EHSP Helps with Equine Rescue and Shelter Efforts

The Equine Health Studies Program of the LSU School of Veterinary Medicine established the Horse Hurricane Helpline on Thursday September 1 and faculty, staff and students began fielding countless calls around the clock from people reporting horses in need of rescue. A “Central Command” was set up in conjunction with the Helpline, whereby areas were mapped out showing the location of horses in need, and a rescue strategy was quickly developed. The LSU Hurricane Equine Rescue Operations began assembling rescue teams comprised of veterinarians and staff from the LSU Equine Clinic, private equine veterinarians and numerous volunteers, often times consisting of a convoy of several trucks and trailers.

"We deployed between one and seven teams daily beginning on Friday, September 2, once we were granted access into the affected areas," said Dr. Rustin M. Moore, director of the EHSP. "Some days we rescued 60 or 70 horses from a given area and other times we rescued only one or two. This was an extremely dynamic process." Some of the horses required rescue out of high water and others needed to be moved to an area where they could reliably and safely be provided with sufficient food and water.

Following Hurricane Katrina, nearly 400 horses were evacuated from seven parishes and transported to the Lamar-Dixon Expo Center, where a satellite veterinary clinic staffed by LSU Equine Clinic personnel and numerous volunteers was set up to provide veterinary medical care, shelter, food, water, and lots of compassionate tender loving care. The horses underwent careful identification and documentation upon arrival for purposes of reuniting them with their owners. Some horses required medical treatment in the field prior to transport, and all horses were thoroughly examined and evaluated by veterinary staff at the Lamar-Dixon facility and provided necessary treatment. Care was provided by veterinarians, veterinary students, and volunteers under the supervision and guidance of an LSU Equine Clinic staff veterinarian. A volunteer served as the coordinator of the equine facility at Lamar-Dixon and helped keep track of the horses and made sure sufficient food, water, supplies, and volunteers were available.

The primary goal was to care for these horses until they could be reunited with their owners. Several of the horses required some level of veterinary care while at Lamar-Dixon and approximately 10 of the horses required referral to the LSU Equine Clinic for more advanced veterinary medical care. The remaining 20 (out of the original 400 horses) housed at Lamar-Dixon were moved to nearby foster farms when the shelter closed on October 26. As of November 21, nine of these horses with identified owners are still being fostered and nine others with no known owners (five with microchips, two with tattoos, and two with no identifying marks) are being cared for at these facilities until their owners can be identified. "We still are hopeful that we will be able to identify the owners of the remaining horses," said Dr. Moore.

"The response of the numerous people involved in this rescue operation was nothing short of amazing considering the enormity and complexity of the problems resulting from Hurricane Katrina, and compounded by Hurricane Rita," continued Dr. Moore. "The most rewarding part of this operation has been to save the lives of these horses and to reunite horses and owners. It has been said that veterinarians are good for horses; and horses are good for people. It is our greatest reward to see that circle complete, to play a role in

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EHSP Faculty and Staff visit with horsemen at a hospitality breakfast prior to the Two-Year Old-in-Training Sale at the Fair Grounds Race Course in New Orleans on March 22.

Mark Your Calendars

**Stallion Service Auction**
October 14-December 16, 2005
See article on page 5.

**Louisiana Veterinary Medical Association Equine Seminar**
January 22-24, 2006
Bossier City, La.
Call Dr. James "Sonny" Corley at 337-235-9945.

**Equine Artificial Insemination Workshop for Owners and Breeders**
January 28-29, 2006
See article on page 19.

**Open House**
February 4, 2006
Don’t miss this opportunity to tour the School of Veterinary Medicine and see exhibits and demonstrations, including the equine treadmill and an equine parade of breeds. For more information call 225-578-9900.

**Animals in Art Exhibit**
March 19-April 16, 2006
Visit the School of Veterinary Medicine Library and view this annual art exhibit featuring artists from around the world. For more information call 225-578-9900.

**Hill’s Great Rover Road Run**
Saturday, March 24, 2006
The School of Veterinary Medicine is hosting a 5K run and a 1 mile Fun Run/Walk with Rover. Leashed pets are welcome for this annual race benefiting the Student Chapter of the American Veterinary Medical Association. For more information, call 225-578-9900.

"Horses leave hoof prints on your heart."
Anonymous

"It is the very difficult horses that have the most to give you."
Lendon Gray

Equine Health Studies Program

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Internet: www.LSUEquine.com
Hurricane Rescues . . .
(Continued from page 1)

protecting the bond between humans and animals, and to experience in the joy that so many of these owners have had in being reunited with their horses that they care so deeply for.”

Many of the owners lost absolutely everything. Their barns were destroyed by wind, tidal surge and flooding. The only thing many of them have to hold onto is their horse; thus, these horses represent an extremely powerful emotional attachment to their lives. “We have witnessed numerous tearful reunions of horses with owners who thought their horses had perished subsequent to the storm,” said Dr. Moore.

In addition, the LSU Hurricane Equine Rescue Operations teams rescued over 300 dogs, several cats and some birds, rabbits, goats, potbelly pigs, iguanas, and even several people. The group continued to haul feed and water for horses, livestock, dogs and cats into these areas for weeks after the storms. Numerous truckloads of food and supplies (including generators) were delivered to the people that remained behind in areas in St. Bernard and Plaquemines parishes to help care for the horses and other animals.

Just as the role of rescuers changed to that of situation monitors and supply providers, the state was hit yet again with another extremely dangerous storm. Hurricane Rita slammed into the Louisiana coast on September 23, causing additional flooding in some of the mid-eastern portions of the State, and brought hurricane winds, rain, and 15-foot tidal surges into the Southwestern region of Louisiana. Again, LSU was there. Reactivating the helpline 24 hours before the storm hit, the Equine Clinic again received calls for help. Immediately upon learning of the hardest hit areas, LSU was instrumental in coordinating efforts with local veterinary practitioners and parish officials. A new staging area, the SugArena in New Iberia, La., was identified as the most adequate and strategically located facility for housing displaced horses and other animals.

LSU personnel, along with area volunteers, and local practitioners again embraced the task of organizing rescue efforts as they were needed. While the storm experience was similar to that of Katrina, the aftermath was different in that the marshlands of southwestern Louisiana are not bound by levees. The tidal surge swept seaward almost as quickly as it came ashore, but its impact was very similar. Homes and businesses were ripped from their foundations and shrimp boats and sea life were found displaced in the middle of sugar cane fields. Most livestock were left in open pasture, a lesson learned from Hurricane Katrina. And while many were able to find high ground, several were caught in fences and sadly drowned from the force of the flood.

Taking into account the response to Katrina, LSU equine program directed all incoming donations intended to assist the Louisiana horse victims of Hurricane Katrina (e.g., rescue, recovery, veterinary care, sheltering, and rehabilitation) to the Equine Committee Foundation of the Louisiana Veterinary Medical Association. For those individuals wanting to help support the LSU EHSP, please make checks payable to the LSU Foundation, write Equine Health Studies Program on the memo line, and mail to Ky Mortensen, Director of Advancement, Equine Health Studies Program, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803. For more information on the Hurricane Equine Rescue Operation or the EHSP, please visit www.LSUequine.com.

Rescue teams were dispatched to Iberia, Vermilion, and Cameron Parishes. Others went further west to areas near Lake Charles and Sulphur. LSU teams brought 20 horses out of Sulphur and delivered needed veterinary supplies to SugArena to assist with the effort of the local practitioners who monitored the day to day health of the evacuated horses. Over 80 horses were evacuated or rescued and taken to SugArena for veterinary care, food, water, and shelter. Numerous other horses and cattle were rescued or evacuated by owners and ranchers. LSU faculty and staff members surveyed the area via helicopter with the assistance of the U.S. Coast Guard. Numerous horses were identified and marked with GPS coordinates in preparation for future hay and feed distribution. LSU continues to work effectively and cooperatively with many organized groups, volunteers and donors to provide feed to affected producers throughout south Louisiana.

Nearly 50 faculty, staff, and students of the LSU EHSP, along with private equine practitioners and volunteers, completely refocused their priorities over eight weeks and worked tirelessly to assist the horses, horsemen and horsewomen, and other animals and owners in an attempt to restore some normalcy to the people whose lives and property have been so severely affected by the these storms.

“This entire experience taught those involved many valuable lessons regarding how to assimilate and organize a team to respond to a disaster of this magnitude,” said Dr. Moore. “Few if any of us were prepared for the enormity and complexity of this disaster and its aftermath, but everyone rose to the challenge and helped to make this operation successful and rewarding.” There will be ongoing needs and challenges faced by many people, farms and businesses as the state’s equine industry, which prior to the storm was ranked fifth nationally and worth an estimated $2.5 billion, begins to recover from the effects of these two storms. “We continue to help coordinate delivery of hay, feed, and supplies to affected areas,” said Dr. Moore.

While countless resources were expended during these rescue efforts, the LSU equine program directed all incoming donations intended to assist the Louisiana horse victims of Hurricane Katrina (e.g., rescue, recovery, veterinary care, sheltering, and rehabilitation) to the Equine Committee Foundation of the Louisiana Veterinary Medical Association. For those individuals wanting to help support the LSU EHSP, please make checks payable to the LSU Foundation, write Equine Health Studies Program on the memo line, and mail to Ky Mortensen, Director of Advancement, Equine Health Studies Program, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803. For more information on the Hurricane Equine Rescue Operation or the EHSP, please visit www.LSUequine.com.

