# Research Associate in Conservation Ecology

**FACULTY OF SCIENCE**
ACADEMIC DIVISION

the university for the real world®

# About the Position

The primary purpose of the position is to contribute to the project *Formation of a core response and analytics framework* (also known as Wildseek). Working closely with Landcare Australia and WIRES Inc, this project aims to create a system of data collection groups across Australia that are trained to collect wildlife data using drones, with an initial focus on koalas, and to analyse and disseminate that data to improve understanding and management of koalas and other wildlife. This project is part of the Conservation AI Network, a group that pioneered the use of AI for the detection of koalas in native habitat.

The Research Associate will be well supported and will join a research group dedicated to quantitative ecological analysis and biodiversity conservation research using advanced technology, often with the support of Machine Learning. We aim to help threatened species and manage invasive species using leading edge analytics and artificial intelligence algorithms.

This position provides an exciting opportunity to be a key member of a dynamic team working across the fields of biodiversity conservation, quantitative ecology, artificial intelligence and leading edge technology.

This position reports to the Associate Professor in Ecology for supervision, workload management and for Performance Planning and Review (PPR).

### Key responsibilities include:

- Proactively engage and work in close collaboration with the project team.
- Contribute to the delivery and development of projects aligned with biodiversity conservation research.
- Use software to identify threatened species in imagery supplied from contributing groups.
- Collate data from imagery that has been supplied by participating groups, data repositories and other sources, for quantitative analysis.
- Conduct spatial analysis and statistical modelling to create novel and important new knowledge and to assist with the prioritisation of survey efforts.
- Contribute as a team member to assist with data collection, data analysis, and conference presentations, working with a range of collaborators in conservation ecology, invasive species ecology and volunteer groups.
- Contribute to publication of scientific reports and scholarly articles in internationally recognized peer-reviewed journals.
- Attend meetings of relevant working groups and committees.
- Provide assistance to other projects including PhD, Masters and Honours student projects, as required.
- Liaise with volunteer groups to assist with planning surveys, data collection and data transfers.
- Implement and administer University policy within the Faculty with respect to equitable access to education and workplace health and safety.
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To ensure job flexibility the successful appointee may be required to:

- perform any other duties as nominated by the University consistent with the relevant classification descriptors detailed in the Enterprise Agreement. Staff undertaking any new duties will receive training;
- participate in job rotation or multiskilling in consultation with their supervisor;
- work across campuses.

To be appointed as a Research Associate the successful applicant must meet the position classification standards outlined in the QUT Enterprise Agreement (Academic Staff).

### Type of appointment

This appointment will be offered on a fixed-term, full-time basis for two (2) years.

### Location

Gardens Point campus.

# Selection Criteria

1. Completion of a PhD (with a significant research component), in a discipline of relevance to the research topic (e.g. quantitative ecology, biodiversity conservation, environmental statistics, machine learning applied to the environment).

2. Highly developed written and oral communication skills, including at least one peer-reviewed publication, ideally as lead author.
3. Demonstrated experience in spatial data analysis, statistical analysis and coding in a relevant programming language (e.g. R, Python).
4. Well-developed interpersonal and written communication skills, including the ability to develop or assist in the development of collaborative partnerships with both internal and external stakeholders.
5. Demonstrated capacity for project management with stakeholders, including accomplishment of milestones in a timely manner.

### Remuneration and Benefits

The classification for this position is Academic Level A (LEVA) which has an annual remuneration range of $83,894 to $113,836 pa. Which is inclusive of an annual salary range of $70,891 to $96,193 pa, 17% superannuation and leave loading.

Beyond personal and professional fulfilment, a career at QUT brings a broad range of tangible benefits. With competitive remuneration including superannuation, the University offers real and generous benefits.

QUT is a high quality and flexible organisation that is proud of its excellent employment conditions which include but are not limited to:

- Reduced working year scheme
- Parental leave provisions
- Study support encompassing leave and financial assistance
- Comprehensive professional development
- Salary Packaging

Further benefits can be found at the Life at QUT page.

### Information for applicants

The position is open to applicants who have unrestricted work rights in Australia for the duration of the fixed-term appointment. In support of our strategic priority of Indigenous Australian success, Aboriginal Australians and Torres Strait Islander people are encouraged to apply.

Please note that current staff wishing to be considered for secondment to this position must seek prior approval from their supervisor before submitting an application.

For further information about the position, please contact Associate Professor Grant Hamilton, on (07) 3138 2318; or for further information about working at QUT contact Human Resources on (07) 3138 5000.

Candidates who are interested in the position are encouraged to apply even though they may feel they are not strong on individual selection criteria.

In assessing merit, the panel will take into consideration “performance or achievement relative to opportunity”. We recognise that many staff today have a range of personal circumstances, and career histories that challenge traditional ideas of an academic staff member. This may mean, for example, prioritising the quality of achievement rather than the quantity, as considerations of part-time employment, career interruptions and significant periods of leave are taken into account when assessing performance or achievement.

The selection panel is also committed to conducting a process which is fair and free from bias, including unconscious bias.

### How to Apply

For further information and to apply, please visit www.qut.edu.au/careers for reference number **22813**.

