Postdoctoral Research Fellow in Thermal Geography/Heat Equity Planning

College/Division: College of Sciences and Engineering
School/Section: Geography, Planning, and Spatial Sciences
Location: Hobart, Tasmania
Classification: Level A/B
Reporting line: Reports to Professor Jason Byrne

Position Summary
The University of Tasmania is building a vision of a place-based University with a mission to enhance the intellectual, economic, social, cultural, and environmental 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 Post Doctoral Research Fellow in Thermal Geography/Heat Equity Planning in the School of Geography, Planning, and Spatial Sciences which is part of the College of Sciences and Engineering.

The School of Geography, Planning, and Spatial Sciences builds on and advances the University’s strategic pursuit of academic and applied multi-disciplinarity in addressing the challenges that arise at the intersection of science and society. In Geography, Planning and Spatial Sciences, we take a keen interest in the sustainability of people and places. Our research and teaching encompass and integrate human geography, physical geography, spatial sciences, planning, and environmental management.

The Post Doctoral Research Fellow in Thermal Geography/Heat Equity Planning is a four-year research-intensive role with a fraction for teaching and service duties. This balance provides opportunities for career development. The Fellow will be involved in the Australian Research Council (ARC) Future Fellowship research led by Professor Jason Byrne on thermal inequity in Australia’s cities. The Fellow will be responsible for delivery of teaching and service up to 0.3 FTE in topics such as urban planning and professional practice, with skills in urban analysis, land use or environmental planning, and/or environmental design. The Fellow will be supported in teaching and service roles by Professor Byrne and provided with opportunities to build higher degree research supervision skills and international collaborations as part of the larger Future Fellowship research program.

Who we are looking for
We are looking for someone with experience in using quantitative methods such as spatial modelling and spatial analysis, who can use remote sensing data and field-based temperature sensors in urban settings, and who has experience in managing large spatial datasets. The successful applicant would preferably also have some experience in interacting with practitioners, policy makers, and the broader public in research settings.

The research program is on thermal geography and urban heat equity. There are three global megatrends intersecting to create vulnerability in cities – rapid urbanisation, ageing populations, and climate change. Climate change is increasing heatwave frequency and intensity at the same time as our cities are becoming denser and populations are growing older. Heatwave impacts do not affect all people the same way. Older people aged 65+ and lower income earners often face heightened vulnerability due to income constraints, medical conditions, physical frailty, and reduced mobility.

The research program seeks to answer key questions about which types of urban greening might best reduce heat impacts in cities (size, scale, configuration, location), how potential beneficiaries (e.g., older people)
might perceive different urban greening interventions, and which sorts of policy responses might deliver the best outcomes over different timeframes. The research will assess these questions across a thermal gradient from coast to inland and from cool temperate to subtropical places.

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, respect, and value diversity and difference, and we recognise the strengths that people with diverse ethno-racial backgrounds, gender identity, sexual orientation, disability, age, neurodiversity, and life course bring to our teams. Applications are encouraged from all sectors of the community. Tell us how we can make this job work for you.

We invite you to see yourself in this exciting role. We are specifically looking for someone who thinks rigorously, is flexible and adaptable to change, trusts and respects others, resolves conflict positively, values and maintains honesty, integrity, and transparency, is a collaborator, and who strives to deliver exceptional results.

You will be a member of Professor Byrne’s Future Fellowship team, which will create, test, and apply new knowledge to promote thermal equity in Australian cities. This position will provide an exciting opportunity for you to undertake research into how best to deliver tangible outcomes for making built environments more liveable and equitable, through urban greening interventions.

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/scholarly activities under limited supervision both independently and as a member of Professor Byrne’s Future Fellowship team, and publish research findings as sole author or in collaboration.
- Undertake scholarly undergraduate and/or postgraduate coursework teaching of a high quality.
- 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 your supervisor.

What We’re Looking For (essential criteria)

1. PhD or equivalent in Geography, Urban Planning, Environmental Management, or Climate Science: A doctoral degree that has provided the candidate with the knowledge and skills relevant to undertaking research into urban heat management.
2. Experience in Thermal Geography/Urban Heat Management: Demonstrated by a solid academic record in research grants, publications, or equivalent professional experience. This should include the ability to understand and interpret complex spatial datasets.
3. Technical Proficiency in Spatial Modelling and Remote Sensing: Very well-developed skills in GIS, remote sensing, spatial analysis, and experience in deploying heat sensors in urban locations. Experience managing large spatial datasets is important.
4. Innovative Research and Problem-Solving Skills: Proven ability to use quantitative methods in spatial modelling and analysis, and creativity in answering complex questions about urban heat distribution.
5. Engagement and Communication Skills: Some experience in interacting with practitioners, policymakers, and/or the broader public in research settings, with the ability to translate complex scientific findings into clear language for diverse audiences.
6. Collaborative Teamwork Skills: Ability to work successfully as a part of an interdisciplinary team, contributing to building and maintaining effective networks within the discipline, profession, and wider community.

Other position requirements (desirable criteria)

7. Ability to travel for domestic and/or international research meetings.
8. Knowledge of relevant Workplace Health and Safety requirements.
9. A current driver’s licence.
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.

The University has been recognised as a global leader on climate change action. 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


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.