

Jill Stowe Named UK Ag Equine Programs Director

Jill Stowe, PhD, has been named the director of University of Kentucky (UK) Ag Equine Programs and Dickson Professor of Equine Science and Management beginning May 1. Stowe, an associate professor within the College of Agriculture's Department of Agricultural Economics, follows Ed Squires, PhD, Dipl. ACT (Hon.), as the leader of the multidisciplinary equine program that serves as a gateway to all equine activities in the college.

Since her arrival at UK in 2008, Stowe has taught in the recently established and rapidly growing equine undergraduate degree program and conducted equine economic research. She led the 2012 Kentucky Equine Survey, the first comprehensive equine industry study done in Kentucky since 1977, which was implemented in partnership with dozens of organizational partners. The project inventoried the state's equine industry and is in the final stages of determining the industry's economic impact to the state. Stowe also serves as faculty advisor for UK's Dressage and Eventing Team and has served as part of the UK Ag Equine Programs' faculty leadership for the past several years.

"It is a privilege to have the opportunity to serve this program, which has already given so much to me both professionally and personally," Stowe said. "I am excited to be able to work alongside others on the Equine Programs team to help the program continue to reach its potential."

"Having a leader such as Jill Stowe, a horsewoman and a scholar of big picture issues, such as the Kentucky Equine Survey, represents another milestone in the college's efforts to dedicate more programs to the horse," said Nancy Cox, MS, PhD, associate dean for research in UK's College of Agriculture, Kentucky Agricultural Experiment Station director, and administrative leader for UK Ag Equine



Dr. Jill Stowe

Programs. "Dean Smith's original call to enhance programs for our signature industry will realize an even greater potential through Jill's leadership."

Prior to joining UK, Stowe was an assistant professor at Duke University's Fuqua School of Business. She earned her bachelor's degree in mathematics,

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Researchers Recommend Three-Tiered EIA Testing

Equine infectious anemia (EIA), also known as swamp fever, is an infectious and potentially fatal viral disease that affects all equines. The infection is blood-borne and transmitted by blood-feeding insects carrying the virus. Researchers from the University of Kentucky, in conjunction with researchers at the University of Pittsburgh and Istituto Zooprofilattico Sperimentale delle Regioni Lazio e Toscana, in Rome, Italy, have been looking into options for more accurate EIA diagnosis.

After comparing results from current testing methods, the researchers recommend a three-tiered approach to testing for EIA.

In the 1970s, Leroy Coggins, DVM, invented the first reliable assay to diagnose EIA—the commonly known and popular Coggins test that determines EIA antibody presence in a blood sample. For decades the Coggins test has been required in movement of all horses and is currently the gold standard as a serological diagnosis of EIA. A negative Coggins test is usually required for a horse to be imported from another state or country. A positive test result, however, requires that the horse be euthanized or quarantined for the rest of its life, significantly affecting the equine industry.

Testing has expanded to about two million samples each year. The good news is

Jill Stowe

summa cum laude, from Texas Tech University and her doctorate in economics from Texas A&M University. Her research areas of interest include equine markets, incentives in individual decision-making, decision-making under risk, and ambiguity and sports economics.

"I have a number of goals that I hope to help the UK Ag Equine Programs achieve during the course of my term, and many of them focus on leveraging our rich equine opportunities, not only in this area, but also abroad," Stowe said. "Ultimately, doing so will help UK's equine program achieve excellence, both nationally and internationally."

Stowe has been actively involved in the horse industry since she was a child, starting with local Quarter Horse show circuits, 4-H, and Pony Clubs and later hunter/jumper, combined training, and dressage. She currently competes in dressage shows and horse trials with her off-the-track Thoroughbred and is on the board of directors for the Lexington-based Masterson Equestrian Trust.

