

Position Description

Research only – Research Fellow – Molecular & Cellular Biologist/Biochemist

Position No:	NEW
Department:	La Trobe Institute for Agriculture & Food, Department of Animal, Plant and Soil Sciences
School:	School of Life Sciences
Campus/Location:	Melbourne - Bundoora Campus
Classification:	LEVEL B – Research Associate
Employment Type:	Fixed-term, full-time (1.0 FTE)
Position Supervisor:	Associate Professor
Number:	50145705
Other Benefits:	http://www.latrobe.edu.au/jobs/working/benefits

Further information about:

La Trobe University - <http://www.latrobe.edu.au/about>

School of Life Sciences – <http://latrobe.edu.au/school-life-sciences>

For enquiries only contact:

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A Level B research only academic is expected to carry out independent and/or team research within the relevant field and carry out activities to develop their research expertise relevant to the particular field of research.

Position Context

La Trobe Institute for Agriculture and Food

As part of La Trobe University's ongoing commitment to solving real world problems at the regional, national and international level, the mission of the La Trobe Institute for Agriculture and Food (LIAF) is to use and translate cutting-edge research to maintain and increase food production in a sustainable manner. LIAF's goal is to find solutions that enable sustainable agriculture to provide food of the quality and quantity to meet future global food challenges. A further goal of LIAF is to support the development of the future workforce that is needed to underpin this rapidly changing sector. Foods will need to be developed and produced with inherent health traits; grown sustainably in ways that respond to increasingly challenging climatic environments; and supported by growers and supply chains that provide provenance and safety credentials.

Based at the world-class AgriBio Building at La Trobe University's Melbourne - Bundoora Campus, Nutritional Bioengineering is the one of the four areas of research focus for LIAF. An ARC 2021 Discovery Project grant has been awarded to conduct research in cereals in the critical area of dietary fibre, known to be essential for human health. A lack of sufficient soluble fibre – water-soluble cell wall polysaccharides of which (1,3;1,4)- β -glucans (mixed-linkage glucans, MLG) are the major component in cereals – in our diets is a major contributor to a number of diet-related, non-communicable diseases. The \$0.5 million research project is focused on revealing new knowledge about the molecular mechanism(s) of synthesis and regulation of MLG by the *cellulose synthase-like F (CSLF)* gene family. The major aims of the project are to define the region(s) within CSLF6, the major MLG synthase, that controls the specificity of the β -glucosidic linkage and to investigate its modes of regulation.

The employment period is for 3 years as a Level B academic. The successful applicant will have established a track record of high-quality publications in the fields of plant molecular biology/biochemistry and a demonstrated capacity to work collaboratively in a team environment. The appointee will be involved in supervision of students/technical staff and expected to take responsibility for and show leadership in their work as part of a multi-disciplinary team to deliver project milestones. They will develop and/or optimise techniques and implement state-of-the-art approaches for the molecular, cellular and biochemical analysis of plant tissues and the genes and proteins that are the target of the study. They will comply with all regulations governing research related to the plants utilised for experimental purposes.

Duties at this level include:

- Conduct and contribute to the writing up of research findings for dissemination of high quality and/or high impact research as a member of a team or independently and produce conference/seminar papers/publications/ reports from that research.
- Contribute to the preparation of research proposal submissions to external funding sources where appropriate.
- Understand complex biological problems in order to provide expert advice on experimental design and identify innovative solutions.
- Co-supervise Higher Degree by Research (HDR) postgraduate students as required.
- Supervise research support staff.
- Contribute to a robust and ambitious research culture.

- Contribute to building collaborative relationships to conduct research at the local, national and international level.
- Contribute to ensuring compliance is maintained with respect to all aspects of working with plants.
- Other duties as required.

Key Selection Criteria:

- A PhD degree or equivalent experience in the biological, molecular, life sciences with proficiency and expertise in plant molecular & cell biology and biochemistry.
- A record of publications, conference papers and/or reports, or professional or technical contributions which provide evidence of strong research potential.
- Extensive experience and knowledge in the majority of the following areas; modern molecular cloning techniques, preparation of plant tissue for imaging (e.g. light, confocal and electron microscopy), and protein biochemistry (e.g. enzyme assays and product analysis; protein purification expression and characterisation).
- Demonstrated experience in recombinant protein production and purification in a range of hosts (e.g. bacteria, yeast and/or plants).
- Sound analytical skills to analyse, integrate and interpret various types of cellular & molecular data.
- Strong interpersonal skills including the ability to negotiate, motivate and build relationships with researchers, research students and external clients as needed.
- Well-developed communication writing skills, with an emphasis on the ability to evaluate, analyse and communicate information clearly in writing and orally.
- Demonstrated high level of self-motivation and personal management skills such as organisation, and the ability to effectively execute tasks: to set priorities, meet competing deadlines, initiate and follow-up actions, all with minimal or no supervision.
- Evidence of the ability to work collaboratively, collegially and productively with staff and students from a diverse range of backgrounds.

Desirable Attributes

- Experience with a wide range of imaging modalities of plant samples, including cryo-electron microscopy.
- Experience in the preparation of research proposal submissions to external funding bodies.
- Experience with co-supervision of Honours, Masters and/or PhD students.
- Knowledge of grass biology

Other relevant information:

- The position description is indicative of the initial expectation of the role and subject to changes to University goals and priorities, activities or focus of the job.

Essential Compliance Requirements

To hold this La Trobe University position the occupant must:

- hold, or be willing to undertake and pass, a Victorian Working with Children Check; AND
- take personal accountability to comply with all University policies, procedures and legislative or regulatory obligations; including but not limited to TEQSA and the Higher Education Threshold Standards.

- The position may involve sponsored research with industry partners requiring the employee to agree to confidentiality clauses as well as assignment of Intellectual Property rights to the University.

Position Flexibility

La Trobe University is committed to providing a diverse, inclusive and respectful working environment for all staff. We offer flexible work arrangements that can assist you in balancing your work and other responsibilities.

La Trobe Cultural Qualities

Our cultural qualities underpin everything we do. As we work towards realising the strategic goals of the University we strive to work in a way which is aligned to our four cultural qualities:

- We are **Connected**: We connect to the world outside — the students and communities we serve, both locally and globally.
- We are **Innovative**: We tackle the big issues of our time to transform the lives of our students and society.
- We are **Accountable**: We strive for excellence in everything we do. We hold each other and ourselves to account, and work to the highest standard.
- We **Care**: We care about what we do and why we do it. We believe in the power of education and research to transform lives and global society. We care about being the difference in the lives of our students and communities.

For Human Resource Use Only

Initials: Date: