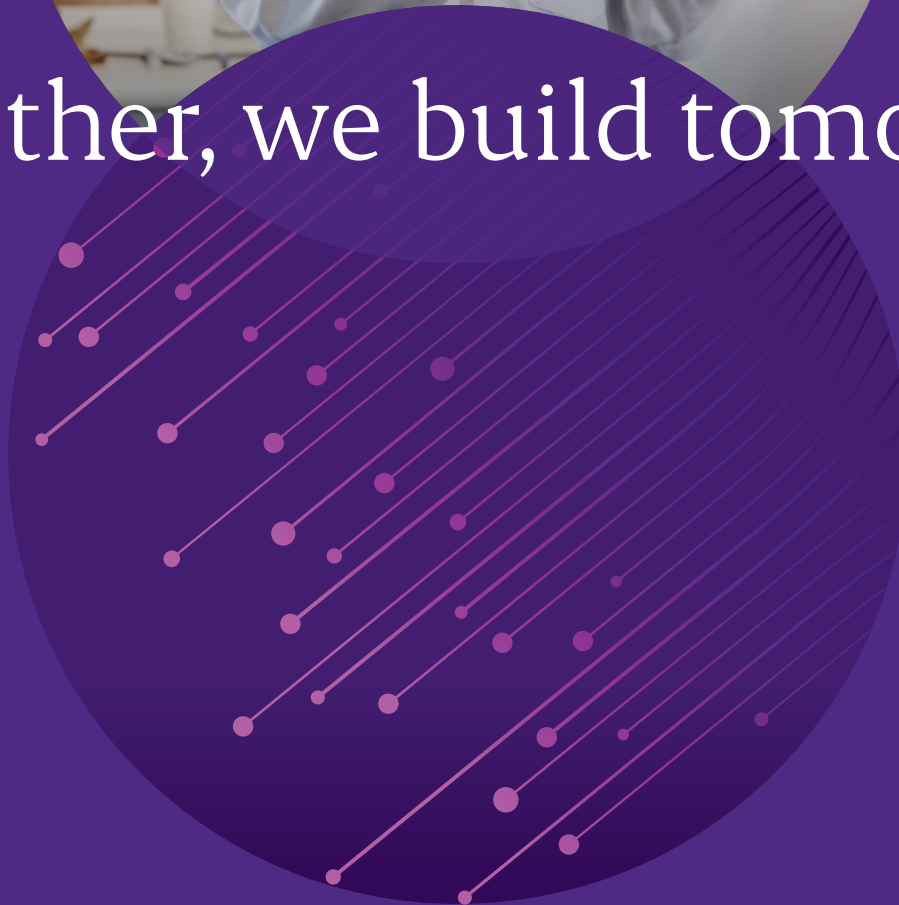




Together, we build tomorrow





Towards a new science and innovation strategy for Queensland

Turning ideas into impact isn't easy – but in Queensland, it happens.

Queensland universities are delivering world-leading science and supporting innovation across the state. We are driving knowledge creation and translation to lift economic growth, build industry advantage and achieve better health and community outcomes.

In 2025, leading healthcare company Sanofi acquired UQ startup Vicebio, a company formed in 2018 to develop UQ's Molecular Clamp technology to make vaccines against life-threatening respiratory viral infections. The record-breaking deal is the largest involving a company commercialising intellectual property (IP) from an Australian university – a total upfront payment of US\$1.15 billion, with potential milestone payments of up to US\$450 million based on development and regulatory achievements.

UQ welcomes the Queensland Government's ambition to accelerate science and innovation for a better future. With Queensland expertise, infrastructure and drive, we have the foundations for success. A bold science and innovation strategy can super-charge Queensland's ability to turn today's ideas into tomorrow's impact.



Why science and innovation matters to Queensland

Science and innovation are the building blocks of prosperity.

Long-term economic success, productivity, competitiveness and growth depend on creating ideas and turning them into impact. It's also key to improving the lives of people at home and abroad – fuelling the solutions and medical breakthroughs that deliver social and economic impact.

Research shows that investment in Research & Development (R&D) delivers significant returns. In 2022, the CSIRO found that every \$1 of R&D investment generated an average of \$20.8 in economy-wide benefits, while Universities Australia estimates that every \$1 invested in business and university partnerships returns \$4.47.