"The appointment of Dr. Stowe as director of Ag Equine Programs and Dickson Professor of Equine Science and Management indicates the tremendous diversity and highest levels of expertise available to the horse industry from the University of Kentucky," said Norm Luba, executive director of the North American Equine Ranching Information Council and chair of the College of Agriculture's UK Equine Advisory Committee. **UK**

>Holly Wiemers, MA, is the communications director at the University of Kentucky Ag Equine Programs.

Three-Tiered EPA Testing

that veterinarians rarely find animals with clinical signs associated with the infection. The major problem is primarily the hard-to-find and unapparent carriers of the virus. Optimized assays to detect the disease have therefore become increasingly important to the horse industry.

Since the Coggins test's introduction, scientists have developed several new enzyme-linked immunosorbent assay (ELISA) tests, some which have proven to have fewer false negatives than the Coggins, said Charles Issel, DVM, PhD, professor at the UK Gluck Equine Research Center.

"Data from our studies has shown the benefits of using the combined strengths of the Coggins test, several enzyme-linked immunosorbent assay tests, and an immunoblot test to diagnose EIA. In combination with the immunoblot, ELISA assays identified up to 20% more cases of EIA," Issel said.

The studies involved samples from experimental studies at UK, which were tested using Coggins and ELISA test formats, as well as a group of mules naturally exposed to EIA. These results indicated that some of the serum samples that were negative with the Coggins tested positive with several commercially available ELISA assays as well as with immunoblots. These animals were also found positive for genetic material of the virus (they are proven carriers).

A national surveillance program conducted in Italy from 2007-2010 provided 96,468 blood samples for validation of the Competition-ELISA (C-ELISA) assay. Overall, 331 of the 96,468 samples proved positive in C-ELISA, but only 124 of those were interpreted as positive by the Coggins test. Therefore, the 207 samples testing positive with the C-ELISA but negative with the Coggins test were investigated further with immunoblots in conjunction with meticulous evaluation of history information for each horse.

Examination results showed that 182 samples had tested falsely positive on the C-ELISA. In comparison, 25 samples were confirmed to be false-negative with the Coggins test. The researchers thus documented 20% more cases of EIA using a three-tiered laboratory system, the C-ELISA assay, the Coggins test, and the immunoblot.

"Based on this, we would suggest minimizing false negative cases by adopting the three-tiered system: ELISA first, instead of the Coggins, and then use the Coggins to confirm a positive ELISA to catch as many carriers of the virus as possible," Issel said.

According to Issel, veterinarians should always perform the immunoblot if the results from the two tests do not agree, because the ELISAs have higher rates of false-positive results than Coggins tests.

"By combining the strengths of the two test formats, we can improve the accuracy of our surveillance," Issel said. "Some states, however, only use the ELISA test in their initial testing of animals because the ELISA, as documented here, has fewer false-negative results." **UK**

>Shaila Sigsgaard is an editorial assistant for the Bluegrass Equine Digest.

Methods for Controlling Equine Parasites in the Environment

Most horse owners are familiar with deworming as a part of their parasite control programs. But did you know some strategies can help control parasites in horses' environments? At the 2013 University of Kentucky (UK) Equine Showcase, held Jan. 18 in Lexington, Ky., Mary Rossano, PhD, an assistant professor in the UK Department of Animal and Food Science, discussed recent research about controlling equine ascarids before they enter the horse's body.

Rossano explained that ascarids (*Parascaris equorum*) are the largest worms that infect



Researchers evaluated windrow composting.

horses and most commonly affect horses up to 18 months of age. Once a foal develops natural immunity to the parasite, he enjoys life-long protection against it, Rossano said. Foals with heavy ascarid infections often present with a pot-bellied appearance, anorexia, and coughing (from worms migrating to their lungs); in serious cases, pneumonia can develop. She also noted that large worm masses can obstruct horses' bile ducts and intestines, leading to colic or death.

