

The EVOLUTION of Equine Guelph

The WORLD-CLASS EQUINE EDUCATION CENTRE

— a partnership between the industry and the University of Guelph — has come a long way since it was launched in 2003.



Dr. Jeff Thomason, Equine Guelph's Director of Research.

A pastoral image of a mare and foal conveys Equine Guelph's goal of well-being for every horse, but the winged stallion Pegasus would be just as representative of the University of Guelph centre, which is that most mythical of entities: a wildly successful partnership between industry, academia and government.

Carved from the bones of the former Equine Research Centre (ERC) — founded at the University in 1988 — Equine Guelph was officially launched in 2003. The non-profit organization was designed to serve the equine industry through education, research, communica-

tion and development, with the welfare of horses serving as the overarching goal.

"There was a wish, in the industry, to form a partnership between the industry and the University to promote equine research that would be sensitive and responsive to the industry, using the expertise the University could provide," recalls Dr. Moira Gunn, past co-chair of Equine Guelph's Advisory Council.

"I believe it was the first partnership of its type in North America."

When the idea of Equine Guelph was born in 2002, Gunn was sitting on the board of the E. P. Taylor Equine Research Fund, one of four

funding bodies that eventually gathered under the Equine Guelph umbrella in an effort to concentrate research support. Joining the E.P. Taylor fund were the equine research arms of the Ontario Horse Racing Industry Association (OHRIA), the Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA) and the University of Guelph. This cooperative effort allowed continued support for the University of Guelph's talented researchers, but added a layer of focused input from the industry.

"We still had a research program ongoing, but now what we did was we worked it with the research com-

mittee being an Equine Guelph research committee," explains Gayle Ecker, current director of Equine Guelph and a former researcher at the Equine Research Centre.

"The different groups that were bringing money to the table all had a seat at the table, and they were asked about the industry priorities, and that's how the money was then allocated — based on the results of the (outside) peer review and on the results of the designated industry priorities."

Those focused efforts have paid off in countless high-quality research studies that have resulted in fundamental changes to how the equine



The horse racing industry has benefitted from Equine Guelph's research.

industry does business. From looking at early embryonic loss, to the impact of track surfaces on soundness, to treatments for colic and digestive upset, University of Guelph researchers, under the aegis of Equine Guelph, are engaged in world-class ground-breaking inquiries. (See side-bar p. 18)

"I think the work being done at Equine Guelph has huge benefits for the well-being of horses, and as a result the whole industry benefits," notes Gunn.

ONLINE LEARNING

While this successful research approach was being tailored, Ecker was also working on a proposal for the education component of Equine Guelph, and the centre's first online courses were offered in 2002 as part of the Equine Science Certificate program.

In the years since the launch, the program has expanded to 19 online courses, and students can now pursue the original Equine Science Certificate, an Equine Studies Diploma, an Equine Business Management Certificate or, new this year, an Equine Welfare Certificate.

The online courses, which range from Equine Exercise Physiology to Equine Business Finance and Risk Management, feature noted University of Guelph lecturers and renowned guest speakers from the equine industry and beyond.



Jackie Bellamy demonstrates Equine Guelph's online education component.

Ecker says the number of students that have enrolled in one or more courses is approaching 2,000 and that the student body — like the guest speakers — hail from all corners of the world.

Standardbred owner and breeder Lynn Magee is among the students who have obtained an Equine Studies Diploma from Equine Guelph's online offerings, and the Wingham, ON resident is clear about the benefits of extended learning to both horsepeople and their horses.

"It was a marvelous opportunity for me, and I put so much into all of my classes and got so much more out of it. Every time I learned something it took me to something else," notes Magee. "And things are changing so fast now in the world of horses. The research that is being done and all the work that is going on at University of Guelph and places like that — just the way we feed them is so much better than some of the theories that they had at one time. You have to keep up. You have to keep up with the changing science around us.

"I wish everybody who has ever thought about, or has a horse, would take these courses, because the horses deserve it," Magee says.

Designed to address needs within the industry, the course offerings are continually tweaked through feedback from both students and stakeholders. Equine Guelph regularly consults with its advisory council, made up of representatives from every facet of Ontario's horse industry including the Ontario Harness Horse Association (OHHA), the Ontario Racing Commission (ORC), and Standardbred Canada, and also surveys the broader population of horse owners, trainers and breeders.

The most recent survey indicated a need for shorter programs on key topics of interest and in March, 2012, the centre launched the first in a series of two-week e-sessions.

"We did a survey of the equine industry last year, and we asked the industry what they wanted. Education was viewed by virtually everybody in the industry as very important, but time and money is often an obstacle for them," explains Ecker. "So what we are starting to do now is create two-week mini-courses. The first one we are going to launch is on biosecurity. So in that two-week time period people can come online, at any time they choose during the day, and they can learn

about keeping infectious diseases out of their barn.”

