



## POSITION DESCRIPTION

Department of Anatomy and Neuroscience  
Faculty of Medicine, Dentistry and Health Sciences

### Postdoctoral Research Fellow

POSITION NO	0043292
CLASSIFICATION	Research Fellow Grade 1, Level A
SALARY	\$69,148 - \$93,830 p.a.
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Standard business hours
BASIS OF EMPLOYMENT	Full time (fixed term) position available for 3 years Fixed term contract type: Research
OTHER BENEFITS	<a href="http://about.unimelb.edu.au/careers/working/benefits">http://about.unimelb.edu.au/careers/working/benefits</a>
HOW TO APPLY	Online applications are preferred. Go to <a href="http://about.unimelb.edu.au/careers">http://about.unimelb.edu.au/careers</a> , select the relevant option (‘Current Staff’ or ‘Prospective Staff’), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	A/Prof Stuart Mazzone Tel +61 3 8344 6457 <a href="mailto:stuart.mazzone@unimelb.edu.au">stuart.mazzone@unimelb.edu.au</a>  <i>Please do not send your application to this contact</i>

For information about working for the University of Melbourne, visit our website:  
[about.unimelb.edu.au/careers](http://about.unimelb.edu.au/careers)

## ***Position Summary***

An opportunity exists within the Department of Anatomy and Neuroscience, part of the Faculty of Medicine, Dentistry & Health Sciences, for a PhD qualified research scientist with specialised skills in small animal physiology and neuroscience. The Research Fellow will work in the respiratory sensory neuroscience laboratory headed by A/Prof Stuart Mazzone studying the organisation and function of sensory neural control circuits of the pulmonary system in health and disease using modern in vivo physiological systems and viral circuit mapping technologies. In doing so, they will make independent and original contributions, which expand knowledge and practice in the discipline and have a significant impact on the field. The Research Fellow will integrate into the research and scholarship activities of the laboratory, contributing to the preparation of successful funding applications and research publications and assisting with the supervision and training of research higher degree students.

### ***1. Key Responsibilities***

#### **1.1 RESEARCH & ADVANCEMENT OF THE DISCIPLINE**

- ▶ Design and conduct the required research effectively and efficiently in the time frame of the supporting funding and under limited supervision
- ▶ Develop effective timelines and milestones based on goals of the research program
- ▶ Independently plan and carry out experiments focused on completion of research project aims to meet agreed timelines and milestones
- ▶ Independently collect, manage and analyse quantitative data, prepare figures and reports for publications
- ▶ Publish and present research work in refereed journals, books, conference and seminars, reports etc.
- ▶ Maintain accurate experimental records and laboratory books
- ▶ Observe Occupational Health and Safety (OHS) Regulations with regard to storage, maintenance and disposal of all equipment, animals, chemicals and pharmaceutical products used in the laboratories

#### **1.2 SERVICE AND LEADERSHIP**

- ▶ Contribute to the research culture of the Department and host laboratory through attendance at meetings or seminars relevant to the Fellow's research outputs.
- ▶ Undertake an involvement in professional activities, including contributions to conferences and seminars in the field of expertise.
- ▶ Assist with the supervision of other research staff and students
- ▶ Contribute to the preparation and management of research grants and identification of sources of funding to support relevant individual or collaborative projects.

#### **1.3 ENGAGEMENT**

- ▶ Active participation in some outreach activities relating to research and scholarship
- ▶ Effective liaison with external networks to foster collaborative partnerships

- ▶ Seek opportunities to build the knowledge and expertise base in Australia to engage in the challenges of the discipline in Australia
- ▶ Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 5

## ***2. Selection Criteria***

### **2.1 ESSENTIAL**

- ▶ A PhD level qualification in neurobiology or physiology
- ▶ A developing research profile, in both independent research and as a member of a research team, as evidenced by data collection for, writing and publication of original research in peer-reviewed international journals, conference and seminar presentations and contribution to grant applications.
- ▶ Proven ability to plan, develop, prioritise and coordinate laboratory experiments
- ▶ Demonstrated excellence in neurobiological or physiological research using small animal systems, including animal surgery for instrumented and behavioural testing, and the management and analysis of data.
- ▶ Demonstrated capacity to work effectively in an interdisciplinary environment, contribute to the work of the research team and to interact in an effective, collegial and courteous manner with academic, administrative and support staff and students.
- ▶ Demonstrated high-level interpersonal and written communication skills, demonstrated strong work ethics.
- ▶ Awareness of OHS responsibilities and willingness to attend OHS training as required.

