

Brought to you by the UK Equine Initiative and Gluck Equine Research Center

Equine Genome Sequence Published

Four researchers from the University of Kentucky Maxwell H. Gluck Equine Research Center and a faculty member in UK's Department of Computer Science were among 58 co-authors of a research article published Nov. 6 in *Science* that reported the first complete sequencing and assembly of the horse genome.

"This is the culmination of a project that began in 1995 from a workshop in Lexington, Ky.," said Ernie Bailey, co-author and professor of veterinary science.

Since the workshop, scientists from 25 countries have collaborated on what is known as the Horse Genome Project to build preliminary maps of the horse genome and use genomics tools to address horse health issues. The group has met twice a year since the first workshop. Bailey was the coordinator of the Horse Genome Project.

Other researchers from UK include Teri Lear, professor of veterinary science;



James MacLeod, John S. and Elizabeth A. Knight chair, professor of veterinary science and director of UK's Equine Initiative; Stephen Coleman, graduate student in the department of veterinary science; and Jinze Liu, professor of computer science.

"The frequent meetings stimulated research," Bailey said. "Every six months we needed a new discovery to present. With over 120 scientists active in the workshop, progress was rapid."

Even so, the consortium of scientists working on the horse genome did not have sufficient resources to actually sequence the entire genome. These skills and resources existed only at the laboratories that had completed the human genome sequence in 2003. In 2005, Bailey submitted a formal request, co-authored by scientists active in the workshop, asking the National Human Genome Research Institute to sequence the horse genome and integrate with existing physical and genetic maps. In February 2006, the genetic sequencing of the horse began using a Thoroughbred mare named

ARTICLES OF INTEREST

Carter Named Kentucky Veterinarian of the Year

Weed of the Month: Wild violet

UK Equine Reproduction Facilities Groundbreaking Recognizes Donors

Dan Rosenberg Named 2009 Friend of the UK Equine Initiative

UK's Nancy Cox honored with Bluegrass Tomorrow Vision Award

Keeneland President Speaks at Inaugural Lecture Series

UK LDDC Construction Moving Ahead Equine Research Hall of Fame

Equine-Related Therapies a Focus for UK Doctoral Candidate

UK's Tracy Farmer Center Works to Green the 2010 WEG

Commentary: Horse Health Research Needs Funding

Upcoming Events

(EQUINE GENOME ...)

"Twilight" from Cornell University College of Veterinary Medicine in Ithaca, N.Y. DNA sequencing of the horse genome was completed five months later by the Broad Institute, a research collaboration of the Massachusetts Institute of Technology and Harvard University.

The sequencing, which was announced by the National Human Genome Research Institute in February 2007, indicated the horse genome consists of about 2.7 billion base pairs of DNA. The horse genome was found to be very similar to the organization and sequence of the human genome. Therefore, advances in human genomic research can readily be applied to the horse. Likewise, discoveries made with horses can be applied to improve human health. Research currently under way around the world on equine exercise physiology, infectious diseases, reproduction, development and performance are likely to benefit human health.

The information from the sequencing of the horse genome is currently being used at the Gluck Equine Research Center to study diseases of skeletal development and aspects of infectious diseases and reproduction. [UK](#)

Jenny Blandford is the Gluck Equine Research Foundation assistant at the Gluck Center.

DR. CRAIG CARTER NAMED KENTUCKY VETERINARIAN OF THE YEAR

Each year the Kentucky Veterinary Medical Association (KVMA) names one Kentucky Veterinarian of the Year. The award recognizes a practitioner who has made outstanding contributions either outside or within the veterinary profession, or both, and who is held in high esteem by his or her peers.

This year's recipient is Craig Carter, DVM, PhD, director of the University of Kentucky College of Agriculture's Livestock Disease Diagnostic Center and professor of epidemiology.

Wade Northington, DVM, MPA, director of the Breathitt Veterinary Center in Hopkinsville, Ky., chaired the committee that chose Carter for the distinction. He said Carter is an individual who has contributed to the betterment of society and the veterinary profession above and beyond his normal activities. He added that Carter's award is one that highlights a lifetime of achievements.

