

Postdoctoral Research Fellow – Statistical Population Genomics

College/Division	College of Health and Medicine
School/Section	Menzies Institute for Medical Research
Location	Medical Science Precinct, Hobart
Classification	Level A/B
Reporting line	Reports to Senior Research Fellow – Bioinformatics and Human Genetics

Position Summary

The University of Tasmania is building a vision of a place-based University with a mission to enhance the intellectual, economic, social and culture future of Tasmania, and from Tasmania, contribute to the world in areas of distinctive advantage. The University recognises that achieving this vision is dependent on the people we employ as well as creating a people-centred University that is values-based, relational, diverse, and development-focused.

We are seeking to appoint a Postdoctoral Research Fellow at the [Menzies Institute for Medical Research](#) (Menzies), part of the [College of Health and Medicine](#).

Menzies is one of Australia's leading health and medical research institutes and is recognised worldwide for its research excellence. Menzies' mission is to perform internationally significant medical research leading to healthier, longer and better lives for all Tasmanians. Research takes a bench-to-bedside and disease prevention approach that is aimed at improving patient care and clinical outcomes for the community by translating knowledge into clinical and policy actions and through the commercial application of discoveries. Tasmania, an island state with a population of over 500,000 people, has a discrete health system that enables close engagement with the University and with government agencies and health providers and offers a unique framework for translational health research.

The Multiple Sclerosis (MS) Research Flagship at the Menzies is one of the major MS research groups internationally. It has a combination of MS-focussed research expertise in neuroscience, genetics, epidemiology, and health economics; paired with current MS clinical practice and well-established partnerships for community education and engagement. This team is uniquely positioned to deliver a pipeline from gene discovery all the way through to translation, evaluation, and education.

The Postdoctoral Research Fellow will be involved in NHMRC and MS Australia funded research. This work uses population genomics to identify functional variation under selection at loci associated with multiple sclerosis risk, improving our understanding of the mechanisms underlying the disease. The incumbent will apply statistical and genomics expertise to develop pipelines to detect balancing selection in the major histocompatibility (MHC) region of the genome using large population datasets. This position will offer the opportunity for the incumbent to further develop leadership skills through planning and leading statistical genomics research and support the training and development of junior research staff and students.

We are an inclusive workplace committed to 'working from the strength that diversity brings' reflected in our Statement of Values. We are dedicated to attracting, retaining and developing our people and are committed to inclusive principles. We celebrate the range of diverse assets that gender identity, ethnicity, sexual orientation, disability, age and life course bring. Applications are encouraged from all sectors of the community. Tell us how we can make this job work for you.



What You'll Do

- Make an effective and sustained contribution to the University in achieving its strategic objectives and fulfilling its operational responsibilities.
- Undertake high-quality research of national and increasingly of international standing, secure external competitive and other funding, publish research findings and contribute to the successful supervision of research higher degree students.
- Apply statistical and genomics expertise to develop pipelines to detect balancing selection in the major histocompatibility (MHC) region of the genome using large population datasets
- Contribute to the development and maintenance of productive and effective links inside the University and locally and nationally with the discipline, relevant interdisciplinary domains, profession, industry and/or wider community.
- Contribute to the internal development of Menzies through involvement in Institute planning activities, active membership of selected Institute committees, and philanthropic and community engagement activities.
- Undertake other duties as assigned by the supervisor.

What We're Looking For (success criteria)

- A PhD or equivalent in statistical genetics, genetic epidemiology, or a related field.
- Experience in the analysis of genomic data including practical experience with the use of high-performance computing for the analysis of genome sequence data, and ideally with a focus on analysing immune system genes in the MHC region.
- Demonstrated skills in bioinformatics relevant programming languages such as python, R, or perl.
- A good record of, and continuing commitment to, research that has achieved national recognition and made worthwhile contributions to the field of statistical genetics, demonstrated by a record of quality publications, presentations at conferences and preferably success in securing external competitive and other funding relative to career stage and opportunity.
- A record of contributing to building and maintaining effective and productive links locally and nationally with the discipline, profession, industry (where relevant) and wider community.
- Demonstrated ability to work autonomously, as well as to collaborate successfully with other researchers/clinicians and be able to prioritise tasks and meet deadlines.

University of Tasmania

The University of Tasmania is an institution with an enduring commitment to our state and community, and a strong global outlook. We are committed to enhancing the intellectual, economic, social and cultural future of Tasmania. Our [Strategic Direction](#) strongly reflects the University community's voice that our University must be place based but globally connected as well as regionally networked and designed to deliver quality access to higher education for the whole State.

We believe that from our unique position here in Tasmania we can impact the world through the contributions of our staff, students and graduates. We recognise that achieving this vision is dependent on the people we employ, as well as creating a university that is values-based, relational, diverse, and development-focused.

Check out more here:



<https://www.utas.edu.au/jobs>

<https://www.utas.edu.au/careers/our-people-values-and-behaviours>

The intention of this position description is to highlight the most important aspects, rather than to limit the scope or accountabilities of this role. Duties above may be altered in accordance with the changing requirements of the position.

