

POSITION DESCRIPTION

School of Ecosystems and Forest SciencesFaculty of Science

Research Fellow: Spatial Analyst

POSITION NO	0057214
CLASSIFICATION	Level B
SALARY	\$110,236 – \$130,900 p.a (pro rata for part-time)
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Part time (0.5 FTE)
BASIS OF EMPLOYMENT	Fixed-term for 12 months.
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
OTHER BENEFITS HOW TO APPLY	http://about.unimelb.edu.au/careers/working/benefits Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or

For information about working for the University of Melbourne, visit our website: about.unimelb.edu.au/careers

Position Summary

The position involves working with the research team in the University of Melbourne, School of Ecosystem and Forest Sciences, Bush Heritage Australia and partner organisations as part of the Ian Potter Foundation Gift project: Mapping Conservation Futures.

The project will build on current progress in integrating cross-cultural knowledge and aspirations toward a stronger evidence base for regional planning in Australia.

The project comprises three interrelated streams of work:

- i) The development of a knowledge portal that will provide knowledge support to all stakeholders and organisations involved in strategy development and regional planning
- ii) the implementation of national-scale analyses that will help organisations crystallise and represent understanding of environmental, cultural and economic risks and opportunities
- iii) regional planning case studies undertaken in at least four key case study regions that will exemplify the use of cross-cultural knowledges in support of regional plans.

1. Key Responsibilities

- Work with data systems experts and Conservation Futures team members to oversee the
 development of an Integrated Knowledge System that combines spatial data on
 conservation management, cultural knowledge, climate and other data relevant to
 landscape planning and management, and which can be used in implementation of
 national-scale analyses and regional planning practices.
- Identify a wide range of datasets at multiple scales and assess their quality and relevance to the national project and regional case studies and partners.
- Curate and integrate datasets into the system from a wide range of relevant sources, including co-developing meaningful cataloguing systems for organising diverse datasets.
- Troubleshoot challenges in integrating datasets across different scales and regions, including how to scale datasets effectively and how to communicate key issues regarding data reliability, relevance and protection within the system.
- Review governance, data, inclusion, analysis approaches necessary to underpin knowledge portal with layered approaches and access levels, including strong protections for Indigenous Cultural and Intellectual Property. Working with key stakeholders, identify data and analysis approaches likely to be of high value.
- Assist in liaising with industry partners, stakeholders and First Nations groups around the development and usability of the Integrated Knowledge System.
- Project management of key processes within a team environment.
- Conduct research and contribute to knowledge through scholarship, (assistance with) publication and presentation.
- Perform administrative functions and duties that are connected to the area of research.
- Participate in the University Professional Development Framework.
- Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 5.

2. Selection Criteria

2.1 ESSENTIAL

- Completion of Ph.D. thesis and/or postdoctoral work in a discipline relevant to, conservation management, data analysis, data engineering and spatial mapping.
- Strong track record in GIS and related mapping applications and in analyses using R, and familiarity with a wide range of Australian spatial data sources relevant to conservation, landscape and Country planning.
- Experience with managing projects and working with systems developers.
- Advanced computer skills and knowledge of conservation data and metadata management.
- Demonstrated track record in dealing with a wide range of stakeholders.
- The ability to interact positively and productively as part of a team environment with a strong collaboration focus.
- Strong interpersonal and communication skills, both oral and written.
- An excellent record of research productivity and publication in the area of conservation science
- The ability to undertake independent research with a minimum of supervision.

2.2 DESIRABLE

- A broad understanding of issues relating to First Nations data monitoring and protective mechanisms particularly relating to Indigenous Cultural and Intellectual Property and Indigenous Data Sovereignty
- Demonstrated experience in liaising with government agency staff and stakeholders.
- Research interests that could provide synergies with other members of the School of BioSciences and collaboration with other researchers at the university.
- Experience in applying for grants.

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion, and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the Advancing Melbourne strategy that addresses diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and

background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Advancing Melbourne.

4. 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.