From the start, Ecker’s philosophy about Equine Guelph’s education offerings has been grounded in what she calls the pyramid of learning, providing an accessible pathway of lifelong learning for horsepeople. Once the first Equine Science Certificate was up and running, she turned her attention to the program that serves as the first portal on the pyramid.

REACHING OUT TO YOUTH

Equimania, a fun, interactive youth program focusing on horse health and safety, made its debut at the Can-Am Equine Expo in 2005 and has since introduced hundreds of thousands of young people to the world of horses.

The widely traveled exhibit is a regular at the Can-Am events in London and Nova Scotia, the Royal Agricultural Winter Fair in Toronto,

the Royal Manitoba Winter Fair, Canada’s Outdoor Equine Expo, and racetracks and fall fairs. Equimania has also appeared internationally, and was such a hit at the 2010 World Equestrian Games in Lexington, KY, that the Kentucky Horse Park is now developing its own interactive youth exhibit.

“Equimania serves two purposes. One, it attracts people to the horse industry while they are kids, because we know we have to get them bitten by the bug when we’re eight and 10 years old,” says Ecker with a chuckle. “And two, it gives us a platform to speak to parents about kids who want to get into the horse industry.”

With Equimania focused on youth aged 8 to 12, and the online courses open to learners over the age of 18, Equine Guelph staff and their industry advisors perceived a gap in the learning pyramid. In 2006, the Groom One program was created to offer newcomers to the industry the opportunity to gain knowledge and

skills that would allow them to obtain work at a racetrack or training centre.

“We had this void for youth who wanted to get into the industry, and so that’s what we wanted to do, provide that next level for them. Also, we could attract people to the Groom One program and get them introduced to racing,” explains Ecker, noting that the industry had expressed an ongoing need for knowledgeable, competent caretakers.

Consisting of a two-day orientation, which includes a backstretch tour and a night or afternoon at the races, plus an online component and a work placement, the Groom One program has seen graduates gain employment in all sectors of the racing industry.

Cambridge, ON resident Tim Irvine graduated from the Groom One program in 2008 and went on to earn the Ontario Harness Horse Association’s Caretaker of the Year award in 2009. Although set to begin studies toward a career as a network cable specialist in April, Irvine enjoyed his four years as a caretaker, and continues to support the Groom One program, appearing as a guest speaker at the March orientation session.

“It is a good course for someone like me, who didn’t know a lot about the industry or the animals themselves. We touched on anatomy, on how the industry works, and general care of the animal,” says Irvine. “And I met a lot of great people too. It’s a good program.”

In addition to an education, participants in the Groom One orientation session are receiving

positive messages about the racing industry, and Ecker says the benefits of that communication have ripples far beyond the program’s stated goal of producing competent and employable caretakers.

“One husband and wife came to a Groom One about three years ago and they are now up to five horses over in London,” notes Ecker. “So they didn’t work as grooms, but they became horse owners.”

The positive messages generated by the Groom One orientation are just one small part of what Dr. Gunn calls the third pillar of Equine Guelph’s strong foundation, the communication program.

“You can do all the research, but if nobody knows about it you really haven’t been effective. Having an effective communication arm disseminating that information benefits people in the industry,” Gunn emphasizes.

To that end Equine Guelph distributes regular newsletters, and has recently joined the wave of organizations making effective use of social media. At www.youtube.com/equineguelphuofg, horsepeople will find monthly editions of ‘Report on Research’, in which leading researchers discuss their work and offer helpful hints for horse owners. To date, Dr. Peter Physick-Sheard has addressed his work on heart rates and heart conditions in racehorses, and Equine Guelph research director Dr. Jeff Thomason has discussed his research on the equine hoof and lower limb anatomy and the impact of racetrack surfaces on lower limb injuries.

The most recent additions are several videos on biosecurity, with Dr. Scott Weese, and information on stem cell research from Dr. Thomas Koch.



Gayle Ecker, director of Equine Guelph.

Update on the Ontario Equine Centre

Representatives from the Ontario Harness Horse Association and Standardbred Canada are part of the team working to develop the Ontario Equine Centre, a proposed world-class equine facility on the 600-acre Arkell Research Station property bordering the city of Guelph.

The Ontario Equine Centre (OEC) would offer training, sale and show facilities for all breeds and disciplines, and is slated to become the new home of Equine Guelph, which would anchor an equine-related research cluster and incubator. Although the group had hoped to have shovels in the ground as early as 2010, the process of transferring the land from the Agricultural Research Institute of Ontario to the OEC Corporation has been slower than anticipated.

“The Ontario Equine Centre is still working with the Ontario Ministry of Agriculture and Food and with the Ontario Agricultural Research Council on having the property designated for the intent of establishing a world-class equine centre that could also accommodate other livestock related activities,” explains OEC chair Jean Szkotnicki.

“Once the property is designated, the OEC will need to raise the funds to develop the property and facilities based on agreed upon milestones between the Ministry and OEC.”

