



# Research Fellow

<b>Department/Unit</b>	Department of Biochemistry and Molecular Biology
<b>Faculty/Division</b>	Faculty of Medicine, Nursing & Health Science/School of Biomedical Science
<b>Classification</b>	Level A
<b>Work location</b>	Clayton campus
<b>Date document created or updated</b>	14 November 2017

## 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](http://www.monash.edu)

The **Faculty of Medicine, Nursing & Health Sciences** is the University's largest research faculty. World-class researchers work across disciplines including laboratory-based medical science, applied clinical research, and social and public health research. The Faculty is home to a number of leading medical and biomedical research institutes and groups, and has contributed to advances in many crucial areas. Our expertise in life sciences and biomedicine is recognised both nationally and internationally.

From a teaching perspective, our education curriculum covers a range of disciplines, including medicine, nursing, radiography & medical imaging, nutrition & dietetics, paramedic studies, biomedical sciences, physiotherapy, occupational therapy, behavioural neurosciences and social work. We take pride in delivering outstanding education in all courses, in opening students to the possibilities offered by newly discovered knowledge and in providing a nurturing and caring environment.

To learn more about the Faculty, please visit [www.med.monash.edu.au/](http://www.med.monash.edu.au/)

The **sub-Faculty of Biomedical and Psychological Sciences (FBPS)** is a unique discovery research precinct of the Faculty of Medicine, Nursing and Health Sciences. The Discovery Precinct is a partnership between (i) Monash Biomedicine Discovery Institute; (ii) Australian Regenerative Medicine Institute; and (iii) Monash Institute of Cognitive and Clinical Neuroscience. The mission is to carry out world-class discovery research that translates to the clinical and commercial sectors. The FBPS Discovery Precinct is home to two ARC Centres of Excellence, namely, (1) Advanced Molecular Imaging and (2) Integrative Brain Function.

We are committed to an inclusive working environment with a particular focus on gender equity. Please visit [www.med.monash.edu.au/biomed-psych/index.html](http://www.med.monash.edu.au/biomed-psych/index.html) for more information on FBPS.

The **School of Biomedical Sciences and Monash Biomedicine Discovery Institute** is one of the largest and most dynamic biomedical research and teaching environments in Australia. The School 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 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 our teaching space is about to be transformed by a new \$80 million dollar biomedical teaching building.

Opening in 2019, the new building will provide world-class teaching and learning space for Biomedical Sciences.

All research staff in the School are also a member of the **Monash Biomedicine Discovery Institute (BDI)**. The BDI comprises six inter-disciplinary health-focused research Programs, each led by a research leader in the field. The BDI Programs include, Infection and Immunity, Cancer, Cardiovascular Disease, Development and Stem Cells, Metabolic Disease 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.

The School and BDI comprise over 120 research teams that publish over 700 papers in international journals every year. Annual research income is over \$50 million, the vast majority of which comes from the NHMRC and ARC. For more information about the School of Biomedical Sciences, please visit our website at [www.monash.edu/discovery-institute](http://www.monash.edu/discovery-institute) and [www.med.monash.edu.au/sobs/](http://www.med.monash.edu.au/sobs/)

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/](http://www.med.monash.edu.au/biochem/)

## Position purpose

A Level A research-only academic is expected to contribute towards the research effort of the university and to develop her/his research expertise through the pursuit of defined projects relevant to the particular field of research.

We are currently seeking two junior post-doctoral (or equivalent) scientists to commence in the Chemokine-Receptor Interaction Laboratory, each playing a lead role in a project related to the regulation of chemokine function in inflammation.

One position will focus on elucidating novel signalling pathways activated by chemokines. Suitable applicants will have very strong foundations in cellular biochemistry, pharmacology or a closely related field, including skills in cell culture, cell-based assays, molecular biology, Western blotting and related methods. Experience in proteomics would be a distinct advantage.

The second position will focus on functional and structural characterisation of novel chemokine-binding proteins from tick species. Suitable applicants will have very strong foundations in protein expression and purification, structural biology and biophysical characterisation of proteins. Experience in computational structural modelling and bioinformatics would be significant advantages.

Both successful applicants would also be involved in other ongoing projects. The selected applicants will be part of a team of post-doctoral researchers and students and be will expected to work collegially with the team and to assist in the supervision of more junior members, including summer, undergraduate and PhD students. They will be responsible for paper writing, regular presentations and assistance with grant proposal preparation.

For both positions, the successful applicants are expected to have strong potential to develop into leaders of independent research programs.

**Reporting line:** The position reports to Associate Professor Martin Stone

**Supervisory responsibilities:** Not applicable.

**Financial delegation and/or budget responsibilities:** Not applicable

## Key responsibilities

A Level A research-only academic shall work with support, guidance and/or direction from staff classified at Level B and above and with an increasing degree of autonomy as the research academic gains in skill and experience.

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 her/his 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 to more junior lab members, commensurate with the staff member's expertise and experience

## Key selection criteria

### Education/Qualifications

1. The incumbent should possess:
  - a PhD in biochemistry, molecular biology, cell biology, pharmacology or a related discipline from a recognised university or equivalent qualifications and research experience in the area; or
  - an equivalent combination of relevant experience and/or education/training

### Knowledge and Skills

2. A strong research track record including papers in the fields of biochemistry, cell biology or pharmacology
3. Knowledge and experience in protein biochemistry, structural biology and/or cell signalling
4. Excellent oral and written communication skills
5. Exemplary ethical standards
6. Good organisational and record keeping skills with the ability to meet project timelines and deadlines
7. Ability to work independently and as part of a research team
8. Demonstrated self-motivation, creativity and problem solving skills
9. Proven ability to mentor and advise research graduate students
10. A desire to build an independent research profile

## Other job-related information

- Current satisfactory Police Records Check
- Travel to other campuses of the University may be required
- Overtime and out of hours work may be required
- There may be peak periods of work during which the 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.