



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

CREATE CHANGE

To create change
venture forward.

Entrepreneurship Strategy

2018-2022

Entrepreneurship at UQ – venture ahead



As one of Australia's leading research and teaching institutions, UQ recognises that knowledge itself won't suffice in an increasingly interconnected world. Instead, it will be the application of knowledge – and the skills that support it – that will equip graduates to chart their own path, and to drive innovation across diverse industries and sectors.

Right now, we're standing directly in front of a new wave of technological innovation. New technologies and business models are transforming the way we live and work. Naturally, the way we learn is also undergoing unprecedented change.

The need to be agile and innovative has never been more important, and we must equip our communities with the knowledge, networks and skills to be positive disruptors.

This is why every student at UQ will have the opportunity to experience entrepreneurial learning. Building on our excellence in teaching and research, we will embed entrepreneurial learning across all disciplines, and continue to deepen engagement with local and global partners.

By supporting entrepreneurs at every stage of their journey, UQ will not only engage the existing student body, but will also attract future students, create game-changing graduates, connect with alumni, and draw in new partners.

We call this effort UQ Ventures.

To venture is to step fearlessly into the unknown. It speaks to optimism, boldness and a determination to lead in times of uncertainty. When we

seek to create positive change, we venture forth. When we tackle global challenges, we venture further.

UQ is no stranger to entrepreneurship. The University already offers a range of integrated and multidisciplinary initiatives including international startup internships, incubator and accelerator programs, and market testing.

Through our commercialisation arm, UniQuest, we are an undisputed leader in translating research to novel products and services. More than 100 startups have been founded from our intellectual property – a milestone unsurpassed by any Australian university.

UQ also contributes significantly to the success of new and existing businesses, with products and services using UQ intellectual property amassing sales of more than \$16 billion.

Through a strong and unified Entrepreneurship Strategy, UQ confirms its commitment to this exciting space. Together, we will venture forward to question existing ideas, create new opportunities and address today's complex and interconnected global challenges.

**Professor Peter Høj AC,
Vice-Chancellor and President**



We are escalating UQ entrepreneurship programs, and building on existing strengths.

900+

participants annually
in Idea Hub programs

60+

students have experienced
Idea Hub overseas startup
adventures

20+

projects progressing
through the Startup
Academy

185+

startup companies
benefited from ilab
accelerator and
incubator programs

\$57M+

investment and
grants attracted
by ilab startups

15+

high schools
participating in
Idea Hub discovery
workshops in 2018

100+

courses already provide
access to entrepreneurial
learning – these are
present across all faculties

3200+

mentor sessions
conducted by ilab

100+

startup companies
established
through UniQuest
commercialisation of
UQ intellectual property

30+

academics in the
Business School
researching
entrepreneurship
and innovation

UQ Ventures

***A venture is a pioneering journey or endeavour.
To venture is to take bold steps – to have a go, to take a chance and to stand out from the crowd.***

UQ Ventures is a name that reflects the University's entrepreneurial spirit, whether in addressing a wicked problem, introducing a new concept, idea or technique, making a research breakthrough, or building a business.

Through Ventures, UQ supports entrepreneurs to generate and action ideas in response to identified needs and opportunities. This includes building creative problem solving, design thinking, negotiation, communication and leadership skills that may be applied within an existing organisation, or in the creation of a new one. Entrepreneurial skills are supported by a mindset of determination, resourcefulness, initiative, agility and managed risk-taking.

Under the UQ Ventures umbrella, we take a collaborative and multidisciplinary approach to challenges to make positive change locally and globally. We foster leaders for the future world of work – self-starters who are indispensable in their chosen fields.

We support UQ community members to design their own path, from fostering creativity and learning design processes to building a business model; from gaining the skills to be a catalyst for change in a corporate organisation to pitching to an investor.

If your goal is to build a successful business, inspire a younger generation, or see a problem from a new perspective, UQ Ventures is for you.

If you aim to shape future environments, engineer technologies that make a difference, or create a more sustainable planet, UQ Ventures is for you.

If you seek to explore big questions of the universe, hone your diagnostic abilities, or better care for society's vulnerable, UQ Ventures is for you.

We believe in the adage – nothing ventured, nothing gained. Ventures offers a community and the tools to support your next steps and execute your ideas, whatever your skills and passion.

