



# *Research*



*Research Plan*  
2016–2020

# Message from the Deputy Vice-Chancellor (Research & Innovation)

Research is a fundamental purpose of a university, and is integral to its role within the community. In recent times, USQ's research performance has significantly strengthened and the University's profile has been substantially raised.

These achievements were borne from a commitment to research excellence, formation of new research structures, continuous improvement of research systems, implementing mechanisms to foster a vibrant research culture, and targeted investment of Strategic Research Funds made available by USQ Council.

This Research Plan builds on USQ's success and serves to deliver the research pillar of the University's Strategic Plan 2016-2020. It is envisaged that this plan will be regularly reviewed and modified as required to adapt to the dynamic and ever evolving research and innovation environment.



Professor Mark Harvey

DEPUTY VICE-CHANCELLOR (RESEARCH & INNOVATION)



# Overarching Research Goal

USQ's overarching research goal, as declared in the USQ Strategic Plan 2016-2020, is to be internationally recognised for high impact research in areas of research focus.

This Research Plan serves to achieve this goal. Fundamental to achieving this is the production of research outputs of international quality, and leveraging external research income to fund our research programs. Also critical is engaging effectively with industry and our stakeholders, and contributing to innovation that will benefit our communities and the nation.

In order to achieve this, USQ will:

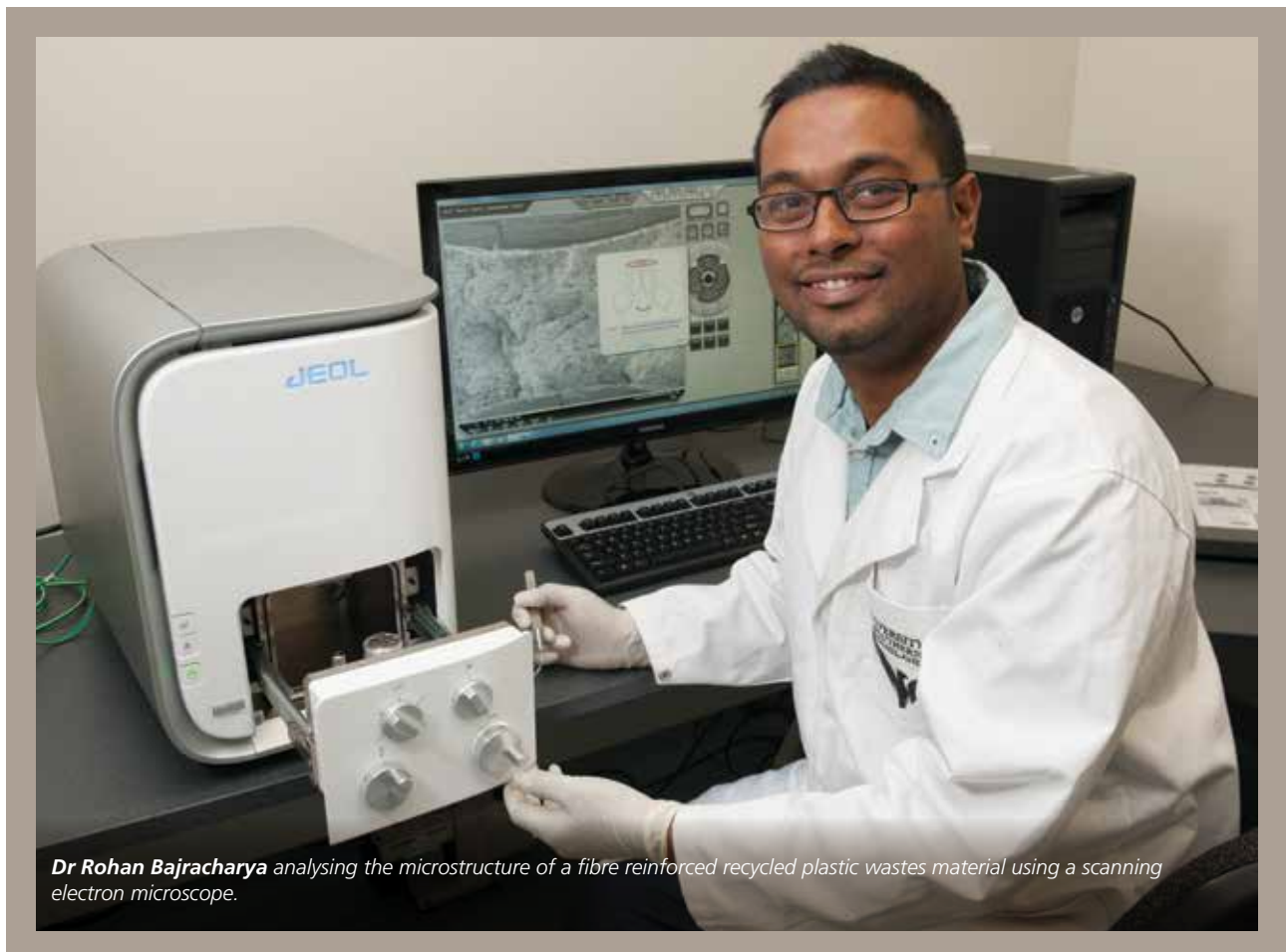
- create opportunities for our researchers to collaborate and grow their Research Program Teams (RPTs)
- deliver high quality research training and development programs to our researchers and research students
- implement mechanisms and structures that continue to foster a vibrant research culture