Queensland researchers are punching well above their weight with over 360 US patents granted and over 240 active licence agreements. UQ exemplifies how R&D can deliver economic returns. UQ Innovations have generated over \$88.5 billion in global product sales, attracted \$1.2 billion in funding and enabled \$1 billion to be reinvested back into Queensland research.

Commercialisation is a marathon, not a sprint. It requires an ecosystem with specialised skills to nurture ideas, secure resources and find the right business model. Queensland has the talent, infrastructure and global connections to succeed, but often lacks the scale of venture capital or size of local markets needed to fully realise opportunities.

UQ is today one of Australia's strongest engines for new companies – second only to CSIRO – with 136 spin outs and start-ups turning UQ Intellectual Property (IP) into new market opportunities.

As a commercialisation powerhouse, UQ is strengthening innovation in Queensland, generating original IP and providing translation pathways to deliver impact. We continue to re-invest to spur future opportunities, including through the \$32 million UniQuest Extension Fund which supports students, researchers and alumni with pre-seed, seed and follow-on investment opportunities.

In 2026, UQ will establish a new Commercialisation Fund, made possible through past commercialisation success, to accelerate early discoveries towards commercial viability. Under its latest strategic plan, UniQuest will focus on creating pre-seed and seed funding opportunities for companies commercialising UQ IP, as well as providing additional support to early-stage researchers with promising ideas.

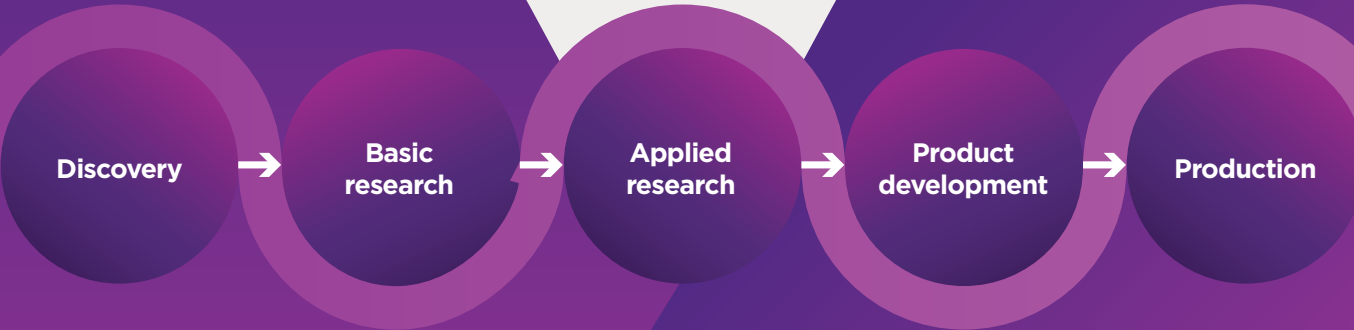
UQ Innovations have generated over \$88.5 billion in global product sales, attracted \$1.2 billion in funding and enabled \$1 billion to be reinvested back into Queensland.

The commercialisation pathway

Commercialisation gap between discovery and production

Universities

Industry



← Innovators and entrepreneurs →

Science and innovation have always been key to Queensland's economic success.

From mining to agriculture, R&D has enabled industries to find and refine minerals, adapt to Queensland's harsh conditions and overcome great distances. A healthy R&D sector is the difference between an economy that thrives and one that falls behind – losing jobs and opportunities offshore.

Today, Queensland stands at a turning point. Global shifts in technology, energy, and manufacturing are reshaping industries, and Queensland must act now to secure its economic future.

Queensland's investment in R&D lags behind other states. Queensland's Gross Expenditure on Research and Development (GERD) to Gross State Product (GSP) sits at just 0.5%, half that of Victoria and New South Wales. Local universities capture less federal funding than our southern counterparts through programs like the Medical Research Future Fund and National Health and Medical Research Council grants.

Despite this, Queensland's research excellence, infrastructure and global connections provide a strong foundation for turning ideas into impact. UQ ranks within the top 50 universities in the world, with sports-related courses ranked second, mineral and mining engineering ranked sixth, and petroleum engineering, environmental science and agriculture and forestry ranked within the top 20.