Horse in flood water being rescued by a member of the LSU Hurricane Equine Rescue Operation. Photo courtesy of Dr. Neil Henderson, a private veterinary practitioner from Ruston, La., working with the LSU Hurricane Equine Rescue Operation.
Greetings from the LSU Equine Health Studies Program! I should begin by apologizing for the tardiness of this issue – we were in the process of assembling its contents in August when Hurricanes Katrina and Rita disrupted our plans along with many others in South Louisiana and Mississippi. Although we sustained no damage here at the LSU Equine Clinic (in fact we did not even lose electrical power), we were affected mainly because of the needs of horses and horse owners, breeders and trainers, and others involved in the diverse and vibrant Louisiana equine industry resulting from these two unprecedented and powerful storms. Like others, we completely refocused our energy and priorities from our regular activities to assist with equine rescue and recovery for over eight weeks.

I am extremely proud of the faculty, interns, residents, technicians, staff and students of the EHSP and the numerous volunteers from Louisiana and all over the United States for their unselfishness, dedication, and tireless work on behalf of all aspects of the Hurricane Equine Rescue Operation. These storms were forceful and destructive, and the complexity and enormity of the rescue of people and animals in its aftermath were equally unprecedented. However, the team of individuals rose to the challenges and overcame all obstacles to successfully rescue, treat and reunite nearly 500 horses from the two hurricanes. This would not and could not have happened without every single person that contributed their time and resources. We also have to extend our thanks to the numerous companies, organizations, groups and individuals who donated their time and much needed resources (e.g., hay, feed, bedding, buckets, halters, lead ropes, grooming utensils, stall cleaning equipment, medical supplies, truck and trailers, and money), without which our efforts would not have been nearly as successful.

Prior to the hurricanes coming ashore, we had established our EHSP Advancement and ESHP Veterinary Advisory Councils to help guide and assist us as we strive to meet our objectives. The damage the state’s equine industry may have sustained from these storms will not prevent us from moving forward with our initiatives to improve all aspects (clinical service, industry outreach, teaching/instruction, scientific investigation) of our program. The effects of the storms will require us to re-think our strategies and our timelines, but we will succeed in becoming the elite equine biomedical program each and every constituent of the state’s equine industry deserves and of which they can be confident and proud.

The faculty and staff of the EHSP recently updated our strategic plan to meet the programmatic needs for today and in the future to facilitate achieving our collective mission and vision. We are dedicated and committed to this plan. We always seek constructive ideas and comments from everyone to improve every facet of our program and its effect on the horses and horsemens and horsewomen of the industry.

Because of the tremendous impact the storms and their aftermath have had on individuals, companies, organizations and the state, our fundraising efforts will need to be focused more regionally and nationally in order to see some of our planned expansions and much needed new facilities and equipment become a reality, including construction of a new Equine Isolation Unit for hospitalizing critically ill and injured horses with infectious/contagious disease, a new Equine Reproduction Unit, enabling us to continue to provide routine and advanced reproductive services; an expanded reception area, medical records and client waiting area; and acquisition and installation of a standing MRI (magnetic resonance imaging) unit to improve our diagnostic capabilities for subtle soft tissue and bone injuries.

We have made some improvements to the facilities recently, including painting, installing new and expanded lighting, acquiring new furniture in the reception area, and a newly renovated client waiting area with new furnishings that provides a relaxing and soothing environment. Currently, we are proceeding with architectural plans to renovate the stalls in the Equine Clinic to make them more “equestrian-like,” and we are confident we will meet our customers’ approval and provide an even greater level of comfort and safety to our hospitalized horses.

We have also recently acquired new technology that improves our diagnostic capabilities. We are now using digital radiography, which provides much greater detailed imaging of bones and joints than traditional radiography. We also acquired a portable, high quality ultrasound machine that enables us to perform echocardiography (ultrasound of the heart) more completely and comprehensively for horses with expected cardiac disease or as part of a comprehensive evaluation of athletic horses with poor performance.

We have initiated discussions with three well-known equine practice management consultants and have sought proposals from them to assist us in improving our customer care, business operations and marketing and technology acquisition. We have already utilized the services of one consultant to provide staff training, and we have developed and are in the process of implementing several operational changes that we hope will improve the efficiency and effectiveness of our business operations and customer care.

The recent establishment of the Louisiana Equine Council is a key priority for our program. We are intricately involved in the leadership of this newly formed organization and strongly support its cause. The work of this group is an industry effort and is something of which every horse owner should be aware and in which they should actively participate. Through a collaborative effort across many breeds and disciplines, this group will work (Continued on page 5)
Fifth Annual Stallion Service Auction to Benefit New Equine Isolation Unit

The LSU School of Veterinary Medicine announces its fifth annual Stallion Service Auction October 14 – December 16, 2005. The event is a multiple-breed internet-based benefit auction for the LSU School of Veterinary Medicine’s Equine Health Studies Program to expand and renovate the Equine Clinic, including the Equine Isolation Unit.

The Equine Clinic provides advanced veterinary care and state-of-the-art services for equine patients. “Due to the expanding Louisiana horse industry, the Equine Clinic case load increases each year. To continue to provide efficient, quality care, it is necessary to expand the School’s facilities,” said Dr. Rustin M. Moore, director of the EHSP.

Through an Internet Web site, www.LSUEquine.com, stallion owners donate a breeding session with their stud, either by live cover or by artificial insemination, to be bid on by more owners locally, nationally and internationally for the upcoming 2006 breeding season. Auction bidding begins on the service at 50% of the standard stud fee so interested bidders have an opportunity for reduced-rate breeding to top quality stallions. Donors of breeding services also benefit from extensive marketing and advertising of their stallions and farms via the internet and equestrian publications.

Bidding begins October 14, and the site is open for potential bidders and donors to view. The first round of bidding closed on October 28, and the final round will close on December 16. Donations are welcomed and invited. Donations, including donated breeding services, are tax deductible for the fair market value regardless of the winning bid price.

The event, now in its fifth year, has raised funds for expanding the EHSP. This year’s proceeds will go toward the construction of a new Equine Isolation Unit, which will be used to hospitalize critically ill horses with infectious and potentially contagious disease. This new state-of-the-art facility will replace the current two-stall isolation unit, and will enable the School to more effectively and safely treat horses with these conditions. A portion of the funds will also go toward offsetting the costs associated with the rescue, treatment, shelter, feeding and rehabilitation of nearly 500 horses rescued from Hurricanes Katrina and Rita.

Please visit www.LSUEquine.com for more information about the Stallion Service Auction and the School of Veterinary Medicine’s Equine Health Studies Program.

Director’s Message . . .
(Continued from page 4)

toward uniting our industry in many areas including industry economics, marketing, and legislative efforts. Interested persons should visit the Louisiana Equine Council website at www.laequinecouncil.com.

Recently, the American Horse Council published a report ranking the economic impact of the equine industry on states that participate actively in it; Louisiana ranked fifth. The industry is extremely diverse in terms of demographics and equestrian discipline and not only contributes approximately $2.5 billion to the state’s economy, but also provides cultural, social and recreational contributions to the citizens of Louisiana. Although South Louisiana’s equine industry has been hard hit by the storms (including damage to the Fair Grounds Race Course in New Orleans and Delta Downs Racetrack & Casino in Vinton, and subsequent displacement of their fall meets to Louisiana Downs in Bossier City and Evangeline Downs Racetrack & Casino in Opelousas, respectively), we cannot be sure at this time what long-term effect these storms have on our industry. However, I am confident that collectively we will pull through this setback and that the equine industry in Louisiana will once again flourish.

As always, I seek the advice and input from anyone interested in helping us to advance the mission, vision and goals of the LSU Equine Health Studies Program. I believe strongly that the EHSP is a program for the constituents of the state’s equine industry and am confident and committed that our program is vital to recovery, rebuilding and sustaining the state’s equine industry. I invite you to contact me by telephone (225-578-9500) or e-mail (equine@vetmed.lsu.edu), or stop by in person to discuss ideas or opportunities to enhance our program and thus make a contribution to the recovery of our equine industry and its people. We wish you a safe and happy holiday season and a joyous new year.

Our Vision

The EHSP will be considered by our contemporaries and colleagues worldwide as an elite comprehensive equine biomedical program based on quality and productivity.
Laparoscopy – A Less Invasive Method to Facilitate Selected Equine Surgical Procedures

Jeremy D. Hubert, BVSc, MRCVS, MS, Diplomate American College of Veterinary Surgery, Assistant Professor, Equine Surgery

Historically, there have been some surgical techniques that have been extremely challenging and frustrating for the equine surgeon. The main reason for this challenge is that some of these procedures are performed deep within a body cavity with little or no ability to directly observe the organs/tissues that are involved. Therefore, in order to adequately observe or expose the affected tissue, more invasive procedures or approaches have been required. Although the patient can tolerate this, the invasiveness can increase the chances of complications, prolong hospitalization, and increase the associated costs. However, with the advent of camera systems that can be inserted into a body cavity and minimize trauma to the patient, the surgeon has adapted and applied these along with instruments and techniques to visualize organs/tissues that previously could not be observed. This has facilitated development and implementation of selected surgical techniques that historically were cumbersome and associated with a potentially high rate of complications. These techniques are collectively known as endoscopic techniques or more commonly referred to as laparoscopy or arthroscopy.

Arthroscopy involves insertion of a small camera (arthroscope) into a joint such as a knee. In people, the knee is “scoped,” and the patient walks home with the damage repaired; a nice short procedure with minimal discomfort and lay up time – far better than the more traditional methods of opening up the knee joint to do the same procedure. This technique has been applied to horses successfully for many years. Arthroscopic surgery provides excellent visualization of the inside of many joints in the horse, some of which were not really amenable to successful surgery prior to the advent and use of the equipment and techniques. The incisions are much smaller and thus the complications (such as damage to the joint capsule and complications with the incisions such as joint infection) are much reduced, and the duration of hospitalization and convalescence time are shorter; thus the cost(s) are typically lower.

