POSITION DESCRIPTION

Position Title:	Research Assistant in Computational Marine Ecology
Organisation Unit:	School of Biological Sciences, Faculty of Science
Position Number:	New
Type of Employment:	Full time, Fixed term for 24 months with possibility to extend (funding permitting)
Classification:	HEW Level 6

THE UNIVERSITY OF QUEENSLAND

The University of Queensland (UQ) ranks in the world's top universities, as measured by several key independent ranking, including the CWTS Leiden Ranking (32), the Performance Ranking of Scientific Papers for World Universities (40), the US News Best Global Universities Rankings (42), QS World University Rankings (47), Academic Ranking of World Universities (54), and the Times Higher Education World University Rankings (66). Excluding the award component, UQ is now ranked 45th in the world in the ARWU, and is one of the only two Australian universities to be included in the global top 50.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 53,000-plus strong student community includes more than 16,400 postgraduate scholars and more than 17,000 international students from 135 countries, adding to its proud 260,000-plus alumni. The University has more than 6,600 academic and professional staff (full-time equivalent) and a $2.15 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 a track record in commercialisation of our innovation with major technologies employed across the globe and integral to gross product sales of $11billion+.

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

Organisational Environment

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

Diversity and Inclusion

The School recognizes and values equity and diversity, and encourages applications from any individual who meets the requirements of this position irrespective of gender, sexuality, race, ethnicity, religion, disability, age or other protected attributes. The School strives to provide an inclusive working environment, and along with the University is committed to supporting staff with family and caring responsibilities by providing policies, programs and initiatives to help balance work and family responsibilities.

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

The University of Queensland Enterprise Agreement outlines the position classification standards for Levels A to E.

DUTY STATEMENT

Primary Purpose of Position

As part of a major research investment into the feasibility of coral reef restoration, the University of Queensland is partnering with QUT to explore the efficacy of rubble stabilisation methods. This position develops web-enabled software tools to help guide where restoration of rubble is likely to be feasible and worthwhile (e.g., where the environment prevents it stabilising naturally for long periods of time). The developer will partner with coral reef scientists, engineers, and GIS experts to create meaningful tools that integrate models and map appropriate locations for interventions. Tools might include Bayesian Belief Networks but other options will be considered.

Duties

Duties and responsibilities include, but are not limited to:

Research
- Developing software applications to map the results of both physical and ecological models through a web-enabled interface
- Analysing data and writing papers on data visualisation and end-user applications
- Collaborating with project researchers

- Assisting with project reporting
- Communication of project results

Service

Contribute to project reporting

Other

Communication of results to end users (e.g., tourism resorts, reef managers)

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 Prof Peter Mumby.

Selection criteria

- Minimum of Bachelors degree but masters or above may be feasible

- A high level of experience in creating software applications that map spatial data for public display and interrogation. It is critical that this includes processing of output from various ecological and physical models (e.g., using Bayesian Belief Networks).

- Excellent written and statistical skills

- A familiarity with marine conservation and coral reefs would be an advantage but is not mandatory

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