"In being selected KVMA Veterinarian of the Year, Dr. Carter is recognized for his recent retirement from 42 years of military service," Northington wrote. "In a retirement ceremony March 22, 2009, at the Army Reserve Medical Command in Pinellas Park, Fla., Dr. Carter was awarded the Legion of Merit and Joint Service Commendation Medal."

Carter received the Legion of Merit for excep-



In addition to being recognized for his recent retirement from 42 years of military service, Dr. Carter (right) was named the Kentucky veterinarian of the year.

tionally meritorious service in positions of increasing responsibility, culminating in a 30-year career as veterinary readiness advisor for the U.S. Army Reserve Medical Command. Carter received the Joint Service Commendation Medal for exceptionally meritorious service as senior veterinarian in Task Force Ramadi, Iraq, from March through August 2008. Carter received the Bronze Star in 2002 for commanding the first veterinary unit to be deployed to Afghanistan after 9/11.

Carter joined the UK faculty in 2005 as a professor of epidemiology before being named director of the LDDC in 2007 after the retirement of Lenn Harrison, VMD, who was awarded the Kentucky Veterinarian of the Year honor in 2007. Since arriving at UK, Carter has conducted research on *Rhodococcus equi* pneumonia in foals and electronic health monitoring of cattle. He

(DR. CRAIG CARTER ...)

also has developed epidemiological software systems for the early identification of animal disease outbreaks in Kentucky.

"What a distinct honor, humbling beyond belief," Carter said. "The Kentucky Veterinary Medical Association is such an outstanding organization with so many great people that do endless volunteer work to assure a vibrant veterinary profession and healthy animals, large and small, for the commonwealth. I am so proud to be a member of this compassionate and productive group of veterinarians, technicians, and workers, including the likes of Louise Cook, the energetic and dedicated KVMA executive director. Many thanks go out to the nominating committee and the many folks who supported me."

Carter, an Indiana native, received his master's, doctorate of veterinary medicine, and doctorate in veterinary public health degrees from Texas A&M University. He is a diplomate of the American College of Veterinary Preventive Medicine and a distinguished scholar of the National Academies of Practice. Carter served at the Texas A&M College of Veterinary Medicine and in the Texas Veterinary Medical Diagnostic Laboratory System from 1981 to 2004.

Carter has been notably engaged internationally as a consultant to the Department of Defense, USDA, and the U.S. Agency for International Development. He's recently traveled to Iraq, Kuwait, Jordan, China, Thailand, Australia, Uruguay, Nicaragua, and Ethiopia, where he delivered lectures and participated in nation-building

activities. Most recently, Carter participated in the USDA Foreign Agricultural Service mission to Afghanistan Aug. 6-Sept. 3 to advise the Afghanistan Ministry of Agriculture on operations and strategic planning for veterinary diagnostic laboratories and animal disease surveillance. Carter

was inducted as president-elect of the American Association of Veterinary Laboratory Diagnosticians at their annual meeting, which was held in San Diego in October. [UK](#)

Aimee Nielson is an agriculture communications specialist at UK.

WEED OF THE MONTH

Common name: Wild violet (also blue violet, meadow violet)

Scientific name: *Viola papilionacea* Pursh

Life Cycle: Perennial

Origin: United States

Poisonous? No

Wild violet is distributed widely throughout the eastern United States and occurs most frequently in highly maintained pastures, turf grass, and landscapes. This low-growing plant forms dense colonies and thrives in pastures that are frequently mowed. Leaves are heart-shaped, and flowers have five petals in a typical violet shape and are blue to purple in color.

The wild violet reproduces from flowers and stout rhizomes (creeping stems lying, usually horizontally, at or under the surface of the soil and differing from roots in that they have scale leaves, bearing leaves or aerial shoots near their tips, and producing roots from their undersurfaces). Generally, flowers are produced from April through June, but this can vary. This plant is not susceptible to frost and grows readily in the fall and winter, depending on the severity of the winter. There are several other violet species that could be confused with this wild violet.

