science
Arts in Translation and Interpreting
Bioinformatics
Financial Mathematics
Quantitative Biology
<b>Graduate Certificates</b>
Arts in Interpreting
Arts in Translation
Clinical Informatics and Digital Health
Conservation Biology

- Twenty-three new programs were introduced in 2021 for commencement between 2021 and 2023, with another 63 discontinued and 36 restructured.
- UQ continued to invest in the delivery of Shorter Form Credentials (SFCs), primarily through MOOCs, which saw 10,605 verified enrolments in 2021 – including the course *AVAXX101x: Antivaccination and vaccine hesitancy*, which the Papua New Guinea government approved for broad distribution throughout its country. More broadly, the University has focused on exploring SFCs to meet the lifelong learning needs of our alumni and the community more widely, and several faculties are reviewing their offerings and the needs of industry partners to develop such offerings between 2022 and 2025.

## Review of activities

# 2. Enhancing our high-quality research by improving our capacity to collaborate to achieve greater impact

While rightly proud of our research excellence, over the coming years we need to ensure that our research remains collaborative and continues to achieve great impact. To succeed in our focus areas of leading healthy lives, building better bioeconomies, achieving resilient environments and livelihoods, designing technology for tomorrow, and transforming societies, we will be outwardly focused, while at the same time working across disciplines internally.

### Key performance indicators

## Research impact

### An improvement in our global reputation

Times Higher Education Academic Reputation Survey results <sup>1</sup>			
	2019	2020	2021
Research reputation votes: UQ rank within Go8	6	6	4

### An increase in normalised citations

Category	Normalised Citation Impact (NCI) score <sup>2</sup>					
	2015	2016	2017	2018	2019	2020 <sup>3</sup>
UQ's rank within Go8 for NCI score	2	4	6	6	7	7
UQ's Go8 rank on the proportion of publications that sit in the top 10 per cent globally <sup>4</sup>	2	3	5	5	5	5

### Rank in the top 3 in Australia on national competitive grants income

Competitive Grants Category	Category 1 research income <sup>5</sup>					
	2015	2016	2017	2018	2019	2020
UQ's national rank	2	2	2	2	1	4

### Rank in the Top 65 global universities across all influential rankings

UQ's position in global university rankings	2017	2018	2019	2020	2021	2022
Academic Ranking of World Universities (ARWU) <sup>6</sup>	55	55	54	54	51	n/a
Times Higher Education World University Ranking <sup>7</sup>	=60	65	69	66	=62	=54
QS World University Ranking <sup>8</sup>	=51	=47	48	47	46	47
Performance Ranking of World Scientific Papers <sup>9</sup>	41	43	40	39	38	n/a
U.S. News Ranking <sup>10</sup>	52	45	42	42	=36	36

<sup>1</sup> Source: Times Higher Education Datapoints.

<sup>2</sup> Source: Incites Dataset within Web of Science and is based on a rolling 6-year window; the document types included in this metric are Article, Review or Conference Paper.

<sup>3</sup> Figures for 2020 are preliminary. Data will be finalised in mid-2022.

<sup>4</sup> Based on performance around citations; source Incites.

<sup>5</sup> Source: Department of Education.

<sup>6</sup> Source: Academic Ranking of World Universities.

<sup>7</sup> Source: Times Higher Education.

<sup>8</sup> Source: Quacquarelli Symonds.

<sup>9</sup> Source: National Taiwan University.

<sup>10</sup> Source: U.S. News.

### An improvement in our global reputation – research

The Times Higher Education Academic Reputation Survey is an opinion survey of published academics asked to name up to 15 universities they believe are the best in their field for research. With an overall vote improvement from 137 to 149, UQ achieved fourth position within the Go8 in 2021, up from sixth in 2019.

### Supporting achievements and initiatives

- By providing quality infrastructure and support, UQ continued its long-term strategy to attract and retain leading international researchers.
- Strategic research capabilities focusing on international imperatives such as food security, medical technology, defence and the environment were identified and developed, including:
  - Stryker, a global leader in medical technology, announced it would establish its first Australian R&D facility in Queensland at the Herston Health Precinct, supported by the Queensland Government, UQ and QUT.
  - The Queensland Defence Science Alliance (QDSA) was established in 2021 to focus on sovereign collaboration and innovation to accelerate defence's capability edge. With UQ as the host organisation, it incorporates 7 Queensland universities plus industry partners, government and defence.
  - The CSIRO-UQ Food Systems and Food Value Chains initiative commenced in 2021 through the Queensland Alliance for Agrifood Innovation (QAAFI) as a collaborative research initiative to broker, design and deliver positive outcomes for Australian food system transformation.
- SMI has established relationships with United Nations Environmental Programme's Global Sand Observatory, which will further develop UQ's international reputation.

### An increase in normalised citations

The normalised citation metric measures how many citations an institution has per publication compared with how many would be expected. UQ's score of 1.65 is well above world average and has improved substantially since 2015. Work continued during the year on collaborating, partnering and co-authoring to maintain a strong research focus and to attract and retain key influential staff.

The proportion of publications within the top 10 per cent globally remained steady at 17.7 per cent and strategies continued to focus on supporting researchers.