Information about the proposed facility, including a site plan, is available at the OEC’s website <http://www.ontarioequinecentre.ca>. 🍁

AN INDUSTRY PARTNERSHIP

Support for Equine Guelph’s efforts — education, research and communication — is broad-based, coming from all sectors of the horse industry.

“It is truly representative of the entire industry and everyone contributes in some way, shape or form,” notes Dr. Gunn.

In addition to racing, equestrian, and agricultural organizations, Equine Guelph is also supported by the business community, both equine-related and otherwise. Five online health care tools for horse owners — a biosecurity calculator, horse health check, journey through the joints, lameness lab, and vaccination equi-planner — are

supported by corporate sponsors.

"When you go through the questionnaire for the biosecurity calculator, it tailors the information to your needs and your situation, so rather than you trying to extrapolate 'What's in it for me?' out of an article about a guy that's got 50 broodmares when you have two horses, the tool actually brings it down to a level and gives you the information that you need for your horses," Ecker explains. "And they're achievable too; it's not like we're telling you to build an isolation facility.

"If we've got basic knowledge that's evidence-based, then we can make educated decisions on how to deal with those situations and support the welfare of the horse."


Stepping well outside the bounds of its traditional partnerships, the centre is currently working with Mirvish Productions on the Equine Guelph-Ontario Equestrian Federation 'War Horse' Welfare Education Fund. While the outstanding National Theatre of Great Britain production of War Horse appears in Toronto, supporters have a variety of opportunities to contribute to development of

Equine Guelph's new welfare education programs, ranging from donations to participation in special performances.

Whether in partnership with the Ontario Racing Commission, Pfizer or Mirvish Productions, the goal of Equine Guelph's development efforts is to deliver ongoing and increasing benefits to the horse industry and Dr. Gunn estimates that each investment delivers a dramatic return.

"I think it has a ten-fold or more impact," says Gunn. "The focus is always on the horse's well-being, so that everyone does better."

"Equine Guelph is unique that it was created by the industry for the industry, and yet with the University involvement as a partner. And it is a very powerful combination," concludes Ecker. "It's a win on many levels for every partner."

Created by the industry, and serving industry needs with a unique blend of skill sets and funding from the equine world, the University of Guelph and governmental bodies, Equine Guelph clearly exists in a class of its own. 

Equine Guelph funds ground-breaking research

Investing in research reflective of industry priorities has resulted in countless improvements in the care and management of racehorses. Dr. Jeff Thomason, Director of Research at Equine Guelph and a popular professor of anatomy in the Department of Biomedical Sciences at the Ontario Veterinary College at the University of Guelph, notes that many advances are targeted toward veterinarians, rather than horse owners, but that racehorses have benefited tremendously from inquiries like the six listed below.

Researchers: Dr. Peter Physick Sheard, Dr. Dan Kenney, Dr. Kim McGurrian

Advancement: Development of a procedure to stop atrial fibrillation in exercising horses. This has proved to be particularly effective for standardbreds, and is in wide-spread use.

Researchers: Dr. Luis Arroyo, Dr. Laurent Viel, Dr. John Runciman, Dr. Tony Hayes

Advancement: The frequency of hardening of the arteries in young racehorses (primarily thoroughbreds), and the significance of this condition for health and performance. This work is on-going.

Researchers: Dr. Dean Betts (now at the University of Western Ontario) and Dr. Thomas Koch

Advancement: Harvesting stem cells from blood in the equine umbilical cord. These cells have proven to be powerful generators of cartilage, and Dr. Koch is progressing well with work aimed at using them for joint repair in racing and performance horses.

Researchers: Dr. Antonio Cruz, Dr. Mark Hurtig, Dr. Luis Rubio-Martinez

Advancement: The frequency of joint damage in racing standardbreds and thoroughbreds. This study used horses from the Ontario Death Registry to first document the high frequency of joint disease, then describe its effects on the strength of the cannon bone.

Researcher: Dr. Jeff Thomason


Advancement: Impact and loading of the hoof in standardbreds, thoroughbreds and show jumpers, at numerous tracks and arenas. This work features prominently in discussions of track, arena and surface design, and of ways to reduce the risk posed by the facility and surface to limb injuries.

Researcher: Dr. Suzanne Millman (now at Iowa State University)

Advancement: Handling and housing and their effects on the trainability and behaviour of horses. This study, which included data from over 1,200 standardbreds found that:

- 1) Stress from racing is not associated with undesirable behaviours (cribbing, weaving, etc.);
- 2) These behaviours, when present, were associated with lower racing performance (winnings);
- 3) Ten per cent of standardbreds bit or kicked their handlers; female grooms were more likely to try and address rather than live with the problems, and that aggressive behaviour and longer paddock-vs.-stall time were associated with greater success.


To learn more about the research being conducted by Equine Guelph teams, check out the centre's YouTube channel at www.youtube.com/equineguelphuofg. Each month a new researcher will step in front of the camera to explain their work and its implications for horse owners.




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