Laparoscopy is an endoscopic surgical technique similar to arthroscopy but performed within the abdominal or thoracic (chest) cavity. It applies the same principles of triangulation as in arthroscopic surgery using a rigid fiberoptic telescope and specialized instrumentation for surgical manipulation. Studies have documented that the advantages of laparoscopic surgery in humans include improved visualization of the abdominal cavity, shorter hospitalization time, decreased incisional complications, and a shorter post-operative return to normal physical activity. Some specific surgical techniques developed and adapted for use in humans include gall bladder removal, hernia repair, appendectomy, ovariohysterectomy, surgical biopsies, gastrointestinal surgery, and lung lobe resections.

These endoscopic surgical techniques have been well adapted for use in horses. They improve visualization of the abdominal and thoracic cavities. The smaller incision results in less soft tissue trauma at surgery, which decreases convalescent time, pain, and incisional complications, thus allowing horses a quicker return to athletic activity. The technique requires a 55-cm long rigid telescope, which is inserted carefully into the abdomen. Then the abdomen is distended with an insufflator (a regulated pump) with carbon dioxide to improve visualization by gently expanding the cavity to allow more space so that the organs can be effectively examined. Long, specialized instruments which permit organ manipulation and stapling or suturing from the outside of the abdominal cavity have been designed specifically for use in the horse. These manipulations require some practice as the field is magnified and the surgeon is essentially handling the instruments from half a meter away. The procedures are performed with either the horse awake and sedated or under general anesthesia depending upon the procedure to be performed and the horse’s demeanor. If general anesthesia is indicated, a special table that permits firm positioning of the horse at a 30° angle with the head down, (Trendelenberg position) so that the abdominal contents are allowed to shift forward to increase visualization of organs in the rear portion of the abdomen (such as the urinary bladder, ovaries, and cryptorchid testicles).
There are a few disadvantages including expensive instrumentation and practice and experience in learning and mastering the techniques. However, the benefits include less invasive nature of the procedure with a reduction of patient discomfort, hospitalization, complication rate, convalescent time, and associated costs.

The LSU Equine Clinic has had laparoscopic equipment for several years and surgeons have been using it successfully for selected diagnostic and surgical procedures. Some of the most common laparoscopic techniques performed in horses include removing retained abdominal testicles (cryptorchid testicles), removal of ovaries for behavior modification or for recipient mares used for embryo transfer, removal of granulosa cell tumors (ovarian tumors), ablation (closure) of the nephrosplenic space for preventing recurrence of a specific type of large intestinal displacement that causes colic, organ biopsy, and diagnostically for horses with non-specific abdominal or thoracic cavity disease. Most of these procedures are routinely performed in the standing sedated horse and require a much shorter hospitalization time. The main advantage of performing these procedures in the standing horse is that the recovery time is greatly reduced and anecdotally it is believed that these animals experience less discomfort, do better and recuperate more quickly. Additionally, the risks (although minimal) and costs of general anesthesia are avoided. Most of these procedures historically have involved general anesthesia and a larger incision either in along the ventral abdomen similar to that used for colic surgery or in the flank or inguinal (groin) areas; the surgeon was challenged to expose the ovary and to visualize and ensure that the blood supply had been effectively ligated to prevent postoperative hemorrhage (bleeding). Greater exposure could be gained by performing a large incision in the flank of the horse; again this is significantly invasive compared with laparoscopy.

Laparoscopy has also been used to repair ruptured bladders in foals, remove uroliths (bladder stones) in geldings, inguinal hernia repair (inguinal herniorrhaphy) and left ventral colon colopexy in brood mares that have recurrent colon displacements. Furthermore, closure of the nephrosplenic space in the standing horse has been achieved successfully for those horses that have recurrent entrapment of the colon in the space between the kidney and the spleen. Many of these procedures are also performed in the standing sedated horse minimizing some of the concerns and costs of general anesthesia.

As surgeons become more familiar with laparoscopic techniques and it has become more accepted, newer equipment to assist the surgeon are continuing to be developed. Instruments to aid hemostasis (controlling hemorrhage or bleeding) have been develop and shown to be extremely successful. The LSU Equine Clinic purchased a LigaSure® instrument a couple of years ago, which facilitates the effective, rapid and safe sealing of blood vessels. Previously, the surgeon was technically challenged to tie a knot deep within the abdominal cavity or apply stapling instruments to ligate the vessels. Use of the LigaSure® device has facilitated laparoscopic removal of large ovarian tumors, which usually have large blood vessels supplying the tumor and it could be quite challenging to access the ovarian pedicle (which contains the blood vessels) and adequately visualize this area as the blood vessels were ligated.

Laparoscopy has been used successfully in North America for many years to manipulate and monitor reproductive events in camels, llamas and alpacas. Research and development may allow techniques to be adapted in mares for specific reproductive techniques such as intrafallopian tube transfer of oocytes or in vitro derived embryos. It may be of benefit in confirming the presence of a uterine torsion before surgery, or determine the definitive source of postpartum hemorrhage, or the cause of colic in peri-partum mares. It may also be useful for determining if a lack of ovarian duct patency (opening) or if ovarian adhesions is the cause for infertility in mares.

The LSU Equine Clinic has the equipment necessary to perform laparoscopic surgery in horses, which permits us to perform techniques that have been proven successful and to conduct research to develop and investigate other techniques that may improve the health and reproductive efficiency in horses.

Please feel free to contact the LSU Equine Clinic at 225-578-9500 for more information regarding laparoscopic surgery or for other questions or inquiries.
Breeding For Early Foals

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American College of Theriogenology
Clinical Instructor, Theriogenology

One of the greatest problems limiting the production of foals is man. Despite what we know about the anatomy and reproductive physiology of horses, many breed organizations have arbitrarily assigned January 1 as the birth date of foals. Therefore, breeders strive to get their mares to foal close to the first of the year in order to give the foal the maximum number of days to grow before becoming a year of age the following January 1. This yields the largest weanlings for the sales, and the largest yearlings for the sales, and the most mature two-year-olds at the racetrack.

Mares are photosensitive breeders. Their season is initiated by increasing amounts of daylight, and thus we call them long day breeders. In addition to light, mares are also somewhat sensitive to ambient temperature. Adequate nutrition, especially energy, is necessary to overcome the stress of winter and the low temperatures of early spring. Mares need to be in good condition or a positive energy balance before they will begin to cycle properly.

Mares may have one of three cycle patterns during the year. Seasonally polyestrous mares have a definite physiological or ovulatory breeding season and periods of anestrus where they have no ovarian activity (follicular development and ovulation). This type of mare enters and exits the breeding season with irregular cycles. These irregular periods are termed “transition periods.” During these transition periods, mares can show variable cyclic irregularities. The average first ovulation was April 7 on a large broodmare farm in north central Florida. Latitudes north of this region will experience ovulations later in the year, whereas latitudes south of this region will experience ovulations earlier in the year. This is the most common pattern of cyclicity with approximately 80% or mares displaying this pattern.

Polyestrous mares cycle regularly throughout the year and seem to be less responsive to ambient light. The closer that one gets to the equator, the greater the number of mares that are polyestrous because day length is less variable throughout the year. These mares will have an occasional period of anestrus that doesn’t seem to have any relationship to the time of year. Irregularly polyestrous mares cycle regularly during the breeding season similar to the seasonal mare, and they have irregular cycles during the transition season. But unlike the seasonal mare, these mares never really enter a true anestrus period. They cycle year-round like the true polyestrous mare, but the cycles during the winter months of these mares are very irregular, thus the name irregularly polyestrous. Although the cycle pattern may be confusing, mares tend to fit one pattern throughout most of their lives and only occasionally deviate from their usual pattern. Thus a reproductive history of the previous season(s) can be quite helpful in managing the mare during subsequent breeding seasons.

The next major problem in equine reproduction arising from people is confusion about what constitutes estrous behavior. Owners frequently confuse behavioral problems or urinary tract problems for heat. Unlike cows, homosexual riding is not seen in normal mares. Since mares do not ride each other, we are forced to resort to observing the mare’s response to a “teaser” male. Teasing is extremely beneficial for efficient breeding and allows more accurate identification of mares that are truly exhibiting estrous behavior and thus receptive to breeding.

The estrous cycle of the mare averages about 20-21 days. She usually remains in heat (estrus) approximately four to seven days, but this varies with the mare and the season. The period of estrus is often longer during the transition periods, and early or late during the physiologic breeding season. Signs of heat are typically not displayed during diestrus, which lasts 14-16 days. Thus, the cycle length (estrus + diestrus) averages approximately 20-21 days in most mares. Occasionally mares ovulate during diestrus which lengthens the number of days that she is out of heat (“prolonged diestrus”). In the normal cycling mare, variations in the length of the cycle are usually due to variations in the length of estrus. Regardless of the length of estrus, most mares ovulate 24 to 48 hours before the end of heat and most mares are often bred on the second and fourth days of a five-day heat.