You won't just learn about changing the world, you'll learn while changing the world.



Through UQ Ventures, students, staff and alumni have access to a suite of programs to build their skills in a hands-on environment. A wide range of events and activities are run across the year, and support is provided from idea generation through to market validation, and from launching a startup to scaling it up.

HAVE AN IDEA?



Idea Hub

Students from all disciplines and levels can join alumni and staff to learn about entrepreneurship. At Idea Hub, you get to learn about design-led thinking, hone critical thinking and problem solving skills, and work with others to address real problems and opportunities. With access to industry mentors, guest speakers and a 24/7 co-working space, there are targeted programs including the LeadHers program for women, a PhD program and the annual UQ Weekend of Startups. UQ Idea Hub also runs Startup Adventures, where students receive a scholarship for a four-week intensive internship at locations including San Francisco, Tel Aviv, Singapore and Shanghai.



TEST THE MARKET



Startup Academy

UQ's Startup Academy supports entrepreneurs to discover appropriate business models for their ventures and to validate the fit between their ideas and market needs. Supported by Entrepreneurs in Residence, academic faculty and mentors, the Startup Academy increases the chances of success – whether that is the launch of a business, an app, or a social venture.

TAKE IDEAS TO THE NEXT LEVEL



ilab

UQ's ilab offers students and recent alumni the Germinate PLUS startup accelerator program to build and grow a business venture. The program provides equity-free funding, workshops, mentoring from an Entrepreneur in Residence, co-working desk space, introductions and access to professional networks.



Formal entrepreneurial learning

UQ provides excellence in formal learning opportunities, with a range of undergraduate and postgraduate entrepreneurship and innovation courses offered in various programs.

There are a range of flexible delivery options, including the free online masterclasses, through to the UQx MicroMasters in Corporate Innovation and a Master of Entrepreneurship and Innovation.

Events and competitions

A wide range of events and competitions are run throughout the year including the UQ Weekend of Startups, the Sustainability Innovation Student Challenge, the Global Business Challenge, GovHack, policy hacks, industry panel events, alumni guest speakers, meetups and pitch nights.



Venturing into the **unknown**

The award-winning ilab engineers behind Oseyeris - one of whom is blind - are bridging the gap between the sighted and the visually impaired. The team recently designed an app using NASA data that allows users to move their phones around and understand where corresponding planets, satellites, stars and comets are using touch and sound.

“Vision is an acquired skill, a decathlon, not a sprint.”
Yuma Antoine Decaux, Oseyeris Co-Founder.

UQ's entrepreneurship and **innovation ecosystem**

Our learning environments, curriculum, research, programs, and partners all form part of our entrepreneurship ecosystem, alongside a wide range of stakeholders including students (future and current), staff, alumni, business, government, and not-for-profit organisations.

By integrating entrepreneurship in everything we do, UQ will empower our community to develop the knowledge and abilities that are critical to succeed in our rapidly changing world.

The diagram to the right shows the features of UQ's entrepreneurial ecosystem.



“...around one-tenth of the workforce are in occupations that are likely to grow as a percentage of the workforce. Around one-fifth are in occupations that will likely shrink.”

The Future of Skills: Employment in 2030. London: Pearson and Nesta.

UQ's vision for entrepreneurship

A hub for innovators, leaders and entrepreneurial minds, who challenge and accelerate ideas to deliver economic, social, cultural, and environmental impact.

The 2018-2022 Entrepreneurship Strategy represents a cohesive set of actions to support the aspirations of the UQ community.

Entrepreneurship is about transforming the way we think and act, to create value in the world, whether as an engaged employee, inspiring leader, research pioneer, driver of social change or creator of the next 'big thing'.

This strategy recognises the diverse students and staff already engaged in entrepreneurial activity across the University. Importantly, it supports the UQ community to venture forward with a shared vision so that we can continue to identify valuable opportunities and to embed an entrepreneurial mindset in everything we do.

The objectives, imperatives, success measures and implementation guidelines outlined in this strategy are based on best practice in higher education institutions, and the views of the wider UQ community. The message was clear: UQ students urgently require broader and more cohesive entrepreneurial opportunities.

