## POSITION DESCRIPTION

<table>
<thead>
<tr>
<th>Position Title:</th>
<th>Postdoctoral Research Fellow in Molecular Microbiology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation Unit:</td>
<td>School of Agriculture and Food Sciences</td>
</tr>
<tr>
<td>Position Number:</td>
<td></td>
</tr>
<tr>
<td>Type of Employment:</td>
<td>Fixed term for 2 years, full-time</td>
</tr>
<tr>
<td>Classification:</td>
<td>Research Academic Level A</td>
</tr>
</tbody>
</table>

## 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 Agriculture and Food Sciences is one of the largest Schools of this type in Australia, comprising research and teaching experts in agribusiness and the science disciplines of animals and wildlife, plants and soil sciences, food and nutrition science. With nearly 350 staff, 300 higher degree research students and over $33 million in operating and research income, the School has helped UQ to become recognised as one of the top 50 universities in the world for Life and Agriculture Sciences, and the leading agriculture university in Australia. Located at St Lucia and Gatton, the School is a large and dynamic multidisciplinary hub focused on applied research and teaching within the Faculty of Science committed to finding innovative and technology focussed solutions to global challenges. The School offers a range of undergraduate postgraduate coursework and research degrees encompassing agriculture and related disciplines ranging from Bachelor Degree to Doctorate. With a diverse group of internationally regarded scientists, the School hosts six research concentrations, of which three are aligned with the Queensland Alliance for Agriculture and Food Innovation – a joint initiative between The University of Queensland and the Queensland State Government. Quality laboratories and facilities and strong partnerships with industry, community and government bodies, provide an environment that enables world class research and research training in a collaborative and cooperative spirit for postgraduate students and researchers. Information about the Faculty and the School may be accessed on the Faculty’s web site at http://www.uq.edu.au/agriculture/

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

To work as part of a team on the ARC-funded project “Unravelling a novel stress-signalling system in bacteria”. This project is led by Associate Professor Mark Turner in the School of
Duties

Duties and responsibilities include, but are not limited to:

Research

- Undertake laboratory experimentation Gram-positive bacteria using molecular genetics and omics-based techniques.
- Create gene knockout and gene overexpression in several different Gram-positive bacteria.
- Identify new c-di-AMP receptors in several Gram-positive bacteria.
- Undertake bioinformatic analyses.
- Carry out c-di-AMP measurements using UPLC-MS methods.
- Work with colleagues and senior scientists in the development of joint research projects.
- Travel with the project for conferences and collaborative visits as necessary.
- Maintenance of detailed laboratory books which remain the property of the University
- Write up progress reports and scientific papers.
- Present findings at lab meetings, collaborator meetings and research conferences.
- Supervise and assist other project staff/students with laboratory experimentation.
- Work with colleagues and postgraduates in food science and biotechnology groups.

Teaching and Learning

- Assist undergraduate and postgraduate students

Service and Engagement

- Perform a range of administrative functions in the School
- Contribute to the processes that enable the academic team to manage the work of the School, including participate in School decision-making and serve on School committees
- Foster the School's relations with industry, government departments, professional bodies and the wider community.
- 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 the Chief Investigator, Associate Professor Mark Turner.

SELECTION CRITERIA

- A PhD or nearly complete PhD in molecular microbiology or equivalent.
- Demonstrated knowledge and skills in bacterial molecular genetics and biotechnology.
- Knowledge of and laboratory experience with one or more of the following is highly desirable: gene cloning and bacterial genetic manipulation, RNA extraction, qPCR, PCR, DNA sequence analysis, bacterial transformation, genomics, proteomics, transcriptomics, metabolomics, protein purification, analysis of GM bacteria and c-di-AMP quantitation and troubleshooting.
- Knowledge and skills in bioinformatics using next-generation sequencing data.
- Ability to design, carry out and analyse data from bacterial suppressor mutant screens.
- Ability to lead, or work in, cross-disciplinary teams and enhance collaborations.
- Research experience in bacterial molecular genetics and biotechnology research.
- Demonstrated experience in scientific publishing, including in leading international journals.
- Experience in the production and analysis of Gram-positive bacteria, including lactic acid bacteria.

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.

Accessibility requirements and/or adjustments can be directed to (science.recruitment).