

Postdoctoral Research Fellow - Neuroscience

College/Division College of Health and Medicine

School/Section Menzies Institute for Medical Research

Location Medical Science Precinct, Hobart

Classification Level A to Level B

Reporting line Reports to Principal Research Fellow

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 <u>Menzies Institute for Medical Research</u> (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.

Menzies' five themes reflect the burden of disease in the Tasmanian community: Public Health, Primary Care and Health Services; Musculoskeletal Health & Disease; Brain Health & Disease; Cardiovascular and Respiratory Health & Disease; and Genetics and Cancer.

The Postdoctoral Research Fellow will plan, carry-out and analyse preclinical studies examining the role of glial cells in the development of multiple sclerosis pathology, and will explore the capacity for oligodendrocyte progenitor cells and adult-born oligodendrocytes to enable neural repair following demyelination.

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 international standing, secure external competitive and other funding, publish research findings and contribute to the successful supervision of research higher degree students.
- Use expression and gene deletion approaches to determine how specific genes or genetic variants influence the behaviour or neural, vascular or immune cells in vitro and in vivo.



- Plan, execute and evaluate studies involving preclinical models of demyelination.
- 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.
- Undertake other duties as assigned by the supervisor.

What We're Looking For (success criteria)

- A post-graduate degree in the field of neuroscience.
- A good record of, and continuing commitment to, research that has achieved international recognition
 and made worthwhile contributions to the field of neuroscience, 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.
- Experience in at least two of the following techniques in a neuroscience context:
 - culturing primary neural cells or human iPSCs differentiated into neural cells
 - inducing demyelination in mice and monitoring / phenotyping mice
 - performing histological analyses of pathologically altered nervous system tissue
 - using cre-lox or CRISPR/Cas9 technology to label or alter gene expression in neural cells in vivo
- 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.
- A working knowledge of glial cell function in the central nervous system.

Desirable/optional:

- A research background in glial cell biology.
- Experience in epi-fluorescent and confocal microscopy.
- Experience in general molecular biology techniques.
- A working knowledge of immunology.
- Evidence of prior supervisory experience.

Other position requirements

- Working with experimental animals, including euthanising
- Laboratory and workshop activities and handling hazardous substances

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.

