



Research Fellow (Bioinformatics)

Research Group	Jose Polo's Group
Department/Unit	Department of Anatomy and Developmental Biology
Faculty/Division	Faculty of Medicine, Nursing & Health Science/School of Biomedical Science
Classification	Level A
Work location	Clayton campus
Date document created or updated	23 February 2018

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 & 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/

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.au/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.med.monash.edu.au/anatomy/

Position purpose

Opportunity to join the Epigenetics and Reprogramming Laboratory led by A/Professor Jose M. Polo.

The open position is for a Research Fellow in Bioinformatics to work alongside a multidisciplinary group of researchers. The successful candidate will conduct their own independent research as well as participate in different projects involving transcriptional regulation of cellular identity under different contexts such as reprogramming, differentiation, ageing and disease.

Successful incumbent will join the Epigenetics and Reprogramming Laboratory led by Associate Professor Jose M. Polo.

The purpose of the position is to conduct their own independent research as well as participate in different projects involving transcriptional regulation of cellular identity under different contexts such as in somatic cell nuclear reprogramming, differentiation, ageing and disease.

Reporting line: The position reports to Associate Professor Jose Polo

Supervisory responsibilities: Potentially involved in the co-supervision of students

Financial delegation and/or budget responsibilities: Not applicable

Key responsibility

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

1. The conduct of research under limited supervision either as a team member or independently and contribute to the production of conference and seminar papers and publications from that research
2. Involvement in professional activities including: attendance at conferences and seminars in the field of expertise (subject to availability of funds)
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 at departmental, school or faculty meetings and where there is membership of a limited number of committees.
8. Provide advice within the staff members field of research to postgraduate students, research assistants, honours students and any member of the research team

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

Key selection criteria

Education/Qualifications

1. The incumbent should possess:
 - Successful completion of a PhD in bioinformatics, computational biology, statistics, mathematics, computer science or related field
 - a PhD in biology with strong statistical and computational skills

Knowledge and Skills

2. Knowledge and experience in analysing high-throughput DNA sequencing applications including ATAC-seq, RNA-seq, ChIP-seq
3. Proficiency in Unix shell or a scripting language. R and/or Python desirable
4. Ability to work both independently and within a team
5. Demonstrated self-motivation, creativity and problem solving skills
6. Good organisational and record keeping skills
7. Experience in report writing and publishing
8. Ability to meet project timelines and deadlines in a timely manner

Other job related information

- Travel (e.g. to other campuses of the University) 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.