POSITION DESCRIPTION

Position Title: Postdoctoral Research Fellow in Muscle Physiology.
Organisation Unit: School of Biomedical Science
Position Number: New
Type of Employment: Full-time Fixed Term for 12 months with possible extension up to 3 years.
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 well within the top 100 universities worldwide, measured through a number of major independent university rankings: the Academic Ranking of World Universities, Times Higher Education World University Rankings, US News Best Global Universities Rankings, QS World University Rankings and Performance Ranking of Scientific Papers for World Universities, and is indeed in the top 50 in some of these rankings. In 2013, UQ attracted more Australian Research Council funding than any other Australian university or research body.

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 Australian Teaching and Learning Council Awards for Teaching Excellence 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, and a founding member of Universitas 21, an international consortium of leading research-intensive universities. UQ is also the largest university in Queensland.

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 215,000-plus alumni. The University has more than 7,000 academic and professional staff and a $1.6 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.

Organisational Environment

Faculty of Medicine and Biomedical Sciences

Medicine and Biomedical Sciences (M+BS) is a research-intensive Faculty and incorporates the Schools of Medicine, Biomedical Sciences and Public Health as well as major hospital-based research centres including the UQ Centre for Clinical Research, UQ Child Health Research Centre, UQ Diamantina Institute, Mater Medical Research Institute-UQ and the Centre for Integrated Preclinical Drug Development. These three research intensive schools and hospital-based institutes and centres achieve broad coverage of the 'translational pipeline' linking the pre-clinical and clinical sciences with population and global health.

The Faculty has a budget in excess of $275M, employs approximately 900 continuing and fixed-term staff, has a community of more than 3,500 non-salaried academic appointees and has around 4,000 students (EFTSL).

M+BS possesses enormous strengths spanning research, teaching, industry engagement and clinical practice in disciplines ranging from basic biomedical sciences, biomedical research and development, to clinical trials and public health. Cutting-edge facilities such as the $25 million Herston Imaging Research Facility and our laboratories in the Translational Research Institute sharpen our understanding of cancer, autoimmunity, mental disorders, infectious diseases and neurological disease.

We discover. We innovate. We lead.

The School of Biomedical Sciences is a distinguished centre for teaching and research in the academic disciplines of Anatomy, Developmental Biology, Physiology, and Pharmacology. The School has over 40 full-time research and teaching staff and is one of the largest Schools of this type in Australia. It has links to other prestige research centres on the St Lucia campus which include the Queensland Brain Institute (QBI), The Institute of Molecular Bioscience (IMB) and The Australian Institute for Bioengineering and Nanotechnology (AIBN). 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/

In addition to its graduate research programs, the School teaches undergraduate students in Science, Medicine, and Health Sciences.

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 conduct research in calcium handling and heat generation in skeletal muscle fibres. The position will lead and develop innovative research projects investigating the way that the ryanodine receptors regulate the movements of calcium in muscle fibres with relevance to how this generates heat for thermoregulation in mammals.

Duties

Duties and responsibilities include, but are not limited to:

Research

- Conduct research to delineate calcium signalling mechanisms regulating heat generation and the maintenance of Ca\(^{2+}\) homeostasis in muscle fibres from a range of taxa, including toad, rat, mouse and human.
- Conduct research and publish scholarly papers in international journals.
- Present research progress and findings at all levels – laboratory, school, national and international meetings.
- Contribute to a safe and collegiate laboratory working environment.
- Supervise undergraduate students and junior members of the laboratory.
- Contribute as a positive and collaborative member of a wider research group within the Muscle Research Laboratory and within the School of Biomedical Science.
- Work with colleagues and postgraduates in the development of joint research projects.

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:

- 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

The position reports to Associate Professor Bradley Launikonis.
SELECTION CRITERIA

**Essential**
- PhD in Cell or Muscle Physiology, Biophysics, Neuroscience, or related discipline.
- Knowledgeable in common laboratory techniques in physiology and chemistry.
- Prior experience with fluorescence microscopy.
- Demonstrated productivity and contributions to research relative to opportunity in the form of published scholarly papers in internationally peer reviewed journals.
- Excellent communication skills including presentations at institutional, national and international meetings.
- The ability to develop relationships with colleagues in cognate disciplines and work collaboratively to achieve project objectives.
- The ability to work independently.

**Desirable**
- Demonstrated expert knowledge in processes that underpin the regulation of Ca\(^{2+}\) movements in cells, especially skeletal muscle fibres.
- Research experience with rodents or amphibians and muscle dissection techniques.
- Quantitative analysis of images obtained by confocal microscopes, mathematical modelling or similar.
- Experience with electrophysiology or force transducers.

**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 is committed to equity, diversity and inclusion.