



## POSITION DESCRIPTION

School of Ecosystem and Forest Sciences  
Faculty of Science

### RESEARCH FELLOW IN FOREST RESILIENCE AND ADAPTATION

POSITION NO	0051900
CLASSIFICATION	Level A
SALARY	\$73,669 - \$99,964 p.a (PhD entry level \$91,125)
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full-Time (1.0 FTE)
BASIS OF EMPLOYMENT	Fixed-Term 18 months
OTHER BENEFITS	<a href="http://about.unimelb.edu.au/careers/working/benefits">http://about.unimelb.edu.au/careers/working/benefits</a>
HOW TO APPLY	Online applications are preferred. Go to <a href="http://about.unimelb.edu.au/careers">http://about.unimelb.edu.au/careers</a> , select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Name Tel +61 3 xxxx xxxx Email <a href="mailto:name@unimelb.edu.au">name@unimelb.edu.au</a> <i>Please do not send your application to this contact</i>

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

### Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of country throughout Australia. The University recognises the unique place held by Aboriginal and Torres Strait Islander peoples as the original custodians of country and their continued connection to the land, waterways, songlines and culture. The University respects all Aboriginal and Torres Strait Islander People and warmly embrace those students, staff, Elders and collaborators who identify as First Nations.

## ***Position Summary***

The Forest and Landscape Dynamics Research Group within the School of Ecosystem and Forest Science (SEFS) is undertaking a project for the Department of Environment, Land, Water and Planning (DELWP) for investigating the impact of different adaptation and mitigation strategies for maintaining ecosystem services and functioning in Victoria's montane forests.

This Research Fellow in Forest Resilience and Adaptation will be responsible for the day-to-day operation of this project; including the planning and completion of a field-based survey and monitoring program, conducting and analysing field data, and undertaking landscape-level vegetation modelling. The Research Fellow will be responsible for sampling forest structure and composition across a range of montane forest environments relevant to the occurrence of alpine ash (*Eucalyptus delegatensis*), high elevation mixed species eucalypt forests, and non-eucalypt forests in areas impacted by wildfires over the last 20 years.

The position is located at SEFS's Burnley campus in Melbourne.

### ***1. Key Responsibilities***

The position description should be read alongside [Academic Career Benchmarks and Indicators](#).

A level A academic is acquiring skills and building academic achievements (oriented towards the benchmarks).

#### **1.1 RESEARCH AND RESEARCH TRAINING**

You are expected to significantly contribute towards the research effort of the team and to develop your research expertise with an increasing degree of autonomy.

- ▶ Under the guidance and support of Senior Academic staff conduct internationally competitive research, resulting in publications in high impact journals.
- ▶ Undertake research activities outlined in the DELWP funded projects which may include, but are not limited to, the design of field and modelling studies, the management and organisation of field campaigns, the collection, processing and analysis of field data, the parameterisation of landscape models and the processing and analysis of modelling data.
- ▶ Contribute to the improvement (where necessary) of existing landscape-scale modelling programs and develop response functions for integrating data and understanding derived from field studies into landscape dynamics models.
- ▶ Contribute to and publish academic papers and other scholarly outputs to a high academic standard in accordance with the research expectations of the University of Melbourne.
- ▶ Actively participate in research seminars and conferences to disseminate research findings as opportunities arise.
- ▶ Contribute to the preparation, or where appropriate individual preparation of research proposal submissions to internal or external funding bodies as relevant.
- ▶ Undertake administrative functions and obligations primarily connected with the staff member's area of research.
- ▶ Contribute to and assist in the co-supervision and training of research students at both the undergraduate and graduate level.

- ▶ Engage with relevant professional and industry bodies and stakeholders to foster collaborative partnerships.
- ▶ Participate in numerous extended (5 to 10 day) field trips within Victoria to collect data for research.

## 1.2 TEACHING AND LEARNING

- ▶ Contribute to teaching, training, scientific mentoring and supervision of students.
- ▶ Contribute to the effective supervision of junior research staff in the appointee's area of expertise.
- ▶ Organisation and supervision of casual research assistants to support the collection of field data.

