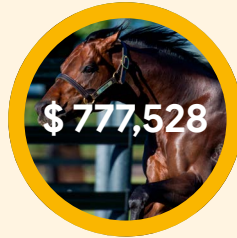


Industry update

Vol. 1 No.4



RD&E
investment
April-June
2019



RD&E
investment
2018/19



RD&E
investment
committed
from 1 July
2019

Upcoming events

12
Aug

AgriFutures™ Thoroughbred Horses Program Preliminary Research Proposal Open Call (opens)

30 Aug

Australian Rural Leadership Program applications close

11 Sept

Rural Women's Award Gala Dinner, Canberra ACT

16-18
Oct

AgriFutures™ Thoroughbred Horses Advisory Panel meeting

18-19
Feb

evoke^{AG}. 2020, Melbourne VIC

Advisory Panel

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

Emerging leaders in ag

Applications are now open for the Australian Rural Leadership Program (ARLP). The ARLP is a 15-month leadership development program that takes places over five sessions across Australia and Vietnam.

AgriFutures Australia is pleased to sponsor a ARLP recipient in Course 27 and welcomes applications from the thoroughbred industry. If you're interested in putting forward an application please speak with Annelies (annelies.mcgaw@agrifutures.com.au).

Apply now rural-leaders.org.au

Project spotlight: Developing a novel diagnostic test for early pregnancy

Project ID: PRJ-011748

Principal investigator: Aleona Swegen

Research Organisation: The University of Newcastle

This recently contracted project seeks to enhance breeding efficiency in the thoroughbred industry through the development of a novel method for the detection and monitoring of early pregnancy.

In this project, the research team will use state-of-the-art mass spectrometry technology to compare blood protein and lipid (fat) profiles of early pregnant and non-pregnant mares, and world-first strategies to investigate the unique biological features of equine pregnancy. This will identify compounds that could serve as biomarkers of an early pregnancy, and a compromised early pregnancy or poor embryo health at time points prior to conventional diagnosis by ultrasound (ie earlier than day 14 after ovulation).

The end goal being to develop a quick, simple and accurate on-farm blood test for early pregnancy and enhanced understanding of the possible causes for early embryo loss.

Project spotlight: Coxiella burnetii infection in association with equine abortion

Project ID: PRJ-011758

Principal investigator: Joanne Devlin

Research Organisation: The University of Melbourne

This project aims to increase the industries understanding of Q Fever (coxiella burnetii infection) for equine health (specifically its association with equine abortion) and any related risks to human health in Australia. The research team will genetically characterise the Q fever detected in 16 historical cases of equine abortion from NSW and VIC and compare these characteristics with those from cases of Q fever in humans and other species. They will also consider the load of Q fever in the historical cases to assess the likely level of environmental contamination, and the risk of infection to other horses and humans, after an abortion event.

The findings from this research will be used to help inform the development of appropriate control measures, this may include appropriate biosecurity and infection control, and could include Q Fever vaccination for staff exposed to high risk material.

Current projects

Project ID	Project Name	Finish	Principal Investigator	Research Organisation
PRJ-011162	Measurement of economic impact of the Australian thoroughbred breeding industry	3/08/2018	Hardy, Glenn	The Trustee for the IER UNIT TRUST
PRJ-011357	Postgraduate Scholarship - UoA Laura Nath	1/07/2019	Nath, Laura	The University of Adelaide
PRJ-011251	Wellbeing from pregnancy to racing- horse demographics	1/08/2019	Flash, Meredith	The University of Melbourne
PRJ-011268	PhD Understanding, reducing the effects of heat stress on TB stallion fertility	1/07/2020	Swegen, Aleona	The University of Newcastle
PRJ-011192	Improving jockey safety through virtual reality and biomarkers of concussion	15/05/2021	Wright, Brad	La Trobe University
PRJ-011188	Maintaining welfare and integrity in Australian Racing	20/12/2021	Noble, Glenys	Charles Sturt University
PRJ-011628	Rapid diagnosis of infectious agents of equine reproductive loss	30/01/2020	Jenkins, Cheryl	NSW DPI
PRJ-011237	Computational modelling of limb loads from galloping horses on different tracks	30/04/2020	Whitton, Chris	The University of Melbourne
PRJ-011248	The uterine microbiome- key to equine infertility?	31/08/2020	Krekeler, Natali	The University of Melbourne
PRJ-011159	Non-invasive ventilatory support for foals	31/10/2020	Raidal, Sharanne	Charles Sturt University
PRJ-011233	Improved bacterial identification and antimicrobial susceptibility testing	31/12/2020	Raidal, Sharanne	Charles Sturt University
PRJ-011758	Coxiella burnetii infection in association with equine abortion	31/12/2020	Devlin, Joanne	The University of Melbourne
PRJ-011191	Improving the detection of parasitic infections and control strategies of horses	30/11/2021	Jabbar, Abdul	The University of Melbourne
PRJ-011402	Understanding the epidemiology of Chlamydia psittaci infections in mares	31/12/2021	Timms, Peter	University of the Sunshine Coast
PRJ-011271	Wellbeing: Racing demographics, reasons for retirement & post racing destinations	30/12/2021	Flash, Meredith	The University of Melbourne
PRJ-011712	A Novel Device for the On-farm Assessment of Stallion Sperm Fertility	31/05/2022	Gibb, Zamira	The University of Newcastle
PRJ-011748	Developing a novel diagnostic test for early pregnancy in the mare	31/12/2022	Swegen, Aleona	The University of Newcastle