Student Nathaniel Deering working in the Centre for Solid Waste Bioprocessing, which undertakes research and development into organic waste recycling and identifying novel markets for waste organic materials.

2.5 Develop a more consistent approach to higher degree by research (HDR) training with a focus on ensuring students build research, transferable and professional skills.

UQ Industry PhD partnerships
The Graduate School provides strategic HDR scholarships to facilitate greater connectivity and involvement between HDR candidates and industry partners. Projects are designed in partnership with industry and involve a cohort of students working on projects that are aligned with the interests of the industry partner and are consistent with an engagement and impact agenda. Building on the existing partnership with Boeing, further partnerships with Newcrest, CSIRO and Ecotourism Australia were developed this year, providing HDR candidates with the opportunity to work on a program of industry-led research with associate advisers from industry, collaborative funding arrangements, and opportunities for placement and embedded experiences.

Career Development Framework (CDF)
The CDF was expanded in 2019 to include research development activities for enhancing the project design/data analytical capabilities of students. This was designed in partnership with faculties, institutes and HDR candidates.

Higher degree by research (HDR) industry placements
2019 was a big year for HDR placements with a considerable increase in demand from candidates. The Graduate School organised more than 76 placement opportunities, including five under a new partnership with APR Intern this year. Placements were undertaken within government, industry and the not-for-profit sectors and provided HDR candidates with an opportunity to further develop and translate their transferable skills.

Career development mentoring
The purpose of the HDR Career Development Mentoring Program is to provide HDR candidates with the opportunity to engage with professionals working in diverse industries (including academia) to investigate career pathways and gain exposure to different perspectives and advice when considering their broader professional and career development. The initial pilot ran over 12 weeks in two phases and included 15 pairs. After revising the pilot's report form, further iterations of the program will be run in 2020 after some adjustments have been made.

Three Minute Thesis (3MT)
2019 saw the 3MT competition continue to grow with African nations Uganda and Zambia joining the 3MT family, along with the first West Indies country, Saint Kitts and Nevis. 3MT is now at more than 600 universities in more than 85 countries globally. UQ's own competition was strongly contested in 2019, its twelfth year. Medical student **Cody Frear** won with his presentation *Negative pressure wound therapy in paediatric burns: no-no or Noo-Noo*. Cody also won first place in the Universitas 21's 3MT competition. Another 3MT competitor, **Rhys Pirie**, went on to win the Falling Walls competition in Berlin.

2.6 Invest in the development of systems and processes for the storage and publication of research data, including the capability for this to benefit future researchers.

UQ Research Data Manager (UQRDM)
Sustained growth continued in the world-leading UQRDM project, part of the Research Management Business Transformation program. UQRDM integrates working data storage, and delivers researchers and HDR students an automated platform to appropriately and securely store, share, re-use, collaborate on, and manage their projects' research data.

Key progress indicators included the launch of Digital Research Notebooks and delivery of a pilot-completed integrated Datasets feature into UQ's publications repository, UQ eSpace.

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

UniQuest
UniQuest continued to impress in 2019 as Australia's leading university technology transfer company.

A potential therapy targeting difficult-to-treat immune system disorders such as rheumatoid arthritis will progress to clinical trials in 2020, after securing $20 million in Series A funding from UniQuest's licensing of the intellectual property rights.

UniQuest also negotiated a licence agreement with Australian Stock Exchange-listed environmental management technology firm Envirosuite for the SeweX technology, developed by researchers from UQ's Advanced Water Management Centre.

JKTech
As the technology transfer company for the University's Sustainable Minerals Institute (SMI), JKTech provides technical consulting and training services in drill and blasting, geometallurgy and minerals processing, laboratory services, specialist testing equipment, specialised ore characterisation tests and simulation software products. Significant activities and achievements during 2019 included:
– JKTech's team completing client work in more than 15 countries
– rolling out of a new blast movement model (JK Value Based Ore Control) across 18 Rio Tinto global mine sites: JKTech is commercialising this model from SMI research
– JKTech team members working within the CRC ORE (Cooperative Research Centre – Optimising Resource Extraction) team to co-develop Grade Engineering® as a commercial product: JKTech aims to commercialise this technology after the conclusion of CRC ORE II
– JKTech being finalists in two categories at the 2019 Premier of Queensland Export Awards (Professional Services, and Mining, Energy and Related Services).