Determining the stage of the mare’s reproductive cycle based on clinical signs and response to a teaser male are useful in breeding management of the mare. Estrus: The mare in heat raises her tail, squats, urinates frequently in the male’s presence, winks (everts the clitoris), and does not kick or strike at the male. Most mares wink a few times after urination but the estrous mare shows exaggerated winking even before urinating. Some mares may be resentful initially when teased (especially maiden and dominant mares, or those recently introduced to the herd), but then they “break down” and become receptive to the stallion with continued teasing. Therefore, the handler and observer must be patient with these mares. Diestrus: Mares not in heat squeal, pin their ears, and strike and/or kick when the male approaches. Passive: The

Mare in estrus. Note the ears are forward, the tail raised, and she is urinating
passive mare shows little or no positive or negative signs. A mare will usually not be passive the entire estrous cycle, but will either display negative signs during diestrus and be passive during estrus, or, display positive signs during estrus and be passive during diestrus. Thus, close observation and obtaining an accurate history regarding past cycles is important in managing these mares.

Understanding an individual mare’s behavioral pattern is valuable in assessing her response to the male, which helps determine the stage of her cycle. A good record keeping system records the reproductive tract findings and the teasing results, and can be useful to predict the onset of the next heat.

Now that we understand the different patterns of the mare’s reproductive cycle and how to detect estrus, we need to compare events in the natural breeding season with events in the arbitrarily defined stud season. The percentage of mares showing estrus in any month doesn’t reach 70% until the middle of March. Some of the mare’s early displays of heat are associated with follicular development that does not result in ovulation and formation of a corpus luteum (CL); this typically occurs during the transitional period. The percentage of mares that have ovulated as assumed by the presence of a CL on the ovary may not reach 70% until mid-to-late April, and the peak of ovulation activity occurs from the middle of July to August. On farms where nutrition is suboptimal, these activities are usually delayed – the majority of mares will not be cycling until mid-May. Thus, normal reproductive physiology is working against us in getting conception in February, March and April.

Comparing the most fertile periods of the mare and the stallion, with the traditional breeding season for a breed having a January 1 birth date, it is evident that the peak of equine fertility occurs at the end of the stud season. In fact, fertility of the male and female is much reduced in the first half of the season. The normal gestational (pregnancy) length of the mare is approximately 11 months with a range of 320-360 days. So if we add a month to the foaling date we can determine in which month most mares conceived the previous year. Even though most breeders attempt to get January, February and March foals, most foals are born in April and May; therefore, conception occurred in May and June, respectively. What can we do to overcome or manipulate nature to make the mare’s reproductive physiology capable of producing earlier foals?

When scientists discuss the role of light in initiating reproductive cycles they divide the day into the photophase (light) and the scotophase (dark). They have also been able to define an inducible period when light exposure can initiate the hormonal events that cause a mare to begin to cycle. Extending light into the inducible period over time causes initiation of cycles. In the mare, the inducible period occurs 8-10 hours after the onset of darkness (or the scotoperiod). The amount of light needed is 10 foot candles (1 lux) at the level of the mare’s eye. This is usually equivalent to a 100 watt bulb for a 12 x 12 box stall or two 40 watt fluorescent bulbs per box stall. The light level can be tested by using a 35mm camera with the film speed set to 400 and the shutter speed at ¼ second. Place a styrofoam cup diffuser over the lens and set the aperture for the correct exposure. The f stop should be about 10 or greater to ensure sufficient light.

Artificial light schemes have been used to induce cycling in mares for years. The length of the transition period is unchanged, but the anoestrus period is either eliminated or greatly shortened. Three basic light methods have been used. They all begin about 60 to 75 days prior to the desired date to begin breeding. Abrupt Method: This method involves extending the duration of light to 16 hours with lights beginning about 60 to 75 days prior to the first day of the breeding season. Although this scheme is not as physiological as other methods, it is effective, but may result in higher electricity bills than some of the other methods. Gradual Method: This method begins 60 to 75 days prior to the onset of breeding, but in this case the day length is increased by one-half hour per day on a weekly basis. Add two to two and half hours of light after sunset to achieve this goal. By February 1, mares are receiving 16 hours of light per day. Intermittent Method: This method may be the most physiological and is also the most conservative of electricity, but it requires the purchase of a timer switch for the lights and is the most complicated to regulate. In this case, day length is lengthened to 10 hours, followed by eight hours of darkness, then two hours of light, and another 4 hours of darkness. The two hours of light in the middle of the night occurs during the inducible period. Alternatively, one hour of light 9½ -10½ hours after the natural onset of darkness is also effective.

Once mares are on a lighting program they should be kept under the lights until the natural daylight reaches 16 hours. Otherwise they may react as if it were autumn and have irregular cycles as if they were in the fall transition period. Another consequence of a lighting program is that these mares shed their hair coats early and therefore may need to be protected from the cold in colder climates. Mares under lights will still have transitional cyclic irregularities, but these are moved up to earlier in the year, prior to the onset of the breeding season. The physiologic ovulatory season is moved up into February, and thus we get better breedings, earlier conceptions, and mares foaling closer to January 1.
Poncho, A Horse Out of Breath

Lais R. R. Costa, MV, MS, PhD,
Diplomate American College of
Veterinary Internal Medicine
Visiting Assistant Professor, Equine
Emergency & Critical Care

Poncho, a mature Quarter Horse
baying presented to the LSU School
of Veterinary Medicine’s Equine Clinic
approximately one year ago for severe
respiratory distress. Dale Blanchard, the
owner, reported that for the two months
prior to presentation, Poncho had
increased his breathing effort and had
been losing weight. Poncho had been
treated empirically with little success. At
the time of presentation, Poncho’s
breathing was extremely labored (his
nostrils were flared and he had a
pronounced heave line), the heart rate
and breathing rate and effort were
increased, and Poncho was depressed,
febrile (running a fever) and wheezing
with each breath. Drs. Elizabeth Vint
and Ann Chapman had to identify the
causes of Poncho’s distress. His blood
work showed that the oxygen in his
arterial blood was very low and the
carbon dioxide was slightly increased
despite his great breathing effort,
indicating he was having difficulty
ventilating. He did not want to eat or
drink because all of his attention and
effort was devoted to getting air into his
lungs. In order to determine the nature
of his problem (pulmonary, cardiac or
other organ system, or a combination),
Drs. Vint and Chapman recommended
ultrasonographic and radiographic
examination of Poncho’s chest and
heart. However, because of the results
of the clinical examination and blood
work, Poncho was administered
intrasal oxygen in order to increase
the oxygen content in his blood before
the radiographic and ultrasonographic
exams were performed.

The radiographs revealed changes
indicative of airway obstructive disease,
like asthma, and no evidence of
pneumonia or any other pulmonary
disease. The ultrasonographic exam
supported the radiographic findings
and no cardiac abnormalities were present.
So, the good news was that Poncho did
not have a heart dysfunction, nor a lung
infection or a tumor. However, he still
had difficulty breathing. The remaining
laboratory work suggested that there was
no evidence of systemic infection and all
the other organ functions appeared in
order, except for the lungs.

A sample from the tracheal
secretion was evaluated, and revealed a
large number of inflammatory cells
known as neutrophils, excessive mucus
accumulation, and absence of lung
infection, confirming the tentative
diagnosis of airway disease. Much like
asthma, this is an allergic response of
the airways that impairs the delivery and
removal of air into and from the lungs.
The wheezing and labored breathing
were due to the obstruction to air flow
into the lungs because of the airway
inflammation and bronchospasm
(constriction of the airway walls).
Poncho was given inhaled
bronchodilators (albuterol and
ipatropium) aimed to relax the airways,
improve pulmonary clearance
(albuterol) and therefore provide better
air movement in and out the lungs. He
was also given a systemic anti-
inflammatory corticosteroid
(dexamethasone) to relieve the
inflammation and decrease airway
obstruction.

Dr. Vint asked Mr. Blanchard many
questions in order to determine which
environmental conditions Poncho was
exposed to at home and to identify what
might have triggered his airway allergy.
Mr. Blanchard recalled that beginning
in July, Poncho started showing signs of
difficult breathing while in pasture.
Poncho was diagnosed with summer-
pasture-associated heaves. Because this
is an allergic condition of the airways,
just like in human asthma, decreasing
exposure to environmental particles that
trigger the airway allergic response is
critical for improvement of airway
function. Poncho was placed in an
environment with very little dust (a box
stall in a well ventilated area bedded
with good quality wood shavings and
minimal dust) and he was fed a
complete pelleted diet (which means the
fiber content is greater than 25%), and
no hay was given to him.

Scientific investigations performed
by LSU Equine Health Studies Program
scientists, including Drs. Ralph E.
Beadle, Thomas E. Seahorn, Lais R.
Costa, C. S. Venugopal, and co-workers
has indicated that summer-pasture-
associated heaves is a seasonal airway
disease that appears to be initiated by
exposure to certain particulate matter
such as mold spores and grass pollens.
In addition, removal of the horse from
the insulting environment is crucial for
clinical recovery. Research by Dr. Costa
has shown that mold spores and grass
pollens can induce inflammatory cells to
produce mediators of inflammation and
activate neutrophils, which seem to
perpetuate the disease.

Research in several other
institutions, including Kansas State
University, Tufts University and Michigan
State University, has indicated the
successful treatment of clinical
exacerbation of equine recurrent airway
disease with inhaled administration of
bronchodilators, two of which were
given to Poncho.

By the second day of
hospitalization, Poncho’s breathing was
much improved and he became
interested in feed and water again.
Poncho continued to improve clinically,
and within two days he no longer
needed the supplemental oxygen. Within
a few days, the dose of anti-
inflammatory corticosteroid was
gradually decreased until finally it was
discontinued. Poncho was discharged
with recommendations to minimize
exposure to respirable dust particles
(such as mold spores and pollens) and
to prevent the recurrence of the clinical
exacerbation during the late spring to
mid fall by maintaining Poncho in a box
stall away from the pasture.