#### Supporting achievements and initiatives

- Hundreds of research stories were written and published to highlight UQ's strengths and a new *Research News* site launched.
- UQ received the most Highly Cited Researcher Awards in Australia (43) with 40 researchers being included on the 'HiCi' list for 2021, 3 of whom achieved this status in 2 subject areas: Professor Philip Hugenholtz (Microbiology, Biology and Biochemistry), Professor David L Paterson (Pharmacology and Toxicology, Immunology) and Professor Yusuke Yamauchi (Materials Science, Chemistry).
- Faculties and institutes continued to collaborate with international and industry partners to ensure research outputs align to key national and international concerns. These include proposals as diverse as Advanced Biomanufacturing Nucleic Acid through to an Australian Text Analytics Platform.
- UQ Library delivered 17 *Strategic scholarly publishing principles and communications workshops* including:
  - 11 Career Development Framework sessions for HDR candidates with the Graduate School
  - regular staff development sessions for UQ academic and professional staff
  - sessions for participants in the Winter and Summer Research Scholar programs
  - several tailored scholarly publishing sessions for various schools, institutes and research groups.

### Rank in top 3 in Australia on national competitive grants income

With the original 2021 target of \$200 million being exceeded in 2019, the University directed its focus on establishing university-wide resources and networks to improve efficiency and collaboration. UQ has traditionally been a strong performer in this measure, which includes ARC and NHMRC funding, and 2021 was no exception – despite placing in fourth position nationally.

#### Supporting achievements and initiatives

- The Research Management Business Transformation program continued to support projects that will deliver automated systems and improved processes to UQ researchers.
- The ethics component of the MyResearch research management system was released in January 2021, ready for full implementation in early 2022.
- Working groups were established to focus on key national research priority areas including infectious diseases, agrifood and bioeconomies, and defence and space.

### Rank in the top 65 global universities across all influential rankings

UQ improved and/or maintained its standing in most major rankings tables in 2021, reflecting strong continued brand presence and campaign coverage in global markets. These are important results as they influence the choice of destination for international students, academic staff and industry partnerships.

#### Supporting achievements and initiatives

- Established in 2020, the Rankings Strategy Steering Group continued to support UQ's aspiration to remain a top-ranking global university, using a whole-of-university approach to showcase UQ's capabilities.
- UQ became a partner in the *Times Higher Education* Campus Plus clearinghouse for scholarship in tracking.

### General activities enabling the enhancement of our high-quality research by improving our capacity to collaborate to achieve greater impact

- UQ was, once again, the leading Australian university on the 2 key commercialisation metrics: amount of commercialisation revenue and value of the equity held in active startup companies: these metrics were considered as part of the 2021 Survey of Commercialisation Outcomes from Public Research (SCOPR) survey based on 2020 data.
- JKTech continued in its role as technology transfer company for UQ's Sustainable Minerals Institute.
- Research and Innovation Week 2021 included the Three Minute Thesis competition (online) and refreshed UQ Partnerships and Translation Awards.
- Emphasis remained on investing in national fellowship schemes, training programs and major grant schemes to attract and retain quality researchers.
- The Impact Tracker software was used to facilitate institutional reporting of research impact and support the Engagement and Impact 2024 submission.
- The UQ Aboriginal and Torres Strait Islander Research and Innovation Strategy was launched with a vision to leverage research as a tool of empowerment for Aboriginal and Torres Strait Islander peoples, communities and organisations.

## 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.

## Key performance indicators Partnerships

### Rank first in Australia for attracting research income from industry

UQ research income <sup>1</sup>	2015	2016	2017	2018 <sup>4</sup>	2019	2020
UQ's national rank on research income from industry	2	2	1	2	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-authors <sup>2</sup>	2015	2016	2017	2018	2019	2020 <sup>3</sup>
UQ's rank within the Go8 for the percentage of publications with an international co-author	6	6	4	3	3	4
UQ's rank within the Go8 for the percentage of publications with a non-academic co-author	5	5	5	5	7	5

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Figures for 2020 are preliminary. Data will be finalised in mid-2022.

<sup>4</sup> Change in previously reported figures due to change in methodology.

### Rank first in Australia for attracting research income from industry

In 2020, UQ received \$144 million in research income from industry, and remains one of the country's most consistently strong achievers in the sector.

#### Supporting achievements and initiatives

- UQ continued to build and strengthen its research collaborations with industry partners, including a new Memorandum of Understanding with Infosys and a research agreement with Stanwell.
- Sector-focused partnerships at scale were explored, with current ones with Stanwell, IBM, CBA, Oracle, ALS Siemens, and New Leaf being strengthened.
- Beyond our involvement in established industries, UQ is positioning to be a key partner for emerging manufacturing fields.
- Formal agreements with national research agencies were put in place, particularly with CSIRO, Queensland Government, and the Defence Science and Technology Alliance.
- Opportunities to boost the Centre for Water in the Minerals Industry were also identified.
- The Global Change Institute (GCI) established Research Networks focusing on digital health, next-generation workplaces and protected cropping, and facilitated multiple Collaborative Research Initiatives (CRIs) designed to help address global challenges.

▶ See also

2021 UQ Honour Roll

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