

Equine Guelph

Research Update



Volume 16 - 2019

*Welcome to Equine Guelph's new digital newsletter.
Same great information in an easily accessible, eco-friendly format.*

Ontario Equestrian Supports Gut Research

“Gastrointestinal disease in horses is probably the number one cause of all illness,” says Ontario Veterinary College researcher Dr. Luis Arroyo. His research team is hard at work investigating how microorganisms in the gut can get out of control and cause disease. Greater understanding in this area could be the key to future prevention and better management. Arroyo states, “We are using the latest technological tools (Robo-gut) and methods to tackle this issue. The results could have far reaching impact to the international equine population.”

Research funding provided by Ontario Equestrian will be used in part to purchase an anaerobic chamber gut that will be used to handle strictly anaerobic bacteria (bacteria that do not need oxygen to survive) and supplies to run the culture experiments of such organisms.

Robo-gut, designed originally for studies in humans, is an integral approach that mimics the natural environment where microbial communities live. The apparatus allows researchers to learn how the gut microbes can be affected by several factors. Changes can be reproduced in the laboratory using Robo-gut and have proven extremely useful in studying gastrointestinal disorders in humans.

Gastrointestinal illness such as colic and colitis can affect any horse. The equine industry suffers large economical loses due to preventive and sick animal treatments, days lost to training and competition, and crippling complications or death. A better understanding of gastrointestinal disorders in horses is very much in need and of great value to the industry and equine health in general.



With the collaboration and expert guidance of Dr. Emma Allen-Vercoe, (designer of the human Robo-gut), Arroyo is setting up a similar simulated gut to help understand what a healthy horse microbiome looks like as the first step in understanding gastrointestinal disorders.

Diarrhea continues to cause morbidity and mortality in Ontario horses and worldwide. “This research has the potential to impact equine health beyond borders”, says Arroyo. “Very few laboratories/researchers are currently invested in finding out the cause(s) of gastrointestinal disorders in horses and this kind of research is very much in need.”

Learn more about this [research](#) or [donate](#).

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*Sign up for
Equine Guelph's
online courses*

FASCINATED BY DIGESTIVE HEALTH?

Gut Health and Colic Prevention

Short Course on [TheHorsePortal.ca](#)

12 week courses at [EquineStudiesOnline.ca](#)

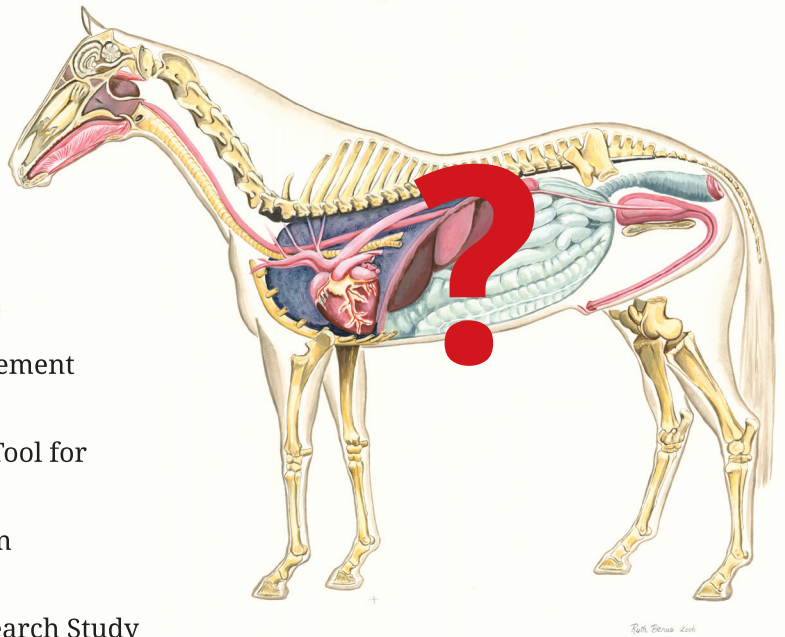
- Equine Nutrition
- Advanced Equine Health through Nutrition
- Equine Health and Disease Prevention

2018 Research Stories

See How Research is Helping YOU!

Check out these research story links:

- Guelph PhD student takes on Leaky Gut in horses
- Readers Digest New Chapter on Gut Bugs
- Guelph researchers spurred by interest in the use of equine training equipment in Canada
- Equine Guelph funded research investigates steamed, soaked and dry hay in Ontario
- Dr. James Raeside Honoured with Lifetime Achievement Award in Equine Reproduction
- Pilot Study looks at On-Farm Welfare Assessment Tool for Equines in Canada
- Airway Disease in Racehorses More Prevalent Than Previously Thought, Study Reveals
- Major Threats to Equine Welfare Identified in Research Study



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Anyone wishing to excerpt Equine Guelph should contact jbellamy@uoguelph.ca

EQUINE GUELPH
HEALTHflash

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A photograph of a woman with short brown hair, wearing a light blue shirt, smiling and petting a brown horse with a white blaze on its face. The background is a solid green color.

JOIN THE HERD

A photograph of a herd of horses running across a green field under a blue sky. There are three horses visible: a dark brown one in the foreground, a black one behind it, and a lighter brown one to the right.

TheHorsePortal.ca

When you support EQUINE GUELPH you make a difference in horse health and well-being.

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Charitable registration Number 10816 1829 RR 0001

EquiMania! on Tour



"The smiles say it all when youth and family have fun learning about the wonderful world of horses," says Equine Guelph director, Gayle Ecker.

"Since 2005, EquiMania! has grown into a hugely popular travelling exhibit, gaining international awards and delighting horse lovers across North America!"

In 2018 EquiMania! was available to millions of visitors:

Georgia National Agricultural Fair	Can-Am All Breeds Expo
Canadian National Exhibition (CNE)	Mohawk Fireworks Night
Royal Agricultural Winter Fair	Brooklin Spring Fair
Minnesota State Fair	Erin Fall Fair

We could not do it without our loyal sponsors and wonderful volunteers.

Thank you ESSO, Greenhawk, Kubota Canada, Ontario Equestrian, Shur-Gain, SSG Gloves, Standardbred Canada, System Fencing and Workplace Safety and Prevention Services.

Want to be part of the 2019 tour? Eq4kids@uoguelph.ca

EVENTS

Mark your calendar

EquiMania! at Can-Am All Breed Equine Expo, Markham, ON
April 05 - 07

Equine Guelph Summer Semester Online courses begin
May 6

15th Annual International Society for Equitation Science Conference,
University of Guelph
August 19 - 21