



POSITION DESCRIPTION

School of Agriculture and Food
Faculty of Veterinary and Agricultural Sciences

C.R. Roper Fellow in Agricultural Science

POSITION NO	0049599
CLASSIFICATION	Level B, Research Fellow Grade 2
SALARY	\$102,967 - \$122,268 p.a.
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full time
BASIS OF EMPLOYMENT	Fixed-term position available for up to 2 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 Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Jim He Email: jizheng.he@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

ABOUT THE POSITION

The C.R. Roper Fellow in Agricultural Science is to encourage research relevant to Agricultural Sciences, including both 'on farm' and 'off farm activities'. The position will conduct research activities related to soil-plant microbiome interactions and co-evolution to adapt to Australian landscapes. There are many indigenous plant/crop species across Australia which can survive in very tough conditions like drought, nutrient deficiency and high salinity. This research is aimed to decipher the roles and mechanisms of soil and plant microbiomes in helping plant survival under stress conditions. The position will be based at the School of Agriculture and Food, Faculty of Veterinary and Agricultural Sciences, University of Melbourne.

The successful applicant will be based at the Parkville campus of the University of Melbourne and work with a group of researchers focusing on soil microbiology and chemistry, plant physiology and genetics, and biogeochemistry. However, as the Faculty is located across several metropolitan and regional campuses, staff may be required to travel to, or work from, other sites and campuses as required.

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 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.

Below are the standards for Level B academic staff. The Key Responsibilities, outlined below, are to be read in conjunction with the appropriate standard.

MSAL Level B – Lecturer or Research Fellow Grade 2

A level B academic will undertake independent teaching and/or research in their discipline or related area. In research and/or teaching and/or scholarship, a level B academic will make an independent contribution through professional practice and expertise and coordinate and/or lead the activities of other staff, as appropriate to the discipline.

A level B academic will contribute to teaching at undergraduate, honours and postgraduate level, and/or engage in independent scholarship 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 and may be required to perform the full academic responsibilities of, and related administration for, the coordination of an award program of the institution.

At level B an academic will have experience in research or scholarly activities, which have resulted in refereed journals or other demonstrated scholarly activities. Research may be carried out independently and/or as part of a team. Level B academics may supervise postgraduate research students or projects and be involved in research training.

1.1 TEACHING AND LEARNING

- ▶ This position is a research only role. However, there may be an occasional requirement to lecture or assist with teaching responsibilities, as it relates to this role.

1.2 RESEARCH AND RESEARCH TRAINING

- ▶ Undertake independent research required to develop a research framework and methodology in soil-plant microbiome as well as fully immerse in the research culture of the Faculty.
- ▶ Contribute to the supervision of the research programs of research students associated with the research field.
- ▶ Contribute to the dissemination of project research through publication writing, conference presentation and a sustained publication record in peer-reviewed international journals.
- ▶ Assist with obtaining research funding from national or international competitive granting agencies and from other sources.
- ▶ Promote collaborations across institutions, internationally and nationally to further research in related disciplines.
- ▶ Provide leadership in developing external research networks.
- ▶ Supervise and mentor more junior staff and postgraduate and undergraduate students, as appropriate to the level of the role.

1.3 LEADERSHIP AND SERVICE

- ▶ Contribute to the management of instruments in the laboratory, developing research methods required for this purpose
- ▶ Contribute to the coordination and reporting of project activities.
- ▶ Expand the knowledge of the discipline which impacts the field.
- ▶ Engage with relevant professional and industry bodies and stakeholders to foster collaborative partnerships both within and outside the University.
- ▶ Assist in driving new engagement initiatives or assist existing initiatives by presenting to the public to elevate awareness of educational, research and scientific developments, and promote critical enquiry and public debate within the community.
- ▶ Contribute to and participate in committees, events and other activities at the Faculty and/or University level.
- ▶ Foster excellence in research and develop best practice standards for the Faculty.
- ▶ Actively participate in professional activities including consulting, workshops and executive education courses for external participants.

- ▶ Foster a harmonious workplace environment that is conducive to productivity; promotes creativity; and rewards and recognises individuals and group achievement.
- ▶ Build and foster partnerships with industry, government, collaborators at other Universities and other stakeholders that contribute to the engagement of research in the wider community engagement.
- ▶ Promote student well-being and ensure all students are aware of all University support services, working in collaboration or seeking advice from more senior staff.
- ▶ Engage with students to maximise positive experiences and develop student experience initiatives within the curriculum that contribute to the development of a strong student cohort.

1.4 RESPONSIBILITY AND COMPLIANCE

- ▶ Maintain a sound knowledge of current University Policy and Procedures, and reliably follow these or provide compliant advice to others;
- ▶ Reliably follow communications protocols and/or policies as appropriate.
- ▶ Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 5.
- ▶ Behavioural Expectations - All staff are expected to maintain the following behaviours:
 - ▶ Treat everyone equitably; act fairly with staff and demonstrate respect for diversity
 - ▶ Be an effective team player who is cooperative and gains the trust and support of staff, peers and clients through collaboration.

2. Selection Criteria

In order to be considered for interview by the Selection Panel, applicants must address the following Criteria in their application. Please visit the University website how to address [Essential Selection Criteria](#)

2.1 ESSENTIAL

- ▶ A PhD awarded in soil microbiology, evolutionary ecology, plant physiology or a relevant discipline.
- ▶ Sound knowledge and demonstrated experience in cross-disciplinary field of soil science, plant science, microbiology and/or ecology.
- ▶ Demonstrated ability to undertake original and independent research, evidenced by a record contribution in peer reviewed journals, book chapters, conference papers and presentations.
- ▶ Demonstrated capacity of securing competitive research grants and/or industry funding, and collaborative working with research teams.
- ▶ Excellent communication skills and capacity to work constructively and collaboratively and the ability to build rapport with all levels of staff within a diverse work environment.
- ▶ Strong ability to develop links with agriculture industries, primary industry departments and other stakeholders in developing research and industry initiatives at the national level.

- ▶ Demonstrated capacity to supervise/co-supervise graduate research students and junior staff.
- ▶ Demonstrated ability to work with people of diverse cultural backgrounds.

2.2 DESIRABLE

- ▶ Experience with undertaking collaborative research projects as part of a team across institutions and/or disciplines
- ▶ Demonstrated well-developed skills in metagenomics, metabolomics and/or bioinformatics.

2.3 SPECIAL REQUIREMENTS OF THIS POSITION

- ▶ 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.
- ▶ Candidates must be in possession of a valid Australian driving license.
- ▶ This position requires the incumbent to hold a current and valid Working with Children's Check.

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 strive 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 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.

5.2 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>.

5.3 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.

5.4 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>