

POSITION DESCRIPTION

Position Title:	Postdoctoral Research Fellow
Organisation Unit:	Institute for Molecular Bioscience
Position Number:	NEW
Type of Employment:	Fixed term full time
Classification:	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://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 University of Queensland's Institute for Molecular Bioscience, located on the main University campus, is Australia's leading biosciences research institute. Established in 2000, the Institute is home to over 420 staff and is located in thriving Brisbane, a city consistently ranked as one of the world's most vibrant and liveable cities.

The Institute, ranked in the Top 20 globally for life sciences research, pursues a multidisciplinary approach to solving some of the world's most serious challenges in the fields of health, disease and sustainable solutions for our cities, fuels and foods. The Institute is housed in a single building and is organized into technological platforms (Divisions) and research themes (Centres). The Divisions support state-of-the art facilities including the Centre for Microscopy and Microanalysis, which houses new cryo-electron microscopes; the NMR facility containing 500, 600 and 900 MHz machines; the Mass Spectrometry Facility accommodating a wide array of instrumentation; suites for work with a variety of model organisms; a plethora of next generation DNA sequencing technologies and the southern hemispheres leading program in complex genetic traits. The Research Centres accommodate 36 groups using a combination of genomics, chemistry and cell biology to take life science discoveries from the genome to drug design and application in the areas of antimicrobial resistance, inflammation, pain, cardiovascular disease and rare and developmental diseases.

The quality of our internationally recognised researchers underpins our research excellence. Over the past five years, our group leaders have attracted nearly \$250 M in research funding. They have leveraged funding from over 40 different national and international research sponsors including significant support from federal and state government sources. The success rate in federal funding schemes is amongst the highest in all of Australia. The accomplishment of our staff is reflected by the consistent contribution they make to the prestigious Nature science index and by the fact five are listed in the prominent 2018 Clarivate Highly Cited Researchers List.

A corner stone of the Institute is the strong emphasis on ensuring our discovery science has impact by translating our research discoveries to meet industry, community and clinical needs. The Institute has generated more than 30 patent families and has spun out multiple companies. The impact of our work is illustrated by two biopharmaceutical companies founded in the Institute, Protagonist Therapeutics Ltd and Inflazome Ltd. The former company entered into a \$1 B worldwide agreement to co-develop a drug for inflammatory bowel disease and the latter recently received \$70 M to develop treatments for inflammatory diseases. Our ambition to strengthen our translational portfolio continues. For example, in the last 12 months researchers from the IMB:

- were part of a successful push to put endometriosis on the national agenda to improve understanding, treatment and support of this debilitating disease
- identified genetic factors contributing to the risk of developing diseases like endometriosis and motor neurone disease, advancing our understanding of these disorders on a global scale
- discovered a new type of cell in the brain that mops up cellular waste and may provide protection against stroke and dementia

- discovered a small protein in spider venom that could prevent the devastating brain damage caused by stroke
- discovered we could shrink brain tumours using existing breast cancer treatments
- found a promising potential treatment for breast cancer that blocked cancer spread and improved survival rates in models
- discovered a molecular trigger for inflammation that could lead to new treatments for rheumatoid arthritis, inflammatory bowel disease and neurodegenerative diseases
- furthered research in development of new medicines for treating inflammatory diseases, including allergies, by building molecular switches that can control immune response
- as part of a global team, identified a new gene behind a rare form of inherited childhood kidney disease
- combated superbugs by creating a new diagnostic, repurposing old drugs and continuing to crowdsource the next antibiotic
- developed the first new therapy in over 30 years to be used successfully in patients to treat antibiotic resistant infections
- helped an Australian family-owned company create the first mass-produced organic insecticide from peptides found in the Butterfly Pea plant
- initiated a program to use algae to produce clean water, livestock feeds, foods, fuels and medicines

IMB's research outcomes are protected and commercialised by UQ-owned technology transfer group UniQuest.

Details of the research interests of the Institute may be accessed on the Institute's website at: <https://imb.uq.edu.au/>

Information for Prospective Staff

The Institute recognises 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.

IMB 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.

Specific initiatives at IMB can be found at (<https://imb.uq.edu.au/about/equity-and-diversity-imb>)

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

Participating on the research program of the team through its establishment and achievement in collaboration with the group leader. Additional participation of the management of the laboratory will happen through the mentoring of students that will further enable the development of applicants' competencies.

Duties

Duties and responsibilities include, but are not limited to:

Teaching and Learning

- Supervise at honours and postgraduate level

Research

- Contribute to the research program of the team, focussing on the role of the circadian clock, feeding rhythms, and endocrine and nervous signals on rhythmic liver physiology. It requires competencies in biochemistry, molecular biology, animal behaviour, endocrinology, and data analysis.
- Conduct research and publish scholarly papers
- Work with colleagues and postgraduates in the development of joint research projects.

Service and Engagement

- Additional administrative duties 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 group leader.

SELECTION CRITERIA

Essential

- PhD in the area of Biology or Biochemistry with relevant research experience in the area of circadian biology, molecular biology, and endocrinology
- Proven track record for the performance and analysis of omics data
- Expertise in behavioral studies, stress and metabolism research using rodent models
- Ability to show productivity demonstrated by scientific publications in high rank journals and successful application for grants and/or fellowships
- Experience with working in teams, as well as demonstrated ability to work independently
- Commitment to upholding the University's values, and with the outstanding personal qualities of openness, respectfulness and integrity

Desirable

- Prior experience with clinical studies

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 IMB HR.