

Research Associate in Physical Pyrogeography

College/Division College of Science and Engineering

School/Section School of Natural Sciences

Location Hobart

Classification Academic Level A

Reporting line Reports to Senior Research Fellow in Fire Ecology

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.

The Fire Centre in the School of Natural Sciences are seeking a spatial and statistical analyst to conduct a range of research projects in the field of bushfire risk management. The Centre is the leading centre for bushfire research in Tasmania and is growing to become a key partner for developing evidence-based bushfire risk management in Tasmania and more broadly across Australia and the world. The position will contribute primarily to excellent research in two products focused on landscape fire modelling and pyrogeography, including a Natural Hazards Research Australia grant focused on geostatistical analysis the effectiveness of prescribed burning operations, and a NSW Bushfire and Natural Hazards Research Centre grant focused on remote sensing severity validation and fire regime landscape metric analysis. The Fire Centre is also conducting projects related to fire ecology, flammability of garden plants, fire risk in the Wildland Urban Interface, and the effectiveness of different risk reduction strategies. You may contribute to any and all of these.

The University of Tasmania is 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

- Undertake high-quality research/scholarly activities under limited supervision either independently or as a member of a team, standing, publish research findings as sole author or in collaboration, to meet and regularly exceed the University's research performance expectations for Level A.
- Undertake high-quality original research and meet agreed research objectives on the development of tools, methods and models of prescribed burning, fire regime and ecosystem change analysis.
- Drive day-to-day execution of research-related tasks and provide support to project supervisors (Assoc. Prof. Owen Price and Dr Grant Williamson) as part as an interdisciplinary and multiinstitutional team, including preparation of reports and manuscripts for publication in refereed journals, and preparing and presenting research findings at national and international seminars, conferences, and workshops.
- Make an effective and sustained contribution to the University in achieving its strategic objectives and fulfilling its operational responsibilities.



- 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
- Assist in student supervision and mentoring where appropriate.
- Ensure that project practices, research data and code management conforms to the Australian Code for the Responsible Conduct of Research, and the UTAS Framework for the Responsible Conduct of Research.
- Undertake other duties as assigned by the supervisor.

What We're Looking For (success criteria)

- A PhD completed or imminent (<6 months to submission) in a relevant biological, environmental or geosciences field and/or equivalent qualifications and/or professional experience.
- A demonstrated ability and understanding of research in the field of bushfire ecology and/or bushfire risk management.
- Advanced skills in geospatial and statistical analysis, preferably including in "R" analysis software.
- Demonstrated knowledge and experience in understanding of Australian fire regimes and contemporary fire management challenges.
- Demonstrated knowledge and experience in working with a variety of remotely sensed, thematic and climate data.
- Demonstrated ability to work as part of a research team but also autonomously.

Other position requirements

- Demonstrated ability to write manuscripts for publication in internationally recognised scientific journals, and a track-record of publications appropriate for the applicant's career stage.
- Demonstrated organisational skills and excellent communication and interpersonal skills, including the ability to be self-directed, but also to work effectively and harmoniously as part of a research team

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 <u>Strategic Direction</u> 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.