To make effective decisions on environ-

Controlling Equine Parasites

mental parasite control, it's important to understand the ascarid lifecycle. Rossano explained that affected horses shed one-celled eggs in their feces; however, these eggs can't infect horses just yet. After one to two weeks, the one-celled eggs develop into infective eggs, which the horse can ingest from a variety of sources, including feces, soil or pasture, stall floors, feed buckets, and nearly any other surface the eggs and the horse might come in contact with. Once inside the horse, larvae in the eggs hatch and migrate from the small intestine to the host's liver. Later, they migrate to the lungs. Once the larvae are in the lungs, the horse coughs them up and subsequently swallows them, returning them to the digestive tract. There, they develop into adult worms that reside in the horse's small intestine; these adults will lay eggs, which are then expelled into the environment in the horse's feces. The entire process takes about three months to complete, she said.

Rossano explained that once the eggs have been released into the environment their protective coating enables them to survive for years in soil in most climates, which can add to the challenges of environmental parasite control. Another ascarid challenge is their resistance to several common dewormers, she said. Multiple studies conducted around the world have shown that ivermectin and moxidectin are no longer effective against ascarids, she said. Further, researchers have reported some resistance against pyrantel pamoate and double doses of fenbendazole. At this point, she noted, resistance to the latter two products could be farm-dependant.

Emerging resistance to dewormers highlights the need for environmental control methods that target parasites while they are outside the horse. To that end, Rossano, graduate student Jessica Gould, and colleagues from UK performed two studies to evaluate different environmental ascarid control methods. In the first they evaluated disinfectants that could be useful for stall and stable hygiene. In the second they evaluated composting's efficacy at killing ascarid eggs, which could help prevent the spread of infected feces over pastures.

Rossano reported that in the first study, Gould and colleagues used four commercially available disinfectants—Lysol Multi-Surface Pour, Nolvasan, Liquid Amphyll Professional Disinfectant, and Aerosol Professional Amphyll II—and one control treatment (deionized water) to see which was most effective at killing ascarid eggs over 20 days. They found that the aerosol Amphyll was most effective at killing ascarid eggs, followed by the Lysol product. Neither the

liquid Amphyll nor the Nolvasan was effective at killing the eggs, Rossano said.

Rossano explained that while the aerosol product was most effective, most aerosol products aren't overly practical for use on farms. She suggested that liquid Lysol might be beneficial and practical to use in stalls and stables to kill ascarid eggs. She noted in the future, she'd like to carry out a longer-term study to evaluate the disinfectants' efficacy over the course of several months.

In the second study the team tested windrow composting's effects on ascarid egg viability. Rossano said the study produced evidence that windrow composting (the production of compost by piling organic matter or biodegradable waste into long rows called windrows) is an efficient and effective way of managing equine waste products while eliminating ascarid contamination.

Rossano noted that because windrow composting requires an investment in time, land, and equipment, it's not a feasible option for all farms. Other composting methods—such as building and using a compost bin—are effective as well. The UK Extension publication "Composting Horse Muck" is a good resource for learning about the process and practical

considerations of composting, Rossano noted. Composting bin plans can be found by searching online, she said.

In closing, Rossano stressed that owner can—and should—take measures to reduce ascarids' prevalence in horses' environments.

"*P. equorum* transmission can be reduced by composting manure from infected horses" and by applying appropriate disinfectants to stalls, she said.

She said that pastures where foals live and deposit manure still remain a "significant source of infection," and that total eradication of ascarids from breeding farms is not a realistic goal, given the parasite's resilience. Foals that experience light ascarid infections can develop natural immunity to the parasite, but the goal of environmental control is to prevent the harm caused by heavy infections, Rossano stressed.

"Future studies should investigate the benefits of keeping foals off pastures for extended periods of time—long enough to allow natural forces (sunlight, heat, and dryness) to take their toll, reducing the numbers of infective eggs in the pasture when foals are eventually returned to it," she concluded. **UK**

>Erica Larson is the news editor for TheHorse.com.

MASTHEAD

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A New Tool to Detect the Effects of Endophyte-Infected Tall Fescue in Horses

A team of University of Kentucky (UK) researchers recently evaluated whether horses consuming endophytic alkaloids experienced vasoconstriction (a narrowing of the blood vessels)—a phenomenon previously reported in cattle—and tested a method by which to detect the vasoconstriction.

