



STANDARD RESEARCH POSITION DESCRIPTION

Position	Research Associate
Level/ Classification	ACLEA
Reports to	Director, Centre for Crop and Food Innovation, and Director, State Agricultural Biotechnology Centre
Division/ Centre	Centre for Crop and Food Innovation / State Agricultural Biotechnology Centre
College / Institute	Food Futures Institute

Position Purpose

The purpose of this position is to design and implement a range of experiments and assist with developing genomic resources such as de novo genome assemblies, pangenomes, genotyping platforms and databases for five Australian horticultural crops – banana, pineapple, papaya, custard apple and passionfruit. It is expected that this position leads and contributes in data generation; analysis of the sequence and genotyping data using bioinformatics tools and pipelines; write peer-reviewed journal articles, progress report, and make presentations; support Higher Degree by Research (HDR) students, and work collaboratively as part of a large team involving government and industry partners.

About Murdoch University

Murdoch University helps people discover how to make a difference, through education and research endeavor. It remains one of the most inclusive universities in the country, providing students with quality education and recognised academic standing within an engaging and caring environment. We are a university for all, irrespective of background and social standing, with a focus on social equity, self-direction, and freedom of thought and belief.

With strong links to government, business and the community, Murdoch University helps people discover how to make a difference. We are a young, innovative and enterprising university with more than 23,000 students and 1,700 staff across Perth, Singapore and Dubai. We are committed to high-quality education, innovative research, and strong community engagement locally and internationally.

Our [Strategic Plan and Future Horizon 2017-2027](#) outlines an ambitious blueprint for development and growth, with a focus on one purpose: to be a creative force for current and future generations.

We are clear about our two core goals: to educate free thinkers who thrive in society and are sought after by employers; and, to provide life-changing solutions for the world's big challenges through our outstanding translational research and innovative practice.

About the Work Area

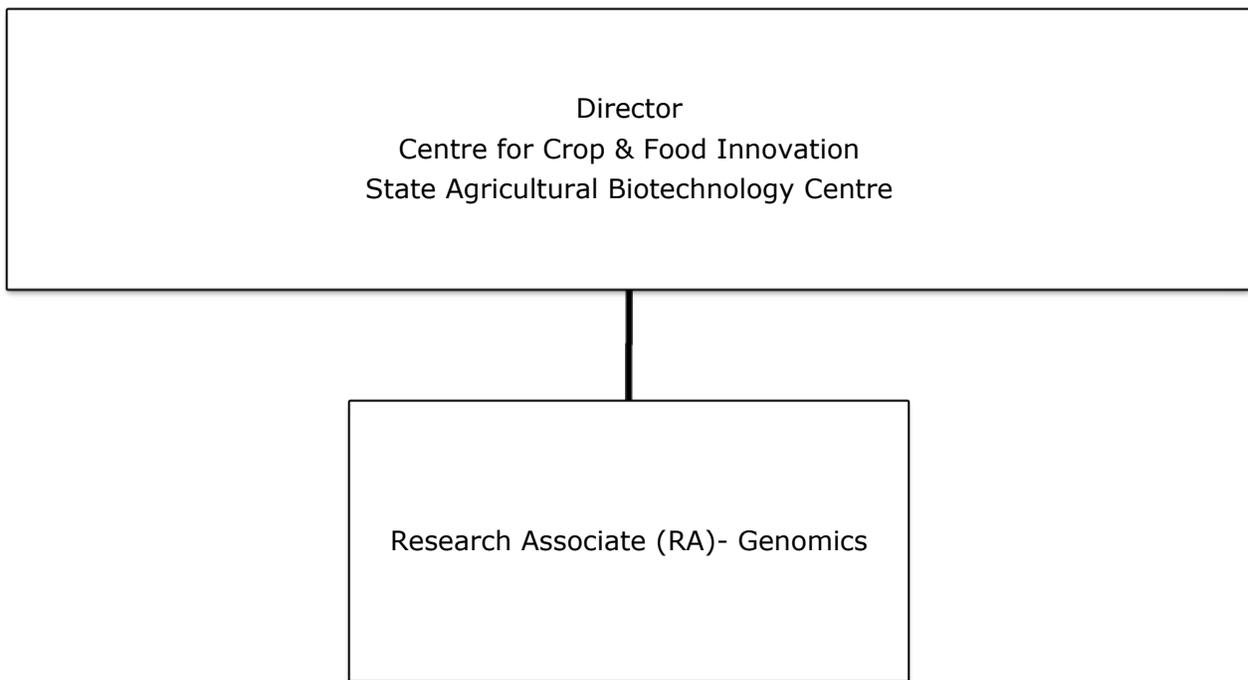
The Food Futures Institute is one of Murdoch University's research institutes, working to provide solutions on the sustainable use of limited land and water resources to economically and ethically improve food, forestry and fibre production. The incumbent of this position will be located in the Centre for Crop and Food Innovation, and State Agricultural Biotechnology Centre within the Food Futures Institute.