This plant is very difficult to control. Mowing is ineffective and only a few herbicides will provide partial control. Multiple herbicide treatments are needed for effective total control. Consult your local Cooperative Extension Service personnel for information about herbicidal control in your area. [UK](#)

William W. Witt, PhD, a researcher in Plant and Soil Sciences, provided this information.



Wild violet

UK EQUINE REPRODUCTION FACILITIES GROUNDBREAKING CEREMONY RECOGNIZES DONORS

A groundbreaking ceremony for the University of Kentucky (UK) Equine Reproduction Facilities was held Oct. 26 at UK's Maine Chance Equine Campus. The ceremony recognized supporters who generously donated money to fund the remodeling of facilities for equine reproduction research that will be conducted by scientists at the Maxwell H. Gluck Equine Research Center.

The remodeled facilities will help the university develop the best equine reproductive research program in the country and give the Gluck Equine Research Center the opportunity to match the signature equine industry it serves. The remodeled facilities will be used for the management of mares and stallions, and laboratory facilities will be constructed for handling semen, embryos, and reproductive tissues.

Lexington is the epicenter of the state's renowned equine industry and, as such, reproductive health is of top concern. Statistics show the importance of equine reproduction research at UK and the significance of equine breeding in the area. In 2008 41% of all Thoroughbred mares bred in North America were bred in Kentucky, and 608 Quarter Horse stallions in Kentucky covered or bred via artificial insemination more than

10,990 mares. In 2007 30 Standardbred stallions covered or bred via artificial insemination 1,543 mares, and 752 Standardbred foals were registered. Each year, the American Saddlebred Horse Association reports about 1,050 of its registered mares are bred in Kentucky.

"This facility augments a program that is of highest significance to a region which represents the equine reproduction capital of the world," said Nancy Cox, MS, PhD, associate dean for research of UK's College of Agriculture, Kentucky Agricultural Experiment Station director, and administrative leader for the Equine Initiative. "The college appreciates the advice from our stakeholders to make a shared investment in reproduction research. We are grateful to those who showed their confidence in us through investments in this facility."

Major donors who have supported the remodeling of the facilities are: Ashford Stud, Darley USA, Flaxman Holdings Limited, Hagyard Equine Medical Institute (Drs. Walter W. Zent, William D. Fishback Jr., Kevin B. Pfister, Stuart E. Brown II, Ed Fallon, Luke Fallon and Kristina Lu), Kentucky Thoroughbred Association/Kentucky Thoroughbred Owners & Breeders (KTA/KTOB), Lane's End, Rood & Riddle Equine Hospital (Drs. Tom Riddle and Peter Morresey), Shadwell Farm, Shawnee Farm, Dr. Ed Squires, and Dr. Mats Troedsson.

Funds donated by stakeholders were matched through UK's Research Challenge Trust Fund.

"The new reproductive area at UK's equine



"This facility augments a program that is of highest significance to a region which represents the equine reproduction capital of the world," said Dr. Nancy Cox.

research farm includes state-of-the-art mare and stallion facilities with modern laboratories to study reproductive problems in horses," said Troedsson, chair of the Department of Veterinary Science and director of the Gluck Equine Research Center. "The facilities will allow researchers at the Gluck Equine Research Center and the Department of Veterinary Science to conduct research on reproductive diseases in mares and stallions, and to respond to emerging problems that are presented to the breeding industry in Kentucky and elsewhere.

"The facilities are the result of generous support from the equine and veterinary communities in Central Kentucky," Troedsson said. "It is a great example of how the horse community and the university can work together with a common goal

(GROUNDBREAKING ...)

to further our knowledge in equine veterinary science. We are very thankful and excited about the enthusiastic support this project received."

Squires, executive director of the Gluck Equine Research Foundation and director of advancement and industry relations, said, "The mare and stallion facilities, when finished, will provide researchers with laboratories and barns to conduct cutting-edge studies on fertility issues in both stallions and mares."

Areas of reproductive health research at the Gluck Equine Research Center include causes, diagnosis, and treatment of embryonic and fetal loss in mares; early embryonic development; uterine infection; nutritional effects on reproduction; stallion behavior; diagnosis and treatment of fertility problems in stallions; and fescue toxicosis.