This year, Mr. Blanchard reported
that Poncho started to show signs of
heaves (coughing and slight increase in
respiratory effort) in the beginning of
July. Poncho was removed from pasture
and kept in a low-dust environment.
The farm veterinarian was called and
Poncho responded very quickly to
treatment with bronchodilator and anti-
inflammatory medication, only having to
be medicated for a couple of days. The
early recognition and treatment of the
problem and the early and aggressive
management changes have prevented
Poncho from progressing to another
episode of severe respiratory distress.

Poncho and many other horses
have benefited from the knowledge
gained through clinical experience and
basic and applied scientific investigation
in horses and from the knowledge
applied from research in human
asthma.
Guest Lecturer Provides Insight into Musculoskeletal Injuries in Thoroughbred Racehorses

Recently, the LSU School of Veterinary Medicine hosted Dr. Susan Stover, professor and director of the JD Wheat Veterinary Orthopedic Research Laboratory at the University of California-Davis, as part of the LSU Chancellor’s Distinguished Lectureship Series. Dr. Mandi Lopez served as the primary host for her visit. Dr. Stover’s presentation, “Clues to Genesis of Musculoskeletal Injuries from Thoroughbred Racehorses,” was an in-depth exploration of the frequency of low grade bone damage in Thoroughbred racehorses and how the damage correlates with the development of catastrophic breakdown injuries.

Work presented in Dr. Stover’s study began after a program was developed in 1998 wherein she and her colleagues were able to conduct postmortem examinations on a number of horses that had died as a direct or indirect result of a breakdown during racing. She wanted to learn more about the breakdown and what factors led up to the fracture or severe soft tissue injuries that led to the horse’s demise.

To this end, Dr. Stover and her team endeavored first to identify the cause of death, secondly to identify the reasons for the cause(s), and ultimately, to design strategies for prevention in the future.

The overall intent of the presentation was to provide background information on bone biology, to demonstrate patterns of bone structure disruption and to ultimately emphasize how the majority of fractures occurring in Thoroughbred racehorses are frequently associated with pre-existing damage.

**Dr. Stover’s work suggests that a change in the typical training cycle could greatly increase the number of races a horse is able to compete in over the course of its athletic career.**

Dr. Stover’s work demonstrated that there are predictable patterns of exercise in Thoroughbred racing that basically predispose a horse to breakdown. Often these patterns involve too much high-speed exercise over a short period of time. The majority of Thoroughbred racehorses are trained in a traditional manner of going through either a work (high intensity exercise) or an actual race once a week. The day after the race they are hand walked. In subsequent days, the horse is then galloped, then they move up to an actual “work” or race, and the cycle repeats itself.

Clearly, to maintain the level of fitness required to compete at the desired level, the training process must continue. However, Dr. Stover’s work suggests that there is a delicate balance between maintaining and increasing that level of fitness, and taking a horse too far. It is important to allow sufficient time for the bone to adapt to the damage sustained during exercise so that it can successfully remodel; this minimizes the risk to catastrophic injury and is necessary to maximize the chances for the horse’s long-term athletic career.

Dr. Stover’s work suggests a change in traditional training methods. Each horse is different, and while some are able to withstand the rigors of training under current methods, others are not. Dr. Stover’s work suggests that a change in the typical training cycle could greatly increase the number of races a horse is able to compete in over the course of its athletic career.

“In California, a horse runs approximately every 21 to 26 days,” said Dr. Stover, “and right now if you look at the economic impact of the attrition of these horses, we have approximately 28% attrition every three months. We need to ease the pressure on trainers and increase the time between races to allow the horses time to recover in an attempt to decrease injuries and subsequent temporary or permanent loss.”

**Did You Know . . .**

The EHSP serves as a leader in the scientific investigation of medically and economically important equine diseases/injuries.
Summer is Science Season for Equine Research Students

While school was out for many undergraduate and veterinary students, veterinary research experiences were just beginning for those participating in summer research programs in the Equine Health Studies Program. With a program as diverse as the EHSP, there are many avenues for students whose interest in learning didn’t stop after completing their last final exam of the spring semester. The EHSP sponsors mentoring programs in veterinary research in conjunction with the Howard Hughes Medical Institute Undergraduate Science Program, the Merck-Merial Veterinary Student Scholars Program, the National Institutes of Health Biomedical Research Experience for Veterinary Students, the Geraldine R. Dodge Frontiers in Veterinary Medicine, and the Louisiana Biomedical Research Network Undergraduate Research Program.

All of the students worked with mentors in basic and/or clinical equine research labs throughout the EHSP. Under the guidance of his or her mentor, each participant designed and completed an original project, and prepared his or her findings for poster presentations at the end of the summer program and in the fall for Phi Zeta Research Day on September 28. Students also participated in journal club discussions, seminars and laboratory meetings.

We hope their experiences this summer will encourage some of these outstanding students to consider careers in equine veterinary biomedical research. At the very least, these students conducted their own research, were exposed to research possibilities, and increased their knowledge regarding the subject matter and scientific methods.

EHSP students in the Merck-Merial/NIH summer veterinary research program (Jessica Carey, Jenny Liford, and Christine Mocklin) presented their work July 28-31 at the University of Georgia in Athens, Georgia at the 2005 meeting of the Merck/Merial National Veterinary Scholar Symposium.

Jeffrey Cardinale, an undergraduate summer researcher and an EHSP student worker, presented his work on the LSU campus during the LSU Summer Undergraduate Research Forum (SURF) on July 28.

To obtain a summer fellowship, students submitted proposals to the various funding agencies under the direction of their faculty mentors. Selection is very competitive; therefore, we are very proud of our summer research fellows and their hard work.

EHSP Summer Research Fellows, projects and mentors for 2005:

Jeffrey Cardinale, LSU Undergraduate Junior. The expression of the inflammatory-related gene IL-8 (chemotaxis) in equine laminitis. Louisiana Biomedical Research Network Summer Undergraduate Research Program. Drs. Ashley Stokes and Sharon Chirgwin.


Equine Health Tips
For more information on several diseases or injuries of horses, please visit our website (www.LSUEquine.com) and click on the Equine Health Tips tab and expand your knowledge.
On September 28, the LSU School of Veterinary Medicine held its annual Phi Zeta Research Emphasis Day, which was established to promote research in veterinary medicine; to recognize research conducted by veterinary students, residents, graduate students and faculty; and to encourage veterinary students to pursue careers in veterinary medicine. Phi Zeta is the national veterinary honor society, which recognizes and furthers scholarship and research in matters pertaining to the welfare and diseases of animals.

Phi Zeta Day provides an opportunity for national experts to speak to students on current research in various fields and to present a picture of global veterinary research. This year’s speakers were Dr. Corrie Brown, professor of veterinary pathology and coordinator of international veterinary medicine at the University of Georgia College of Veterinary Medicine; and Dr. Ann Kier, professor of veterinary pathology and director of the Center for Comparative Medicine at the Texas A&M University College of Veterinary Medicine.

Veterinary and graduate students (including interns and residents) and faculty and staff presented their current research relevant to disease and welfare of animals. This year, there were 30 entries in two categories: doctoral student competition, and the undergraduate, Master’s degree, and House Officer competition. First-, second- and third-place received monetary awards.

Winners in the Student competition, including Master’s, undergraduate and veterinary students, and interns and residents were as follows: First place went to Dr. Joseph Bernstein a dermatology resident at the School for “Mohs Micrographic Surgery: An Application in Veterinary Cutaneous Oncology and Surgery.” Bernstein’s major professor is Dr. Carol Foil with the Department of Veterinary Clinical Sciences (VCS). Second place went to Mark Bates (Class of 2007) for “Comparison of Methods Used for Restraint in Juvenile Chimpanzees, Pan troglodytes, and Their Effects on Behavioral and Physiologic Indicators of Sedation.” Bates’ faculty mentor is Dr. David Baker with the School’s Division of Laboratory Animal Medicine. There was a tie for third place between Courtney Sember (Class of 2008) for “Tumor Necrosis Factor -- alpha Nox1, gp91phox and Nox4 In Rat Cardiomyocyte Cultures;” and Brenna Hanly (Class of 2009) for “Expression of the Apoptosis-Related Gene Caspase-3 in Equine Laminitis.” Sember’s faculty mentor is Dr. Joseph Francis with the Department of Comparative Biomedical Sciences (CBS), and Hanly’s faculty mentor is Dr. Ashley Stokes with the Department of VCS.

Winners in the Ph.D. Category were as follows: First place went to Julie Hartfield for “Angiotensin II-Induced Hypertensive Response Is Modulated Through Tumor Necrosis Factor-α: Role of Nox1, Nox4 and gp91phox.” Second place went to Anuradha Guggilam for “Cytokines Modulate Oxidative Stress in Ischemia Reperfusion-Induced Heart Injury in Rats: Role of gp91phox and Its Homologues, Nox1 and Nox4;” and third place went to Anna Israyelyan for “Oncolytic Herpesviruses for the Treatment of Breast Tumors.” The faculty mentor for Hartfield and Guggilam is Dr. Joseph Francis, and Israyelyan’s faculty mentor is Dr. Konstantin G. Kousoulas with the Department of Pathobiological Sciences (PBS).

Phi Zeta would like to take this opportunity to thank the poster judges: Dr. Doris Carver, associate vice chancellor, LSU Research and Graduate Studies; Dr. Stephanie Cormier, assistant professor, LSU Biological Sciences; Dr. Fred Rainey, associate dean, LSU Biological Sciences; Dr. Kenneth Bondioli, associate professor, LSU Animal Sciences; Dr. Diane Williams, National Hansen’s Disease Programs, USPHS; Dr. Cathy Williams; associate professor, LSU Dairy Science; Dr. Jerome LaPeyre, assistant professor, LSU Veterinary Science; and Dr. Hans Berthoud, professor of basic science, Pennington Biomedical Research Center.

