RESEARCH FELLOW – STRUCTURAL BIOLOGY

DEPARTMENT/UNIT Drug Discovery Biology

FACULTY/DIVISION Faculty of Pharmacy and Pharmaceutical Sciences

CLASSIFICATION Level B

WORK 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 B research-only academic is expected to carry out independent and/or team research within the field in which they are appointed and to carry out activities to develop their research expertise 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 structural biology, structure-function, and biophysical studies within GPCR drug discovery projects, in addition to support and delivery of outcomes that may involve administrative, financial and other activities associated with the research program. The position supports both academic and commercial research projects.
Reporting line: The position reports to Professor within the Drug Discovery Biology Theme and the Head of Servier Drug Discovery Program

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budget Responsibilities: Not applicable

KEY RESPONSIBILITIES

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

1. The conduct of research either as a member of a team or independently and the production of conference and seminar papers and publications from that research

2. Supervision of research-support staff involved in the staff member’s research

3. Guidance in the research effort of junior members of research-only Academic staff in their research area

4. Contribution to the preparation or, where appropriate, individual preparation of research proposal submissions to external funding bodies

5. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise

6. Administrative functions primarily connected with their area of research

7. Occasional contributions to the teaching program within the field of the staff member’s research

8. Co-supervision or, where appropriate, supervision of major honours or postgraduate research projects within the field of the staff member’s area of research

9. 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

10. Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures

11. Adherence to occupational health and safety requirements of the organisation, including awareness of risk, risk assessment, and the identification and completion of training appropriate for required experimental work

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
   - A Ph.D. degree or equivalent qualifications/experience in structural biology, biochemistry or a related discipline from a recognised university or equivalent qualifications and research experience

Knowledge and Skills

2. Extensive previous research experience in structural biology, including use of appropriate software to examine protein structure, and x-ray or electron microscopic density maps

3. Experience in the expression and purification of integral membrane proteins and the study of protein-protein interactions

4. Extensive experience in application of single particle cryo-electron microscopy to derive high-resolution protein structure
5. Demonstrated statistical analysis and manuscript and research proposal preparation skills; including a solid track record of refereed research publications

6. Experience in successfully supervising, mentoring and coaching to support the development of research staff and/or a demonstrated trajectory of leadership capability

7. Experience in supervising and working with major honours or postgraduate students within the discipline

8. The ability to work both independently in a research environment and as part of an inter-disciplinary research team

9. High level organisational skills, with demonstrated capacity to establish and achieve goals

10. Excellent written and oral communication skills

11. Demonstrated capability in positively contributing to laboratory meetings, seminars and journal club meetings

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

13. Advanced computer skills with experience using Microsoft Word, Excel and PowerPoint; specific experience in working with a range of analytical software relating to the analysis of cryo-EM data

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

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University will 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
- Flexibility to travel to project partners inter-state

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.