Equine Guelph Research Program

Call for Proposals for the 2015 competition

Proposals are solicited for the 2015 Equine Research competition, which is administered by the Equine Guelph Research Committee on behalf of several contributing organizations: Research operating funds for this program are provided by the EP Taylor Foundation (EPTF), the Horse Improvement Program (HIP) administered by the Ontario Racing Commission (ORC), and Horsemen’s Benevolent and Protective Association of Ontario (HBPA); infrastructural support is provided by the partnership between the University of Guelph and OMAFRA.

Priorities

All three sponsoring agencies (EPTF, ORC, and HPBA) are within the racing sector of Ontario’s equine industry (Thoroughbred, Standardbred, and Quarterhorses). The committee will give preference to proposals of relevance to racing. The HBPA has specified two areas of priority for them:

1. Track surface: Synthetic vs dirt. This priority encourages research on any issues relevant to surface, for example, injuries to the horse or rider, and risk factors for such injuries, and respiratory issues for rider and horse, etc.

2. Lasix: What happens to our industry and the health of the horse if is taken away? Are there other methods that control bleeding that could be considered?

Each proposal is rated on its scientific merit (established by expert peer reviews), its relevance to the priorities, its relevance to Ontario’s horse industry, and the total request. The success rate in recent competitions has been 50% ±10% in the range or $8K-$70K. Here is an alphabetical list of titles of recent successful proposals, to give an idea of the breadth of topics that have been funded:

- Bleeders and Pulmonary Physiology
- Calibration and assessment of capsule-endoscopy technology as a diagnostic tool for imaging the small intestine of the horse
- Cardiac Troponin in the Standardbred Racehorse
- Characterization of extracellular matrix proteins and resident cells in calcified pulmonary arteries in horses
- Characterization of the respiratory microbiome of healthy horses
- Effect of allogeneic umbilical cord blood mesenchymal stromal cells on induced synovitis in horses

---

1 The voting members on the committee are nominated by the funding sponsors. The current members are Dr. Bruce Duncan (ORC), Dr. Dan Duncan (HIP-TB), Dr. Gayle Sommer (HIP-QH), Dr. Dan McMaster (HIP-SB) and Dr. Darryl Bonder (HBPA). Terms of Reference for the committee are available on Research page at: http://www.equineguelph.ca/

2 Funds from the EPTF arise from the annual interest on a trust administered by Alumni House at the University of Guelph, and are awarded by the EG Research Committee acting for the University and the EPTF.
Effectiveness of a paravertebral block compared with local anesthetic infiltration of portal sites in horses undergoing laparoscopic surgery for closure of the nephrosplenic space under standing sedation.

Electroarthrography for non-invasive on-farm assessment of fetlock joint cartilage health
Equine induced pluripotent stem cells for treating cartilage defects and disease modelling
Evaluation of the intestinal microbiota in horses with gas colic
Evaluation of the significance of arthropathy of the caudal facet joints in horses
Immuno-histochemical staining of adrenergic and cholinergic fibers in the equine sympathetic and parasympathetic nerves of the lower and upper airways in 6 horses
Molecular epidemiology of organisms potentially causing diarrhea in foals: a longitudinal study to identify pathogenic genotypes with emphasis on clostridial organisms
Molecular mechanisms of prostaglandin-induced embryonic loss in mares
Nitric Oxide’s role in Persistent Endometritis in Mares
ORC Death Registry: An in-Depth Analysis
Plasma transfusions in horses: Does it improve the clinical outcome?
Prospective evaluation of MSC isolation from umbilical cord blood and jugular blood
Proteins involved in the failure of early pregnancy
The effect of a newly designed probiotic on prevention of diarrhea and fecal pathogen shedding of foals during the first two months of life
The global lung epithelial response to inhaled dust
Using network analysis and dynamic models to develop an understanding of the opportunities and challenges for disease control in equine populations

Application process and due dates

All relevant forms are attached to this email and may also be found on the Research page at [http://www.equineguelph.ca/](http://www.equineguelph.ca/).

The three primary pieces of information to be submitted are the short Preproposal (described under Deadlines below), and the completed and signed Proposal and OR-5. The Proposal Template form includes instructions for font size and word-counts for each section; please comply with these carefully.

If you are requesting the use of horses at the Arkell research station, please contact Brad Rogers brogers@uoguelph.ca for current costing for the use of existing horses or the purchase of new ones.

If the proposal requires the use of horses on Campus or use of the hospital or clinical research building consult the OVC animal manager Ann ODonnell immediately for information, instructions, and costing to be included in the budget.

Funds will not be released to any successful proposal using live animals without a valid animal use protocol AUP. It is recommended that you begin preparing an animal use protocol AUP for the use of live animals (if any) once the proposal is submitted: [https://www.uoguelph.ca/research/services-divisions/acc/animal-utilization-protocol/](https://www.uoguelph.ca/research/services-divisions/acc/animal-utilization-protocol/).
Deadlines

Monday November 3rd, before 4p.m. Submit this information in the body of an email to Barb Gaudette bgaudett@ovc.uoguelph.ca:
- PI’s name
- Title
- Scientific Abstract
- Reviewers: a list of the names, affiliations and contact information for up to six external peer reviewers.

Friday November 7th. By this date you should have completed the proposal and begun the process of obtaining signatures on the OR-5 form from the Dean’s office and from the Office of Research.

Monday November 17th, before 4p.m.
Submit the complete and signed proposal and OR-5 form to Barb Gaudette. Please submit one printed copy and an electronic version in word-processor format (not PDF please).

If you have questions please send them to Dr. Jeff Thomason jthomaso@ovc.uoguelph.ca

---

3 An external peer reviewer is defined as an expert in the field relevant to the Proposal who is not at the University of Guelph, nor has been an academic supervisor or recent collaborator of the primary investigators on the proposal.