Major equine research contributions from the Gluck Equine Research Center's reproductive health group include demonstrating the usefulness of artificial lights and progesterone/estradiol treatments for hastening the onset of the breeding season. Additionally, this group was part of the team that performed the definitive experiments that identified the cause of mare reproductive loss syndrome (MRLS). [UK](#)

Jenny Blandford is the Gluck Equine Research Foundation assistant at the Gluck Center.

Dan Rosenberg Named 2009 Friend of the UK Equine Initiative

Dan Rosenberg was named 2009 Friend of the Equine Initiative Nov. 3 at the conclusion of the inaugural University of Kentucky Equine Initiative Distinguished Industry Lecture Series on UK's campus.

Rosenberg was recognized for his involvement at the strategic level of forming the Equine Initiative and for applying his creativity, experience, and success in public relations to advise administrative leaders since the Equine Initiative's creation in 2005.

"From the very beginning of the Equine Initiative at UK, Dan has been one of our most trusted, widely respected advisors. He has offered a strong hand in shaping what the Equine Initiative has become today," said Scott Smith, dean of the College of Agriculture.

"I can think of no one more deserving of this award," said Ed Squires, executive director of the Gluck Equine Research Foundation and director of advancement and industry relations. "Dan is always striving to find new ways to help the Equine Initiative. I wish we had more supporters like him; he is a great advocate for the Equine Initiative."

Rosenberg is the owner of Rosenberg Thoroughbred Consulting in Midway, Ky. He served as president and chief operating officer of Three Chimneys Farm from 2001 to 2007 and was



Dan Rosenberg was named 2009 Friend of the UK Equine Initiative (from left to right: Nick Nicholson, Rosenberg, Dan Liebman).

general manager from 1978 to 2001. He is past president of the Kentucky Thoroughbred Farm Managers Club and former director of the Thoroughbred Club of America. He is also past vice president of the Kentucky Equine Institute, where he also served on the board of directors. Rosenberg was named Farm Manager of the Year in 1992 and an Ambassador for Racing in 1994 by the Kentucky Thoroughbred Farm Managers' Club.

He has also been involved with numerous advisory boards and nonprofit organizations and currently serves as a Gluck Equine Research Foundation board member. Rosenberg also recently served as director of industry relations for the foundation and has been influential in acquiring funds for new facilities at the UK Maine Chance Equine Campus.

The Friend of the Equine Initiative was created in 2005 to recognize a member of the public who

(ROSENBERG ...)

has provided advocacy, funding, or other extraordinary support for the UK College of Agriculture's Equine Initiative, or a college or university employee who has generated an exceptional relationship with stakeholders that has been manifested in a new program, new advocacy success, or new resources for the initiative.

Past Friend of the Equine Initiative recognitions include Northern Kentucky county extension agents Don Sorrell of Campbell County, Dan Allen of Kenton County, and Boone County's Jerry Brown in 2008. David Switzer of Kentucky Thoroughbred Association/Kentucky Owners and Breeders Association earned the inaugural recognition in 2005. The award was not given in 2006 and 2007. **UK**

For more information about the Equine Initiative, visit www.ca.uky.edu/equine.

UK'S NANCY COX HONORED WITH BLUEGRASS TOMORROW VISION AWARD

The University of Kentucky (UK) College of Agriculture's Nancy Cox, MS, PhD, was one of Kentucky's visionaries and innovators who were honored at Bluegrass Tomorrow's 20th Anniversary Vision Awards/InnoVision Breakfast on Oct. 30 at the Hyatt Regency in Lexington.

Cox, associate dean for research in UK's College of Agriculture, Kentucky Agricultural Experiment Station director, and administrative leader for UK's Equine Initiative, was recognized for her long-term vision in support of the Bluegrass and its signature equine industry.

In addition, she was invited to serve as one

of four visionary panelists. Cox focused on the Equine Initiative and the recommendations that came out of a Lexington-Fayette Urban County Government (LFUCG)-commissioned Equine Task Force, of which she was a member.

