

# Industry update

## January 2019



**14**  
Current & contracting projects



**\$328,904**  
Invested in RD&E October-December 2018



**\$1,734,091**  
Committed to RD&E from 1 July 2018

### Project spotlight (current): Understanding, reducing the effects of heat stress on TB stallion fertility

**Project ID:** PRJ-011268

**Research Organisation:** The University of Newcastle

One of our exciting projects is looking into the effect of heat stress on stallion fertility. This is a PhD research project with Aleona Swegen who is looking into climatic conditions experienced by stallions in major Thoroughbred breeding hubs of Australia. Preliminary data has shown a relationship between ambient temperatures and per cycle conception rates.

This study will examine the relationship between ambient temperatures, sperm DNA damage and stallion fertility. Understanding these mechanisms will provide short-term reproductive efficiencies and will also look towards the development of novel management strategies to alleviate the effects of heat stress on fertility.

### Project spotlight (current): PhD student Laura Nath

**Project ID:** PRJ-011357

**Research Organisation:** The University of Adelaide

#### How did you identify the need for this project?

Cardiac arrhythmias are an important and not well understood cause of impaired athletic performance, collapse and potentially death in racehorses. Relatively little work has investigated cardiac arrhythmia in comparison to other causes of racing and training fatalities. The outcomes of this research will hopefully assist in reducing racehorse fatalities and jockey injuries and could also have relevance to human athletes.

#### What inspires you to work in the thoroughbred horse industry?

The thoroughbred horse industry has important social, economic and cultural connections within Australia and globally. Whilst the role of the horse in society has diminished over the last 100 years, thoroughbred racing remains as the premier opportunity for the public to interact with and share in the grace of the horse.

### AgriFutures™ Thoroughbred Horses Program Advisory Panel

- Prof. Nigel Perkins (Chair)
- Dr Catherine Chicken (Deputy Chair)
- Derek Field
- Jacqueline Stewart
- Dr Judith Medd
- Tas Reilley
- Annelies McGaw (AgriFutures Australia Manager, Research)

### Upcoming events

**4 Feb**

AgriFutures™ Thoroughbred Horses Program Advisory Panel meeting

**13 Feb**

AgriFutures™ Thoroughbred Horses Program Open Call closes

**19-20 Feb**

evoke<sup>AG</sup>, Melbourne

**1 Mar**

AgriFutures™ Horizon Scholarship applications close

Sign up to the AgriFutures™ Thoroughbred Horses Program newsletter to receive regular program updates

## Current projects

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Wellbeing from pregnancy to racing - horse demographics

**Principal Investigator:** Meredith Flash

**Research Organisation:** The University of Melbourne

**Expected Completion Date:** 1 June 2019

**Project ID:** PRJ-011251

Postgraduate Scholarship

**Principal Investigator:** Laura Nath

**Research Organisation:** The University of Adelaide

**Expected Completion Date:** 1 July 2019

**Project ID:** PRJ-011357

Computational modelling of limb loads from galloping horses on different tracks

**Principal Investigator:** Chris Whitton

**Research Organisation:** The University of Melbourne

**Expected Completion Date:** 30 April 2020

**Project ID:** PRJ-011237

PhD Understanding, reducing the effects of heat stress on TB stallion fertility

**Principal Investigator:** Aleona Swegen

**Research Organisation:** The University of Newcastle

**Expected Completion Date:** 1 July 2020

**Project ID:** PRJ-011268

The uterine microbiome - key to equine fertility?

**Principal Investigator:** Natali Krekeler

**Research Organisation:** The University of Melbourne

**Expected Completion Date:** 31 August 2020

**Project ID:** PRJ-011248

Non-invasive ventilatory support for foals

**Principal Investigator:** Sharanne Raidal

**Research Organisation:** Charles Sturt University

**Expected Completion Date:** 31 October 2020

**Project ID:** PRJ-011159

Improved bacterial identification and antimicrobial susceptibility testing

**Principal Investigator:** Sharanne Raidal

**Research Organisation:** Charles Sturt University

**Expected Completion Date:** 31 December 2020

**Project ID:** PRJ-011233

Improving jockey safety through virtual reality and biomarkers of concussion

**Principal Investigator:** Brad Wright

**Research Organisation:** La Trobe University

**Expected Completion Date:** 15 May 2021

**Project ID:** PRJ-011192

Improving the detection of parasitic infections and control strategies of horses

**Principal Investigator:** Abdul Jabbar

**Research Organisation:** The University of Melbourne

**Expected Completion Date:** 30 November 2021

**Project ID:** PRJ-011191

Maintaining welfare and integrity in Australian Racing

**Principal Investigator:** Glenys Noble

**Research Organisation:** Charles Sturt University

**Expected Completion Date:** 20 December 2021

**Project ID:** PRJ-011188

Wellbeing - Racing demographics, reasons for retirement and post racing destinations

**Principal Investigator:** Meredith Flash

**Research Organisation:** The University of Melbourne

**Expected Completion Date:** 30 December 2021

**Project ID:** PRJ-011271

Understanding the epidemiology of Chlamydia psittaci infections in mares

**Principal Investigator:** Peter Timms

**Research Organisation:** University of the Sunshine Coast

**Expected Completion Date:** 31 December 2021

**Project ID:** PRJ-011402

## Contracting projects

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Rapid diagnosis of infectious agents of equine reproductive loss

**Principal Investigator:** Cheryl Jenkins

**Research Organisation:** NSW DPI

**Expected Completion Date:** 1 October 2019

**Project ID:** PRJ-011628

Learn more

[agrifutures.com.au/thoroughbred-horses](http://agrifutures.com.au/thoroughbred-horses)