



RESEARCH FELLOW

DEPARTMENT/UNIT	Monash Biomedicine Discovery Institute
FACULTY/DIVISION	Faculty of Medicine, Nursing and Health 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 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 Anatomy and Developmental Biology** is one of five departments of the School of Biomedical Sciences. It is one of the strongest research and teaching departments in the field. Staff and students are accommodated in high quality research space with easy access to all of Monash university's research platforms. Areas of research expertise include renal and lung biology, epithelial and reproductive biology, inflammation, embryology, cancer, stem cell biology and regenerative medicine.

The department is responsible for the delivery and coordination of the developmental biology major within the BSc course, and the teaching of human anatomy in the medical, physiotherapy, radiography, biomedical science and science degrees (including a major in developmental biology). Teaching is conducted at both the undergraduate and postgraduate levels.

Further details about the department can be found at: www.monash.edu/discovery-institute/departments/anatomy-and-developmental-biology.

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 primary purpose of this position is to establish, execute and perform experimental techniques relating to super resolution, light-sheet microscopy and advanced fluorescence techniques including life-times and anisotropy. The problems that these techniques will address are endosomal trafficking and self-organisation in biology.

Reporting Line: The position reports to the Senior Research Fellow, Anatomy and Developmental Biology

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:

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) and training of students

6. Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures with appropriate training and supervision
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. Manage or provide significant assistance to the operations of a research laboratory or field station including maintaining laboratory equipment and materials, the disposal of waste and the ordering of supplies
9. Comply with University policy, procedure and protocols in relation to the nature of the research being conducted
10. Standardise and document protocols generated in the lab and publish technical papers when appropriate
11. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - A degree in Optical physics or Micro and Nano systems, from a recognised university with subsequent relevant experience in experimental research with an emphasis on building optical set-ups, time-resolved measurements, using advanced techniques to image biological samples, programming and analysis

Knowledge and Skills

2. Demonstrated analytical and manuscript preparation skills; including a track record of refereed research publications and experience in grant writing
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. Knowledge of High-Performance Liquid Chromatography, Nuclear Magnetic Resonance and Differential Scanning Calorimetry, protein purification
10. Knowledge of Protein expression, purification, labelling, UV—vis spectrometry, and enzyme kinetics

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.