



## POSITION DESCRIPTION

School of Agriculture and Food  
Faculty of Veterinary and Agricultural Sciences

### Research Fellow (Plant Reproductive Biology)

POSITION NO	0044328
CLASSIFICATION	Research Fellow, Grade 1
SALARY	\$69,148 - \$93,830 p.a.
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full-time
BASIS OF EMPLOYMENT	Full-time (fixed-term) position available for 12 months from commencement
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	School of Agriculture and Food Tel +61 3 8344 6437 Email <a href="mailto:e.loring@unimelb.edu.au">e.loring@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)

## ***Position Summary***

### **ABOUT THE POSITION**

As part of the Plant Molecular Biology and Biotechnology research group, the Faculty of Veterinary and Agricultural Sciences (FVAS) seeks a dynamic Research Fellow in Plant Reproduction to conduct original research on the molecular aspects of plant reproduction, particularly on molecular control of flowering and male germ-line initiation in plants.

The research group conducts original research using the broad spectrum of modern molecular techniques to engineer crop plants for future agricultural and environmental needs and combines genetic, molecular, high-throughput genomics and genetic transformation technologies in plants, such as soybean, rice, arabidopsis, wheat and canola. The Research Fellow will also be expected to carry out other duties commensurate with the level of position in the School of Agriculture and Food of the FVAS, including writing high quality journal publications, mentoring graduate students and submitting abstracts and full-length papers to conferences. For further information on the research group leaders and their research projects, please visit <http://unimelbplantbiotech.com/>

The Research Fellow will have a strong understanding of plant molecular biology, plant reproductive biology and associated functional genomics tools as well as strong interpersonal, relationship building and influencing skills. The appointee must be willing to conduct intensive laboratory or glasshouse based experiments, which may require to work during irregular hours, including weekends. Additionally, the Research Fellow will need to be experienced at presenting scientific outcomes to peers and industry and be prepared to travel to scientific meetings if required.

Commencement salary for this role for appointees with an awarded PhD degree at the time of appointment will be \$87,415 per annum, pro rata.

### **ABOUT US**

The University of Melbourne has affirmed its position as the number one university in Australia, and remains among the fastest-rising research universities in the world's top 100, according to the Academic Ranking of World Universities (ARWU). It is counted among the best universities in the world – 33 by the Times Higher Education (THE) and 32 by the US News and World Report Rankings. Please visit Tradition of Excellence for further information.

The Faculty of Veterinary and Agricultural Sciences provide over 20 courses and 300 subjects to approximately 3,500 equivalent full time students. The Faculty provides the only professional entry veterinary program in Victoria and the Bachelor of Agriculture is the fastest growing undergraduate degree in Australia. The University of Melbourne's agriculture program is the largest in Victoria and ranked 36 in the world, whilst the Doctor of Veterinary Medicine program was the first graduate veterinary professional entry program in Australia. The Faculty is ideally placed to contemplate changes that have far-reaching consequences on its teaching, engagement and research.

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

The University of Melbourne sets 'Minimum Standards for Academic Levels' (MSALs) which are expected from academic staff. The levels are differentiated by level of complexity, degree of autonomy, leadership requirements of the position, and level of achievement of the academic and may be amended from time to time.

Below is the MSALs for Level A academic staff. The Key Responsibilities, outlined in this section, are to be read in conjunction with this MSAL.

#### Level A - Tutor, Research Assistant (Grade 2), Research Fellow (Grade 1)

A level A academic will work with the support and guidance from more senior academic staff and will work under the supervision of academic staff at level B and above.

A level A academic is expected to develop their expertise in teaching, scholarship and/or research with an increasing degree of autonomy and may work with limited supervision and/or as part of a team.

A level A academic will contribute to teaching at the institution (at a level appropriate to the skills and experience of the staff member) and/or undertake research and/or engage in professional activities appropriate to his or her profession or discipline.

They will undertake administration primarily relating to their activities at the institution.

The contribution to teaching and supervision of students of level A academics will be primarily at undergraduate and graduate diploma level.

The results of research conducted may be published as sole author or in collaboration.

### 1.1 CONTRIBUTION TO TEACHING AND LEARNING

- ▶ This is a research only role and there is no expectation to teach, however, the incumbent may be required to supervise or co-supervise postgraduate and undergraduate students.

### 1.2 RESEARCH AND RESEARCH TRAINING

- ▶ Conduct original research under limited supervision with particular focus on plant molecular reproduction in the publication of research in peer-reviewed journals, articles and oral and written presentations to industry and lay audiences either in collaboration with more senior staff.
- ▶ Contribute to the reporting required to meet the project milestones and reporting schedule as well as fully immerse in the research culture of the Faculty and University.
- ▶ Attend and participate in Research Showcase events, including Open Day, and give internal and external seminars/lectures on topic areas relevant to the role.
- ▶ Assist in identifying and attracting research funding from competitive research grants and other funding sources.
- ▶ Assist in the fostering of research activities of staff and students as well as act as mentor, where appropriate.
- ▶ Be responsible for assisting the Principal Investigator in the timely delivery of milestones.
- ▶ Preparing monthly written reports of the progress of their research work. The research data in these reports should be presented in a publication quality format.
- ▶ Supervise or co-supervise research students and ensure completions in a timely manner.
- ▶ Interpretation of gene expression data from whole plant and cell based experiments.

