



POSITION DESCRIPTION

Department of Pathology
Faculty of Medicine, Dentistry and Health Sciences

Research Fellow

POSITION NO	0032372
CLASSIFICATION	Level A
SALARY	\$61,138 - \$82,963 p.a.
SUPERANNUATION	Employer contribution of 9.25%
EMPLOYMENT TYPE	Full-time fixed-term position Available until 31 December 2015 Fixed term contract type: Research
OTHER BENEFITS	hr.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT	NA
HOW TO APPLY	Online applications are preferred. Go to www.jobs.unimelb.edu.au and use the Job Search screen to find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Michael Inouye Tel +61 3 9035 8659 Email minouye@unimelb.edu.au www.inouyelab.org <i>Please do not send your application to this contact</i>

For information about working for the University of Melbourne, visit our websites:

hr.unimelb.edu.au/careers
joining.unimelb.edu.au

Position Summary

The Research Fellow will have a leadership role in the statistical and computational analysis of the Integrative Genomics and Prediction of Cardiovascular Disease research project. The research will involve statistical analysis of already-generated genomic, transcriptomic and metabolomic data together with clinical measures and outcomes with the aim of deriving new biological insights into the pathogenesis of cardiovascular disease. The Fellow will join an exciting existing collaboration between Dr Inouye and the Institute of Molecular Medicine Finland in Helsinki.

The Research Fellow is expected to be “Research Active” and produce high impact publications as well as build local, national and international collaborations that raise the profile of Melbourne University in bioinformatics and systems biology.

1. Selection Criteria

1.1 ESSENTIAL

- ▶ PhD in genomics, statistics, bioinformatics, computer science or related discipline
- ▶ Previous experience in large-scale analysis of omic data
- ▶ Fluency in a programming language (e.g. Perl, Python, C/C++, R)
- ▶ Demonstrated experience in research or scholarly activities that has resulted in peer-refereed journals.
- ▶ Capacity to develop innovative research proposals and conduct research involving large-scale, high dimensional datasets.
- ▶ Excellent communication skills, both verbal and writing
- ▶ Demonstrated ability to work in a cooperative and collegial manner.
- ▶ Demonstrated ability to work independently, use initiative in resolving problems and collaborate with colleagues in a team environment

1.2 DESIRABLE

- ▶ International research experience and established collaborative links

2. Special Requirements

- ▶ The appointee will be based in the Medical Systems Biology group at the University of Melbourne but should have a demonstrated willingness to travel nationally and internationally.

3. Key Responsibilities

- ▶ Research
 - To perform high level statistical and network analysis of genomic, transcriptomic, and metabolomic data for the purposes of identifying molecular networks involved in cardiovascular disease and metabolism.

- To implement new methodologies into software packages that are useable for the wider research community.
 - To plan and execute innovative research plans together with MI and collaborators
 - To liaise and collaborate effectively with collaborators at the University of Melbourne, University of Helsinki and Broad Institute of Harvard and MIT.
- ▶ Teaching and learning
 - To assist in the supervision and training of students and others with an interest in bioinformatics and systems biology
 - To assist in the development of the disciplines of bioinformatics and systems biology at Melbourne University through seminars and workshops
- ▶ Knowledge transfer
 - To write high quality scientific papers for publication in high impact journals.
 - To present research at national/international conferences and workshops
 - Attend and contribute to lab meetings
- ▶ Service and leadership
 - Assist in the preparation of grant applications relating to the lab's research program
 - Perform other tasks as requested by the supervisor or Head of Laboratory
 - Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 5 or 6.

4. Other Information

4.1 DEPARTMENT OF PATHOLOGY

<http://www.path.unimelb.edu.au/>

<http://www.microbiol.unimelb.edu.au/>

4.2 MELBOURNE MEDICAL SCHOOL

<http://www.medicine.unimelb.edu.au/>

The Melbourne Medical School is organised into nine Academic Centres comprising more than 20 departments and five general clinical schools. It also supports the Medical Education Unit.

The School is closely associated with major teaching and other hospitals, (http://mdhs.unimelb.edu.au/our_connections/teaching_hospitals) general practices and community health centres in metropolitan, regional and rural Victoria which provide clinical education for medical students.

Through its Academic Centres and departments the School also maintains a close relationship with major research institutes. (http://mdhs.unimelb.edu.au/our_connections/research_institutes).

4.3 THE FACULTY OF MEDICINE, DENTISTRY & HEALTH SCIENCES

The Faculty of Medicine, Dentistry & Health Sciences has an enviable research record and is the University of Melbourne's largest faculty in terms of management of financial resources, employment of academic and professional staff, teaching of undergraduate and postgraduate (including research higher degree) students and the conduct of basic and applied research. The Faculty's 2012 gross revenue was in excess of \$550M. Nearly 50% of this income relates to research activities.

The Faculty has a student teaching load in excess of 7,500 equivalent full-time students including more than 1,000 research higher degree students. The Faculty has approximately 2,200 staff comprising 700 professional staff and 1,500 research and teaching staff.

The Faculty has appointed Australia's first Associate Dean (Indigenous Development) to lead the development and implementation of the Faculty's Reconciliation Action Plan (RAP), which will be aligned with the broader University – wide plan. To enable the Faculty to improve its Indigenous expertise knowledge base, the Faculty's RAP will address Indigenous employment, Indigenous student recruitment and retention, Indigenous cultural recognition and building partnerships with the Indigenous community as key areas of development.

Further information about the Faculty is available at <http://www.mdhs.unimelb.edu.au/>

4.4 THE UNIVERSITY OF MELBOURNE

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. With outstanding performance in international rankings, Melbourne is at the forefront of higher education in the Asia-Pacific region and the world. The University of Melbourne is consistently ranked among the world's top universities. Further information about our reputation and global ranking is available at www.futurestudents.unimelb.edu.au/explore/about/reputation-rankings

Established in 1853, shortly after the founding of Melbourne, the University is located just a few minutes from the centre of this global city. The main Parkville campus is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide range of knowledge-based industries.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded. Further information about working at The University of Melbourne is available at hr.unimelb.edu.au/careers.

4.5 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

- ▶ Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. www.growingesteem.unimelb.edu.au
- ▶ The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic

breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.

- ▶ The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs.
<http://www.unimelb.edu.au/research/research-strategy.html>

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.

Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.

Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security, sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of *Research at Melbourne: Ensuring Excellence and Impact to 2025*.

4.6 EQUITY AND DIVERSITY

Another key priority for the University is access and equity. The University of Melbourne is strongly committed to an admissions policy that takes the best students, regardless of financial and other disadvantage. An Access, Equity and Diversity Policy Statement, included in the University Plan, reflects this priority.

The University is committed to equal opportunity in education, employment and welfare for staff and students. Students are selected on merit and staff are selected and promoted on merit.

4.7 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at www.unimelb.edu.au.

5. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

<http://safety.unimelb.edu.au/topics/responsibilities/>

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.