BDO Australia estimates that over the past five years, approximately \$650 million in R&D investment received by UQ has delivered an economic return of \$884 million. This value for money outcome is made possible by UQ's strong research capability, infrastructure and institutional strength. UQ hosts the largest concentration of the National Collaborative Research Infrastructure Strategy infrastructure in Australia, with over half of national projects and four out of every five Queensland projects involving UQ.

Science and innovation offer a pathway to future-proof our economy and drive productivity in ways that creates jobs and improves lives.



AdvanCell turns to Queensland for new generation cancer treatment

AdvanCell is an Australian-based clinical-stage radiopharmaceutical company developing a range of novel therapies to boost cancer survival rates and improve patients' quality of life.

Collaborating with UQ's Australian Institute for Bioengineering and Nanotechnology (AIBN), the Sydney-based company is looking to fast track cutting-edge cancer treatments by using Queensland equipment and technical experts.



Queensland takes hypersonic flight to the USA

Hypersonix Launch Systems is Australia's leading aerospace engineering, design and build company, specialising in hypersonic technology, spun out of scramjet propulsion research at UQ.

UQ's partnership with Hypersonix is focused on high-speed flight research. The company's latest test flight at the NASA Wallops Flight Facility in Virginia, USA, achieved five times the speed of sound or more than 6,200km/hr, positioning Hypersonix at the global forefront of hypersonic flight systems.



Queensland leads the way in AI for skin cancer prevention

Australia has the highest rate of skin cancer in the world, with hundreds of thousands of new diagnosed cases each year. Early detection is one of the most important factors in their prognosis.

Led by UQ, the Australian Centre of Excellence in Melanoma Imaging and Diagnosis (ACEMID) is a collaboration between UQ, Monash University, The University of Sydney, and 15 hospital and health services that uses advanced imaging and Artificial Intelligence (AI) to set new global benchmarks in melanoma detection and patient outcomes.



Future oat products germinate in Queensland

A \$5.6 million project aims to expand the consumption of oats beyond breakfast to include oat rice, noodles and pasta. My Plant Co and the Grains Research and Development Corporation (GRDC) are partnering with the UQ-based Food and Beverage Accelerator to develop new oat products by the end of 2026.

This research will combine technical development, sensory testing and market research to unlock the potential of Australian oats, adding value and creating export opportunities for primary producers.

Opportunities to deliver impact for Queensland

The Ideas into impact discussion paper, released by the Queensland Government, describes the challenge well: Queensland has a proud history of innovation, but bold action is needed to ensure our economy is built for the future.

BDO Australia has found that lower levels of government investment in science and innovation, will lead to a loss of economic opportunity for Queensland. Importantly, this loss accelerates over the long-term, increasing the risk that Queensland's priorities industries fall behind their east coast counterparts.

Bold action is needed to focus stakeholders, leverage resources and unleash Queensland's full science and innovation potential.

We can achieve this now, by setting a shared vision for science and innovation in Queensland with measurable goals, such as lifting R&D investment, deploying innovation and invigorating entrepreneurial capacity.

UQ has carefully considered what this might look like and recommends the following actions to boost capability, enhance connection and support commercialisation:

Tip the scales in favour of Queensland

R&D investment is globally mobile and highly competitive, with businesses, research organisations, not-for-profits and governments actively seeking the best partners and most promising places to find solutions.

Queensland has the talent, infrastructure and global connections to excel, with our research infrastructure giving researchers and industry the tools and equipment needed to make discoveries and deliver solutions. At UQ, this infrastructure is provided as Collaborative Research Platforms, enabling access to accelerate innovation and translation.

With the right incentives Queensland can capture a greater share of R&D investment, delivering broad benefits to the state's industries and economy.

BDO Australia estimates that a \$220 million R&D Attraction Fund would unlock a further \$660 million in co-investment and deliver over \$2.6 billion in economic benefits to Queensland over 10 years.