The Centre for Crop and Food Innovation represents a collaboration of academic research staff working with industry partners to provide both strength and depth in research on major broadacre and horticultural crops to improve yield, quality and enhance tolerance and protection from biological and environmental stresses. Centre for Crop and Food Innovation comprises a team of academic and research staff and over 50 current HDR students and is ideally placed to capitalise on new technologies and investments in crop agriculture.

The State Agricultural Biotechnology is the collaborative university Centre for R&D in agricultural and veterinary biotechnology in Western Australia. It provides platform technologies and world class equipment and facilities for R&D in agricultural biotechnology to researchers from universities, state government and industry. At any time 15-20 research groups and companies rent space and use the State Agricultural Biotechnology facilities. The State Agricultural Biotechnology is well resourced with research and teaching facilities, and hosts a number of research groups and centres across the disciplines of:

- Agricultural Sciences,
- Environmental and Conservation Sciences,
- Molecular and Biomedical Sciences and
- Murdoch University College of Veterinary Medicine.

Reporting Relationships



Key Responsibilities / Duties

1. Design and conduct research experiments in genomics and molecular biology leading to generation of sequencing and genotyping data; and maintain accurate records of experimental procedures and results. Director, Centre for Crop and Food Innovation, and Director, State Agricultural Biotechnology Centre Research Associate Murdoch University Position Description – Professional Positions
2. Use a range of bioinformatics pipelines and conduct network and statistical analyses of large-scale sequencing, genotyping and phenotyping data sets for development of genome assemblies, pangenomes, and trait mapping.
3. Contribute to development of mid-density and low-density SNP genotyping platforms.
4. Prepare results for international scientific journals, and industry reports.
5. Participate, subject to opportunity, in applications for competitive grant funding.
6. Provide guidance and contribute to the supervision of postgraduate HDR students.
7. Contribute to the College, the University, the profession and the discipline.
8. Participate in the University's Academic Contribution Development Review (ACDR).
9. Carry out, and assist with, other duties as required.

Guiding Principles and Values / Code of Ethics and Code of Conduct

The founding principles upon which Murdoch University was established continue unabated today. We continue to be guided by the principles of:

- Equity and Social Justice
- Opportunity
- Sustainability
- Global Responsibility

These Murdoch principles come to life through our culture, as evidenced by being an institution where the following are clear:

- Integrity
- Respect and Diversity
- Purpose
- Excellence and Future-focus

All staff will comply with the University's Code of Ethics and Code of Conduct and demonstrate a commitment to its Equity, Diversity and Safety principles and the general capabilities of personal effectiveness, working collaboratively and demonstrating a focus on results.

All Staff are to complete a Contribution Development Review Annually. Details of the University policies on Development Review can be accessed [here](#). A commencing Development Review should be completed within 3 months of commencement.

Selection Criteria

1. Completion of post-graduate tertiary qualification, with subsequent relevant experience.
2. Minimum of two years' experience in agricultural biotechnology, genetics, plant breeding, or another relevant field.
3. Demonstrated expertise in the use of bioinformatics tools/ pipelines to process largescale sequencing, genotyping and phenotyping datasets.
4. Demonstrated experience in data interpretation and writing research articles, and presentation of results before scientific community and industry.
5. Demonstrated ability to work independently under broad direction, and effectively as a team member.
6. Demonstrated ability to engage in high-quality independent research.
7. Demonstrated capacity to generate research funding (either independently or as part of a research team).
8. Demonstrated ability and commitment to successfully supervise honours, postgraduate and HDR students.
9. Well-developed interpersonal skills.
10. Demonstrated high levels of written and oral communication skills in English

Work Requirements

1. Occasional overseas/interstate travel/travel within the state may be required.
2. Ability to work outside of normal office hours when required.
3. Australian residency or possession of a valid visa with work entitlement in Australia.

Probationary Review

This position may be subject to a probationary period, during which the academic staff member is required to meet set probationary objectives and pass a probationary review. Probationary objectives are set following appointment to the position and confirmed at the first Academic Contribution Development Review (ACDR).

Academic Career Framework

Murdoch University's Academic Career Framework provides a transparent, equitable and consistent approach to probation and promotion as well as outcome and workload expectations. Please refer to the Murdoch University Academic Career Framework for performance criteria and expectations for all academic positions.