- be flexible, agile and responsive to change
- use targeted strategic investment to drive research performance
- foster research that is engaged and delivers impact to stakeholders and our communities.

Underpinning our overarching research goal are two key objectives:

- Objective 1: Enhance our national and international standing for high quality, focused and engaged research that makes a difference to communities
- Objective 2: Build our reputation for research training that produces innovators and entrepreneurs.

Below are the strategies and initiatives to accomplish these objectives, and the University's performance indicators for the next five years.



**Dr Rohan Bajracharya** analysing the microstructure of a fibre reinforced recycled plastic wastes material using a scanning electron microscope.

# Objective 1

## ENHANCE OUR NATIONAL AND INTERNATIONAL STANDING FOR HIGH QUALITY, FOCUSED AND ENGAGED RESEARCH THAT MAKES A DIFFERENCE TO COMMUNITIES

### OBJECTIVE 1 STRATEGIES:

- Through targeted investment, continue to build a focused and distinct program in fundamental and applied research that draws on expertise across disciplines, attracts world-class researchers and delivers impact through addressing global productivity and sustainability challenges. Investment will be in USQ's areas of research focus, which are the University's strengths and emerging strengths based on nationally recognised research assessments and metrics including Excellence in Research for Australia (ERA), external research income, strategic partnerships and Higher Degree by Research (HDR) student completions. The University's areas of research focus include:
  - Agriculture and Agribusiness
  - Cultural Heritage and Archaeology
  - Digital Life
  - Environmental Sciences
  - Health and Behavioural Sciences, principally Regional Health and Wellbeing
  - Materials and Mechanical Engineering
  - Mathematical Data Sciences, principally Computational Mathematics and Space Sciences
  - Regional Community and Economic Development.

As a regional University, with a rich and celebrated history in flexible and technology-enhanced education, USQ is also committed to driving world class Education research.

As part of USQ's Reconciliation Action Plan and the USQ Aboriginal and Torres Strait Islander Research Strategy, we will demonstrate an ongoing commitment to Indigenous research and researchers through our areas of research focus.

Research is forever evolving and, as such, USQ's areas of research focus will continue to be assessed and refined in response to performance, national priorities, sector changes and community needs.

- Enhance engagement with industry through strong and sustainable research networks and partnerships with like-minded organisations.
- Invest in and develop industry and innovation partnerships that align with areas of research focus at USQ.
- Optimise impact by ensuring alignment with state, national and international industry and government priorities in key focus areas, and through responsive and managed business and communications processes.
- Continue to build a research culture within USQ that embeds commitment and accountability for high quality performance outcomes within the organisation.
- Provide sustainable, high quality institutional support to ensure that we are a preferred research supplier, regarded as agile and responsive by our research partners.



