RESEARCH FELLOW

DEPARTMENT/UNIT Drug Discovery Biology

FACULTY/DIVISION Faculty of Pharmacy and Pharmaceutical Sciences

CLASSIFICATION Level A

DESIGNATED CAMPUS OR LOCATION Parkville 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 Pharmacy and Pharmaceutical Sciences is dynamic, innovative and ambitious, engaging in world-class research and being a leading education provider for over 130 years. We have two key research initiatives: the Monash Institute of Pharmaceutical Sciences and the Centre for Medicine Use and Safety, in which we engage some of the best equipped and most experienced pharmaceutical scientists in Australia. From a teaching perspective, our education curriculum - comprised of undergraduate, postgraduate and higher degrees by research programs - is purpose designed for the study of pharmacy and pharmaceutical science and taught by discipline experts. Our premises are located in 'the Parkville Strip', Australia's premier health and biomedical precinct, and offer world-class teaching facilities and research laboratories to our students and staff. To learn more about the Faculty, please visit our website: www.monash.edu/pharm/.

The Drug Discovery Biology (DDB) research teams within the Monash Institute of Pharmaceutical Sciences (MIPS) comprise a critical mass of scientists with broad expertise in receptor-molecular and cellular biology, whole-animal studies and translational discovery research.

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 performs a range of research-related activities (including administrative and operational responsibilities) to support the delivery of research program outcomes. Working under broad direction, the position is responsible for performing a range of drug discovery research-related activities, with a particular focus on membrane protein biochemistry, structural biology (particularly cryo-EM), structure-function, and biophysical
studies of GPCRs, in addition to support and delivery of outcomes that may involve administrative, financial and other activities associated with the research program.

**Reporting Line:** The position reports to the Associate Professor within the Drug Discovery Biology Theme

**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)

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

9. Other duties as directed from time to time

**KEY SELECTION CRITERIA**

**Education/Qualifications**

1. The appointee will have:
   - A doctoral qualification in membrane protein biochemistry, cryo-EM, or a related discipline; or
   - equivalent qualifications or research experience

**Knowledge and Skills**

2. Experience in the expression and purification of integral membrane proteins and the study of protein-protein interactions with specific experience on GPCRs

3. Experience in the application of cryo-EM for determination of high-resolution protein structure, including with reconstruction of 3D electron density maps of proteins

4. Evidence of an ability to independently interpret protein structure, protein-protein interaction and drug-protein binding

5. Demonstrated analytical and manuscript preparation skills; including a track record of refereed research publications

6. Ability to solve complex problems by using discretion, innovation and the exercise diagnostic skills and/or expertise
7. Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines

8. Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents

9. A demonstrated awareness of the principles of confidentiality, privacy and information handling

10. A demonstrated capacity to work in a collegiate manner with other staff in the workplace

11. 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

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
- Travel to Astex Structural Biology Group in Cambridge, United Kingdom for 2 months in the second and third years of the fellowship will be required
- There may be a requirement to travel to project partners interstate and overseas

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.