

## POSITION DESCRIPTION

<b>Position Title:</b>	Postdoctoral Research Fellow
<b>Organisation Unit:</b>	School of Biological Sciences
<b>Position Number:</b>	3028122
<b>Type of Employment:</b>	Fixed Term, Full Time
<b>Classification:</b>	Research Academic Level A

## 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://uniquet.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.

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 role will work under the FRDC funded project "A trivalent vaccine for sustainable yellowtail kingfish growout". Working with Dr Andrew Barnes, the position is based in the School of Biological Sciences at the University of Queensland St Lucia campus, and involves laboratory, aquarium and in silico work. Although familiarity with aquaculture and marine finfish is desirable, this is a highly technical project specialising in bacterial pathogenomics pertaining to vaccine design and construction as well as in vivo evaluation.

Consequently, **applicants whose major qualification is in marine biology or aquaculture will not be considered.**

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 Focused, Research Focused and Clinical Academic.

## **Duties**

Duties and responsibilities include, but are not limited to:

### **Research**

- To genome-sequence, assemble and analyse the evolutionary history of a collection of marine Photobacterium and vibrio strains associated with yellowtail kingfish (YTK) in Australia
- Liaise with field veterinarians and a local vaccine manufacturer to conduct research and development activity towards formulation and testing of suitable killed vaccines against *Ph. damsela* and *Vibrio harveyi* for YTK applicable interstate in Australia
- To design, build and test multivalent DNA vaccine candidates against the syndrome in YTK

### **Service and Engagement**

- Foster the School's relations with industry, government departments, professional bodies and the wider community
- Any other project-related 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 Dr Andrew Barnes.

## **SELECTION CRITERIA**

- PhD in the area of veterinary microbiology/immunology
- Demonstrated expertise in fish and shellfish immunology, vaccine development, bioinformatics, recombinant vaccine technology.
- Strong understanding of research animal welfare and ethics legislation in Australia
- Understanding of safe work practices associated with field, farm and biosecure (PC2) laboratory environments
- Ability to liaise with a variety of stakeholder including farmers, field veterinarians, government and scientists
- Ability to write high quality manuscripts and progress reports for industry
- Industry experience in vaccine production and testing would be desirable
- Familiarity with recirculating aquaculture systems operation and maintenance would be desirable
- Familiarity with biosecurity legislation in Australia would be desirable

### **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 [recruitment@uq.edu.au](mailto:recruitment@uq.edu.au)**