Between June and October 2018, UQ conducted a robust consultation process to help inform the development of this strategy. A consultation paper was followed by community forums at the St Lucia,

Herston and Gatton campuses. Roundtable focus groups captured external stakeholder and alumni feedback, while student-run focus groups encouraged students to actively participate in seeking and providing perspectives.

All UQ community members were also encouraged to participate in an online survey. More than 840 people were involved in this process, including more than 560 students.

The themes arising from the consultation included: be aspirational and take urgent action, develop a shared understanding of entrepreneurship, improve the visibility of programs already available and celebrate our role models. Practical hands-on experiences are valued, and respondents indicated a strong desire to be collaborative, involving our alumni, and local and global stakeholders.

UQ values the comments and input of the hundreds of community members who supported this process, and we will continue to collaborate as programs and activities evolve.

This is an ambitious, but important, agenda that will continue to evolve. We look forward to building on our partnerships as we implement new initiatives across the University.



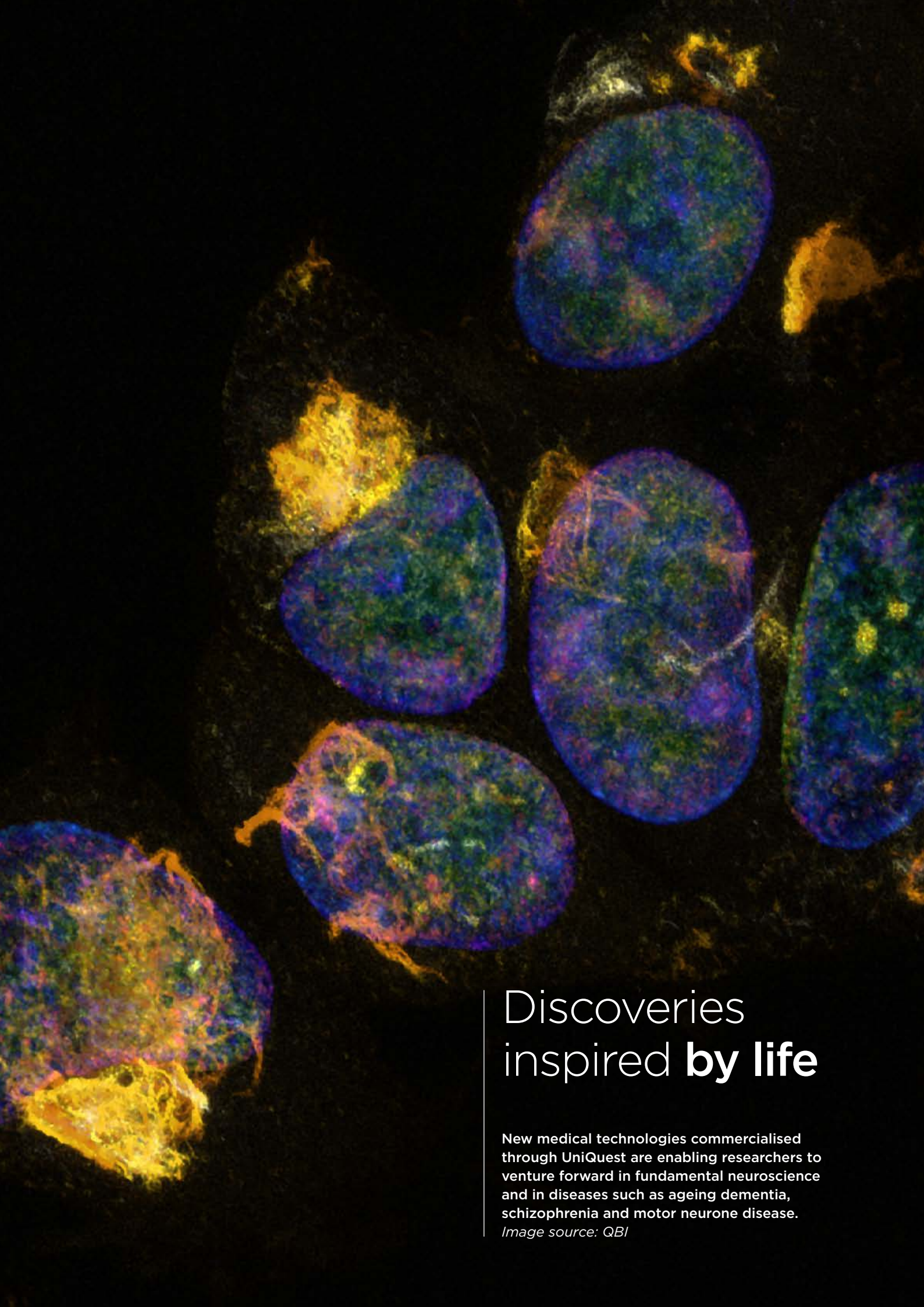
Ventures in action

UQ School of Languages and Cultures PhD student Michael Mersiades' (pictured) startup company 'Chatloop' won the inaugural Shane Chidgzy Young Entrepreneurs Award in 2018.

Michael participated in the Germinate accelerator program at ilab.

According to Michael, "being a humanities and social sciences student doesn't mean your options are limited to the jobs that your field pigeonholes you into. With a bit of creative thinking, you can find innovative ways to apply your skills and make a living".

Chatloop connects people from a refugee background to trained volunteers through a messaging system for convenient language practice. Building a social enterprise while also completing a PhD in Applied Linguistics is no easy task, but support from ilab enabled Michael to realise his idea and see the rapid growth of his company.



Discoveries inspired **by life**

New medical technologies commercialised through UniQuest are enabling researchers to venture forward in fundamental neuroscience and in diseases such as ageing dementia, schizophrenia and motor neurone disease.

Image source: QBI