Tall fescue is a cool-season perennial grass prominent in the eastern portions of the United States that can be infected

with an endophytic fungus known to produce chemicals called alkaloids.

“It is the alkaloid chemicals that have the detrimental health effects on cattle and horses, and it is the alkaloids such as ergovaline that we are interested in,” explained study author Karen McDowell, MS, PhD, a reproductive biology specialist at UK’s Gluck Equine Research Center.

These alkaloids, when consumed

by mares in late pregnancy, can cause dystocia (difficult birth), thickened placenta, and reduced milk production. Previous studies have shown that endophyte alkaloid consumption causes vasoconstriction in cattle, but this phenomenon has not been examined in horses. To that end, the research team tested the hypothesis that if horses consumed fescue seed containing the endophytes, they would experience vasoconstriction measurable by Doppler ultrasonography. Doppler ultrasonography illustrates velocity and direction of blood flow, and during vasoconstriction both of these are negatively affected.

The team employed 11 horses housed in drylots and randomly assigned them to one of three fescue seed treatments: ground endophyte-free seed (E-G), whole endophyte-infected seed (E+W), or ground endophyte-infected seed (E+G). The horses were adapted to the treatment, which the team mixed with a commercially available concentrate, and offered free-choice alfalfa cubes.

The team determined that the best vessel for detecting vasoconstriction in the study horses was the palmar artery, located on the back of the horse’s front leg near the fetlock joint.

They scanned each horse with Doppler ultrasound on four separate days both prior to and during the time the animals consumed the treatment diets. Based on the Doppler ultrasound results, the researchers observed that:

- The horses fed E+G had a significant reduction in artery lumen diameter, circumference, and area—meaning the artery showed a greater amount of vasoconstriction, resulting in reduced blood flow—compared to those fed E-G. The researchers made this observation at the first scanning, which took place approximately 40 hours after the horses consumed the fescue

STUDENT SPOTLIGHT

MIEKE BRUMMER

From: Pretoria, South Africa

Degrees and Institutes: BSc Animal Science, University of Pretoria

MSc Animal Science: Nutrition, University of Pretoria

PhD Animal Science Equine Nutrition, University of Kentucky (UK)



Mieke Brummer, PhD, has always been involved with horses and horseback riding recreationally. While working on a research project at Alltech, Brummer mentioned her interest in equine nutrition to her supervisor at the time.

“When Alltech called me upon completion of my master’s and offered me the opportunity to complete my PhD in equine nutrition under the guidance of the world-renowned equine nutritionist Dr. Laurie Lawrence, in the department of animal and food sciences at UK, there was no way that I could refuse.”


Brummer’s research focused on the mineral selenium in its organic and inorganic form and how selenium status (low, adequate, or high) affects the antioxidant status of an idle horse as well as a horse subjected to a mild exercise test.

“We also evaluated the impact of selenium status on immune function,” she said. “To do so, we worked with Dr. David Horohov and Dr. Amanda Adams, both from UK’s Gluck Equine Research Center. Central Kentucky tends to have low soil selenium content, which results in low selenium pastures. Therefore, Kentucky was the ideal location for the execution of this two-year study, which required a selenium depletion period followed by selenium repletion.”

Low selenium pastures are not unique to Central Kentucky, however, Brummer said. Many other areas in the U.S. as well as parts of New Zealand, China, Europe, and Africa tend to have low soil selenium. Therefore, determining the appropriate level of selenium horses require for optimum antioxidant status and immune function can benefit the industry as a whole.

“I hope my research outcomes will be important and helpful when selenium requirements of the horse are re-evaluated by the National Research Council,” she said.

Throughout her PhD, Brummer was also involved in other graduate student research projects including digestibility, exercise, voluntary intake, and forage preference test studies.