## 1.3 LEADERSHIP AND SERVICE

- ▶ Actively participate in research group meetings and with guidance, contribute to planning and facilitating research groups meetings.
- ▶ Actively participate at School meetings and with guidance, contribute to planning activities or committee work to support capacity building in the School/discipline.
- ▶ Organisation and facilitation of project meetings and workshops.
- ▶ Contribute to, or present research to the public to elevate public awareness of educational and scientific developments and promote critical enquiry and public debate within the community where appropriate.
- ▶ Effective demonstration and promotion of University values including diversity and inclusion and high standards of ethics and integrity.
- ▶ Actively contribute to School activities such as Open day to promote student engagement.

## 1.4 OTHER DUTIES

- ▶ Manage the day-to-day duties, including but not limited to record keeping and maintaining equipment bookings; ensuring collected data are available for required activities and are correctly stored.
- ▶ Perform other tasks as requested by the supervisor or the Head of School.
- ▶ Actively participate in the University Professional Development Framework.
- ▶ Ensure an up-to-date record of University compliance courses, such as, but not limited to, Appropriate Workplace Behaviour, PDF for Staff and Supervisors, OH &S training courses.
- ▶ Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 4.

# 2. Selection Criteria

## 2.1 ESSENTIAL

- ▶ Completion (or near completion) of a PhD in an appropriate discipline such as ecology, botany, zoology, forest science, environmental science or natural resource management

- ▶ Demonstrated experience in designing and implementing field-based research programs
- ▶ Demonstrated experience in undertaking spatial data analysis and mapping
- ▶ Demonstrated experience in statistical data analysis
- ▶ Demonstrated experience in surveying forests for fauna and flora
- ▶ A demonstrated aptitude for research, with a sound publication record in relevant areas, commensurate with experience and opportunities.
- ▶ Demonstrated ability to prepare research reports and manuscripts for publication
- ▶ Strong evidence of ability and desire to build an academic research career trajectory
- ▶ Demonstrated ability to engage with relevant professional and industry bodies and stakeholders to foster collaborative partnerships.
- ▶ Excellent interpersonal and both written and oral communication skills in English.
- ▶ Excellent ability to work co-operatively and positively in a multi-disciplinary research based team environment and liaise with people from diverse backgrounds.
- ▶ Demonstrated excellent organisational skills to meet deadlines and bring projects to a timely completion
- ▶ Demonstrated ability to develop, administer and see through to completion appropriately designed research projects with limited supervision

## 2.2 DESIRABLE

- ▶ Demonstrated knowledge in forest and landscape ecology
- ▶ Demonstrated knowledge on the ecology of obligate seeder and resprouting eucalyptus species.
- ▶ Demonstrated knowledge on fire and forest management.
- ▶ Demonstrated experience using landscape vegetation and/ or fire simulation models to assess changes and impacts on forest ecosystems.
- ▶ The ability to attract external funding through grant applications and/or support in funded joint projects with others internal or external to the university.
- ▶ Experience in assisting with supervision of students undertaking undergraduate or higher degree research projects.

## 2.3 OTHER JOB RELATED INFORMATION

- ▶ Occasional work out of ordinary hours, travel, etc.

## 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 University's People Strategy 2015-2020 and policies that address 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 service for excellence and reach the targets of Growing Esteem.

## **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 Forest Ecosystem Science' (MFES) 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

<https://science.unimelb.edu.au>

Science at the University of Melbourne is among the most highly ranked Faculties 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 53,000 alumni and is one of the largest faculties in the University comprising seven schools: BioSciences, Chemistry, Earth Sciences, Ecosystem and Forest Sciences, Geography, Mathematics and Statistics, and Physics.

The Faculty is custodian of the Bio21 Molecular Science and Biotechnology Institute, Office for Environmental Programs, Australian Mathematical Sciences Institute (AMSI) and home to numerous Centres.

Science manages more than \$315 million of income per annum, with a staff base in the order of 290 professional staff, and more than 630 academic staff.

We offer a range of undergraduate, honours, graduate and research degrees; enrolling over 9,700 undergraduate and 2,400 graduate students. The Faculty of Science is the custodial Faculty for the BSc (Bachelor of Science). The Faculty of Science is a leader in research, contributing approximately \$80 million in HERDC income per annum. The Faculty of Science is highly research focused, performing strongly in the ARC competitive grants schemes, often out-performing the national average. The Faculty of Science is currently growing its competitiveness and standing in the NHMRC space.

*\*Based on 2018-19 subject rankings by QS and Time Higher Education*

### 5.3 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>.

### 5.4 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.

### 5.5 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>