5. Other Information

5.1 SCHOOL OF ECOSYSTEM AND FOREST SCIENCES

https://ecosystemforest.unimelb.edu.au/

The School of Ecosystem and Forest Sciences (SEFS) is Australia's premier research and education provider dedicated to the study of ecosystem processes, sustainable land management, and environmental social science in forest and other ecosystems, covering the full range from natural to highly urbanised systems. SEFS combines expertise in the biological and physical sciences with environmental social science to provide research and teaching of applied ecosystem science that is relevant to society, delivering innovative solutions to the environmental issues faced by a rapidly growing global community. Our work spans from molecular to ecosystem scales, from technology to sociology, and from city to wilderness.

Established research strengths include 'Integrated Forest Ecosystem Research', 'Bushfire Science', 'Urban Horticulture and Landscape Management' and 'Ecohydrology'. SEFS features significant cross-institutional collaborations and engagement activities with many industries throughout Australia and South-east Asia.

As a School we provide leadership in applied sciences through our Postgraduate Coursework degrees, the 'Master of Ecosystem Management and Conservation' (MEMaC), 'Master of Science (Ecosystem Science)' and the 'Master of Urban Horticulture' (MUH). Our Graduate Certificates and Diplomas in 'Bushfire Planning and Management', 'Forest Systems Management', 'Garden Design', 'Arboriculture' and 'Green Roofs and Walls' provide individuals working in industry with opportunities for intensive and career-directed learning and skills development.

As one of seven Schools within the Faculty of Science, SEFS operates from three locations:

- the University's main Campus at Parkville;
- the suburban Burnley Campus with a century old tradition of excellence in urban horticulture, which today is a dynamic multidisciplinary research centre with a focus on green infrastructure, urban ecology, ecohydrology and forest science; and

 the regional Creswick Campus, the University's specialist campus for forest science and the birthplace of forest education and research in Australia, which today also is home to significant plant and crop science initiatives of other Faculties.

Our extensive teaching and research facilities at all three campuses are complemented by a number of long-term field research sites including 'Long Term Fire Effects Study Areas' established in the 1980s, the Little Stringybark Creek urban catchment experiment, and a 'Terrestrial Ecosystem Research Network Super Site' in the Wombat State Forest, close to Creswick, which represent a significant strength of the new School.

5.2 FACULTY OF SCIENCE

Science at the University of Melbourne is the most highly ranked Faculty of Science in Australia. Science is defined by its research excellence in the physical and life sciences and is at the forefront of research addressing major societal issues from climate change to disease. Our discoveries help build an understanding of the world around us.

We have over 150 years of experience in pioneering scientific thinking and analysis, leading to outstanding teaching and learning and offer a curriculum based on highly relevant research, which empowers our STEM students and graduates to understand and address complexities that impact real world issues and the challenges of tomorrow.

We aspire to engage the broader community with the impact that Science has on our everyday lives. Through the strength of our internships and research project offerings, our students are provided opportunities to engage with industry partners to solve real-world issues.

The Faculty of Science has over 50,000 alumni and is one of the largest faculties in the University comprising six schools: BioSciences, Chemistry, Ecosystem and Forest Sciences, Mathematics and Statistics, Physics and the School of Geography, Earth and Atmospheric Sciences.

The Faculty is custodian of the Bio21 Molecular Science and Biotechnology Institute, the Indigenous Knowledge Institute, the Melbourne Energy Institute, the Office for Environmental Programs and home to numerous Centres.

Science manages more than \$301 million of income per annum, with a staff base in the order of 250 FTE professional staff, and more than 662 FTE academic staff.

We offer a range of undergraduate, honours, graduate and research degrees; enrolling over 10,800 undergraduate and 2,500 graduate students. The Faculty of Science is the custodial Faculty for the BSc (Bachelor of Science). The Faculty of Science is highly research focused, performing strongly in the Australian Research Council competitive grants schemes. The Faculty of Science is currently growing its competitiveness and standing in the National Health and Medical Research Council and health space.

The Faculty of Science provides community services and industry partnerships based on a solid foundation of research in the pure and applied sciences. The Faculty has an endowment of approximately \$100 million. The annual income from the endowment supports more than 140 prizes, scholarships and research awards, and numerous academic positions.

THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville 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. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

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 http://about.unimelb.edu.au/careers.

ADVANCING MELBOURNE

The University's strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University's commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.

We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.

We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.

We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne's academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes; place, community, education, discovery and global.

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 http://www.unimelb.edu.au/governance