



POSITION DESCRIPTION

School of Agriculture, Food and Ecosystem Sciences
Faculty of Science

Research Fellow (Agricultural Economics)

POSITION NO	0063683
CLASSIFICATION	Level B3
SALARY	\$128,169 (pro rata for part-time)
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	0.6 FTE
BASIS OF EMPLOYMENT	Fixed-term position available for up to 2 years
OTHER BENEFITS	https://about.unimelb.edu.au/careers/staff-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	Professor Bill Malcolm Tel +61 428 499 266 Email: b.malcolm@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

Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of the unceded land on which we work, learn and live: the Wurundjeri Woi Wurrung and Bunurong peoples (Burnley, Fishermans Bend, Parkville, Southbank and Werribee campuses), the Yorta Yorta Nation (Dookie and Shepparton campuses), and the Dja Dja Wurrung people (Creswick campus).

The University also acknowledges and is grateful to the Traditional Owners, Elders and Knowledge Holders of all Indigenous nations and clans who have been instrumental in our reconciliation journey.

We recognise the unique place held by Aboriginal and Torres Strait Islander peoples as the original owners and custodians of the lands and waterways across the Australian continent, with histories of continuous connection dating back more than 60,000 years. We also acknowledge their enduring cultural practices of caring for Country.

We pay respect to Elders past, present and future, and acknowledge the importance of Indigenous knowledge in the Academy. As a community of researchers, teachers, professional staff and students we are privileged to work and learn every day with Indigenous colleagues and partners.

Position Summary

The Research Fellow will play a key role in the ARC Research Hub Theme 5 (Maximizing Sector-wide Value) across this multi-disciplinary, industry-university partnership, and will work with and be part of the Agricultural Economics Group in the School of Agriculture and Food.

Working closely with the Theme 5 Leader, Hub Director and ARC Research Hub, this position will be responsible for:

- Investigating the farm-level economic effects of the input-output responses of some agricultural and horticultural crops to applications of enhanced efficiency fertilizers and traditional nitrogen fertilizers, and effects on associated nitrogen pollutants.
- Conducting analyses at farm and industry level of the social benefits and costs of enhanced efficiency fertilizers and traditional fertilizers in some agricultural and horticultural crops, including costing of associated nitrogen pollutants.
- Contributing to the development of a calculating method and decision calculating technology for estimating the private and external benefits and costs of using enhanced efficiency fertilizers as an alternative to traditional nitrogen fertilizers in some agricultural and horticultural crops, considering costs of associated nitrogen pollution.

A PhD in Agricultural Economics is essential along with experience in farm and production economic analysis and social benefit-cost analysis. The Research Fellow will have excellent interpersonal skills to support collaboration across disciplines and with industry partners and external stakeholders. The Research Fellow will also play an active role in mentoring and developing the skills of Hub graduate researchers.

This position offers an excellent opportunity for a researcher interested in working in a highly applied, inter-disciplinary field with the core discipline area being agricultural and farm economics, collaborating with industry to create innovative solutions that address significant economic and environmental challenges in the agricultural sector.

Australian Research Council (ARC) Research Hub for Smart Fertilisers

The *Australian Research Council (ARC) Research Hub for Innovative Nitrogen Fertilisers and Inhibitors* commenced operations in August 2021 and will undertake interconnected projects

over 5 years that aim to transform agriculture by delivering a new class of nitrogen fertilisers and inhibitors designed to increase efficiency of nitrogen use by crops and reduce losses to the environment. The Hub is funded through the [Australian Research Council Industrial Transformation Research Program](#) and is a partnership between the *University of Melbourne*, *La Trobe University* and two of Australia's leading agribusinesses – *Incitec Pivot Fertilisers (IPF)–Fertilisers* and *Elders Rural Services*. The Hub aims to develop a suite of novel cost-effective controlled-release N fertilisers and new urease and nitrification inhibitors, tailored for Australia's intensive agricultural industries to address challenges posed by a variable and changing climate and soil conditions.