"Bluegrass Tomorrow has recognized from its inception 20 years ago that, as a region, our greatest common denominator is the unique land itself," said Don Robinson, director of Bluegrass Tomorrow, current president of the Kentucky Thoroughbred Association/Kentucky Thoroughbred Owners and Breeders, and fourth generation Thoroughbred farm owner and breeder. "This Bluegrass has produced most of the best equine athletes in the world for some 200 years.



Dr. Nancy Cox

Under the passionate direction of Nancy Cox, UK's Equine Initiative was conceived and is being implemented to coordinate education, service, and science under one roof to sustain and support equine enterprises for the people and businesses of the commonwealth.

"Nancy Cox has built relationships with farm management, veterinarians, agricultural engineers, educators, and researchers in order to identify needs to maintain and strengthen Kentucky's signature industry," he continued. "Nancy exemplifies the vision that Bluegrass Tomorrow awards."

According to Bluegrass Tomorrow, vision awards are presented to individuals or organizations for efforts devoted to specific community

EQUINE INITIATIVE LECTURE SERIES



Keeneland Race Course President and Chief Executive Officer Nick Nicholson spoke at the inaugural University of Kentucky Equine Initiative Distinguished Industry Lecture Series on Nov. 3 in the Seay Auditorium in UK's Ag Science Center North.

The lecture was open to students and the general public. Dan Liebman, editor of The Blood-Horse magazine, interviewed Nicholson about his career path, Keeneland, and the general state of the horse industry. For more information, visit www.ca.uky.edu/news/index.php?c=n&d=458. **UK**

(NANCY COX ...)

improvement or projects that have a positive impact on the citizens of central Kentucky. Those eligible for the award include any individual (or organization) in the Bluegrass who has completed or is in the process of completing an innovative, forward-thinking project that improves quality of life, social capital, or creative talent, or that promotes the best examples of smart growth planning, new urbanism, historic preservation, urban infill, or preservation of farmland and green space. These individuals are recognized for devoting relentlessly their time, efforts, and talents toward community service or their project. Their project enhances the quality of life for the citizens of Central Kentucky, and their project is innovative and visionary in its purpose and/or approach.

"The commonwealth of Kentucky is very fortunate to have Nancy Cox at UK's College of Agriculture and her global vision for a first-class, thriving equine industry," said Bob Quick, president and CEO of Commerce Lexington Inc., and co-chair of the LFUCG Equine Task Force. "I have been associated with many excellent leaders in my 20 years of chamber work, but Nancy is one of the best visionaries and results-oriented leaders that I have had the privilege of working with."

The awards are a direct result of the Bluegrass InnoVision 2018 process undertaken during 2009 in which innovative projects from 22 similar markets around the country were identified, according to a news release from the organization. The group then examined the Central Kentucky region

UK Livestock Disease Diagnostic Center Construction Moving Forward

In 2008 the University of Kentucky College of Agriculture broke ground on a \$28.5-million expansion and renovation of UK's Livestock Disease Diagnostic Center. A year later, the construction is progressing briskly and was recently celebrated with a "topping off" ceremony to signify that all structural steel for the expansion is in place.

LDDC Director Craig Carter said two 10,000-pound alkaline digesters should be installed before the end of the year.

"We're looking forward to the facility being 'dried-in' soon," he said. "Hopefully by mid-to-late summer our new necropsy (animal autopsy) facility and a new administration wing will be finished as well."

Carter said the expansion is what enabled the center to attain its recent full national accreditation.

"It will also help us move forward in joining the National Animal Health Laboratory Network, which is an initiative of the U.S. Department of Agriculture," he added. "On a practical level, the new space will open up a lot of lab space in the main building and bring with it updates in air quality and biosafety, which are invaluable improvements. We'll have more room to conduct testing, an increased capacity for necropsies, and it will enable us to better handle any large disease outbreak."