Nurturing a sharing economy

Based on a circular economy, Brisbane Tool Library is building a more sustainable society, reducing consumption and extending the life of a range of products that would otherwise end up in landfill.

The social enterprise, located at the State Library of Queensland, allows members to borrow power tools, lawnmowers and even camping equipment.

Brisbane Tool Library was founded by Sabrina Chakori – a UQ alumnus (Master of Environmental Management, 2016) and current PhD candidate. Sabrina received mentoring and \$10,000 in grant money as part of ilab's 2018 Germinate program.

Strategic objectives

1. Inspire a venturing spirit

UQ comprises a community of enterprising thinkers and leaders. To further inspire and connect our entrepreneurs, we will promote inclusive and engaging activities, and recognise and celebrate our successes.

Actions focus on increasing the participation in our programs by a broader range of our community. For students, we will build on our existing resources to offer and encourage involvement from across faculties and study levels. We will increase the number of activities that bring together cross-disciplinary teams to identify new opportunities and overcome challenges.

We will also celebrate our community of entrepreneurs, by raising their profiles and showcasing different pathways to success, for example, through startups, social enterprise, not-for-profits, business or government.

To inspire a venturing spirit we will:

Recognise, reward and celebrate our entrepreneurs:

- sponsoring entrepreneurship awards, and adding to existing awards structures to recognise the achievements of our diverse community of entrepreneurs
- showcasing UQ entrepreneurial successes – through case studies, guest speaker engagements and participation in programs and events
- establishing an annual signature event for UQ entrepreneurship.
- raise the visibility of UQ as an entrepreneurial university by building a cohesive narrative about UQ Ventures through coordinated communication, marketing and events.

Champion and connect our entrepreneurs across faculties and institutes:

- support established and pop-up events that make the most of visiting entrepreneurs and emerging opportunities, while facilitating networking across the University and community.

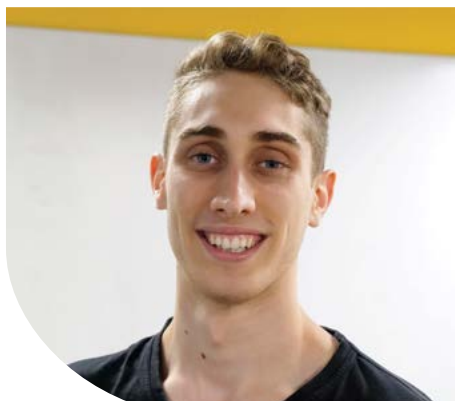
- apply a diversity and inclusion lens to events, programs and activities to improve accessibility.