The research addresses the global challenges of low nitrogen use efficiency in agriculture, environmental degradation, and greenhouse gas emissions. The implications of low-emissions nitrogen fertilizer for the agribusiness value chain, the benefits and costs of innovative nitrogen fertilizers, the social cost of nitrogen and implications for public policy are areas of research within the scope of the Hub. The Hub brings together industry partners and a multi-disciplinary team to work on interconnected projects in nano chemical engineering, synthetic chemistry, plant physiology, plant biochemistry, soil microbiology and economics. The Hub will use a novel co-design process involving representatives of the whole agriculture value chain from product design through to validation and adoption.

1. Key Responsibilities

View the minimum standards at academic level B [here](#)

1.1 TEACHING AND LEARNING

- ▶ This is an Academic Research only position and there is no expectation to teach, however there may be opportunities to contribute to teaching and learning activities.

1.2 RESEARCH AND RESEARCH TRAINING

- ▶ Conduct research and deliver against research objectives to meet project milestones and reporting schedule as well as fully immerse in the research culture of the Faculty.
- ▶ Undertake research leading to publications arising from research in peer-reviewed journals, articles and oral and written presentations to industry and lay audiences, including presentations at industry and science conferences.
- ▶ Promote collaborations across institutions, internationally and nationally to further research in related disciplines.
- ▶ Prepare written reports of the progress of research work ensuring that the research data within these reports are presented in a publication quality format.
- ▶ Attend and participate in Hub events and industry engagement activities and give internal and external oral seminars/lectures on the project topic areas.
- ▶ Participate in Hub industry placements, site visits, mentoring and training programs.
- ▶ Under limited supervision, deliver against research objectives.
- ▶ Assist to identify and contribute to the application of research funds and grants.
- ▶ Within the scope of the level of appointment, supervise honours, postgraduate coursework and research higher degree students and ensure completions in a timely manner.

- ▶ Lead and foster research activities of, and mentor, staff and students as appropriate the Level of the role.

1.3 LEADERSHIP AND SERVICE

- ▶ Lead by example and ensure the values, standards and expectations appropriate behaviour in the workplace and the best interests of a leading University are upheld as well as the University's commitment to a diverse and inclusive workplace.
- ▶ Attend and contribute to project and Hub meetings.
- ▶ Prepare and participate in the Hub Mentoring program for graduate and early career researchers.
- ▶ Participate in activities and events that enable translation and extension of project findings to broader audiences, including, but not limited to, attending industry events, conferences, field days, writing for non-specialist audiences, participating in workshops and supporting sector and public engagement with the activities of the Hub.
- ▶ Undertake administration primarily relating to the activities of the role.
- ▶ Attend relevant conferences and incorporate learning's into practice, as funding permits.
- ▶ Engage with relevant professional and industry bodies and stakeholders to foster collaborative partnerships.
- ▶ Foster a harmonious workplace environment that is conducive to productivity, promotes creativity and rewards and recognises individuals and group achievement.
- ▶ Foster excellence in research and scholarly output and develop best practice standards for the Faculty's and University.
- ▶ Maintain a sound knowledge of current University Policy and Procedures, and reliably follow these or provide compliant advice to others;
- ▶ Contribute and participate in committees, events such as Open Day, Dookie Day and other activities at the Faculty and/or University level.
- ▶ 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.
- ▶ Undertake appropriate leadership roles within the Faculty, School and/or University, if available.
- ▶ 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.

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 relevant PhD qualification awarded in agricultural economics.
- ▶ Proven ability to undertake research under limited supervision and delivering against research objectives evidenced by peer-reviewed publications as well as oral and written presentations to industry and lay audiences.
- ▶ Demonstrated skills and experience in integrating disciplinary and systems knowledge and applying it farm systems and agricultural economics analyses.
- ▶ Proven ability to work autonomously as well as participate in teamwork and assist in providing technical guidance to postgraduate students.
- ▶ Demonstrated ability to complete research projects to specified deadlines.
- ▶ Demonstrated ability to engage with relevant professional and industry bodies and stakeholders to foster collaborative partnerships.
- ▶ Demonstrated high-level organisational and administrative skills with the ability to prioritise a range of tasks, manage time effectively and meet deadlines in a busy environment.
- ▶ Well-developed interpersonal and communication skills with the ability to build and maintain relationships with internal and external stakeholders, and an ability to tailor information to difference scientific audiences in a diverse environment.
- ▶ Excellent communication skills in English, written and oral, appropriate for scientific audiences, technicians and other stakeholders and collaborators.

