POSITION DESCRIPTION

Position Title: Assistant Research Technician
Organisation Unit: School of Biological Sciences
Position Number: NEW
Type of Employment: Fixed Term, Part Time
Classification: Hew Level 3

THE UNIVERSITY OF QUEENSLAND

The University of Queensland (UQ) contributes positively to society by engaging in the creation, preservation, transfer and application of knowledge. UQ helps shape the future by bringing together and developing leaders in their fields to inspire the next generation and to advance ideas that benefit the world. UQ strives for the personal and professional success of its students, staff and alumni. For more than a century, we have educated and worked with outstanding people to deliver knowledge leadership for a better world.

UQ ranks in the world’s top universities, as measured by several key independent ranking, including the Performance Ranking of Scientific Papers for World Universities (43), the US News Best Global Universities Rankings (52), QS World University Rankings (47), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (65). UQ again topped the nation in the prestigious Nature Index and our Life Sciences subject field ranking in the Academic Ranking of World Universities was the highest in Australia at 20.

UQ has an outstanding reputation for the quality of its teachers, its educational programs and employment outcomes for its students. Our students remain at the heart of what we do. The UQ experience – the UQ Advantage – is distinguished by a research enriched curriculum, international collaborations, industry engagement and opportunities that nurture and develop future leaders. UQ has a strong focus on teaching excellence, winning more national teaching excellence awards than any other in the country and attracting the majority of Queensland’s highest academic achievers, as well as top interstate and overseas students.

UQ is one of Australia’s Group of Eight, a charter member of edX and a founding member of Universitas 21, an international consortium of leading research-intensive universities.

Our 50,000-plus strong student community includes more than 13,000 postgraduate scholars and more than 12,000 international students from 144 countries, adding to its proud 240,000-plus alumni. The University has about 7,000 academic and professional staff and a $1.8 billion annual operating budget. Its major campuses are at St Lucia, Gatton and Herston, in addition to teaching and research sites around Queensland and Brisbane city. The University has six Faculties and four University-level Institutes. The Institutes, funded by government and industry grants, philanthropy and commercialisation activities, have built scale and focus in research areas in neuroscience, biomolecular and biomedical sciences, sustainable minerals, bioengineering and nanotechnology, as well as social science research.
UQ has an outstanding track-record in commercialisation of our innovation with major technologies employed across the globe and integral to gross product sales of $11billion+ (see http://uniquest.com.au/our-track-record).

UQ has a rapidly growing record of attracting philanthropic support for its activities and this will be a strategic focus going forward.

The **Faculty of Science** is recognised as a powerhouse for some of the world’s leading scientists, teachers, science programs and commercial outcomes. The Faculty is one of the largest Science groupings in Australia, with approximately 1100 (equivalent full-time) staff, and about 7500 (equivalent full-time) students.

Throughout its Schools and Centres, the Faculty unites the disciplines of agriculture and animals, biomedical and biological sciences, chemistry, earth sciences, food sciences, geography, marine science, maths and physics, the environment and veterinary science.

With strong links between the enabling and applied sciences, UQ researchers and graduates are working on a wide range of groundbreaking projects from the molecular characterisation of drug resistant bacteria that affect piglets through to finding better treatments for illness and rehabilitation of the environment.

Information about the Faculty may be accessed on the Faculty’s web site: [http://www.science.uq.edu.au/](http://www.science.uq.edu.au/)

The **School of Biological Sciences** is part of the Faculty of Science and is one of the largest and most successful of its type in Australia, with 49 full-time academic staff, and over 200 enrolled PhD students. The School has broad expertise across ecology and evolution, molecular and quantitative genetics, paleobiology, developmental biology, behaviour, plant and animal physiology, and conservation biology. Our research programs involve a diverse array of taxa, ranging across microbes, animals and plants, including a particular focus in the areas of marine biology and entomology. Unique opportunities for biological research and teaching are provided by our proximity to a stunning array of marine and terrestrial subtropical habitats and their endemic biodiversity. A number of research programs in the School take advantage of major model-organism systems, including Drosophila, C. elegans, and Arabidopsis, and many include a strong quantitative and modelling focus.

