



POSITION DESCRIPTION

School of BioSciences
Faculty of Science

Research Assistant in Plant Adaptive Evolution

POSITION NO	0048487
CLASSIFICATION	UoM 5
SALARY	\$71,816 - \$74,712 per annum (pro rata for part-time)
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Part time (0.6 FTE)
BASIS OF EMPLOYMENT	Fixed-Term for 3 years
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers , select the relevant option ('Current Opportunities' or 'Jobs available to current staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Dr Alexandre Fournier-Level Tel +61 383 447 258 Email afournier@unimelb.edu.au <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

Position Summary

The Research Assistant will primarily be responsible for the technical support of the experiments within the Adaptive Evolution Lab in the School of BioSciences (please see adaptive-evolution.org for details on ongoing projects). The lab focuses on the effect of warming temperature in plant and the emergence of resistance in natural populations of pests and weeds. The experiments will be performed on a range of organisms including *Arabidopsis thaliana*, rigid ryegrass and *Chlamydomonas reinhardtii* involving planting, grafting, monitoring, performing bioassays and applying molecular biology protocols.

The appointee will oversee the lab biosafety, OGTR and hazardous chemical compliance, and the coordination of purchases. The appointee will interact closely with Dr Alex Fournier-Level as well as members of his group including PhD, masters and undergraduate students.

The Adaptive Evolution Lab is using advanced computational techniques and the Research Assistant is expected to develop computational skills including but not limited to the management of web presence, scientific watch and novel experimental tools and equipment.

1. Key Responsibilities

- ▶ Assist with conduct of major plant experiments in the greenhouse and in growth chambers facility, including media preparation (soil and agar-based), planting, grafting and sub-culturing plant material.
- ▶ Set up, monitor and demonstrate standard experiments and equipment, including DNA and RNA extraction, PCR, electrophoresis and sequencing library preparation
- ▶ Perform a scientific watch to keep up-to-date with new technique and technology for plant experiment and molecular work.
- ▶ Oversee the lab biosafety, OGTR and hazardous chemical compliance including the induction of new members of the lab and the risks assessment for new experiments and reagents.
- ▶ Co-ordinate the purchasing, handling and stocking of lab equipment
- ▶ Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section

2. Selection Criteria

2.1 ESSENTIAL

- ▶ Masters or honours in plant science, molecular biology, genetics or related field
- ▶ Demonstrated capacity to conduct experiments, primarily on plants
- ▶ Demonstrated responsibility in administrative tasks and compliance activities
- ▶ Experience in training others in research activities
- ▶ Excellent interpersonal communication and capacity to work in team
- ▶ Willingness to develop computational skills to handle tasks and manage workload

2.2 DESIRABLE

- ▶ Interest in population genetics and genome technology
- ▶ Computer and web literacy

- ▶ Experience managing others in compliance issues
- ▶ Experience in general lab management
- ▶ Creativity, dynamism and problem-solving skills

3. Job Complexity, Skills, Knowledge

3.1 LEVEL OF SUPERVISION / INDEPENDENCE

This position operates under the broad direction of the lab head, Dr Alex Fournier-Level. The incumbent will be required to work independently with little day-to-day supervision and to seek advice from and consult with Dr Alex Fournier-Level as required.

3.2 PROBLEM SOLVING AND JUDGEMENT

The incumbent will have a high level of problem-solving skills and judgement to deal with the variety of day-to-day issues that may arise in the laboratory.

3.3 PROFESSIONAL AND ORGANISATIONAL KNOWLEDGE

The incumbent will be required to have professional and organisational knowledge of laboratory practices and general financial concepts.

3.4 RESOURCE MANAGEMENT

The incumbent will have strong resource management skills. The incumbent will be required to oversee purchasing of all laboratory items including chemicals and assets and knowledge of the grants and funding held, and the funds available to spend will be necessary.

3.5 BREADTH OF THE POSITION

For many initiatives, activities and actions the incumbent will need to communicate effectively with students, university staff at various levels of seniority and external partners, and to provide professional, accurate, timely and expert advice.

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 strive 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/people/community/responsibilities-of-personnel>

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

6. Other Information

7. SCHOOL OF BIOSCIENCES

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

The School of BioSciences was formed in 2015 through the amalgamation of the School of Botany and the Departments of Genetics and Zoology thus bringing together a critical mass of 160 Academic staff and 240 Research Higher Degree students undertaking world class teaching and research in the biological sciences. Academics within the School are aligned to 2 research domains - Ecology & Evolutionary Biology and Molecular and Systems Biology. Through cross-disciplinary collaborations within the School and with external partners the School is a major recipient of grant and contract funding.

The School is a major contributor to the Bachelor of Science, Bachelor of Biomedical Science and the Environmental Science programs, its teaching program reflecting the research interests within the School.

7.1 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*

7.2 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>.

7.3 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*.

7.4 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>