



# RESEARCH FELLOW (CANCER FUNCTIONAL GENOMICS)

**DEPARTMENT/UNIT** Department of Biochemistry & Molecular Biology

FACULTY/DIVISION

Medicine, Nursing and Health Sciences /School of Biomedical

Sciences

**CLASSIFICATION** Level A

**DESIGNATED CAMPUS OR 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 <a href="https://www.monash.edu">www.monash.edu</a>.

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 centers, 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.

Further details about the department can be found at <a href="www.monash.edu/discovery-institute/departments/biochemistry-and-molecular-biology">www.monash.edu/discovery-institute/departments/biochemistry-and-molecular-biology</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.

The **Research Fellow (Cancer Functional Genomics)** will undertake research and study the effect of heritable DNA on cancer predisposition. The project will involve the use of new CRISPR based base editors for high throughput introduction of cancer variants and measuring phenotypes they mediate in various cancer models. This position will contribute to combine methods in advanced molecular biology, genetics, high throughput screening and next generation sequencing.

Reporting Line: The position reports to the Chief Investigator of the grant

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

**Budgetary Responsibilities:** Not Applicable

### **KEY RESPONSIBILITIES**

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

- 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.** Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures
- **5.** 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
- 6. Advice within the field of the staff member's research to postgraduate students
- 7. Other duties as directed from time to time

### **KEY SELECTION CRITERIA**

# **Education/Qualifications**

- **1.** The appointee will have:
  - A doctoral qualification in the relevant discipline or a closely related field.

### **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 and specified University software programs, with the capability and willingness to learn new packages as appropriate
- 9. Previous experience with CRISPR and genome editing is not required but is an advantage
- 10. Previous experience with cancer models is not required but is an advantage

### 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.