2.2 DESIRABLE

- ▶ Experience in interacting with agricultural value chain participants, from farmers to suppliers of farm inputs to sellers of farm output.

2.3 SPECIAL REQUIREMENTS OF THE ROLE

- ▶ As the School of Agricultural, Food and Ecosystems 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.
- ▶ This position requires the incumbent to hold a current and valid Working with Children 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 desire to strive 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:

<https://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.

5. Other Information

5.1 SCHOOL OF AGRICULTURE, FOOD AND ECOSYSTEM SCIENCES

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

The School of Agriculture, Food and Ecosystem Sciences has a vision of science for flourishing environments and communities. The School brings together diverse discipline strengths to lead the development of new interdisciplinary thinking and high-impact solutions for global challenges relating to climate change, food security, healthy food systems, biodiversity conservation, sustainable forest management, invasive species, and environmentally and economically sustainable agricultural practices. Our expertise spans biophysical, social and technical sciences, and we support a large cohort of PhD students across these domains.

The School teaches a range of undergraduate and postgraduate programs, including the Bachelor of Agriculture, several majors of the Bachelor of Science and, and six Master coursework programs: Master of Agricultural Sciences, Master of Ecosystem Management and Conservation, Master of Food and Packaging Innovation, Master of Food Science, Master of Urban Horticulture and Master of Environment.

The School is situated across four University campuses, with dedicated agriculture, forest and fire, and urban horticulture facilities that enable exceptional and tailored research capacities as well as unique hands-on learning experience. The School is actively engaged in partnerships with industry, government, alumni, and the community to share knowledge and co-develop solutions to real-world problems. Join a vibrant community committed to benefiting people and nature through education and research.

5.2 FACULTY OF SCIENCE

<http://www.science.unimelb.edu.au>

Science at Melbourne is a global leader across fundamental and impactful scientific research and education. Science begins with curiosity, and we are dedicated to understanding the universe from the level of sub-atomic particles to the solar system. We aim to be leaders who positively impact the community locally and globally, addressing major societal issues from climate change to disease. Our discoveries help build an understanding of the world around us.

Our strength is our breadth of expertise. We are the second largest faculty in the University comprising seven schools: Agriculture, Food and Ecosystem Sciences, BioSciences, Chemistry, Geography, Earth and Atmospheric Sciences, Mathematics and Statistics, Physics and Veterinary Science.

This depth of knowledge positions the faculty to better understand, explore and impact our world and humanity, within a truly comprehensive Faculty of Science.

We have more than 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. We aim to train students with the knowledge and intellectual flexibility to drive the industries of tomorrow and lead across all levels of society.

We offer a range of undergraduate, honours, graduate and research degrees, enrolling more than 11,500 undergraduate and 3,750 graduate students.

We are dedicated to delivering leading transformative educational outcomes, underpinned by research, and an inclusive and inspiring student experience.

Excellence comes in many forms and diversity of thought, perspective and disciplines is essential to deliver globally leading science. At the core of our success is our focus on an inclusive environment for all in our community. Our Faculty's focus on equity, inclusion and belonging is grounded in our endeavour to ensure we are best placed to advance research, teaching and serve diverse national and global communities.

As a Science community we sit across five of the University's campuses – Parkville, Dookie, Burnley, Creswick and Werribee. This reach provides us with a unique perspective that is beneficial to our teaching and research. It also means we can offer our students a greater variety of learning experiences and internships to engage with industry partners to solve real-world issues.

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

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 <https://about.unimelb.edu.au/strategy/governance>