*Dr Kathryn Gilbey, a lecturer at USQ's College for Indigenous Studies, Education and Research, is the recipient of a prestigious Fulbright Postdoctoral Scholarship in Cultural Competence.*

## Objective 2

### BUILD OUR REPUTATION FOR RESEARCH TRAINING THAT PRODUCES INNOVATORS AND ENTREPRENEURS

#### OBJECTIVE 2 STRATEGIES:

- Continue to build on our innovative HDR programs that broaden students' horizons and prepare them for challenging careers in their chosen fields, including expanding the range of professional doctorates.
- Enhance the University's research supervision capability, including expanding the use of non-traditional models for supervising and delivery of HDR programs.
- Strategically expand the range of scholarships and financial support available for both domestic and international HDR students; targeting support to build capacity and outcomes in key research priority areas.
- Develop greater opportunities to assist HDR students to engage with business and industry; to enhance their employability and innovation skills and strengthen USQ partnerships.





*Caitlin Easton, who was awarded an Arrow Energy Indigenous University Scholarship, is undertaking a Master of Science – Advanced Research at USQ with a focus on developing a suicide prevention framework for Indigenous youth.*

# Research Plan Implementation

THE RESEARCH PLAN WILL BE IMPLEMENTED VIA THE ACTIVITIES OF THE OFFICE OF RESEARCH, OFFICE OF RESEARCH DEVELOPMENT, OFFICE OF RESEARCH GRADUATE STUDIES, AND THE FOLLOWING:

Targeted investment in:

- retaining and recruiting outstanding researchers who will drive national and international rankings, secure external research funding, engage effectively with industry and stakeholders, and deliver impactful research findings
- infrastructure and equipment
- professional staff to provide effective services to our researchers.

Continuation and strengthening of our Research Institutes to foster multidisciplinary collaboration and strategic external engagement with industry and the community, specifically to:

- assist the transformative social and economic development and well-being of regional Australians
- align with and support the achievement of the main educational and research goals in USQ's international programs and partnerships
- extend and enhance USQ's role as a centre of excellence in selected fields of strategic focus
- perform as a major regional institution providing leadership, critical capacity and positive impact for its stakeholders.

Partnering with industry, government and the community to develop and translate research for beneficial impact locally in Australia and internationally.

Expansion of the Researcher Development and Training program, an award-winning suite of initiatives for researchers and HDR students that includes:

- Research Giants & Eminent Visiting Scholar Scheme. Brings world-class researchers to USQ to promote national and international collaboration
- Publication Excellence Awards. USQ-wide and School-specific awards recognising publication in high-quality journals and authored books
- Researcher Development and Leadership Program. Provides Early Career Researchers and Mid-Career Researchers with a range of research leadership development and mentoring opportunities
- Research Week. Annual showcase event highlighting research activities to internal and external stakeholders
- Research Communities of Practice. Researcher-initiated communities of practice on topics such as Research Supervision, Qualitative Research, IT Research, and Survey Research
- Workshop series. Provides training in legislative requirements for researchers, and key issues related to ethics, financials, intellectual property, data storage, grant writing and how to make best use of USQ Library resources.





# Research Plan Support

THIS PLAN WILL BE SUPPORTED BY THE:

- Aboriginal and Torres Strait Islander Research Strategy
- ICT Strategic Plan
- Capital Assets Management Plan
- Annual Operational and Resource Management Plans
- International Rankings Strategy.



*Investments in new research infrastructure will position USQ as a major international contributor to the discovery and characterisation of new planetary systems around stars other than the Sun.*

# Performance Indicators

THE FOLLOWING ARE THE RESEARCH STRATEGIC SUCCESS INDICATORS FROM USQ'S STRATEGIC PLAN 2016-2020:

- 10% annual increase in total HERDC reportable research income
- 2% annual increase in Q1 journal publications (defined as increase in the % of Q1 journal publications that comprise our total journal publications)
- 10% annual increase in income from industry and international partnerships and collaborations.



*Research Officer, Jing Lin emasculating wheat heads as part of a pre-breeding program for root-lesion nematode resistance in wheat.*





**Anthropologist, Professor Bryce Barker**, with Associate Professor Lara Lamb, is leading the discovery of previously unrecorded rock art in the Great Papuan Plateau, and aims to shed light on the first arrival of early hominid species to Australia. Photo supplied by Associate Professor Lara Lamb.

**USQ RESEARCH**

[research@usq.edu.au](mailto:research@usq.edu.au)

[usq.edu.au/research](https://usq.edu.au/research)