When applying for this position your application must include the following:

- A current resume
- A written response to the selection criteria

**Applications close 11 September 2022**

## About QUT

QUT is a major Australian university with a global outlook and a 'real world' focus. We are one of the nation’s fastest growing research universities and our courses are in high demand.

We are an ambitious and collaborative institution that seeks to equip our students and graduates with the skills they will need in an increasingly disrupted and challenged world.

We are transforming the student experience we offer our 50,000 students and we place a premium on the international and national accreditation of our various professional degrees.

We offer academic programs in fields spanning business, creative industries, education, engineering, health, law, science, and social justice across five faculties.

We are transforming the learning experience and embed work integrated learning in courses and have a strong focus on developing entrepreneurial skills. QUT provides executive education and professional development to both individuals and organisations through QUTeX, and QUT Online lets students learn when it suits, through courses delivered entirely online. QUT College offers pathways for all students into our undergraduate programs.

QUT has two inner-city campuses in Brisbane at Gardens Point and Kelvin Grove.

Well known for our strong links to industry and government, the high impact of our research which involves multidisciplinary teams, QUT has been named one of the fastest rising universities in the world for scientific research.

Further information about QUT can be obtained from the website at www.qut.edu.au.

### Our Vision

QUT's Blueprint 6 is our institutional strategic plan. The Blueprint formalises QUT's ambitions and declares our strong sense of purpose which is to provide transformative education and research relevant to our communities. It provides a framework and strategies to enable QUT to realise our vision to be the university for the real world and identifies the following priorities:

- support aspiration and inclusion
- encourage creativity and entrepreneurship
- embrace digital transformation and technology
- embed principles of health and wellbeing
- support Indigenous Australian engagement, success and empowerment
- enable professional engagement and ethical leadership and,
- focus on the environment and sustainability

Aligned to and supporting our vision are the QUT Values. These Values highlight what makes QUT distinct and successful. Providing a compass for our decisions, actions and behaviours and strengthening our community.

### QUT Values

- Ambition
- Curiosity
- Innovation
- Integrity
- Inclusiveness

## About the Academic Division

Academic Division includes the University's faculties and research centres. It is responsible for education (learning and teaching), research, research services and support, and digital business solutions. The Academic Division is led by the Provost.

## About the Faculty

The Faculty of Science aims to explore the frontiers of our physical and digital worlds to drive innovation and develop solutions to complex, real-world challenges. We deliver distinctive programs in Information Technology, Mathematics and Science to meet industry demands for data-driven and technological solutions.

Strong connections and long-standing partnerships with governments and industry enable us to address complex challenges though learning, teaching, research, and innovation. We facilitate learning that is delivered on campus, online and in the real-world through relevant and practical learning experiences.

Our Schools are established around disciplines that promote collaboration in teaching and research. These include:

- School of Biology and Environmental Science
- School of Chemistry and Physics
- School of Computer Science
- School of Earth and Atmospheric Sciences
- School of Information Systems
- School of Mathematical Sciences

The Faculty is renowned for its translational research expertise in areas such as climate change, energy, geosystems, food security and water resource management led by world-class and internationally recognised researchers. The Faculty is home to both University and Faculty based Research Centres, including:

- Centre for Agriculture and the Bioeconomy
- Centre for Data Science
- Centre for Materials Science
- Centre for Clean Energy Technologies and Practices
- Centre for the Environment
- Centre for Waste Free World

The Faculty is led by the Executive Dean and the Executive Management Team which includes the Deputy Dean, Associate Deans, Heads of School, and the Faculty Operations Manager.

# About the School

The School of Biology and Environmental Science seeks to understand how microorganisms, fungi, plants, and animals – grow, sense, adapt, interact, and evolve. It studies how genes, species and ecosystems function and can be managed, conserved, and restored; and where appropriate apply this knowledge to biotechnological solutions.

Our school brings together multidisciplinary research teams to address global challenges, ranging from food security to climate change. We work across all levels of complexity, from genes to whole organisms, and in natural to modified ecosystems. Through research, we aim to:

- significantly contribute to the advancement of food production,
- develop more resilient and nutritional crops,
- understand groundwater-soil-vegetation interactions,
- treat plant and animal diseases, and
- prevent and control pests and invasive species.

The school has an outstanding record of producing impactful pure and applied research outcomes, with ERA ratings for fields of research either at or well above world standard (ERA 2015). We are the partner of choice for research and innovation at federal, state and regional government levels, and with industry and end-users.

Our researchers currently play a leadership role in the Australian Research Council's (ARC) Industrial Transformation Research Centre for Fruit Fly Biosecurity Innovation and the ARC Centre of Excellence in Synthetic Biology. School members have leadership roles and are affiliated with a number of University research centres including the Centre for Agriculture and Bioeconomy, Centre for the Environment and Centre for a Waste-Free World.

Mindful of the way in which science and engineering must be done in the 21st century, the school creates an environment where issues can be discussed, researched and resolved in a way that attends to competing priorities. Our courses in science and engineering reflect this approach as we seek to provide students with learning experiences appropriate to real world problems.