Further information and details of the research interests of academic staff may be accessed on the school’s web site at [http://www.biology.uq.edu.au](http://www.biology.uq.edu.au)

One-third of the world’s known amphibian species (2,030 species; 32%), including numerous Australian species, are either threatened with extinction or have gone extinct. From a list of 12 major threat classes, agriculture and aquaculture have contributed most to amphibian declines followed by biological resource use and residential and commercial development. In response to these pressures and recognising the need to balance socio-economic development with environmental protection, efforts to mitigate the ecological impacts of urban and other development activities have increased worldwide, primarily through habitat protection and/or restoration. Aura, an urban residential development owned by Stockland Development Pty Ltd, is one such example where the conservation needs of various endangered species have been carefully considered and incorporated into management plans. Aura has replaced a pine plantation that was removed in 2010/11. Following removal of the pines, and the subsequent raising of the groundwater level, isolated pockets of degraded naturally acidic ponds, supporting both acid frogs and competitor sibling species, have emerged across the Aura development site (hereafter, degraded ponds). In response, Stockland has prepared both a Wallum Sedgefrog (*Litoria olongburensis*) and Acid Frog Management Plan setting out to create 152ha of new coastal palustrine ponds and heath to support non-degraded acid frog breeding ponds and vegetated corridors linking these ponds.
(hereafter, newly created ponds). This management plan was prepared in accordance with the National Recovery Plan for the Wallum Sedgefrog and other wallum-dependent frog species.

UQ and Stockland have developed a research partnership over the past two years, with UQ researchers providing the ecological and technical support for assessing Acid Frog recovery and persistence in both the new, artificially created ponds and the retained, degraded ponds across Aura. Additionally, a new collaboration between UQ, Stockland, QUT, the Sunshine Coast Council and the Federal Government achieved through a successful Smart Cities and Suburbs Grant supports the integration of the ecological information and novel bioacoustics technology developed over the past two years into engagement opportunities with local schools, stakeholder groups and the broader community.

**Information for Prospective Staff**

Information about life at UQ including staff benefits, relocation and UQ campuses is available at - [http://www.uq.edu.au/current-staff/working-at-uq](http://www.uq.edu.au/current-staff/working-at-uq)

**DUTY STATEMENT**

**Primary Purpose of Position**

Stockland Development Pty Ltd has provided funding to The University of Queensland to support research on the Wallum Sedgefrog and other wallum-dependent frog species that occur across Aura. Further funding has been procured through a Smart Cities and Suburbs Federal Government grant to provide insights on how communities in Aura can be sustainably developed in order to protect and improve biodiversity values. As such, this position has two main purposes. The first is to assist with facilitating the collaboration with all stakeholders involved in the Smart Cities and Suburbs Grant. This includes providing support to the CI for all organisational and practical elements of integrating different stakeholder expertise and associated outputs into the project. Second, this role will assist with collecting, analysing and reporting on the ecological data collected as part of the targeted Acid Frog research occurring at Aura. Specifically, this position will be directly providing vital information on (1) acid frog presence and estimated population size in ponds across the site and in newly-created areas and (2) the competition for acoustic space between acid frogs and their competitor sibling species.

**Duties**

Duties and responsibilities include, but are not limited to:

**Research**

- Assisting with data collection in the field, including, but not limited to:
  - Procurement and preparation of equipment
  - Deployment of passive acoustic monitors and acoustic arrays
  - Collection of environmental data
- Analysis of raw acoustic & environmental data
  - Assist with the annotation of acoustic data
  - Complete population analyses on array data using R-based analysis packages monitor, seewave, tuneR and ASCR
- Participate in citizen science engagement opportunities through workshop presentations with local schools and stakeholder groups.
Administration

- Data & equipment management and maintenance including the QRISCloud account
- General lab and fieldwork administration duties

Other

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including but not exclusive to:

- the University's Code of Conduct
- requirements of the Queensland occupational health and safety (OH&S) legislation and related OH&S responsibilities and procedures developed by the University or Institute/School
- the adoption of sustainable practices in all work activities and compliance with associated legislation and related University sustainability responsibilities and procedures
- requirements of the Education Services for Overseas Students Act 2000, the National Code 2007 and associated legislation, and related responsibilities and procedures developed by the University

Organisational Relationships

The position reports to Dr. Berndt Janse van Rensburg.
SELECTION CRITERIA

**Essential**

- Completion of a trades certificate or Certificate III, or an equivalent combination of relevant experience and/or education/training.
- Demonstrated knowledge in the field of ecology.
- Experience using R as an analytical tool.
- Demonstrated fieldwork experience.
- Ability to work collaboratively in team environments.
- Good communication skills.
- Ability to work with industry, government departments, schools, professional bodies and the wider community.

**Desirable**

- Experience in the use of bioacoustic monitoring techniques.
- Experience in the use of the R package `ascr` to estimate animal call locations and call densities.
- Demonstrated knowledge of Australia’s Environment Protection and Biodiversity Conservation Act (EPBC Act).
- Demonstrated knowledge of Australia’s biodiversity offset policies.

The University of Queensland values diversity and inclusion and actively encourages applications from those who bring diversity to the University. Please refer to the University’s Diversity and Inclusion webpage (http://www.uq.edu.au/equity) for further information and points of contact if you require additional support.

Accessibility requirements and/or adjustments can be directed to the contact person listed in the job advertisement.