The Livestock Disease Diagnostic Center is a full-service animal health diagnostic facility. Its faculty and staff handle one of the largest caseloads in the nation, seeing 60,000 clinical cases and averaging more than 3,000 necropsies each year. The laboratory also protects public health by diagnosing many diseases that can potentially cross over into the public sector. [UK](#)

Aimee Nielson is an Agriculture Communications Specialist at the University of Kentucky.



The \$28.5-million expansion and renovation of UK's Livestock Disease Diagnostic Center is scheduled to be completed in February 2010.

(NANCY COX ...)

for quality-of-life innovations that are having the biggest impact on the region.

"As the College of Agriculture constructed its Equine Initiative, Nancy has been both the architect and the builder," said Scott Smith, dean of UK's College of Agriculture. "It was not only her vision, but her commitment and energy that led to the success and impact of this transformative project."

Cox was nominated for the award by Carol Hanley, director of engagement in UK's Tracy Farmer Institute for Sustainability & the Environment.

"Dean Cox had the vision and leadership skills to identify a void in equine-related services in central Kentucky and create a comprehensive program to fill that void," Hanley said. "The equine community and all of us in the College of Agriculture are very proud of her efforts."

For more information about Bluegrass Tomorrow visit bluegrasstomorrow.org. **UK**

Holly Wiemers, MS, is the communications director for UK's Equine Initiative.

UK EQUINE RESEARCH HALL OF FAME

The Gluck Equine Research Foundation inducted four scientists into the University of Kentucky Equine Research Hall of Fame on Oct. 25 at Keeneland Race Course, with about 150 in attendance. Those inducted were (left to right) I.G. Joe Mayhew, DVM, of Massey University, Alan J. Nixon, BVSc, MS, Dipl. ACVS, of Cornell University, Douglas F. Antczak, VMD, PhD, of Cornell University, and Peter J. Timoney, FRCVS, PhD, of UK's Gluck Equine Research Center.

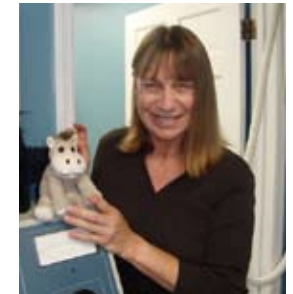
They were selected for their contributions to equine science and research. Nominated by their peers and colleagues, the four individuals were selected by past Hall of Fame inductees. For more information, visit www.ca.uky.edu/gluck/images/HOF/HOF2009_PressRelease.pdf. **UK**



EQUINE-RELATED THERAPIES A FOCUS FOR UK DOCTORAL CANDIDATE

Margi Stickney, MS, a doctoral candidate in the Department of Health Promotion and Kinesiology in the University of Kentucky's College of Education, has been interested in the therapeutic benefits of animals since her early days as a graduate student at UK. As a lifelong horse person and volunteer at Central Kentucky Riding for Hope (CKRH) since 2001, she began exploring the benefits of equine interaction through the Kentucky Horse Park's Mustang Troop during her graduate studies. The Mustang Troop pairs inner-city kids with formerly wild mustangs with the hope that the horses will teach participants empathy and responsibility to prevent at-risk behaviors.

As a student of health promotion and kinesiology, Stickney became increasingly interested in horses' physical and mental effects on humans, and she was surprised to learn that little research had been done in the area. At the suggestion of her professor, Jody Clasey, PhD, in UK's Department of Kinesiology and Health Promotion, Stickney began to explore the benefits of programs like CKRH for children with physical and mental



Margi Stickney

(THERAPIES ...)

disabilities. Most existing research had focused on cerebral-palsy populations, so Stickney's focus shifted instead to autistic patients, who account for the majority of CKRH's clientele. There is no published research in English on the effects of equine therapies on autistic patients. Kim Miller, PhD, also in the Department of Kinesiology and Health Promotion, "was instrumental in guiding the qualitative design of my research," Stickney said.

The variability in ages and symptoms made it necessary for her to use a qualitative rather than quantitative research design. Stickney created focus groups of CKRH instructors and volunteers and interviewed parents of autistic riders and asked them what changes they had noticed in the children since starting in a therapeutic riding program. Instructors and therapists believe the sensory input provided by the horse stimulates the brain and improves riders' focus, as noted by a decrease in self-stimulating behaviors such as rocking or hand-flapping.