Foster a vibrant, high-energy environment:

- provide central, highly visible, convenient spaces for entrepreneurs to meet, access UQ entrepreneurship programs, learn and grow
- increase access to design studios and makerspace facilities for the development of prototypes and minimum viable products
- explore potential for more entrepreneurial enterprises to grow through access to short-term incubator spaces.

Work together

- partner with students and student societies to deliver entrepreneurial activities such as the annual UQ Weekend of Startups and mentoring initiatives
- expand the role of the Chief Student Entrepreneur to champion entrepreneurship on campus and externally.



“As a UQ Chief Student Entrepreneur, I can empower and support UQ students to pursue their own ideas and create an impact.”

Ben Coughlin, 2018 Chief Student Entrepreneur

2. Build an entrepreneurial mindset

Every student will have the opportunity to experience entrepreneurial learning at UQ, embedded across all programs and faculties. Staff will be supported through a comprehensive professional learning program and recognised for entrepreneurial achievement.

At the program level, UQ's curriculum will leverage the Higher Education Learning Framework (HELF) principles for quality learning to develop students' entrepreneurial mindset, empowering them to be creative, adaptable, tolerant of ambiguity and risk, and able to learn from failure.

To build an entrepreneurial mindset, we will:

Develop the curriculum

- offer a flagship entrepreneurship course for credit that is available to all students
- bring multidisciplinary teams together in courses that focus on real-world challenges and problem-solving to develop entrepreneurial mindsets and skills
- establish a flexible course for students to undertake startup internships, intrapreneurship and placement experiences with credit where possible
- support updates and co-design of courses to include entrepreneurial skills, and improve how we describe our courses to make entrepreneurial learning explicit
- support subject-specific interpretations of entrepreneurial learning

- connect to global best practice in curriculum development
- allow and encourage students to learn from productive failure.

Build staff capacity

- recruit academic staff with a proven entrepreneurial track record and providing staff rewards and incentives for entrepreneurship
- implement a professional learning program for entrepreneurship, including developing a toolkit to support entrepreneurial education in the curriculum
- enable peer support through an Entrepreneurship Community of Practice
- recognise and showcase the successes of our entrepreneurial academics through awards and case studies
- investigate opportunities for tailored programs to support early career researchers to build entrepreneurial skills.

3. Empower venture creators

Building on the strength of our existing initiatives, new and expanded activities will provide increased coordinated support from ideation through to application and scaling for impact.

Programs will reflect the aspirations of our community, and be tailored to provide the practical expertise and support for our entrepreneurs to challenge convention and forge new paths that provide benefits locally and globally.

To empower venture creators, we will:

Strengthen activities

- expand the Idea Hub and Startup Academy programs to support more participants from across faculties, institutes and disciplines
- increase the program offering through the Startup Academy and ilab by developing targeted offerings for key verticals that reflect specific discipline area challenges
- develop activities that foster an entrepreneurial mindset and build broad entrepreneurial skills including creativity, innovation and problem-solving
- Recognise the importance of entrepreneurial learning by awarding credit wherever possible.

Provide resources and opportunities

- ensure clear signposting from curriculum to extracurricular programs that allow students to further their entrepreneurial experience at different stages of learning

- incorporate entrepreneurship activities in UQ's micro-credentialing strategy, to ensure recognition towards a student's academic and professional development as much as possible
- investigate structured support for multiple pathways through entrepreneurial learning, such as intrapreneurship internships, design studios and policy labs
- develop a comprehensive suite of tools, resources and templates including information on key methods such as design thinking and lean startup.

Go further

- investigate opportunities for UQ to be a testbed and lead customer for UQ entrepreneurs
- attract gifts and grants to establish a seed fund
- continue to develop University systems and policies to support entrepreneurship.

4. Foster enterprising partnerships

Collaborative relationships provide opportunities for our partners and UQ to benefit from global perspectives, new markets to create and test ideas, and solve challenges.

With a focus on mutually beneficial partnerships, we can source expert advice, provide testbeds for new products and services and access diverse funding streams.

Our alumni networks offer inspiration, mentoring, and introductions to UQ entrepreneurs, while engagement with the not-for-profit sector brings new meaning to all activities through social enterprises.

Through developing and nurturing truly enterprising partnerships, UQ entrepreneurs and partners will have access to support systems, experts, mentors, multidisciplinary challenges and funding support to take ideas to impact.