Brummer is currently in a post-doctoral position at Alltech, where she is acquiring new laboratory skills that she might apply toward equine nutrition practices in South Africa. “Ideally, I would love to further current knowledge on equine nutrition in South Africa, where the forage species and climate are vastly different from other regions of the world where the majority of horse research is conducted,” Brummer said. “I hope that I will be able to achieve this through collaboration with universities or veterinary research facilities located in South Africa.” 



UK COLLEGE OF AGRICULTURE

Tall fescue

>Shaila Sigsgaard is an editorial assistant for the Bluegrass Equine Digest.

Effects of Endophyte-Infected Tall Fescue

seed, and continued for at least 15 hours after the final fescue seed feeding.

- Horses fed the E+W diet tended to closely resemble the scans from the horses fed the E-G diet.
- Blood flow volume in the palmar artery was significantly reduced in the E+G compared to E-G during the treatment period.

The team concluded that Doppler ultrasonography can be a useful tool for assessing vasoconstriction in the horse's palmar artery and that blood flow volume decreased significantly in horses consuming ground fescue seed containing the endophytes.

Future research is needed to determine the minimum amount of endophyte infected fescue that will cause vasoconstriction in horses, the team noted.

The study, "Vasoconstriction in horses caused by endophyte-infected tall fescue seed is detected with Doppler ultrasonography," was published in the April *Journal of Animal Science*. **UK**

>Kristen M. Janicki, MS, PAS, is a performance horse nutritionist in Versailles, Ky.

New Test Helps Vets Diagnose Placentitis in Pregnant Mares

Mid- and late-term foal abortions can be both economic and emotional burdens. While not all abortions can be prevented, researchers now believe that veterinarians might be able to determine if some mares are at risk of late-term abortion by conducting a simple blood test.

"The most common cause of mid- to late-term abortions, premature delivery, and neonatal death in the first 24 hours of life involve problems with the placenta," said Igor F. Canisso, DVM, MSc, Dipl. ACT, ECAR, from the Gluck Equine Research Center. "Infection of the placenta close to the cervix and vagina (ascending placentitis) is most commonly caused

by bacteria such as *Streptococcus equi zooepidemicus*, which enters the vagina, penetrates the cervix and uterus, causing life-threatening infections. Signs of placentitis in mares include vulvar discharge, "softening" of the cervix, and premature udder development and lactation.

"Early diagnosis of placentitis and prompt and appropriate treatment are paramount for survival of the foal, and ultrasound is the most common tool currently used to diagnose placentitis," said Marco A. Coutinho da Silva, DVM, MS, PhD, Dipl. ACT, from The Ohio State University's Department of Veterinary Clinical Sciences, College of Veterinary Medicine.

For years, the veterinary

The team tested one inflammatory protein's ability to identify mares with placentitis in late gestation.

WEED OF THE MONTH

Common name: Star-of-Bethlehem

Scientific name: *Ornithogalum umbellatum* L.

Life Cycle: Perennial

Origin: Eurasia

Poisonous: Yes, all parts, especially bulbs and flowers

Star-of-Bethlehem is a cool-season perennial of the lily family that is native of Europe and escaped cultivation. It grows in the eastern half and portions of the Pacific Northwest of the United States. The plant grows well in pastures, landscape beds, gardens, fields, and roadsides.

Star-of-Bethlehem grows 10 to 20 inches tall in most pastures and is generally not noted until it reaches maturity. Leaves are narrow with a pale green to whitish stripe near the mid-rib. Flowers are a showy white with six white petals and a noticeable greenish stripe down the middle back of the petals. Flowering occurs in April to May. The plant dies back to the bulb shortly after flowering. Seeds are small, and seedling plants are rare in North America. Reproduction is from bulbs, which grow in clumps; bulbs are subtended with a fibrous root system.

Star-of-Bethlehem contains cardiotoxins and glycosides that are toxic to horses. The entire plant contains the toxins, but the bulbs and flowers contain the highest concentrations.

