POSITION DESCRIPTION

Position Title: Postdoctoral Research Fellow
Organisation Unit: School of Biomedical Sciences
Position Number: 3048630
Type of Employment: Full Time, Fixed Term
Classification: Academic Research 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 CWTS Leiden Ranking (32), the Performance Ranking of Scientific Papers for World Universities (43), the US News Best Global Universities Rankings (42), QS World University Rankings (48), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (69). 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 itself is located in thriving Brisbane, a city consistently ranked as one of the world’s most vibrant and livable cities.

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 52,000-plus strong student community includes more than 16,400 postgraduate scholars and more than 15,400 international students from 135 countries, adding to its proud 250,000-plus alumni. The University has more than 6,600 academic and professional staff (full-time equivalent) and a $1.75 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 $11 billion+ (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

UQ’s Faculty of Medicine and The School of Biomedical Sciences

The University of Queensland’s Faculty of Medicine is an internationally recognised provider of world-class education and research. The Faculty possesses enormous strengths spanning research, teaching, industry engagement and clinical practice in disciplines ranging from the basic sciences, biomedical research and development, to clinical trials and public health. Its cutting-edge facilities enable outstanding research outcomes and sharpen our understanding of cancer, autoimmunity, mental disorders, infectious diseases and neurological disease. Further details are available at www.medicine.uq.edu.au.

The School of Biomedical Sciences is a distinguished centre for research and teaching in the academic disciplines of Anatomy, Developmental Biology, Physiology, Pharmacology, Neuroscience, and Pathology. The School has over 40 full-time research and teaching staff, and is one of the largest Schools of this type in Australia. It plays a vital role as a nexus between teaching and the activities of research-only institutes both within and outside of the Faculty of Medicine (Institute of Molecular Bioscience (IMB), Queensland Brain Institute (QBI), Australian Institute for Bioengineering and Nanotechnology (AIBN)), serving the broader goal of training the next generation of biomedical scientists and the translation of research into clinical practice. Our diverse and state-of-the-art research provides an exciting environment for national and international research fellows and higher degree students. Details of the research interests of academic staff may be accessed on the school’s web site at http://www.uq.edu.au/sbms/.

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 the Position

The main aim of this position is to establish a research project that investigates the influence of membrane proteins on cardiac function. The work will involve establishing dietary models of disease states, membrane fractionation, editing of plasmids to generate novel adeno-associated viruses, management of animal colonies including ensuring compliance with animal ethics and office for gene technology regulation.

Primary Responsibilities

- Management of animal colonies including genotyping, liaising with University of Queensland Biological Resources (UQBR) staff, and maintaining compliance with the animal ethics committee (AEC).
- Edit plasmids to develop new strategies for targeting cardiac cells for gene modification
- Establish new models of diseases that contribute to cardiac dysfunction.
- Undertake molecular analysis to evaluate changes in sarcolemmal proteins in diseases that contribute to cardiovascular disease
- Assist with the preparation of manuscripts for peer-reviewed publication, and also summarising and visualisation of data for presentations at e.g. seminars, conferences and meetings;
- Apply for relevant funding opportunities to further expand the research portfolio;
- Assist with the training and supervision of research higher degree students;
- Any other duties (including but not limited to making solutions, autoclaving, ordering) 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 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

This position reports to Dr Melissa Reichelt.
KEY SELECTION CRITERIA
(Qualifications, Experiences, Skills, Abilities and Personal Qualities)

Essential

- PhD in cardiovascular research, including in assessment of the role of membrane proteins in the development of cardiovascular dysfunction;
- Experience with management of animal experiments including ordering, planning of animal treatments and experiments;
- Expertise in the preparation of dietary interventions in the development of animal models of cardiac disease.
- Ability to undertake sub-cellular analysis of cellular function.
- Evidence of high-level contribution to research, including an established track record of peer-reviewed publications, technical reports and/or workshops;
- Ability to work both independently and within a team environment; excellent communication, interpersonal and organisational skills.

Desirable

- Expertise in cloning, mutagenesis and gene editing;
- Previous lab experience with cell culture.
- Willingness to participate in ongoing training, learn and develop new techniques;
- Self-motivated and resourceful, use initiative when approaching experimental and scientific problems.

Applicants invited for interview may be asked to present an overview of any previous research they have conducted in conjunction with the selection/interview process.

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 for further information and points of contact if you require additional support.

This role is a full-time position.

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