

# PhD research opportunities

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

## Apply today



## ARC Training Centre in Predictive Breeding

### The successful candidates will receive:

- An ARC Training Centre in Predictive Breeding living allowance scholarship of **\$34,938** p.a for **4 years**. Agriculture Victoria Research will top this scholarship up to equal **\$37,000** p.a for 3.5 years.
- International travel opportunities up to **\$6000**.
- Assistance with relocation costs up to **\$2000**.
- Access to state-of-the-art technologies.
- Professional development programs.

**Based at AgriBio, the Centre  
for AgriBiosciences,  
Melbourne, Australia**

Successful applicants will enroll through the [School of Applied Systems Biology](#), La Trobe University and 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.

### The PhD Projects on offer :

#### **Modelling GxExM to improve feed efficiency in dairy cattle (HDR13)**

The PhD project will develop a mechanistic model that can simulate cow performance in different environments to generate phenotypes for genetic improvement of hard-to-measure traits, e.g., feed efficiency. The student will use existing data (feed intake, body weight, milk production) to fit/calibrate the model and link them with the cow's genotype. The outcome of this relationship between the cow's genotype and the model's specific genetic parameters will be used to simulate the phenotypes which can be used for genomic prediction.

#### **Integrating phenomics data to predict cow health (HDR5)**

This PhD student will assess the value of reproductive, health, productive, calf growth, and other similar data to predict health status. Milk mid-infrared (MIR) spectra, blood and milk biomarkers, daily milk records, and wearable sensor data from either The objective is to predict cow health in real-time to detect health complications at subclinical or early stages and assist farmers in improving the health and well-being of their

**Note:** projects can be tailored to student's skills/interests, e.g., more related to method development, programming or data sciences.



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