“Tumor Necrosis Factor – alpha Nox1, gp91phox and Nox4 In Rat Cardiomyocyte Cultures;” and Brenna Hanly (Class of 2009) for “Expression of the Apoptosis-Related Gene Caspase-3 in Equine Laminitis.” Sember’s faculty mentor is Dr. Joseph Francis with the Department of Comparative Biomedical Sciences (CBS), and Hanly’s faculty mentor is Dr. Ashley Stokes with the Department of VCS.

Did You Know . . .

The EHSP plays a vital role in the ~ $2.5 billion Louisiana equine industry through our high standards of research, public service, education and outreach.
In an effort to continually improve our service to clients and referring veterinarians, the Equine Health Studies Program faculty and staff recently hosted a Summit with private equine veterinary practitioners from around the state to discuss ways to improve collaborative efforts and strengthen our effectiveness.

This Summit covered a broad range of discussions focused on improving customer care and veterinary services at LSU, such as remaining current in obtaining and maintaining state-of-the-art equipment, particularly related to imaging modalities and other diagnostic and therapeutic procedures, improving communication with veterinarians and owners and enhancing our outreach services and capabilities.

Many of the veterinarians in attendance represented members of a newly formed Veterinary Advisory Council. This council is comprised of veterinarians who refer cases to the LSU Equine Clinic; the members represent a broad cross section of equine practice types and their focus concentrates on a wide variety of equestrian activities throughout Louisiana and the surrounding region.

The overall purpose of the Veterinary Advisory Council is to assist the EHSP in reaching its mission of becoming an elite and premier equine biomedical program by providing advice and counsel to the EHSP faculty and staff in order to meet the needs of the equine industry and its constituents. The Council will also offer insight concerning logistical operations, necessary equipment, facility enhancements, and enhanced communication between EHSP clinicians and referral veterinarians and their clients.

Current Council members include Drs. Gary Norwood – Racetrack/ New Orleans and Bossier City; Jay Addison – Racetrack/ New Orleans and Polo/ Folsom; Randolph Hayes – Racetrack/ New Orleans and Bossier City; Julie Cubbage – Racetrack and Ambulatory/ Lafayette; Sonny Corley – Racetrack and Ambulatory/ Lafayette; Larry Findley – Racetrack and Ambulatory/ Vinton (Lake Charles); Phil Deville – Breeding Farm and Ambulatory/ Abbeville; Chat Kleinpeter – Ambulatory and Breeding Farm/ Baton Rouge; Jim LaCour – Ambulatory/ Slaughter; Allison Barca – Ambulatory/ New Orleans; Keith Cooper – Ambulatory and Breeding Farm/ Covington-Folsom; Gary Greene – Breeding Farm and Ambulatory/ Covington and Folsom; Lowell Roger – Ambulatory, Breeding and Racing/ Folsom; Brad Boutte – Ambulatory/ Alexandria; Patrick Cleveland – Ambulatory/ Picayune, Mississippi; Steve Goodeaux – Breeding Farm and Ambulatory/ Lafayette; Eddie Moore – Ambulatory and Breeding Farm/ Princeton (Haughton); and Chris Thompson – Ambulatory/ Alexandria.

The Council members will rotate, but the geographic and equestrian discipline balance will be maintained. Regardless of membership on the Council, we seek constructive criticism and input/ideas from all of the veterinarians who use our referral services in order to improve customer care and our veterinary services.

Recently the Equine Health Studies Program established its own Advancement Council to provide insight, assistance and guidance toward furthering the work of our program. The Advancement Council is comprised of equine industry constituents and leaders representing a broad cross section of individuals involved in equestrian activities throughout Louisiana.

The overall purpose of the Advancement Council is to assist the EHSP in reaching its mission of becoming an elite and premier equine biomedical program. The objectives of the Council are to provide advice and counsel to the program’s director and staff in order to meet the needs of the equine industry and its constituents. They will also endeavor to provide assistance in engaging equine constituents and cultivating private support, assist with fundraising activities and events in support of the EHSP, and assist in informing the public about the mission, vision and contributions of the EHSP to the equine industry in Louisiana and the surrounding region.

Council members attended their first meeting with representatives from LSU in mid-August to gain a better understanding of the EHSP’s history, programs and goals. The members are Dr. Jay Addison of Folsom; Ms. Julie Calzone of Lafayette; Mr. Glenn Delahoussaye of Carencro; Ms. Debra DePrato of New Orleans; Mr. David Fennelly of Reserve; Mr. Harold Foreman of Folsom; Mr. Warren Harang of Donaldsonville; Ms. Sydney Hines of Pass Christian, Miss.; Ms. Anne Hornbeak of Folsom; Mr. Claude Leach of Lake Charles; Ms. Sharon Londoño of Covington; Mr. Courtney Ramsey of Lafayette; Mrs. Michelle Rodríguez of Folsom; Ms. Francie Sterling of Folsom; Mr. Phil Witter of Baton Rouge; Mr. Randy Wright of Baton Rouge; and Mr. Zeke Zeringue of Westwego.

The faculty and staff of the LSU EHSP are deeply appreciative of the insight, commitment and efforts of these individuals and look forward to working with them to continually strengthen our program and advance the State’s vibrant and diverse equine industry and assist its many constituents.

The Council members will rotate, but the geographic and equestrian discipline balance will be maintained. Regardless of membership on the Council, we seek constructive criticism and input/ideas from anyone involved in the equine industry who uses the Equine Clinic for veterinary care for their horses and who are interested in promoting the health, well-being and performance of horses.
Over 170 people watched Giacomo win the 131st “Run for the Roses” at the LSU School of Veterinary Medicine’s annual Kentucky Derby Party presented by Taylor, Porter, Brooks & Phillips, LLP. The School’s Equine Health Studies Program hosted the event on May 7 at the Country Club of Louisiana.

While celebrating the 131st “Run for the Roses,” guests enjoyed an afternoon of Kentucky Derby activities and cuisine. The afternoon party also included a Derby Trivia Contest and an exhibition of equestrian art by local artist Anita LeJeune. Competitions were held for the best hats and tie. Judging the competitions was René Singleton, representing the South Baton Rouge Journal. In the hat contest, awards were given for Most Beautiful, Honorable Mention, Best Flowers, Best Group, Best Derby Theme, Most Whimsical, and Biggest Hat. The Most Beautiful award was given to Constance Cowart, and the award for Best Derby Tie went to Bill Strain.

Guests placed “bets” on the race, and a prize drawing was held from those who chose the Win, Place and Show Horses. Stacey Simmons received a silver Derby mint julep cup for choosing the winning horse. Amy Strain received a bottle of Woodford Reserve Bourbon for choosing the horse that placed second, and Kelly Strain Guastella received a set of Derby bookends for choosing the horse that came in third. René Singleton received a set of Derby-themed Mardi Gras beads for choosing the horse that came in last place.

The afternoon’s festivities also included traditional Derby cuisine of cheese grits, Kentucky Derby pie, and mint juleps. Each guest received a commemorative 2005 Kentucky Derby mint julep glass. A silent auction was also held, and the EHSP would like to thank the following individuals and businesses for donating items for the silent auction:

- Mike Batten
- Gayle Braud
- Twyla Brower
- Becky Bynum and John Servis
- Calandro’s Supermarket
- Charvet’s Garden Center
- Bonnie Clark
- Richard and Cindy Ford Cochran
- Cool 95.7
- P. J. Demarie
- Johnny Donnels
- Dr. Dina Duplantis
- Victoria Duplantis
- Evangeline Downs Racetrack & Casino
- Lauren M. Francis
- Dr. & Mrs. Dennis French
- Sonya Griffin
- H&H Supplements
- Sherry Harmon
- Jane Henslee
- Jeanne Hines
- Donna Joffrion

The 2005 Kentucky Derby Party included a hat competition. The winners are (front row, from left to right) Mrs. Ronnie Bodin, Honorable Mention; Ms. Julie Hardin, Best Group; Mrs. Rosemary Klei, Most Whimsical Hat; Mrs. Patia LaCours, Best Flowers; (back row, from left to right), Mrs. Margaret McKerley, Best Group; Ms. Libby McKerley, Best Group; Ms. Susan Haynes, Best Group; Mr. Carroll Songy, Biggest Hat; and Mrs. Constance Cowart, Most Beautiful Hat.

The event was planned by the Kentucky Derby Party planning committee: Dr. Rebecca Adcock, Julie Calzone, Pat Edwards, Judi Gerhardt, Ginger Gutner, Dr. Jill Johnson, Catherine Koch, Dr. Rustin M. Moore, Ky Mortensen, Nancy Nolan, Steve Palmer, Warren Parker, Chris Prescott, Jim and Sharon Salmon, South Down’s Gym, Charlene Shexnayder, Tom Siegrist, Amy W. Strain.

Proceeds from the party will benefit the construction fund for the new Equine Isolation Unit, which will facilitate advanced treatment of horses with infectious and potentially contagious disease.
Faculty & Staff Receive Honors

Dr. Abdul Aljarrah, who completed his theriogenology residency and Master of Science degree at LSU, passed the certifying examination and is a Diplomate of the American College of Theriogenology. He is enrolled in a Ph.D. program in the Department of Dairy Science at LSU.

Dr. David Bolt, who completed an internship in equine medicine and surgery followed by an equine surgery residency at LSU, passed the Large Animal certifying examination by the American College of Veterinary Surgeons. Dr. Bolt completed a one-year position at the University of California, Davis and now is a visiting assistant professor of equine surgery at The Ohio State University in Columbus, Ohio.

