

PhD research fellowships

DAIRY

Apply today



The successful candidates will receive:

- A \$30,000 p.a (tax-free) scholarship for up to three and a half years
- Professional development programs
- International travel opportunities
- Access to state-of-the-art technologies

Through our partnering Universities, the PhD research fellowships will be based at the following locations:

- Ellinbank Research Centre and SmartFarm *Ellinbank, Victoria*
- Hamilton Research Centre and SmartFarm *Hamilton, Victoria*
- AgriBio, the Centre for AgriBioscience *Melbourne, Victoria*

Successful applicants must meet Australian university entry requirements for a Doctor of Philosophy degree.

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

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PhD research program in animals

The animal PhD program will focus on new knowledge for advanced predictive innovations that will enable higher levels of farm profitability, and the development of disruptive technologies.

PhD topics scoped are in the following areas;

- Individual animal prediction using herd-test, milk data, clinical data, and sensor data sources
- Data integration from wearable sensor devices to expand and improve traits
- Calf performance, epigenetics and lifetime factors
- Guided decision making on farm using genetic and non-genetic data
- Novel approaches to genomic prediction of feed efficiency and emissions traits
- Molecular phenomics including milk and blood metabolomics
- Long-read sequencing defining structural variants and imputation improvement
- Optimising decision making for genetic progress while managing inbreeding.

Focusing on value from Biobanks and examination of high performing animals.

PhD research program in forages

The forage PhD programs will focus on using a broad range of biotechnology and genomics to ensure the delivery and security of the feedbase for the dairy industry for the next century.

PhD topics scoped are in the following areas;

- Genome editing in novel species – to deliver more nutritious crops for future climate change
- Speed breeding – manipulating plant growth in tissue culture and applying genomics for maximal improvements in the shortest time
- Phenomics – hyperspectral image analysis of seed and plants to screen for critical traits that have been inaccessible
- Biophysical modelling – to computationally integrate plant growth, climate change and genomics to breed for the future
- Genome editing for apomixis – to fundamentally change plant production systems
- Many others

All of the areas described include access to the most advanced technology, training and skill development in genomics, bioinformatics, plant phenomics (hyperspectral imaging) and biotechnology.

The skills will challenge you and make you industry relevant for a career in research and development. You will have access to excellent supervision and support and by being exposed to many different scientific disciplines will have unprecedented experience knowledge and opportunities.