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[1]						
	2013	2014	2015	2016	2017	2018
UQ's national rank on research income from industry	2	1	2	2	1	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[2]						
	2013	2014	2015	2016	2017	2018[3]
UQ's rank within the Go8 for the percentage of publications with an international co-author	6	4[4]	6	6	4	3
UQ's rank within the Go8 for the percentage of publications with a non-academic co-author	5[4]	5[4]	5[4]	5	5	5

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 2018 are preliminary. Data will be finalised in mid-2020.
4. Change in previously reported figures due to change in methodology, and based on data for citations that continue to accrue (based on data over a six-year window).

In May 2019, UQ representatives visited the University of British Columbia (UBC) in Canada to discuss partnership options. Pictured from left: UBC Director of Global Partnerships Emily MacDougall, Professor Bruce Abernethy, UBC Vice-Provost (International) Dr Murali Chandrashekaran, Professor Neville Plint, Dr Jessica Gallagher, Professor Vicki Chen, UBC President Professor Santo Ono, Professor Peter Høj, AC and Professor Stephan Riek.

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

Partnerships Committee
Following the introduction of a Partnership Framework that adopts a 'One UQ' approach to the development of strategic industry partnerships, work continued in 2019 on its refinement. Building on the current Partner Engagement Strategy for international higher education institutions, the new framework seeks to ensure a more coordinated approach to building and strengthening collaborations with industry partners and ensuring that UQ maximises opportunities for the whole institution. For UQ's valued industry partners, the framework will streamline the process of engaging with UQ (particularly with first contact), support delivery of services, and ensure that UQ provides a comprehensive, consolidated offering to match each partner's unique needs. Under the new framework, a Committee was established to help coordinate activity related to UQ's strategic industry partnerships.

Hospital and health services
The Faculty of Medicine began a dedicated campaign to strengthen its relationships with Queensland Health across the state to explore mutually beneficial avenues for supporting clinician research.

Research partnership model
The research partnership model (RPM) has been very successful in supporting UQ to lift its performance in securing industry funding. However, the model is under strain due to its high workload and so work began in 2019 on the development of a new model to augment existing resources.

Dr Gurion Ang was able to complete his doctorate at UQ with the help of a PhD scholarship. Known as 'Dr G', he now works as an Associate Lecturer in biology and as Engagement Officer in the Faculty of Science, sharing his passion for insects and preserving the natural world.

HDR administration

In 2019, the delivery of HDR programs at UQ was reviewed in order to assess the outcomes of the organisational change in delivering a 'One UQ' approach with efficient and high-quality administrative processes, the partnerships required and to ensure UQ is responding to national expectations of research training performance and quality. With endorsement of the structure and a strong partnership approach to HDR programs, HDR candidates will benefit from high-quality and consistent experiences and increased opportunities for development and industry engagement, positioning UQ as a leader in meeting evolving national expectations for research training.

UQ Founders Pledge

In an Australian first, the UQ Founders Pledge was launched in 2019. With a growing number of UQ alumni undertaking successful ventures, the Pledge provides an opportunity for founders to give back to the UQ community in a meaningful way. To join, founders make a non-binding commitment to make a philanthropical gift in support of a cause at the University, at a time that is right for them—such as after the sale of their venture or an Initial Public Offering.

There is no minimum amount, no formal contract, and founders can give to whichever cause they have an affinity with at the time of their donation, whether for medical research, scholarships, or even entrepreneurial programs.

The UQ Founders Pledge is open to anyone wishing to participate and UQ will provide entrepreneurs with networks and support to accelerate their aspirations. In 2019, 15 founders pledged their support.

▶ Related initiatives for 3.1	
1.1 Entrepreneurship Strategy	pg 16
1.4 Science Precinct	pg 18
2.2 Research networks	pg 21
2.5 Industry cohort PhD partnerships	pg 22

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.