To foster enterprising partnerships, we will:

Engage globally

- continue to work with international partners to expand the range and locations of international Startup Adventure programs
- work with strategic partners to expand the range of entrepreneurship mobility experiences available to UQ students.

Partner with industry

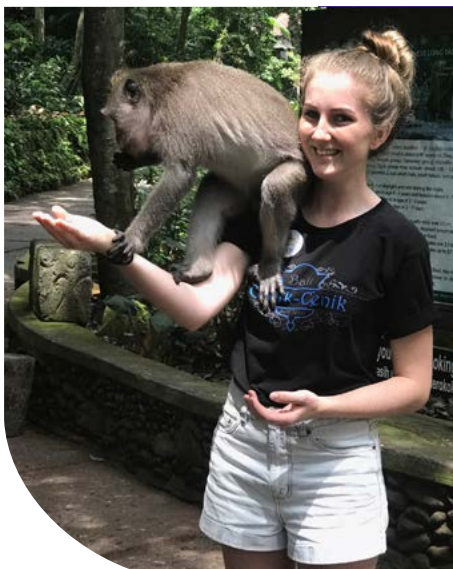
- partner with business to identify industry challenges that require innovative solutions from UQ entrepreneurs to be developed and implemented
- implement a whole-of-University competition that encourages multidisciplinary collaborations to solve challenges and develop solutions
- expand industry internship programs so that students are able to gain firsthand experience of the value of intrapreneurs and the power of an entrepreneurial mindset.

Expand reach

- increase the opportunities for external participants in UQ programs as mentors, guest speakers and judges
- increase awareness within UQ of events and activities run by other ecosystem contributors
- establish a new entrepreneur in residence program that provides students and staff with access to more diverse alumni and external stakeholder expertise and experience
- partner with local and international universities to offer entrepreneurship competitions and training activities
- provide policy input to governments on the importance of university entrepreneurship and actions to support student entrepreneurs.

Engage schools

- expand the reach of entrepreneurial learning support provided to secondary schools
- provide entrepreneurial professional development for teachers and student teachers
- increase the number of on-campus masterclasses, workshops and competitions for secondary students
- continue to partner with ecosystem stakeholders on delivery of secondary school entrepreneurial learning competitions.

