



# **RESEARCH FELLOW**

**DEPARTMENT/UNIT** Department of Physiology

FACULTY/DIVISION Faculty of Medicine, Nursing and Health Sciences

CLASSIFICATION Level A

WORK LOCATION Clayton campus

## **ORGANISATIONAL CONTEXT**

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

The **Faculty of Medicine, Nursing and Health Sciences**, is the largest faculty at Monash University, and offers the most comprehensive suite of professional health training in Victoria. We consistently rank in the top 40 universities worldwide for clinical, pre-clinical and health sciences.

We want to improve the human condition. That is our vision - it has no expiration date. Through academic health centres, other translational models and by educating the healthcare workforce of the future, our staff, students and alumni directly improve quality of life.

Setting the global health care agenda, the Faculty aspires to lead in all areas of research activity and influence local, national and international policy to improve health and social outcomes and health inequalities. We've made a major impact in the world of medical research and become globally recognised for our quality education of over 41,000 doctors, nurses, and allied health professionals.

We are ambitious and aim to maintain our position as a leading international medical research university. We're recognised for the breadth and depth of our research, for our commitment to translational research, for the quality and scale of our research capability, and as a thriving biotechnology hub.

To learn more about the Faculty, please visit monash.edu/medicine.

The Monash Biomedicine Discovery Institute (BDI) is one of the largest and most dynamic biomedical research and teaching environments in Australia. The Institute and its cognate Departments of Anatomy and Developmental Biology, Biochemistry and Molecular Biology, Microbiology, Pharmacology and Physiology comprise over 120 research groups and deliver discipline-focused teaching into our flagship Bachelor of Biomedical Science Degree, the Bachelor of Science Degree, as well as the Medical School and various Health-related Degree Programs. We pride ourselves on an excellent and evolving teaching curriculum and provide world-class teaching and learning space for Biomedical Sciences.

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The BDI comprises six inter-disciplinary health-focused research Programs, each led by a renowned leader in the field. The BDI programs include Infection and Immunity, Cancer, Cardiovascular Disease, Development and Stem Cells, Metabolism, Diabetes and Obesity and Neuroscience. The BDI works closely with clinical and drug development precincts at Monash and has a number of major industry partnerships to facilitate the translation of our research.

For more information about the BDI please visit our website at www.monash.edu.au/discovery-institute.

The **Department of Physiology** is one of five Departments of the School of Biomedical Sciences. Its goal is to further knowledge in the field of animal physiology and to communicate that knowledge effectively to students, professionals in the field and to the community at large. The Department seeks to achieve these objectives by conducting vigorous and expanding research programs, and by fostering excellence in teaching.

Research within the Department of Physiology covers a wide range of integrative, cellular and molecular physiology, with particular strengths in sensory and systems neurosciences, cardiovascular and renal physiology, and metabolic disease. It is anticipated that the Department will play an important role in providing research underpinning the new heart hospital to be built on the Clayton Campus.

Further details about the department can be found at: <a href="www.med.monash.edu.au/physiology/">www.med.monash.edu.au/physiology/</a>.

## **POSITION PURPOSE**

A Level A research-only academic is expected to contribute towards the research effort of the University and to develop their research expertise through the pursuit of defined projects relevant to the particular field of research.

A postdoctoral position is available for a highly motivated researcher in the Pain Mechanisms Laboratory in the Department of Physiology. Our group investigates signalling changes that happen within pain circuits during the development of chronic pain. Our goal is to understand these pathological adaptations in order to discover new therapeutic targets and more effective analgesics.

The successful incumbent will be working on innovative research projects to identify pathological changes in nociceptive circuits and pharmacological modulation of signalling in rodent models of chronic pain. This role will investigate synaptic transmission and circuit activity using slice electrophysiology, neuropharmacology, calcium imaging, and optogenetics.

The Research Fellow - Physiology will be expected to contribute to and develop research projects within the research team, and produce high-quality publications.

Reporting Line: The position reports to Head of Pain Mechanisms Laboratory

**Supervisory Responsibilities:** This position provides co-supervision of Honours, Masters or PhD students

Financial Delegation: Not applicable

**Budgetary Responsibilities:** Not applicable

## **KEY RESPONSIBILITIES**

Specific duties required of a Level A research-only academic may include:

- 1. The conduct of research under limited supervision either as a member of a team or, where appropriate, independently and the production or contribution to the production of conference and seminar papers and publications from that research
- 2. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
- 3. Limited administrative functions primarily connected with the area of research of the academic

- **4.** Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff
- 5. Occasional contributions to teaching in relation to their research project(s)
- **6.** Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures
- 7. Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental, school and/or faculty meetings and/or membership of a limited number of committees
- 8. Advice within the field of the staff member's research to postgraduate students

# **KEY SELECTION CRITERIA**

### **Education/Qualifications**

- 1. The appointee will have:
  - A doctoral qualification in neuroscience, physiology, pharmacology; or
  - a related discipline from a recognised university or equivalent qualifications and research experience in the area

#### **Knowledge and Skills**

- 2. Demonstrated analytical and manuscript preparation skills
- **3.** Ability to solve complex problems by using discretion, innovation and the exercise diagnostic skills and/or expertise
- **4.** Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines
- **5.** Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents
- 6. A demonstrated awareness of the principles of confidentiality, privacy and information handling
- 7. A demonstrated capacity to work in a collegiate manner with other staff in the workplace
- **8.** Demonstrated computer literacy and proficiency in the production of high level work using software such as Microsoft Office applications, basic analysis software (eg: graphpad prism) and specified University software programs, with the capability and willingness to learn new packages as appropriate
- **9.** Expertise in patch-clamp electrophysiology (documented evidence of this skill, for example: publications, thesis chapters or manuscripts in preparation will be requested for shortlisted applications)

## OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted

# **LEGAL COMPLIANCE**

Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.