Controlling Star-of-Bethlehem is difficult. Few, if any, pasture herbicides are effective on large, maturing plants. Extremely low mowing (two inches or less) will reduce flower production, but is not effective in killing the plant since it reproduces from bulbs. Paddocks with severe infestations may need to be renovated by killing all vegetation and then seeding grasses. Small patches can be removed by hand or digging the bulbs. Consult your local Cooperative Extension Service personnel for control in your area. **UK**

>William W. Witt, PhD, a retired researcher in the Department of Plant and Soil Sciences at the University of Kentucky, provided this information.



community has viewed placentitis as a "focal" disease, but Canisso and Coutinho da Silva recently learned that placentitis causes an increase in acute phase proteins circulating in the bloodstream, which means the inflammation is not restricted to the uterus.

"This made us wonder if measuring those acute phase inflammatory proteins in the

blood could be a useful diagnostic and prognostic markers for equine placentitis," said Coutinho da Silva.

To that end, the research team tested one inflammatory protein's (called serum amyloid A, or SAA) ability to identify mares with placentitis in late gestation.

In Phase I of the test, researchers monitored serum SAA levels in 15 mares from

UK Equine Farm and Facilities Expo to be Held June 19

University of Kentucky (UK) Ag Equine Programs will host an Equine Farm and Facilities Expo from 4 to 8 p.m. EDT Wednesday, June 19, at Tollgate Farm in Georgetown, Ky.

Horse owners and horse farm managers will be able to view a range of equipment and supplies for farms of all sizes. University specialists will provide hands-on instruction about practical aspects of management for equine operations.

"The expo provides horse owners the chance to attend an informative event on the grounds of a working horse farm," said Ray Smith, PhD, professor and forage extension specialist for the UK College of Agriculture. "We appreciate Troy Rankin and Tollgate Farm for hosting this event and for opening the farm's gates to the public."

Nick Carter, Fayette County agriculture and natural resources extension agent, said the expo is a unique opportunity for horse owners on farms of all sizes to learn about a wide range of topics, from weed and grass identification to footing for exercise areas.

"There are not many other venues around that allow horse owners this kind of opportunity," he said.

UK experts will lead demonstrations on subjects including drainage

and footing options for exercise areas, temporary fence and water system establishment, rotational grazing benefits, hay production testing, and integrating cattle into equine operations. Other informational topics include weed and grass identification, parasitology, multi-valent vaccines, industrial hemp, and improving farm safety. There will also be a number of informational booths staffed by UK specialists.

Tollgate Farm breeds, trains, and races Thoroughbreds and recently had two Breeders' Cup runners. Tollgate Farm is a diverse operation in that it also produces hay for both on-farm use and sale, grows tobacco and row crops, and raises beef cattle.

According to Michelle Simon, Scott County agriculture and natural resources extension agent, this farm is a great example of how other farming operations can complement an equine operation while still competing at the highest levels.

The farm is located at 301 Stone Road in Georgetown. Admission to the Expo is free, and a meal will be provided. Reservations are appreciated. Contact the Fayette County Extension Office at 859/257-5582 to reserve a spot. For more information about this and other UK Ag Equine Programs events, visit www.ca.uky.edu/equine or e-mail equine@uky.edu. **UK**

>Holly Wiemers, MA, is communications director for UK Ag Equine Programs.

Placentitis

Day 280 of gestation until 60 hours postpartum. In Phase II the team induced placentitis in 14 mares between Days 280 and 295. Of those, nine were treated and five served as untreated controls. The researchers measured SAA levels at specific time points in all mares. Key findings were:

- In normal pregnancies, blood SAA levels remained low (between 3.2 and 8.2 mg/L) throughout pregnancy. SAA levels increased significantly postpartum, but returned to normal by 60 hours after birth.
- SAA levels increased significantly within about 96 hours of inducing placentitis in all pregnant mares.
- SAA levels did not increase

in six of the nine mares with placentitis treated with an antibiotic (trimethoprim-sulfamethoxazole), pentoxifylline, and altrenogest. Abortion occurred more often in the mares that had increased SAA levels compared to mares that either had no increase in SAA or that returned to normal values following treatment. "These data suggest that

SAA is a useful prognostic indicator of ascending placentitis," said Coutinho da Silva.