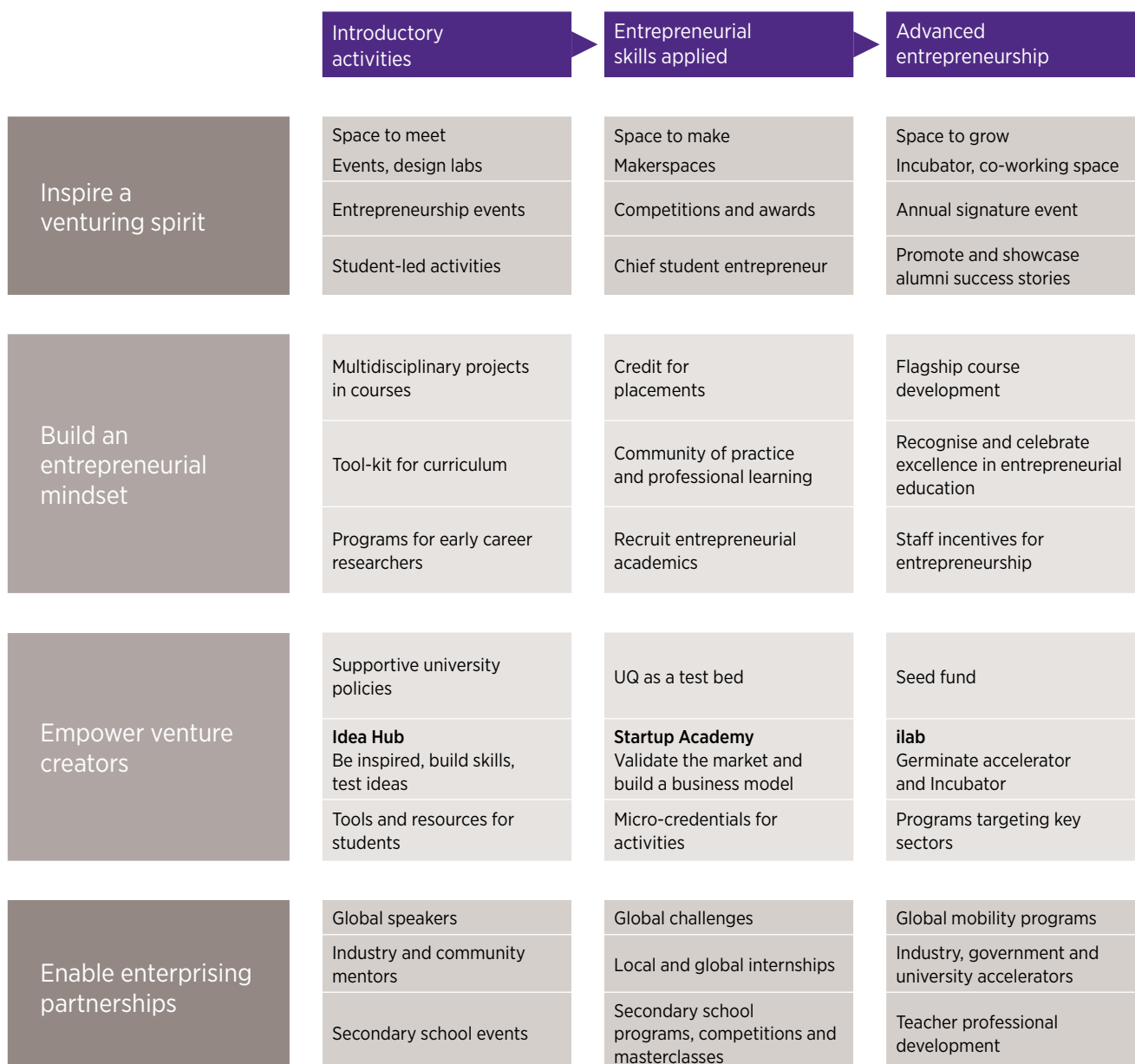


“Enrolling in an entrepreneurial course allowed me to develop my critical thinking, communication, problem-solving, networking and group skills. These skills will assist me tremendously in a clinical environment, and I can see myself reflecting on what I learnt during this course in future years.”

Rhiannon Simpson,
Bachelor of Science (Animal and Veterinary Bioscience major)

Strategy imperatives

The UQ Entrepreneurship Strategy is a holistic approach to creating a community of entrepreneurial thinkers who deliver impact on a local, national and international scale. This strategy represents a cohesive set of actions to support the broad range of aspirations – from social enterprise, policy innovation and intrapreneurship in government or corporate settings, to professional practice, freelancing or starting a business.



Finding smarter solutions

Underpinned by the digital economy, UQ ilab startups support high growth and low capital requirements. Founders range from students and researchers through to established business owners looking to scale globally. Among them, MOVUS, is exploring intelligent machine learning. Through a compact data collection and communications device, MOVUS provides cost-effective remote condition monitoring and reporting across a wide variety of fixed rotating industrial equipment.



A detailed, high-magnification microscopic image of various bacteria. The bacteria are primarily rod-shaped, with some appearing as long, thick cylinders and others as smaller, more rounded forms. They are set against a dark blue background with a subtle pattern of light blue dots, suggesting a microscopic environment. The lighting highlights the textured surface of the bacteria, giving them a three-dimensional appearance.

Pushing past **resistance**

By creating the world's first molecule bank, UQ scientists are working with industry and institutional partners on a venture with global impact: crowdsourcing antibiotic compounds to seek out new solutions and to prevent the proliferation of drug-resistant superbugs.

Measures of success

A range of key performance indicators will track progress against the objectives of this strategy. These will be fully developed as the implementation plan is finalised.

Measures will be established to track movement against our current benchmarks, as new actions are implemented and existing programs are escalated across the University. Measures will likely include:

Short-term

- level of demand and number of participants in entrepreneurship events and activities
- number of students and staff engaging in formal learning in entrepreneurship
- number and reach of national and international partners engaging in UQ entrepreneurship programs

Long-term

- impact of entrepreneurial activities on game-changing graduates who make outstanding contributions and address complex issues with a global perspective, as outlined in the University's Strategic Plan 2018-2021
- numbers of founders and startups established through UQ entrepreneurship programs, and the level of grants and investments they secure
- quantity and quality of entrepreneurship research outputs, including collaborations, publications and impact.

