POSITION DESCRIPTION

Position Title: Postdoctoral Research Fellow
Organisation Unit: School of Biological Sciences
Position Number: NEW
Type of Employment: Fixed Term (3 years), Full Time
Classification: Academic Level A (Research Focussed)

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 (45), QS World University Rankings (48), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (69). UQ again topped the nation in the prestigious Nature Index, and our Academic Ranking of World Universities result in the field of Life and Agricultural Sciences is 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.

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.

The Marine Genomics Lab, where the position will be located, has a comprehensive suite of advanced molecular, cell and microscopy infrastructure, as well facilities for cultivation of marine organisms. In addition, the MGL is supported by high performance NeCTAR computing and storage that covers all advanced bioinformatic analytical needs. The MGL currently consists of six postdoctoral scientists and multiple PhD and Honours students, ensuring a dynamic, diverse and creative working environment.

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

This position is supported by Australian Research Council funding to conduct research on the role of the innate immune system in animal-bacterial symbioses. The animal holobiont model that is core to the project is the coral reef sponge *Amphimedon queenslandica*, which is supported by extensive biological, genomic and transcriptomic resources across multiple life cycle stages and experimental contexts, in both the field and laboratory. This is a focal species in the Marine Genomics Lab led by Associate Professor Sandie Degnan and Professor Bernard Degnan.

The postdoctoral research fellow will be part of a small team of researchers working on various aspects of the innate immunity in symbiosis project, and will be expected to make substantial contributions to experimental design and research ideas, collection and analysis of data, and the writing of papers. In particular, they will take a leading role on generation and analysis of transcriptome data under ecologically-relevant experimental conditions, and on analysis of innate immune gene families in an evolutionary context. This will require both molecular wetlab and bioinformatic computational skills, as well as high level written and oral communication skills. There will also opportunities to assist with the supervision of undergraduate, Honours and PhD students, to attend and present at relevant conferences, and to participate in field work at UQ’s Heron Island Research Station.

Applicants should also refer to the UQ Academic Criteria for Performance policy. This policy applies to staff at levels A to E, across all of the academic categories - Teaching and Research, Teaching Focussed, Research Focussed and Clinical Academic.

Duties

Duties and responsibilities include, but are not limited to:

Research

- Work with CIs and students to achieve the stated goals of the ARC-funded project
- Contribute substantially to the design, development and implementation of molecular and computational research relating to sponge-bacterial symbioses
- Contribute substantially to the analysis of data sets
- Contribute substantially to the writing and publishing of scientific papers of a standard suitable for high quality international journals
- Provide authoritative advice within your area of specialisation
- Assist with the supervision of PhD, Masters, Honours and undergraduate students, as a formally acknowledged co-advisor wherever appropriate
- Attend and present research at relevant conferences
- Participate in field work at UQ’s Heron Island Research Station
**Service, Administration and Engagement**

- Liaise with CIs and students to assist with management of a molecular laboratory and associated computing resources
- Play a substantial role in organising the outsourcing of ‘omics data generation
- Contribute positively to the lab community by participating in lab meetings, encouraging discussion amongst lab members, and generally leading by example
- Engage with the broader School of Biological Sciences community both as a representative of the Marine Genomics Lab, and as appropriate to your own professional and personal development
- Any other duties as reasonably directed by your supervisor

**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 Associate Professor Sandie Degnan and Professor Bernie Degnan, CIs in the Marine Genomics Lab.
SELECTION CRITERIA

- PhD in an area of the biological sciences, with extensive postdoctoral experience in both molecular biology and bioinformatics
- Demonstrated ability to generate and analyse genome, transcriptome and microbiome datasets
- Strong organisational skills and attention to detail, with demonstrated ability to prioritise own workload, exercise independent judgement and work independently to meet project deadlines
- Excellent written and oral skills, and a strong publication record in relevant fields
- Ability to work collaboratively with colleagues, students and volunteers, with strong interpersonal skills
- Experience in contributing to supervision of undergraduate and postgraduate students in a research environment.
- Commitment to upholding the University’s values, and with the outstanding personal qualities of openness, respectfulness and integrity

Qualification Verification
An appointment to this position is subject to the verification of the highest academic qualification from the conferring institution.

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.

This role is a full-time position; however flexible working arrangements may be negotiated.

Accessibility requirements and/or adjustments can be directed to science.recruitment@uq.edu.au.