### **2.2 DESIRABLE**

- ▶ Experience with optogenetic, chemogenetic or other modern physiological methods used to interrogate neuronal function in vivo.
- ▶ An understanding of molecular biological, circuit tracing and viral vectors technologies.
- ▶ A solid understanding of mammalian neuroanatomy and demonstrated experience with quantitative fluorescent microscopy.

## ***3. Special Requirements***

- ▶ A willingness for flexibility in working hours for occasional weekend monitoring of experimental animals

## ***4. Key Responsibilities***

The position description should be read alongside [Academic Career Benchmarks and Indicators](#).

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## ***5. Equal Opportunity, Diversity and Inclusion***

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous strive to service for excellence and reach the targets of Growing Esteem.

## ***6. Occupational Health and Safety (OHS)***

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

<http://safety.unimelb.edu.au/topics/responsibilities/>

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

## ***7. Other Information***

### **7.1 DEPARTMENT OF ANATOMY AND NEUROSCIENCE**

<http://biomedsciences.unimelb.edu.au/departments/anatomy-and-neuroscience>

Our research in neuroscience, cell and developmental biology, and anatomical sciences aims to understand fundamental biological mechanisms in order to develop new treatments for injury and disease states. Our researchers are located in the Medical Building and the Melbourne Brain Centre, and include research teams from Stem Cells Australia and the Melbourne Brain Centre Imaging Unit. The Department has excellent research facilities, including confocal, fluorescence and live cell imaging microscopes, laser capture dissection, tissue culture facilities, an excellent histology laboratory and a new molecular biology suite. Our Department also hosts the Australian Phenomics Network Histopathology and Organ Pathology Service, providing detailed histological phenotyping and digital scanning of data from mutant mice. The synergy between these activities provides a vibrant environment for undergraduate and postgraduate training,

and a friendly and supportive intellectual community to encourage development of early career researchers.

## 7.2 FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES

[www.mdhs.unimelb.edu.au](http://www.mdhs.unimelb.edu.au)

The Faculty of Medicine, Dentistry and Health Sciences (MDHS) plays a vital role in the delivery of the University of Melbourne's Strategic Plan 2015-2020: Growing Esteem by providing current and future generations with education and research equal to the best in the world. It is Australia's largest and leading biomedical research faculty. It employs more than 1,700 members of staff, has more than 8,000 students, and total revenue of \$628 million for 2015. Reflecting the complexity of today's global health landscape, the Faculty is made up of six different Schools and four Strategic Research Initiatives, and draws together all areas of human health, ranging from the most basic to the most applied areas of research. The Faculty contributes close to 50 per cent of research conducted at the University.

The Faculty has appointed Australia's first Associate Dean (Indigenous Development) to lead the development and implementation of the Faculty's Reconciliation Action Plan (RAP), which will be aligned with the broader University-wide plan. To enable the Faculty to improve its Indigenous expertise knowledge base, the Faculty's RAP will address Indigenous employment, Indigenous student recruitment and retention, Indigenous cultural recognition and building partnerships with the Indigenous community as key areas of development.

## 7.3 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at <http://about.unimelb.edu.au/careers>.

## 7.4 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. <http://about.unimelb.edu.au/strategy-and-leadership>

The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree,

research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.

The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs.

<http://research.unimelb.edu.au/our-research/research-at-melbourne>

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

- ▶ Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.
- ▶ Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.
- ▶ Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security, sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of Research at Melbourne: Ensuring Excellence and Impact to 2025.

## 7.5 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at <http://www.unimelb.edu.au/governance>