Dr. Etta Bradecamp, who completed her equine practice residency, passed the certifying examination and is a Diplomate of the American College of Theriogenology. She is currently in private equine practice in Virginia.

Dr. Ann Chapman (LSU 2001), a previous resident in equine medicine at LSU, passed the Large Animal certifying examination of the American College of Veterinary Internal Medicine. She currently serves as an equine internal medicine fellow at the LSU Equine Clinic.

Dr. Lois R. R. Costa successfully defended her doctoral dissertation titled, “Cytokines and aeroallergens in the pathogenesis of summer pasture-associated obstructive pulmonary disease: Effects on endothelin production, neutrophil activation and chemotaxis,” and received her PhD in Veterinary Medical Sciences in May of this year.

Dr. Ann Davidson (LSU 2001), a previous intern in equine medicine and surgery at LSU, passed the Large Animal certifying examination of the American College of Veterinary Internal Medicine. She completed her equine medicine residency and Master of Science degree at Colorado State University and is working at the Acadiana Equine Clinic in Lafayette, La.

Dr. Maria Soledad Ferrer, who completed her theriogenology residency and Master of Science degree at LSU, passed the certifying examination and is a Diplomate of the American College of Theriogenology. She is enrolled in a PhD program at the University of LaPlata, Argentina.

Dr. Dennis French, professor of veterinary science, was awarded the LSU School of Veterinary Medicine Distinguished Service Award based on a criteria of service in departmental administration, participation in continuing education, extension committees, professional and community activities, and counseling. Dr. French is highly deserving of this award for his many years of dedicated and tireless work on behalf of the School, its students, and the farm animal and equine clientele he has served.

Dr. Gary Sod (LSU 2001) completed an internship in equine medicine and surgery at LSU in 2002 and then completed a residency in Farm Animal Medicine and Surgery. He currently serves as an instructor of Farm Animal Health Management. He was awarded the Mark S. Bloomfield Resident Research Award (2005) at the 32nd Annual Conference, Veterinary Orthopedic Society in Snowmass, Colo., in February for his work related to equine orthopedics.

Dr. Ashley Stokes (LSU 2001) graduated from Leadership Greater Baton Rouge 2005, a Baton Rouge Area Chamber of Commerce program to develop tomorrow’s community leaders through innovative problem-solving sessions and teamwork training. This nine-month program focuses on issues of education, city and state government, health care and social concerns, economic development, arts and media, criminal justice system, and the environment. Dr. Stokes currently is an assistant professor of research in the LSU Equine Health Studies Program.

Students Receive Honors and Awards

Internships and Residencies

Dr. Andrew Lewis (LSU 2005) is completing an internship in large animal medicine and surgery at the University of Georgia in Athens, Ga.

Dr. Katie Marcus (LSU 2005) is completing an internship in equine medicine and surgery at Alamo Pintado Equine Medical Center in Los Olivos, Calif.

Dr. Meaghan Gilhooly (LSU 2005) is completing an internship in equine medicine and surgery at Texas A&M University in College Station, Texas.

Dr. Amy Voliva (LSU 2005) is completing an internship in equine medicine and surgery at San Luis Rey Equine Hospital in Bonsall, Calif.

Awards and Honors

Erica Wallace (LSU 2006) was awarded the American Veterinary Medical Association/American Association of Equine Practitioners Foundation Scholarship. The award is given annually to a second year student in good standing with the Student Chapter of the American Association of Equine Practitioners and who has demonstrated outstanding scholastic abilities and a commitment to the AAEP and the pursuit of equine practice.

Jennifer Liford (LSU 2008) was awarded the LSU Equine Health Studies Program Scholarship. The monetary award and certificate are given to a year I-III student in good standing with the Student Chapter of the American Association of Equine Practitioners and who has demonstrated an interest in equine medicine through participation in activities and events involving the equine industry and the Equine Health Studies Program.

Katie Marcus (LSU 2005) was awarded the Louisiana Veterinary Medical Association Equine Clinical Proficiency Award. The award is given to the Year IV student judged by the equine medicine and surgery faculty to be the most proficient in equine medicine and surgery.

Lane Breaux (LSU 2005) was awarded the Arizona Equine Medical & Surgical Centre Award. This scholarship award is given to the Year IV student who has exhibited proven clinical competency in equine medicine and surgery and who is an active member of the Student Chapter of the American Association of Equine Practitioners.

Andrew Lewis (LSU 2005) was awarded the American College of Veterinary Surgeons Large Animal Proficiency Award. The monetary award and certificate are given to a Year IV student who has demonstrated academic and clinical proficiency in large animal surgery.
New Faces at the EHSP

**Dr. Colin F. Mitchell**, originally from Perth, Scotland, received his veterinary medical degree from the University of Edinburgh. He then completed an internship at the University of Prince Edward Island prior to entering a combined three-year equine surgery residency and Master of Science graduate program at the University of Minnesota, which he completed in June 2004. He then remained on the hospital staff at the University of Minnesota, where he worked as the equine emergency clinician/surgeon until July 2005 when he joined the LSU School of Veterinary Medicine. He is board certified by the American College of Veterinary Surgeons. His clinical interests include soft tissue surgery and ultrasound. His research interests include assessment of gastrointestinal motility. He enjoys running, the outdoors, and watching movies.

**Dr. Lais R. R. Costa**, originally from Sao Paulo, Brazil, first came to LSU as an intern in equine medicine and surgery, which she completed in 1990. She then completed a Master of Science degree in virology in at the University of Kentucky in 1994, and spent two years at the University of California, Davis as a combined clinical and research fellow. She entered a three-year equine medicine residency here at LSU, which she completed in June 1999. She then embarked upon a doctoral (PhD) program at LSU involving investigating the pathophysiology of summer heaves in horses, which she completed in March of this year. She has maintained an interest and has continued to work in the clinic during her graduate studies. She was recently hired as an equine emergency clinician to assist with the evaluation, triage and treatment of horses that are admitted to the LSU Equine Clinic for emergency and critical care needs. She is board certified by the American College of Internal Medicine.

**Dr. Cassandra (Cassie) Johnson**, originally from Gardnerville, Nev., is one of our new equine medicine and surgery interns. She comes to us from Columbus, Ohio, where she graduated from The Ohio State University College of Veterinary Medicine in June 2005. She began here at LSU in July of this year. She plans to pursue an equine internal medicine residency.

**Dr. James (Jimmy) Redmond**, originally from Louisville, Ky., is one of our new equine medicine and surgery interns. He graduated from Auburn University College of Veterinary Medicine in May 2005. He began here at LSU in July of this year. He has plans to pursue an equine surgery residency.

**Dr. Amy Snyder**, originally from Newport, New York, graduated from Cornell University College of Veterinary Medicine in May 2004 and completed a one year internship at Chino Valley Equine Hospital in Chino, Calif. She began her two-year equine practice residency, a program that combines advanced training in reproduction, internal medicine and surgery, in July of this year.

**Dr. Jose Len**, originally from Chiriqui, Panama, is our new theriogenology (reproduction) resident. He entered this three-year combined residency and Master of Science graduate program in July of this year. His clinical interests include mare reproduction and infertility.

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**Faculty Departures**

**Dr. Aloisio Bueno**, originally from Brazil, completed an internship in equine medicine and surgery and a Master of Science degree here at LSU, a one-year large animal fellowship at Oregon State University, and then a three-year equine surgery residency at the University of California, Davis. He returned to LSU in July 2002 as the emergency equine clinician/surgeon and has worked in this capacity since that time. He is board certified by the American College of Veterinary Surgeons. He recently accepted a position at the University of Florida, where he will begin in early December. We thank him for the hard work and dedication to the Equine Clinic’s emergency and critical care service.

**Dr. Sharon Chirgwin**, originally from Australia, joined the faculty of the Equine Health Studies Program in 2004 as an assistant professor of research. She brought to the program much needed experience and expertise in molecular biology and facilitated the integration of these new technologies into our diverse and productive research programs. Dr. Chirgwin and her husband, Dr. Andy DeRosa, recently moved to North Carolina. We want to thank Dr. Chirgwin for all of her contributions to our program during her tenure here at LSU.
Over 25 faculty, staff and students of the Equine Health Studies Program participated in the Inaugural Red Stick Dragon Boat Regatta (a fundraising event of the Baton Rouge Area Chamber of Commerce) at University Lakes on Saturday October 8. Each boat required 20 paddlers, a drummer and a person to steer the boat. There were 26 teams from the city’s business community competing in racing vessels decorated as Chinese Dragons. The EHSP team, “The Dragon Jockeys,” representing the School of Veterinary Medicine won both of its heats but did not make the finals. The event provided a great opportunity to have fun, relax and enjoy a beautiful autumn day with family, friends and colleagues.

The LSU Equine Clinic recently acquired two new pieces of equipment that expands and enhances its diagnostic capabilities for performance horses. The clinic acquired an Eklin digital radiography unit for acquisition of radiographic (x-ray) images of the bones and joints of horses’ legs. This state-of-the-art technology provides radiographic images with exceptional quality and detail of bones and joints. The computer technology enables focusing on certain areas or magnifying these areas on the images to obtain a “closer look” without blurring of the image. This imaging modality also removes the need for storage of the traditional radiographic films and allows easy electronic storage of the images. The images can also be copied to a compact disc or sent via e-mail for electronic distribution to clients, which is much easier and less costly than copying all of the films. Thus, this digital radiography unit compliments other existing diagnostic imaging modalities including ultrasonography, nuclear scintigraphy (bone scan) and computer tomography (CAT scan).
## ESHP Advancement Director's Corner

### In This Together

From the moment I arrived in this state eight months ago, I have spent as much time as I could simply trying to get a handle on what truly makes up the equine industry of Louisiana. I have traveled to nearly every major city and to many small towns in countless parishes trying to get to know you, see your farms, learn a little about what you do, and to try and identify ways that the LSU Equine Clinic could improve our service. I wanted to find out what was lacking and what could be done to increase or complement the effectiveness of the industry from a veterinary standpoint.