They also noted movement of the horse and the sensation of pressure experienced while mounted may affect the brain and central nervous system in a positive way, encouraging growth (as was suggested by the studies on cerebral palsy riders), which is especially beneficial, as scientists do not know the exact cause for autism. Therapy sessions allow the children more social interaction outside of their families with both instructors and horses, and they give patients the opportunity to transfer their relationship skills from horses to humans.



COURTESY HIGH HOPE THERAPEUTIC RIDING, INC.

Instructors and therapists believe the sensory input provided by the horse stimulates the brain and improves riders' focus, as noted by a decrease in self-stimulating behaviors such as rocking or hand-flapping.

"It's crucial for them to enjoy relationships as much as they can, so this whole package of riding the horse in a class situation is a unique situation to therapeutic riding ... [it] provides an intervention that many autistic children need," Stickney said.

Stickney said parents were also grateful for the therapy, saying that interaction with the horses had seemed to calm their children and had a normalizing effect on mood and sense of motivation.

Stickney also noted the therapy is helpful to the parents. "It's frustrating for families to interact with the world at large," she said. "In children with autism who are higher functioning, it's not as noticeable a disability and their behavior is misunderstood; they are misunderstood as parents."

Stickney said she hopes her project will open any number of fields of study for conducting further research into the topic, as she believes that therapeutic riding is only growing as a treatment option for physical and mental disorders. The inclusion of paraequestrian events in the 2010 Alltech FEI World Equestrian Games will serve to further stimulate the growth of therapeutic riding and equine-assisted psychotherapy facilities across the country. An estimated 25,000 people benefit from therapeutic riding already.

Most of all Stickney said she was excited to see "nonhorsey" family members of patients see the benefits of a relationship with horses.

"Therapeutic riding really helps people appreciate the benefit of the horse ... to realize what a relationship with an animal can do for anyone," she said.

Stickney is also working on producing a booklet for UK Health Sciences' Saddle Up Safely program on the value of therapeutic riding. [UK](#)

Natalie Voss is a UK equine communications intern and undergraduate student in equine science.

UK'S TRACY FARMER CENTER WORKS TO GREEN THE 2010 ALLTECH FEI WORLD EQUESTRIAN GAMES

When the world comes to Kentucky next September, we want to put our greenest foot forward.

That's according to Carol Hanley, director of engagement in the University of Kentucky College of Agriculture and Tracy Farmer Institute for Sustainability & the Environment.

Hanley said to accomplish that, the Bluegrass Partnership for a Green Community is working with the Kentucky Horse Park and the FEI World Equestrian Games team to implement green projects, such as recycling, sustainability measures in hotels and restaurants, and introducing native plant species at the Horse Park.

"Our European visitors have a different standard of sustainability and we want to make a good impression and welcome them to the Bluegrass State," Hanley said.

Green Friends of the Games is a fundraising initiative that will give Kentuckians the opportunity to help make the 2010 Games greener and reduce their environmental impact. It aims to fund green projects that include, among others, permanent recycling centers to promote recycling at the event and smaller portable recycling stations. Green Friends of the Games is also engaged in planting native species and gardens along Cane

Run Creek, which runs through the Kentucky Horse Park. The Bluegrass partnership hopes to fund other projects through the Green Friends Program. Benches, sculptures, gardens, and bike racks along the Legacy Trail, running from downtown Lexington to the Kentucky Horse Park, are under consideration, as are biofuels as fuel for visitor transportation, and green power might also be purchased. There are local food, education, and hospitality initiatives and green events for Spotlight Lexington, a festival to be held downtown during the Games. Spotlight Lexington will consist of entertainment, cultural, and artistic activities.

The Green Friends will solicit donations from citizens and from local corporations and organizations not currently the focus of World Equestrian Games' fundraising efforts. The Green Friends of the Games will also work closely with World Equestrian Games' management to ensure that green fundraising will not take away WEG fundraising opportunities, but add to WEG's opportunities.