Implementation

This strategy will be implemented progressively and responsively to meet the ongoing and changing needs of students, staff and partners. This will include trialling and assessing new initiatives regularly to continuously improve our approaches.

An implementation plan will support this strategy, and clearly outline roles and responsibilities in delivering the actions across the University, key milestones and timeframes for delivery.

We will continue to be informed by our external partners and embed structured feedback opportunities throughout our activities. Additionally, the UQ Entrepreneurship Expert Advisory Panel will continue to provide insights into the challenges and opportunities facing our entrepreneurs.

A collaborative, whole of institution approach to implementation will be essential, as our success will rely on shared responsibility for implementation across the University.

As student voices are a priority, our programs and activities will include ongoing opportunities for feedback from students, and student representatives will continue to be included in relevant advisory groups.

By 2022, structural decline of certain types of jobs (10% decline) will be fully counter-balanced by job creation and the emergence of new professions (11% growth).

Future of Jobs Report, 2018, World Economic Forum

Glossary

Term	Description
Accelerator	A fixed-term program that offers a cohort of entrepreneurs mentoring, training, workshops, and funding to develop their business. The UQ ilab Germinate PLUS accelerator program assists startups to turn into an investment-ready company with an early-stage product, initial income and a team.
Commercialisation	The process of taking an idea to market and creating value. UQ researchers are assisted by UniQuest, Australia's leading commercialisation entity, to commercialise University intellectual property. JK Tech is the technology transfer company for the Sustainable Minerals Institute.
Community of practice	A group of people who regularly interact to discuss and share experiences to improve practice in areas of shared interest. At UQ, the entrepreneurship community of practice will bring together academic and professional staff who are interested in supporting a culture of entrepreneurial teaching and learning.
Employability	Employability is a set of achievements – skills, understandings and personal attributes – that make graduates more likely to attain lifelong employment success, have impact in organisations, create enterprising opportunities for themselves and others, and effect positive change throughout all stages of their careers to the benefit of themselves, the workforce, the community, and the economy (adapted from Yorke, 2006).
Enterprising skills and activities	An enterprising student/graduate is capable of generating original ideas and making them happen in response to identified needs and opportunities. Skills and competencies include: creative problem solving, design thinking, negotiation, communicating, influencing, and leadership. Activities related to entrepreneurship, such as starting a new business or social enterprise, or applying enterprising skills in an organisational context such as non-profit, corporate, or government.
Entrepreneurial education	At UQ, entrepreneurial education will include a breadth of skills development and learning opportunities, from the development of enterprising skills and an entrepreneurial mindset to applying enterprising competencies in a business or organisational context.
Entrepreneurial mindset	A way of thinking that demonstrates behaviours and attributes such as determination, resourcefulness, initiative, agility and managed risk-taking.
Flagship courses	Exemplars of excellence in scholarly achievements, with potential to produce excellent outcomes for students, display clear links with strategic goals of the University and have potential to link to a range of industry or wider social objectives. These courses target higher-order problem-solving, and 21st-century skills to address challenges.
Incubator	Facilities created to help firms develop and survive during the early years, providing affordable space, shared offices and business advisory services.
Intellectual property (IP)	A novel creation of the mind that can be defined and differentiated from others, including copyright, patents, trademarks, designs, plant breeder's rights or geographical indications.
Intrapreneurship	Entrepreneurship activities conducted within an existing organisation.
Micro-credentials	The awarding of certificates or 'badges' as a record of achievement for learners.
Social enterprise	A business whose main purpose is to achieve social or environmental impact.
Startups	A growth stage company based on a new or novel product, service or business model.
Ventures	Pioneering journeys or undertakings; may also relate to a business enterprise. At UQ, Ventures reflects the entrepreneurial spirit of our community, to be bold and adventurous in working together to find opportunities and solve challenges that create positive change locally and globally.



Startup adventures

Idea Hub offers four-week intensive global internships at some of the world's most vibrant startup hot spots including San Francisco, Shanghai, Tel Aviv (pictured) and Singapore.



CREATE CHANGE



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