No sooner had we developed two advisory councils of veterinarians and horse owners and were beginning to collaborate on ideas and projects, when our state was struck with a hurricane season that no one could have predicted. Our focus shifted, and new work took priority over everything else. It was work that needed to be done, and work that continues even now. Like many of our state’s residents, I find myself looking out at the situation and asking a familiar question…now what?

I’m a firm believer in getting on with the program. Setbacks, as minor or as severe as they may come, are inevitable, regardless of your situation. But as an industry, we need to regroup. How much damage have we incurred? Where do we still need to lend a hand? An economic study published by the American Horse council earlier this year suggested that the state of Louisiana boasts a $2.45 Billion equine industry. Where does it stand now? The veterinary profession is one of service. As horse owners from this great state, we need to know what needs you have. Where can LSU step in and make a difference? These are questions that we don’t necessarily have the answer to right now, and we need to hear from you.

In recent months, I have been privileged to participate as a member of the board of directors of a fledgling organization of horse owners endeavoring to bring unity to the horse industry of Louisiana. This group is the Louisiana Equine Council. I have spent the better part of my adult life involved in such efforts. I have worked closely with the American Horse Council, the American Quarter Horse Association, the Thoroughbred industry, and the veterinary community for years. The diversity of the equine industry is great.

But it is that very diversity that makes the horse such a unique and amazing animal and brings every one of us together time and time again.

Throughout the remainder of this year and well into the next, this group (LSU included) will be working cooperatively with representatives from many disciplines to gauge the health of our industry, work toward strengthening areas of weakness, and collectively moving the needs of our equine community forward. In areas of legislation, marketing, health, and economics, our industry can move forward on countless fronts, and your input is vital to the success of this effort.

The LSU Equine Clinic exists for the people and the horses of Louisiana and the surrounding region. It is a clinic of service, not only in the health of the horse, but in the health of an industry as well. A viable industry is essential to any operation, and the success of that industry is our main priority right now. I’d love to hear from you if you need anything.

Best regards and have a great holiday season,

Ky Mortensen
Director of Advancement
kmortensen@vetmed.lsu.edu

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### LSU Hosts Equine Artificial Insemination Workshop

The LSU School of Veterinary Medicine is hosting an Equine Artificial Insemination Workshop for Owners and Breeders. The dates are January 28-29, and the cost is $325 before January 14, and $350 after January 14. This workshop is designed to provide participants with the knowledge and skills needed to successfully perform artificial insemination with both fresh and cooled semen. In addition, the proper handling and preparation of semen for transport will be discussed to enable participants to provide this service. Training in rectal palpation is not included in this course. Instructors are faculty of the Theriogenology Section, School of Veterinary Medicine.

For more information, please contact Dr. Rebecca A. Adcock, Director of Alumni & Public Programs, at (225) 578-9826 or adcock@vetmed.lsu.edu.

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### Did You Know . . .

The EHSP provides comprehensive, state-of-the-art, advanced medical, surgical and reproductive veterinary care for ill and injured horses by a team of board-certified specialists. While referrals are a large portion of our caseload, we do not require a referral in order to treat your horse at the LSU Equine Clinic.
Scientific Manuscripts


Scientific Abstracts


Past and present EHSP scientists attended and presented scientific abstracts at the 8th International Equine Colic Research Symposium August 3rd – 5th in Quebec City, Canada. From left to right, Drs. Jill Johnson, Adriana de Souza, Rustin Moore, Ashley Stokes, Carlos Valadao, Paco Mora, Britta Leise, Anne Wooldridge and Lee Ann Fugler.


Moore RM: Diagnosis and treatment of joint and bone infection in horses. Proceedings Anais II Simpósio Internacional do Cavalo Atleta - IV Semana do Cavalo, Belo Horizonte, Brazil, Universidade Federal de Minas Gerais, 29-38, 2005.


Grants & Contracts


Drs. Rustin Moore and Ashley Stokes were invited guests and speakers at the II Simpósio Internacional do Cavalo Atleta; IV Semana do Cavalo, Belo Horizonte, Minas Gerais, Brazil, in April 2005. Dr. Moore gave lectures on “Diagnosis and treatment of joint and bone infection in horses” and “Diagnosis and treatment of laminitis in horses: Present and future.” Dr. Stokes lectured on “The pathophysiology of acute laminitis.” In Front: Ashley Stokes (Assistant Professor of Research, LSU), Dr. Rustin Moore (Professor and Director, LSU-EHSP), Geraldo Eleono (Associate Professor, Surgery), Maristela Palhares (Associate Professor, Equine Internal Medicine), Humberto Pereira (Associate Professor, Surgery). Back Row: Roberto Baracat (Vet School Director), Rafael Faleiros (Associate Professor, Surgery), Geraldo Juliani (Associate Professor, Reproduction), José Aurélio Bergmann (UFMG Research Dean), Hans-Joachim Menzel (Associate Professor, Biomechanics).

Equine Gene Sequences Cloned and Submitted by EHSP Scientists to GenBank

Da Cunha AF, Chirgwin SR, Stokes AM, Pettifer GR, Moore RM: Equus caballus, similar to transient receptor potential cation channel, subfamily V, member 1 (Trpv1), mRNA, partial cds. ACCESSIONS DQ267482, DQ267483.

Hanly BK, Stokes AM, Chirgwin SR, Moore RM: Equus caballus caspase-3 mRNA, partial cds. ACCESSIONS DQ174690, DQ174689, DQ174688.


Stokes AM, Chirgwin SR, Moore RM: Equus caballus preproendorphin 1 mRNA, partial cds. ACCESSION AY730629.
Charitable Gifts

Many aspects of the Equine Health Studies Program rely on the generosity of our friends in the equine community. The following persons and entities have donated to the Equine Health Studies Program:

Dr. Cheryl Adams
Herschel Adcock Sr.
John Allender
Animal Health Services
Arthemise Baldwin
Dr. Mark Barry
Micheal Beven
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Blood Horse Publications
Blue Moon Equestrian Center Inc.
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Dr. Martin Vidal
Nancy Vogt
J. Cameron Webster
J. R. Wheatley
Jessie Winegeart
Dr. Karen Wolfsheimer

Thank you for your support!

Ronnie Anderson of the Louisiana Farm Bureau presents a donation to Dr. Michael G. Groves, dean of the LSU School of Veterinary Medicine, for the EHSP.
YOU Can Take Equine Health Studies
“Full Stride Ahead”

Did you know?

• Your tax-deductible charitable contribution to the Equine Health Studies Program will be used to support leading-edge equine scientific investigations, equipment needs, improved facilities and student scholarships in equine studies at the LSU School of Veterinary Medicine.

• We accept gifts of cash, stock or property, which may be made by cash, check or credit card.

• You may direct your gift to a specific project, or allow us to choose the area of greatest need.
  • Equine Isolation Unit
  • Equine Health Studies Program/Most Pressing Need
  • Equine Research Studies

If you would like information about gifts of stock or property, bequests in wills or formation of a charitable trust, contact the Director of Advancement, Equine Health Studies Program, LSU School of Veterinary Medicine, Baton Rouge, LA 70803, 225-578-9590, e-mail: kmortensen@vetmed.lsu.edu or visit our website: www.LSUEquine.com.

YES! I would like to contribute to the Equine Health Studies Program at the Louisiana State University School of Veterinary Medicine. Enclosed is my tax-deductible contribution of:

○ $25   ○ $50   ○ $100   ○ $250   ○ $1,000   ○ Other $__________

Name __________________________________________________

Address __________________________________________________

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Direct my gift to:  ○ Equine Isolation Unit
  ○ Equine Health Studies Program/Most Pressing Need
  ○ Equine Research Studies

My company, ______________________, has a matching gift program. A matching gift form is enclosed.

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Credit Card Type:  ○ VISA    ○ MC    ○ AmEx    ○ Discover
Card Number _____________________________________________
Expiration Date __________________________________________
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Make checks payable to:
LSU Foundation

Mail to:
Ky Mortensen
Director of Advancement
Equine Health Studies Program
School of Veterinary Medicine
Louisiana State University
Baton Rouge, LA 70803

I am interested in:
  ○ Gifts of Stock
  ○ Endowed Gifts
  ○ Will Bequests
  ○ Charitable Trusts

Please send more information.
The LSU School of Veterinary Medicine hosted Pets & Vets, its annual children’s educational program, in June. Each year, Pets & Vets features various topics regarding veterinary medicine and basic information about pet and animal care. All presentations are free and open to the public. The program is open to all children ages 6 and up, and parents are also invited to attend the presentations with their children.

Educational sessions included workshops on orthopedics, wildlife, show animals, veterinary careers, small animals, and cows. There was also one day dedicated to horses. Dr. Rebecca McConnico made a presentation on equine emergencies, and Drs. Ashley Stokes and Dan Burba (pictured above [left]) presented "Anatomy of the Horse."

For more information about this program or to be added to the Pets & Vets mailing list, please contact Ginger Guttner, Public Relations Coordinator, at 225-578-9900 or gguttner@vetmed.lsu.edu.