



RESEARCH OFFICER

DEPARTMENT/UNITBiochemistry and Molecular Biology

FACULTY/DIVISION Medicine, Nursing, and Health Sciences

CLASSIFICATION HEW Level 5

DESIGNATED CAMPUS OR LOCATION Clayton campus

ORGANISATIONAL CONTEXT

Monash is a university of transformation, progress and optimism. Our people are our most valued asset, with our academics among the best in the world and our professional staff revolutionising the way we operate as an organisation. For more information about our University and our exciting future, please visit 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 www.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.

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/discovery-institute.

The **Department of Biochemistry & Molecular Biology** is the largest of the five departments in the School of Biomedical Sciences. Biochemistry and molecular biology are closely-related disciplines which study the chemical components of living cells, including the genetic material, in order to understand biological processes and how these are altered in disease.

Research and teaching in the department encompasses six broad themes: cell biology, signal transduction, host/pathogen interaction, structural biology, immunology and developmental biology. Our research is highly relevant to major human diseases and pathological processes, including infection, inflammation, diabetes and obesity, developmental and degenerative disorders, cardiovascular disease, and cancer. The Department has been ranked as the premier Department in its discipline since the inception of ARC benchmarking of Australian Departments in 1998.

For more information about the Department of Biochemistry & Molecular Biology, please visit our website at www.monash.edu/discovery-institute/departments/biochemistry-and-molecular-biology.

The goal of the **Signalling Network Laboratory** is to characterise - at the molecular level - how cell signalling is altered in cancer, and thereby identify novel therapeutic strategies for particular poor prognosis human cancers, as well as biomarkers that aid classification of patients towards optimal treatments. The laboratory utilizes a variety of biochemical and imaging approaches to characterize cancer cell signalling networks, in combination with 2D and 3D cell culture, organoid and mouse models of cancer.

For more information about the Signalling Network Laboratory, please visit our website at www.monash.edu/discovery-institute/daly-lab/home.

POSITION PURPOSE

The Research Officer provides a variety of high-quality research services to support the operations of the Signalling Network Laboratory. The Research Officer performs a range of research activities to support the delivery of program outcomes in mechanistic and functional characterization of cancer cell signalling networks. This includes undertaking: experimental work including mammalian cell culture, gene overexpression/knockdown, associated biological assays, and biochemical characterization of signalling; analysis of mouse models of cancer; and administrative tasks, while ensuring a compliant and safe research environment.

The Research Officer operates with a focus on excellence in process and judgment and provision of sound and timely advice and support to laboratory researchers and the Head, Signalling Network Laboratory.

Reporting Line: The position reports to the Head, Signalling Network Laboratory

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

1. Support the achievement of research outcomes by undertaking a range of research and administrative support tasks including scheduling bookings, administering experiments, treatments or questionnaires, data collection, input and analysis and preparing results in accordance with established research objectives, timeframes and protocols

- **2.** Keep abreast of developments, activities and protocols in area of expertise through liaison with staff and peers, reading relevant literature and attending meetings and seminars
- **3.** Assist in preparing documentation reports and other documentation, including undertaking literature reviews and data analysis
- 4. Comply with established research methodology, policy, protocols, OHS and regulatory requirements
- **5.** Participate in and implement continuous improvement activities relating to project, research or technical procedures and quality assurance standards
- **6.** Maintain open and effective channels of communication with colleagues, research collaborators and other stakeholders to support and facilitate research objectives
- 7. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

- 1. The appointee will have:
 - A tertiary qualification in a relevant field (Honours in Biochemistry or similar biomedical science field is preferred); or
 - substantial relevant skills and work experience; or
 - an equivalent combination of relevant experience and/or education/training.

Knowledge and Skills

- **2.** Sound analytical, technical and data analysis skills and a demonstrated capacity to apply effective technical methods, processes and systems
- **3.** Demonstrated project administration skills with the ability to prioritise multiple tasks, manage time, plan work to meet deadlines and support research projects in accordance with agreed standards and timeframes
- **4.** Proven ability to work independently under general supervision in a research environment and a demonstrated capacity to work as an effective member of a research team and/or in a collegiate manner with other staff in the workplace
- 5. Strong attention to detail and accuracy with a proven ability to adhere to protocols, standards and guidelines, including an understanding of confidentiality, privacy, information handling and research ethics principles
- **6.** Well-developed communication skills, including the ability to draft a range of documentation relevant to laboratory-based research
- **7.** A high level of computer literacy, including demonstrated experience in learning and adopting new software packages as required
- **8.** Knowledge and experience in mammalian cell biology, including manipulation of gene expression by techniques such as transfection, knockdown and knockout (CRISPR), analysis of signalling pathway activation and relevant biological assays (eg for proliferation) is required
- 9. Experience in use of mouse models of cancer, such as xenograft models, is preferred but not essential

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

GOVERNANCE

Monash University expects staff to appropriately balance risk and reward in a manner that is sustainable to its long-term future, contribute to a culture of honesty and integrity, and provide an environment that is safe, secure and inclusive. Ensure you are aware of and adhere to University policies relevant to the duties undertaken and the values of the University. This is a standard which the University sees as the benchmark for all of its activities in Australia and internationally.