Recommendations:

- Establish an R&D Attraction Fund to signal to local and international investors that Queensland is open for business, and to incentivise companies to innovate in Queensland.
 - An R&D Attraction Fund could provide the co-funding needed for Queensland to capture a bigger share of Federal Government funding, such as the National Collaborative Research Infrastructure Strategy, ensuring Queensland has the cutting-edge tools and equipment needed to attract and support innovation. It could require matched funding at a 2:1 ratio and target government priorities or selected National Innovation Pillars to build on Queensland's strengths.
- Champion Queensland's innovation precincts, such as Boggo Road Innovation Junction, as globally significant hubs for R&D, translation and business formation.

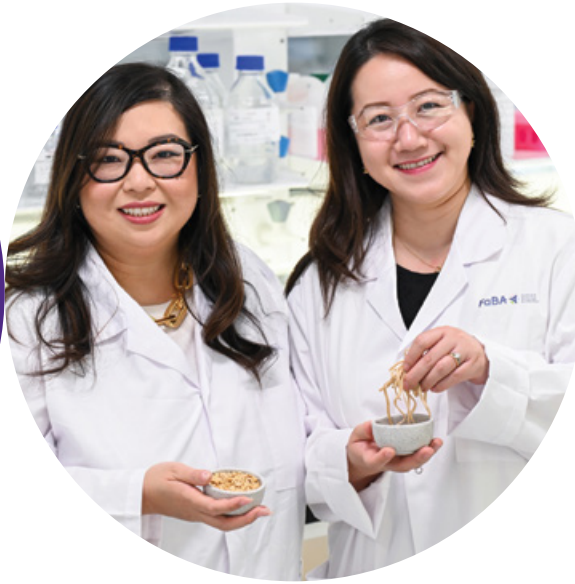
Harness Queensland's world-leading research capability

The greatest opportunities for innovation in Queensland lie at the intersection of industry and research strengths, where our traditional industries meet recognised research excellence.

Emerging technologies such as Artificial Intelligence (AI) are transforming businesses and disrupting industries. Queensland already commands considerable sovereign AI capability and expertise that could be better harnessed to add value and drive positive impact for the state.

UQ is home to Australia's largest university AI-enabled supercomputer, located at UQ's Research Computing Centre (RCC), with over 38 petabytes of structured data ready for analysis. We are creating a safe, secure and locally supported environment for businesses and organisations to build AI solutions.

BDO Australia calculates that Queensland stands to gain \$2.4 for every dollar invested in R&D, with the return for each dollar rising to \$6 when considering the economy wide benefits.



Enable statewide entrepreneurship

Recommendations:

- Leverage Queensland's sovereign AI capability to improve the productivity, competitiveness and success of local businesses, and improve the efficiency and effectiveness of government services.
- Accelerate AI innovation in Queensland through an AI Action Plan that grows AI talent and skills, encourages AI experimentation and incubates new AI start-ups.
- Establish a series of innovation challenges that articulate industry problems, focusing the science and innovation community on finding practical solutions.
- Improve public sector access to Queensland's research capability by streamlining procurement and partnership models.

Entrepreneurship is both the art and science of transforming ideas into impact. We need to build the entrepreneurial capacity of people, businesses and organisations across Queensland. At school, in workplaces and on the job site.

UQ actively fosters a culture of entrepreneurship among students, offering entrepreneurial experiences through curricular and co-curricular opportunities, and over 100 entrepreneurship coursework programs available across all faculties.

UQ Ventures empowers the next generation of entrepreneurs and changemakers through immersive programs, collaborative experiences, and a vibrant community of innovators.

Through partnerships, including with Business Chamber Queensland and the Queensland Investment Corporate (QIC), UQ and UQ Ventures delivers entrepreneurship programs to SMEs and innovation hubs across Queensland.

Recommendations:

- Strengthen the pipeline of future entrepreneurs by improving access to STEM subjects, supporting secondary students to pursue ATAR pathways, and build skills for emerging industries.
 - For example, only 37% of Queensland schools in the lowest ICSEA band (a measure of socio-economic disadvantage) currently offer Specialist Mathematics, compared to 93% for schools in the highest band.
- Deliver entrepreneurship up-lift in partnership with local stakeholders, tailored to the entrepreneurial readiness and aspirations of local communities.
- Adopt scalable delivery models such as train-the-trainer programs and micro-credentials to build statewide capability and drive collaboration at scale.



Partner with us to shape tomorrow's science and innovation

Together we build tomorrow.



Partner with us

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