



RESEARCH OFFICER

DEPARTMENT/UNITBiochemistry and Molecular Biology

FACULTY/DIVISION Faculty of Medicine, Nursing and Health Sciences

CLASSIFICATION HEW Level 5

WORK 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 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.

Modified date: August 2018

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 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 www.med.monash.edu.au/biochem/.

POSITION PURPOSE

The Research Officer operates with a focus on excellence in process and judgment and provision of sound and timely advice and support to researchers and other stakeholders.

Reporting Line: The position reports to Professor Nicole La Gruta

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budget Responsibilities: Not applicable

KEY RESPONSIBILITIES

- 1. Contribute to the daily operational activities of the La Gruta research laboratories, including the application of specialised research techniques, and each of the following as they relate to the individual's research: administration, infrastructure, budget and resource management, supply and equipment management, regularity compliance, and induction of staff and students
- 2. Contribute to the maintenance of complex high-value research data management system/service (plasmid, antibody and mouse databases)
- **3.** Perform GMO mouse care and husbandry, in particular the specialised breeding, genotyping and maintenance of mouse lines
- **4.** Assist with administrative duties such as submission of animal ethics and OGTR approvals and with general laboratory duties including maintenance of the laboratory and equipment and ordering of supplies
- **5.** Conduct experiments independently and in consultation with supervisors, including preparation, sampling, data collection and analysis and preparing results
- **6.** Contribute to interdisciplinary projects with Post-Doctoral Researchers, Research Assistants and research students within the laboratories and wider research groups
- 7. Show ability to perform experimental techniques accurately and reproducibly
- 8. Maintain accurate and detailed records of all experiments conducted
- 9. Contribute to teaching and training of students and new laboratory staff as required

KEY SELECTION CRITERIA

Education/Qualifications

- 1. The appointee will have:
 - A tertiary qualification in Immunology and Biochemistry; or
 - substantial relevant skills and work experience; or
 - an equivalent combination of relevant experience and/or education/training

Knowledge and Skills

- **2.** Well-developed organisational and time management capability, including the ability to engage and deliver to project objectives, deadlines and within budget parameters
- **3.** Demonstrated ability to work autonomously and within a productive team environment; as well as guiding staff and students in relation to laboratory procedures and outputs. This includes but is not limited to contributing to writing and updating SOPs, OGTR compliance, animal ethics, laboratory ordering, maintaining laboratory stocks
- **4.** Demonstrated ability to effectively analyse information and produce clear, succinct reports and documents to communicate ideas, research outcomes or concepts
- **5.** Some experience with cellular immunology, virology and/or molecular biology techniques, including but not limited to:
 - Mouse models of infection (including mouse handling and husbandry, preparation of tissues for genetic screening, and mating programs), lymphoid and non-lymphoid tissue harvesting and preparation, virus/bacterial infection, influenza A virus growth and titration, influenza A virus reverse genetics, intracellular and cell surfacing staining techniques, flow cytometry and analysis; experience with handling human blood samples and some experience with human T cell culture; generation and use of MHC tetramer reagents; recombinant DNA technologies (including but not limited to DNA, RNA extraction, cDNA synthesis, mRNA preparation, DNA transfection, RT-PCR, Sanger sequencing, magnetic enrichment of cells)
- 6. A reasonable level of computer literacy, including the ability to learn new software packages as required

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.