Volunteers are still needed for this effort. If you are interested, you can volunteer by visiting alltechfeigames.com and clicking on "volunteer," or you can contact Carol Hanley at 859/333-8248 or chanley@uky.edu. [UK](#)

Alexandra Harper is a UK equine intern and undergraduate majoring in communications.

COMMENTARY: HORSE HEALTH RESEARCH NEEDS FUNDING

Research is an important, but not always visible, part of the horse industry. Basic research is often conducted in laboratories away from horse farms and racetracks. However, results from basic research are frequently the starting point for clinical research discoveries used in veterinary practices all over the world.

The Department of Veterinary Science at the University of Kentucky has a history of more than 100 years of basic and clinical equine research. We have a strong tradition of working with veterinary practitioners and horse owners/managers to address health concerns in horses. Vaccines for six of the 10 most common equine diseases were developed at UK. Research in response to infectious disease outbreaks, abortions, parasite problems, and fertility problems has provided important solutions to equine health problems. These UK accomplishments could not have been possible without strong support from the horse industry.

The Maxwell H. Gluck Equine Research Center is today a state-of-the-art facility, with more than 20 active research faculty who dedicate 100% of their time to equine research. Comprehensive research programs in infectious diseases and immunology, genetics and genomics, musculoskeletal science, parasitology, reproductive health, and pharmacology/toxicology are generating new knowledge that helps veterinary clinicians

(FUNDING ...)

provide the best care for horses.

Human medical research is funded through federal and state tax dollars as well as many charitable, well-funded foundations. Research on horses is also important, but is poorly supported. Almost no federal or state funds have been set aside for equine research. Equine researchers are dependent on support from private sources, horse organizations, and other groups to improve the health and well-being of horses. The total research funds available in North America from the major research contributors (the Grayson-Jockey Club Foundation, the American Quarter Horse Association, and the Morris Animal Health Foundation) are less than the amount of research dollars received by many individual departments at medical schools around the world.

Additional funding for equine research is therefore necessary. During the difficult financial times we currently face, charitable gifts are declining. However, equine health problems are not taking a break. In order to not fall behind, we need to bring together horse owners, breeders, managers, veterinarians, and others with an interest in horses to sufficiently fund research on equine health-related issues at universities and research centers.

Research has a central role in the health and well-being of horses. Financial gifts in support of that research help build a strong foundation for healthier horses, improved safety for the athletic horse, and protection against infectious diseases when horses are transported locally or internationally. Thank you for your continuing support.

To make an online donation, visit www.ca.uky.edu/gluck and click on the "DONATE NOW" button, which links to the College of Agriculture's secure site, https://givetoto.uky.edu/AG_p/ag.htm. **UK**

Mats Troedsson, DVM, PhD, Dipl. ACT, is the director of the Gluck Equine Research Center and chair of the Department of Veterinary Science.

(Reprinted from Equine Disease Quarterly, University of Kentucky, College of Agriculture, Department of Veterinary Science.)

UPCOMING EVENTS

Dec. 10, 6:30-9 p.m., Pastures Please seminar, Fayette County Extension Office.

Jan. 20-21, 8 a.m. – 5 p.m., Gluck Equine Research Center inaugural Stud Managers' Short Course. The course is intended for owners and managers of all horse breeds and will feature lecturers on reproduction, nutrition, health, pasture management, economics, and marketing from a panel of experts. Fasig-Tipton Sales Pavilion. Please note that this date is a change from Jan. 8 and 9. Registration form and schedule are available at www.ca.uky.edu/gluck.

Jan. 28, 4 p.m., Horse Behavior, Sue McDonnell, PhD, University of Pennsylvania School of Veterinary Medicine. This is part of the Department of Veterinary Science Equine Diagnostic and Research Seminar series. Location: TBD.

Jan. 31, 8:30 a.m., Third Annual Breeders Seminar, hosted by the Kentucky Quarter Horse Association and the UK Equine Initiative. Crowne Plaza Hotel, Louisville Airport, 830 Phillips Lane, Louisville, Ky.

UK Equine Initiative and/or Gluck Center faculty and/or staff are participating in all of these events.