

# 2024 PhD research opportunities

Seeking the brightest graduates to advance your career in industry supported world-class bioscience research

## Apply today

The successful candidates will receive:

- A \$35,000 p.a (tax-free) scholarship for up to three and a half years
- Training in Australia's first integrated agricultural systems biology research centre, AgriBio
- Professional development programs
- International travel opportunities

*Based at AgriBio, the Centre for AgriBiosciences, Melbourne or The Grains Innovation Precinct, Horsham, Victoria, Australia*

Successful applicants must meet the Australian University entry requirements for a Doctor of Philosophy degree through our Higher Education partner, La Trobe University.

For enquiries and to apply, please forward a covering letter, your curriculum vitae (please include evidence of research writing) and academic transcripts to:

**Kendra Whiteman**  
**Higher Education Manager**  
Agriculture Victoria Research  
[kendra.whiteman@agriculture.vic.gov.au](mailto:kendra.whiteman@agriculture.vic.gov.au)

**Closing date for applications:** until filled

## Current projects:

### Molecular curation of the Australian Grains Genebank (AGG)

This project aims to develop novel approaches to curate genebank germplasm collections using genome-wide genotypic data in order to maximise the utility of plant genetic resources (PGRs) warehoused within the AGG for use in research and breeding.

This PhD research will investigate opportunities for large-scale genome-wide genotype datasets to identify and develop core diversity sets and establish methods to maximise curation efficiency and the utilisation of PGRs warehoused within the AGG. The research will be based at the Grains Innovation Precinct in Horsham.

### Seeing is believing: Visualising the Australian Grains Genebank (AGG)

This project aims to develop visualisation practices to drive interactive discovery from huge multi-dimensional genomic and phenomic datasets to maximise the utility of plant genetic resources (PGRs) warehoused within the AGG for Australian agriculture. This PhD research will investigate opportunities for data-driven research to develop new visualisation approaches for 'omics datasets that enable rapid engagement of users and managers of PGRs warehoused within the AGG and will be based at AgriBio Bundoora, Melbourne.

### Haplotypes for Breeding: Establishing the building blocks of future varieties

This project aims to develop theoretical and software-based haplotype analysis approaches that can be applied as the basis for the genomic breeding of crops to meet the challenges of climate change and future food security.

This PhD research will develop computational methods that will establish path to impact for the large genomic data being generated in the form of value-based assessments of haplotype. The research will be based at AgriBio, Bundoora, Melbourne.