### 1.3 ENGAGEMENT

- ▶ Maintain knowledge partnerships with relevant industry partners and stakeholders.
- ▶ Provide a high level of understanding of industry to explain the contribution of plant genetic modification for enhanced food security
- ▶ Expand the knowledge of the discipline, which impacts the field.

### 1.4 LEADERSHIP AND SERVICE

- ▶ Manage and with assistance supervise intensive plant molecular biology based experiments within the broader context of reproductive biology of flowering plants.
- ▶ Develop and participate in cross-discipline and cross-institution strategic projects.
- ▶ Deliver knowledge exchange and engagement activities for end-users, industry, government and the community.
- ▶ Contribute to and participate in committees, events such as Open Day and other activities at the Faculty and University levels.
- ▶ Participate in the communication and dissemination of information relating to the discipline.
- ▶ Undertake administration primarily relating to the activities of the role.
- ▶ Attendance at relevant conferences and incorporate learning's into practice, subject to funding availability.

## 2. Selection Criteria

### 2.1 ESSENTIAL

- ▶ An awarded PhD, or near completion, in plant molecular biology or related discipline.
- ▶ Demonstrated ability to undertake research under limited supervision, delivering against research objectives evidenced by a record of peer-reviewed publications and journal articles, as well as oral and written presentations to industry and lay audiences.
- ▶ Demonstrated ability to undertake established plant molecular biology techniques such as molecular cloning, vector construction, protein expression in heterologous systems and plant genetic transformation.
- ▶ Demonstrated ability with microscopy techniques and with laboratory techniques for immune-labelling and in situ hybridisation technologies.
- ▶ Demonstrated communication skills in English, written and oral, appropriate for scientific audiences as well as excellent organisational and administrative abilities and strong inter-personal skills.
- ▶ Demonstrated capacity to work collaboratively within a research group as a team member.
- ▶ Demonstrated experience in the application of bioinformatics based tools for analysing NGS sequence and genomic databases.
- ▶ Demonstrated ability to work with people of diverse cultural backgrounds.

### ***3. Special Requirements***

- ▶ As the Faculty of Veterinary and Agricultural Sciences is located over several metropolitan and regional campuses, staff may be required to travel to, or work from, other sites and campuses as required.
- ▶ Annual leave must be taken at a time which accommodates the peak workflows of the area.
- ▶ The capacity to work irregular hours, including weekends

### ***4. 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.

### ***5. 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.

## 6. Other Information

### 6.1 FACULTY OF VETERINARY AND AGRICULTURAL SCIENCES

<http://fvas.unimelb.edu.au/>

The Faculty of Veterinary and Agricultural Sciences was formed in July 2014 through the merger of the former Faculty of Veterinary Science and the Department of Agriculture and Food Systems. The new Faculty creates opportunities for closer research collaborations and the formation of interdisciplinary teams to address major issues in veterinary and agricultural sciences. The Faculty's core teaching, postgraduate training, research, clinical consultancy and industry development activities are delivered at the Parkville, Werribee and Dookie campuses, and the Veterinary Hospital operates at Werribee.

Our interdisciplinary approach applies scientific, social, political and economic perspectives to address the needs of both human communities and the natural environment. We address the issues of climate change, food production and food security, crop, plant and soil health, water management, sustainable use of resources for agriculture, animal health and disease and other problems challenging key decision makers today.

Our academic staff engage with government and industry to investigate critical societal issues and the faculty is home to University research centres dedicated to this work. They include: Animal Welfare Science Centre; Primary Industry Climate Challenges Centre; Centre for Animal Biotechnology; Centre for Equine Virology; and the Asia-Pacific Centre for Animal Health', in which the University is a core partner. Research within the Faculty has led to some outstanding outcomes including: increased agricultural productivity; vaccines and diagnostic products that have been commercialised throughout the world; enhanced animal welfare; improvements in public health; and contributions to basic understanding of animal biology.

The Faculty is the only provider of Veterinary Science courses in Victoria and one of only a small number of Universities doing so in Australia. The Bachelor of Agriculture and Bachelor of Food Science along with coursework masters in Agricultural Sciences and Food Science offers one of the most comprehensive educational programs in agricultural and food science in Australia.

### 6.2 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>.

### 6.3 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. <http://about.unimelb.edu.au/strategy-and-leadership>

The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.

The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs.

<http://research.unimelb.edu.au/our-research/research-at-melbourne>

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

- ▶ Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.
- ▶ Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.
- ▶ Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security, sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of Research at Melbourne: Ensuring Excellence and Impact to 2025.

## 6.4 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>