Canisso added, "It is worth noting that because SAA is not specific for placental diseases, other causes of inflammation should be ruled out." **UK**

>Stacey Oke, DVM, MSc, is a freelance medical writer based out of Canada.



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UKAg Dean Scott Smith Receives Lyons Award for Outstanding Service



Under Smith's leadership, the college's external funding increased from about \$10 million to more than \$30 million annually.

Throughout his career, Scott Smith, dean of the University of Kentucky (UK) College of Agriculture, has worked to improve the college and the community it serves. Smith's dedication was honored this week when he received the William E. Lyons Award for Outstanding Service from UK's Martin School of Public Policy and Administration and the Department of Political Science.

"It has been an honor to work alongside so many faculty and staff with such a strong commitment and so much talent for public service," Smith said.

Smith's nominators highlighted his creative and effective leadership of the college during tumultuous times for Kentucky agriculture. He led research and extension efforts within the college to aid farmers as they transitioned from an age-old tobacco economy to a more diverse portfolio of agricultural enterprises. He also served on statewide committees with other agriculture leaders to aid farmers as they maneuvered into new or expanded opportunities.

"Instead of faltering, Kentucky's farm gate receipts grew from \$3 billion to \$5 billion after the elimination of the federal tobacco program," said Nancy Cox, MS, PhD, College of Agriculture associate dean of research and one of the

award nominators.

Under Smith's leadership, the college's external funding increased from about \$10 million to more than \$30 million annually. Also during his tenure, UK Cooperative Extension Service strengthened and today is among the nation's leaders in such areas as youth participation.

"Innovations like fine arts extension, Health Education through Extension Leadership, and the Community and Economic Development Initiative for Kentucky have improved the quality of life across the state and brought national distinction to UK," said Jimmy Henning,

On the university level, Smith served as interim provost from 2005 to 2006 and co-authored the university's Top 20 business plan.

PhD, associate dean for extension and another of Smith's nominators.

As dean, Smith helped bring a U.S. Department of Agriculture research lab to campus and create the UKAg Equine Program, sustainable agriculture program and forest practices, and mine land reforestation programs. He also

led efforts to update and expand the UK Veterinary Diagnostic Laboratory, which serves the veterinary community across the state.

He has overseen growth of The Arboretum, State Botanical Garden of Kentucky, in collaboration with community leaders and volunteers and opened the UK farms to the Legacy Bike Trail in northern Fayette County.

On the university level, he served as interim provost from 2005 to 2006, co-authored the university's Top 20 business plan, and initiated the translation of the business plan to an academic strategic plan. Initiatives started, continued, or completed during his term as interim provost included the creation of Commonwealth Collaboratives, widespread curriculum reform, the creation of the Chellgren Center, and the elimination of a mandatory retirement age for administrative faculty.

"Throughout his career at the University of Kentucky, Scott Smith has provided remarkable leadership for both the land-grant and academic missions of the University of Kentucky," said Mark Kornbluh, PhD, dean of the College of Arts and Sciences and a co-nominator. "He has ensured that academic excellence and broad community impact go hand-in-hand at UK. His legacy is a lasting improvement in the College of Agriculture, the University of Kentucky, and the Commonwealth."

Smith is the 19th recipient of the William E. Lyons Award, established to honor Lyons's career and public service. During his tenure Lyons, a professor of political science and public administration who died in 1994, served as director of the Martin School and chaired the political science department.

Lyons' career accomplishments, in addition to his academic career, were noteworthy for his service to the university, the community, and the Commonwealth. Such contributions now constitute the criteria for this prestigious award. This honor

is given annually to an individual associated with the university who has given outstanding service to UK, the community, the state, or the nation. **UK**

>Laura Skillman is the director of Agricultural Communications Services within UK's College of Agriculture.

