



---

## POSITION DESCRIPTION

<b>Position Title:</b>	Postdoctoral Research Fellow
<b>Organisation Unit:</b>	School of Biomedical Sciences
<b>Position Number:</b>	NEW
<b>Type of Employment:</b>	Full-time, Fixed term for 2 years
<b>Classification:</b>	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 Performance Ranking of Scientific Papers for World Universities (45), the US News Best Global Universities Rankings (52), QS World University Rankings (51), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (60). UQ again topped the nation in the prestigious Nature Index; and secured a greater share of Australian Research Council grants in 2016 (\$24.5 million) than any other university nationally.

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 230,000-plus alumni. The University has about 7,000 academic and professional staff and a \$1.7 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 will have further success in this area as an important strategic aim going forward.

## **Organisational Environment**

### **The School of Biomedical Sciences**

The School of Biomedical Sciences is a distinguished centre for teaching and research in the academic disciplines of Anatomy, Developmental Biology, Physiology, Pharmacology 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 function at UQ in serving as the link between the activities of research only UQ institutes (Queensland Brain Institute (QBI), Institute of Molecular Bioscience (IMB), Australian Institute for Bioengineering and Nanotechnology (AIBN)) and the broader research goal of translating 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/>

In addition to its graduate research programs, the School teaches into the postgraduate medical program (MD), and to undergraduate students in a wide variety of courses in Science, and Health and Behavioural Sciences.

### **Faculty of Medicine**

The University of Queensland's Faculty of Medicine is an internationally recognised provider of world-class education and research. The research-intensive Faculty has a gross budget of almost \$300 million, employs approximately 1000 continuing and fixed-term staff (headcount), has a community of more than 4000 non-salaried academic appointees and around 3200 students (headcount).

The Faculty of Medicine offers Australia's largest medical degree program for graduates and school-leavers. Undergraduate and postgraduate programs are available in the disciplines of Medicine, Health Sciences, E-Health, Mental Health, Biomedical Sciences and Public Health.

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. Research projects within the Faculty have already led to discoveries with far-reaching social and economic impacts, including the revolutionary Gardasil (TM) vaccine for cervical cancer (Professor Ian Frazer) and a drug discovery EMA401 (Professor Maree Smith), a first-in-class oral treatment for chronic pain which through Spinaflex Pharmaceuticals led to Australia's largest biotechnology commercialisation deal. Faculty staff include three highly cited authors, one Fellow of the Royal Society (FRS), three Fellows of the Australian Academy of Science (FAA) and 12 Fellows of the Academy of Health and Medical Sciences (AAHMS). The Faculty is a core member of Brisbane Diamantina Health Partners, the Brisbane-wide academic health science system.

Educational offerings in biomedical sciences, medicine and public health are informed and supported by research activity across a range of fundamental and clinical areas of importance including recognised strengths in cancer, skin diseases, brain and mental health,

maternal and child health and genomics. Cutting-edge facilities such as the Herston Imaging Research Facility (HIRF), the UQ Centre for Clinical Research (UQCCR), our laboratories in the Translational Research Institute (TRI) and the new Centre for Children's Health Research (CCHR) 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](http://www.medicine.uq.edu.au).

## **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**

Perform top quality, high impact research on microglia biology across a range of settings; engineer novel in vitro and in vivo models to investigate microglia regulation of neural stem cells in development, ageing and neurotrauma.

### **Duties**

Duties and responsibilities include, but are not limited to:

#### **Research**

- Interrogation of microglia-derived factors regulating neural stem cells using in vivo and in vitro engineered mouse models;
- Develop novel solutions to rejuvenate aged/injured niches and their stem cells in these models;
- Conduct high impact research and publish in high impact scholarly papers;
- Secure independent funding for further expansion of research portfolio;
- Assist in the supervision and training of research higher degree students.

#### **Service and Engagement**

- Where applicable, 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 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 Jana Vukovic (Head, Neuroimmunology and Cognition Laboratory).

## **SELECTION CRITERIA**

### **Essential**

- PhD in one or more of the following areas:
  - Immunology;
  - Neurobiology;
  - Stem cell (pluripotent, iPSC, tissue resident) biology;
- Expertise in the following areas:
  - Immunology;
  - Neurobiology;
  - Stem cell biology;
  - Cutting-edge molecular biology techniques;
  - Use of genetic mouse models;
- Evidence of a contribution to research, including successful external grant applications and a publications record;
- An ability to establish effective relationships and to represent and promote academic discipline at a university and wider community level, including industry, government and professional bodies;
- Strong motivation with the ability to work independently and design / interpret experiments, with excellent organisational skills;
- Highly developed teamwork and communication skills including excellent written and interpersonal skills.

### **Desirable**

- Demonstrated experience with CRISPR and iPSC technology;
- Demonstrated experience with single cell sequencing and acquisition and integration of multi-omics data sets;
- Demonstrated experience with high throughput screening and molecular profiling;
- Demonstrated experience with flow cytometry;
- Demonstrated experience with mouse brain surgery;
- Demonstrated experience with mouse behavioural testing;

- Demonstrated experience with high-end microscopy and imaging tools and associated analysis.

**Seminar**

Applicants invited for interview may be expected to present a seminar 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.**

**Applications are particularly encouraged from Aboriginal and Torres Strait Islander peoples. For further information please contact our Australian Indigenous Employment Coordinator at: [atsi\\_recruitment@uq.edu.au](mailto:atsi_recruitment@uq.edu.au)**  
**Applications are also encouraged from women.**