International research partnerships

In 2019, 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, Tata Consultancy Services and Boeing, and with funding bodies like Indian Department of Biotechnology and Indian Council of Social Science Research. Advanced stage

funding proposals have been proposed to all of the above. UQ also nurtured flagship partnerships with the University of Exeter, Technical University Munich (TUM) and Wenzhou Medical University.

Collaborative PhDs and research projects with key partners

Research training is a key aspect of many international partnerships and agreements and provides HDR candidates with a global experience as well as facilitating a deeper research relationship with key partners for UQ. 2019 saw further growth in the Joint PhD partnerships of UQIDAR and QUEX.

Sustainable Minerals Institute–International Centre of Excellence (SMI–ICE) Chile

Funded by BHP, AMSA, CAP, Codelco and other industry partners, the SMI–ICE–Chile has enabled internships in Chile for several prospective UQ HDR students, as well as forging links for developing the Clean Technology Initiative, Corfo Circular Economy Centre, and the Corfo Water and Tailings project.

▶ Related initiatives for 3.2	
2.2 Research networks	pg 21
2.3 UQIDAR	pg 21
2.3 QUEX	pg 21
4.1 Indigenous engagement	pg 26
6.1 International students	pg 32
6.3 Enhancing capability	pg 33

Below: A guidance in time, UQ's new RAP artwork.

Above: One of the banners used in the student recruitment advertising campaign for 2019, building on 2018's Own the Unknown message.

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

Brand refresh project

UQ launched a new brand in October 2018 to modernise the identity, support best practice principles, and bring greater consistency across the organisation, which had historically been dominated by a proliferation of sub-brands. The new brand was rolled out throughout 2019, with all faculties, institutes and central portfolios now largely aligned to the UQ Masterbrand. An audit of sub-brands was completed and work is now underway to reduce the number, while ensuring those that remain are aligned with UQ's brand policy and approved guidelines.

Reconciliation Action Plan artwork

Following the successful launch of UQ's first Reconciliation Action Plan (RAP) in 2018, the RAP artwork, *A guidance in time*, was revealed in May 2019. Designed by Quandamooka artists Casey Coolwell and Kyra Mancktelow, the triptych recognises UQ's three major campuses, and champions a strong sense of belonging and truth-telling about Aboriginal and Torres Strait Islander histories, as well as ongoing connections with Country, culture and kin. The artwork reinforces the University's commitment to building respectful relationships and opportunities between Aboriginal, Torres Strait Islander and non-Indigenous peoples.

Rankings strategy

In an increasingly competitive international university sector, even maintaining UQ's current position within the top 100 global

universities on all major rankings (and the top 50 on several) is a challenge, let alone improving it. A key opportunity, however, is to increase awareness of UQ and its exceptional research impact and outcomes by improving our brand recognition and international reputation in a range of disciplines and geographies.

To achieve this, during 2019, UQ's Marketing and Communication team launched a campaign with major rankings organisations and industry publications, who offer significant international audience reach, to promote UQ research through an integrated suite of advertorials, videos and general marketing and promotional assets.

▶ Related initiative for 3.3	
3.4 CX program	pg 25

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. Throughout 2019, work continued on the provision of technology platforms, policies and processes that will facilitate an enterprise-wide, coordinated and personalised engagement experience for all UQ stakeholders.

Collaboration with Queensland Government for new secondary college

In collaboration with the Queensland Department of Education, UQ has been

developing an innovative curriculum for the Foundation Year 7 students at the new Inner City South State Secondary College at Dutton Park. Due to open in Term 1, 2021, the school will service the growing communities in and around Brisbane's inner south, and will sit within the Brisbane Knowledge Corridor as an integral part of the leading education, health, research and hospital precinct.

▶ Related initiative for 3.4	
6.4 Philanthropic support	pg 33

Pictured at the first 'sod turning' at the site of the new Inner City South State Secondary College (ICSSSC) are ICSSSC Executive Principal Kirsten Ferdinands; Broad Construction, Construction Manager Jonathan Back; and UQ Pro-Vice-Chancellor (Teaching and Learning) Professor Doune Macdonald.