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COMMENTARY**Biosecurity for Infectious Disease Control**

Preventing infectious diseases has often been perceived by horse owners as “which vaccines do I need this year?” While vaccines are an important part of an annual health care program, controlling and preventing diseases through management and disinfection has only come to the forefront in the past 20 years.

Veterinary and university hospitals, because they house sick animals along with healthy ones awaiting routine surgeries, have been at the forefront of what is now routinely known as biosecurity. Large hospitals now often have an individual solely dedicated to infectious disease control.

The recent recognition of an equine herpesvirus variant causing neurologic disease and several large outbreaks spanning multiple states has horse owners really understanding the critical importance of biosecurity. The threat of “Was my horse exposed?” looms when a herpesvirus infected horse has been confirmed at a racetrack, horse event, or horse farm. Unfortunately, it sometimes takes a potentially deadly disease to get people’s attention.

So, as we approach the spring and summer with hours of riding and horse enjoyment, people need to be cognizant about not sharing equipment with others without disinfecting afterward; of washing their hands after handling other horses; of avoiding nose-to-nose contact of their horses with others; quarantining horses when they return to the farm; and other recommendations from the *Lloyd’s Equine Disease Quarterly* of July 2011. They do make a difference! As always, consult a veterinarian about an appropriate vaccination program and biosecurity recommendations for your particular circumstances.

Managers of equine event facilities also have a part to play. Financially, they want events to proceed without major disease interruptions and potential quarantines for the sake of the horses, the owners, and basic economics. However, how many stalls at busy facilities are completely cleaned and disinfected before the next round of horses arrives? The horse owners need to take personal responsibility to inspect their assigned stalls (yes, even when arriving at 2 a.m.), and clean them if necessary. Use your own equipment, including buckets, lead ropes, cross ties, hay nets, pitchforks, etc.

Biosecurity and disease awareness also emphasizes the important function of the International Collating Report in virtually every edition of the *Lloyd’s Equine Disease Quarterly*. Knowing when outbreaks of diseases occur in your own country, as well as others gives an idea of what illnesses are circulating. It also emphasizes how diseases can travel with horses internationally.

One reader emailed the question of why accurate numbers of strangles cases were not available for the United States in the International Collating Report. Not all equine diseases are reportable to state veterinarians or centrally located collating centers for equine disease reporting. Internationally, equine disease reporting varies from country to country, and can be a daunting task with current limited resources. However, the expansion of countries providing detailed reports received at the International Collating Center has significantly grown in the past 20 years and has made the report a valuable resource.

CONTACT: Roberta Dwyer, DVM, MS, Dipl. ACVPM—859/218-1122—rmdwyer@uky.edu—Maxwell H. Gluck Equine Research Center, University of Kentucky, Lexington, Kentucky

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UPCOMING EVENTS**May 28-June 1**

Coaches and trainers symposium, Kentucky Horse Park

June 10-12

State 4-H Horse Contest, Lexington, Ky.

June 18, 8:30 a.m.

Advanced Kentucky Grazing School, UK Research and Education Center, Princeton, Ky.

June 19, 4-8 p.m.

Farm and Facilities Expo, Tollgate Farm, Georgetown, Ky.

June 25 (Paducah) and June 27 (Burlington)

UK’s College of Agriculture Department of Community and Leadership Development, in partnership with the Kentucky Nonprofit Network Inc., will host “Stay Exempt,” a one-day workshop to provide nonprofit organizations with information about maintaining their tax-exempt status and complying with tax obligations. Discussion topics will include an introduction to tax-exempt status, Form 990 series filing requirements, unrelated business income, charitable gaming, record-keeping tips, required disclosures, and employment issues. To register, visit <https://kynonprofits.org/events>.

June 27, 4 p.m.

Department of Veterinary Science Equine Diagnostic Research Seminar, Veterinary Diagnostic Laboratory. Field Anesthesia with Nora Matthews, DVM, Dipl. ACVA, Texas A&M University

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