RESEARCH FELLOW

DEPARTMENT/UNIT	School of Biological Sciences
FACULTY/DIVISION	Faculty of Science
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 Science contributes to the university's goals via research, teaching and partnerships with industry, government and individual supporters. Our five Schools cover a large and diverse range of disciplines in undergraduate and postgraduate courses. Ten Schools from other university faculties contribute to science teaching at all levels, allowing students to choose their studies from physical, biological, biomedical, behavioural, environmental, mathematical and computer sciences. The research in the Faculty of Science is carried out by world-class researchers. Their work spans the theoretical to the applied, contributes to new knowledge and technologies, and challenges how we interact with the world. To learn more about the Faculty of Science, please visit our website: www.monash.edu/science/.

The School of Biological Sciences has an international reputation for the highest quality research and education programs. We aim to be a global leader in the life sciences. Areas of expertise include: molecular and cellular genetics; evolutionary genetics, disease causality, adaptation to environmental change and disease resistance; community ecology and ecosystem functioning; the impacts on biodiversity, and strategies to mitigate major environmental challenges. Simply put, we are interested in all forms of life, interactions between the environment and genetics / genomics and strategies to improve human and environmental health. To help us achieve our aims, we have a strong complement of academic, research and professional staff and a large and high achieving student population. We encourage applications from academics of diverse backgrounds and have a number of support processes to aid the transition to Australian research and education sectors. For more information about the School of Biological Sciences, please visit our website: https://www.monash.edu/science/schools/biological-sciences.

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 successful incumbent will be a bioinformatician/computational biologist working on a large-scale genomics-focused projects on the genetic causes of irritable bowel syndrome, microscopic colitis and other GI conditions. The successful candidate will be mainly responsible for project(s) involving large-scale data analysis (genomics, (epi)genetics, transcriptomics, metagenomics etc), the interpretation of results and their communication in scientific journals and at international meetings.

Reporting Line: The position reports to a Professor

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. Data analysis (genomics, (epi)genetics, transcriptomics, metagenomics etc) including the interpretation of results and their communication in scientific journals and at international meetings
2. Guidance in the research effort of junior members of research-only Academic staff in their research area
3. Contribution to the preparation or, where appropriate, individual preparation of research proposal submissions to external funding bodies
4. Involvement in professional activities and administration responsibilities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
5. Occasional contributions to the teaching program within the field of the staff member's research
6. 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

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
    - A doctoral qualification computer science, bioinformatics, biostatistics, genetics, biology or a closely related field

Knowledge and Skills

2. Experience in analysis of large datasets (previous experience of working with large-scale biobank data is considered a special merit)
3. Experienced user of R/Bioconductor, Python and programming languages. Unix environment and high-performance computing clusters
4. Demonstrated knowledge of bioinformatic and computational approaches to the study of human genetic diseases, and good understanding of the “biology” behind scientific questions

5. Computational skills associated with genome-wide analyses (GWAS, EWAS, NGS, miRNA, transcriptomics, metagenomics etc), multivariate analyses, meta-analyses
6. Additional background in mathematics, statistics, and machine learning is advantageous
7. High level of organisational skills, with demonstrated capacity to establish and achieve goals
8. Excellent English written and oral communication skills with
9. A demonstrated capacity to work in a collegiate manner with other staff in the workplace with previous participation in international research activities/projects/publications

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.