



# 2024

## PhD research opportunities

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



### The successful candidates will receive:

- A \$35,000 p.a (tax-free) scholarship 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, Victoria, Australia**

Successful applicants must meet the La Trobe University entry requirements for a Doctor of Philosophy degree.

Check your eligibility here:

<https://www.latrobe.edu.au/study/apply/research/doctor>

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

**Closing date for applications:  
until filled**

### Current Projects:

#### **The application of near-field sequencing technology as a triage and surveillance tool to detect pests and pathogens.**

Rapid and accurate identification of pests and pathogens is critical to ensure Australia's continued biosecurity and effective management of established pests.

Through Agriculture Victoria, the Grains Research and Development Council (GRDC) is funding a PhD project to investigate the utility of near-field sequencing methodologies (e.g., MinION) as a triage and surveillance tool for the detection of endemic and exotic pests and pathogens of significance for the grains industry.

PhD Project Aims -

- To optimise Oxford nanopore Minlon (portable realtime long read sequencing) methods, or other suitable technologies, for rapid near-field sequencing for pest and pathogen diagnostics.
- This project will involve assessing and applying near-field DNA sequencing technologies for DNA Barcoding / Metabarcoding / eDNA sequencing for identification of pests and pathogens.
- This PhD project will involve both field and laboratory components, as well as specialised bioinformatic data analysis.

This project will shape the future of pest surveillance in the grains industry. Through collaboration with a diverse team of researchers, applied entomologists, and industry end users, the student will receive comprehensive training, access to cutting-edge techniques and skills that are in high demand within academia and industry.