

January - March 2019

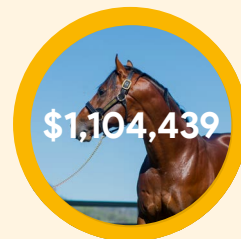
AgriFutures™ Industry update



14
Current
projects



\$127,489
Invested
in RD&E
January -
March 2019



\$1,104,439
Forecast
investment
from 1 January
2019 onwards

Project spotlight

The Uterine microbiome key to equine infertility?

Project ID: PRJ-011248

Principal investigator: Natali Krekeler

Research organisation: The University of Melbourne

This research project investigates the role of the bacterial microflora of the equine reproductive tract on equine fertility.

The main objective is to identify differences in microflora between fertile and infertile mares to develop novel diagnostic and treatment methods for equine infertility. As of September 2018, 160 samples from mares have been collected from four sites across Australia and New Zealand. At the end of the season 16 mares who were not pregnant were sampled. This project is in the very early stages and is not due for completion until 2020. We are very excited to discover more about this crucial area of research.



Dr Martina Jelocnik

AgriFutures™ Thoroughbred Horses 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)

Researcher spotlight: Dr Martina Jelocnik

PRJ-011402 Understanding the epidemiology of Chlamydia psittaci infections in mares

University of the Sunshine Coast

1. Why is this research important

Our recent study (in collaboration with the NSW Department of Primary Industries and Scone Equine group) has confirmed that Chlamydia psittaci infections in horses is higher than originally thought and not limited to New South Wales. This suggests that this problem may be widespread and not just a recent phenomenon. Research has revealed contact with birds are a key part of the issue however little else is known about equine chlamydiosis.

In this current AgriFutures Australia funded project, we aim to reduce pregnancy losses in Australia's thoroughbred industry by revealing basic information on the epidemiology of this disease, focussing on two key aspects of this disease, the C. psittaci infected mare and the potential avian reservoirs of C. psittaci infection.

2. What inspires you to work in the Thoroughbred Horse industry?

Chlamydial infections in horses cause high mortality and also pose a risk to breeders, stud owners and others involved in the industry. I'm driven to understand the epidemiology (where, when and how) of chlamydial infections to safeguard both animals and public health and implement disease management strategies.

Additionally, the inadequate laborious and costly detection tests further challenge efforts to manage and rapidly treat infected hosts. The ability to provide rapid detection of infections is critical to avoid morbidity and mortality. My research provides a nexus between state veterinary laboratories, researchers, veterinarians and horse breeders to form a C. psittaci "One Health" platform to unify efforts in the management of this emerging pathogen.

Read more about Dr Jelocnik and her research at agrifutures.com.au/thoroughbred-horses

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-011745	Peer review of PRJ-011162	15/03/2019	Henderson, Will	RM Consulting Group
PRJ-011251	Wellbeing from pregnancy to racing - horse demographics	1/06/2019	Flash, Meredith	The University of Melbourne
PRJ-011357	Postgraduate Scholarship - UoA Laura Nath	1/07/2019	Nath, Laura	The University of Adelaide
PRJ-011237	Computational modelling of limb loads from galloping horses on different tracks	30/04/2020	Whitton, Chris	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-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-011192	Improving jockey safety through virtual reality and biomarkers of concussion	15/05/2021	Wright, Brad	La Trobe University
PRJ-011191	Improving the detection of parasitic infections and control strategies of horses	30/11/2021	Jabbar, Abdul	The University of Melbourne
PRJ-011188	Maintaining welfare and integrity in Australian Racing	20/12/2021	Noble, Glenys	Charles Sturt University
PRJ-011271	Wellbeing: Racing demographics, reasons for retirement & post racing destinations	30/12/2021	Flash, Meredith	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

AgriFutures™ Ignite Network

Are you part of the AgriFutures™ Ignite Network? The Network is a program to connect passionate rural leaders. Participants in the Network have a strong interest in shaping the future of Australian rural industries and are responsible for igniting the passion, revitalising the industry and introducing and encouraging changes to make it happen.

To be part of the Ignite Network, join the facebook group: <https://www.facebook.com/groups/AgriFutures.Ignite>

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updates**
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