

Equine News

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WSU's EIA research team (left to right): Drs. Robert Mealey, Susan Carpenter, Karin Dorman of Iowa State University, and Lindsay Oaks.

WSU College of Veterinary Medicine Researchers Awarded \$1.4 Million to Study Equine Infectious Anemia

Susan Carpenter, a professor at the Washington State University Department of Veterinary Microbiology and Pathology, along with Robert Mealey and Lindsay Oaks, her departmental colleagues, and Karin Dorman, an associate professor at Iowa State University, were awarded a \$1.4 million grant from the National Institutes of Health (NIH) to study the equine infectious anemia (EIA) virus in horses, a blood-borne disease transmitted primarily by horseflies and deerflies. Their research could improve vaccine strategies that may one day help control the spread of EIA. Currently, according to U.S. Department of Agriculture (USDA) guidelines, a horse that has tested positive for EIA must be quarantined for life or euthanized.

The EIA virus evades detection by the immune system because of its ability to constantly change and adapt. This has made developing successful vaccines or other disease management tools a

challenge. Using longitudinal studies, Carpenter and her research group can better understand how the virus survives. "Our group wants to discover the strategies the virus uses to escape immune control and how it changes over time," said Carpenter. "We want to understand how the virus persists."

EIA, like other lentiviruses, is a life-long infection. While some horses become ill and die quickly, many show few symptoms. Because the acute signs, like fever, may also be attributable to other illnesses, it is often difficult to diagnose EIA, particularly if the horse recovers quickly. Currently, routine testing is the best way to control the disease from spreading.

Because of similarities and differences with the other members of the lentivirus genus, including the human immunodeficiency virus, EIA is a model disease that may one day provide clues to help fight similar infections in other species, benefiting both animals

and humans, which is the primary focus of the NIH.

"Receiving this highly competitive grant is a testament to the extraordinary research done by Dr. Carpenter, and to the strength of the equine infectious anemia program at the WSU's College of Veterinary Medicine," said David Prieur, chair of the department. "Securing a National Institutes of Health grant in this year's funding climate is a very significant achievement."

"WSU's College of Veterinary Medicine has one of the top equine immunology research programs in the country," said Carpenter, who was recruited to WSU in 2005 because of her remarkable virus research record at Iowa State University. "The WSU equine immunology program, the availability of horses, the support of the college and the USDA all make this a great place to do research."

Seattle Slew Endowment Completed

Seattle Slew was one of the greatest horses ever to grace American racing, and a prolific stud whose appraised value at one time was more than \$120 million. He died May 7, 2002, 25 years to the day after he won the Kentucky Derby in 1977.

Like his sired champions that live on, Slew lives on in active biomedical research. The Seattle Slew Spinal Cord Research Fund at WSU's Veterinary College supports continuing research into the diagnosis and treatment of equine spinal cord disease.

Thanks to a recent, generous gift of \$10,000 from Slew's owners, Karen and Mickey Taylor, the fund is now fully endowed at WSU. The fund was originally established in 2003 with a gift from Thoroughbred Promotions through proceeds collected from the sale of Seattle Slew hats. Additional gifts include donations from Slew's former groomer, Tom Wade, and Dr. Barrie Grant, a WSU veterinary alum who performed spinal surgery on Seattle Slew twice to alleviate a crippling spinal cord compression condition that the horse developed in his later years. Another generous donation was

received from Dr. George Bagby, M.D., a Spokane, Washington, orthopedic surgeon who developed an implant and operative procedure Dr. Grant used in the fabled horse.

Now that the endowment has been completed, the college will begin awarding intramural grants to fund research into the diagnosis and treatment of equine spinal cord disease.

Years ago, veterinarians at Washington State University developed a surgical technique for treatment of equine spinal cord compression. In 2000, and again in 2002, Seattle Slew successfully underwent surgery for this condition, after which his quality of life was greatly enhanced. In addition to Dr. Grant, WSU's College of Veterinary Medicine is also the alma mater of three other members of Seattle Slew's surgical team.

During Seattle Slew's racing days, he won 14 times in 17 starts and earned more than \$1.2 million. After retiring from racing, his stud fees ranged from \$150,000 in 1979 to more than \$500,000 in the early to mid 1980s. Many consider his value in



The last portrait ever taken of Seattle Slew with owners Mickey and Karen Taylor in 2002. Photo by Tony Leonard.

racing history to be priceless. On June 9, 2007, Seattle Slew's granddaughter, Rags to Riches, won the Belmont Stakes, the first filly in 102 years to win that race. Seattle Slew won that race in 1977, as did his son, A.P. Indy, in 1992, who fathered Rags to Riches.

In addition to the Seattle Slew Spinal Cord Research fund, the WSU College of Veterinary Medicine also maintains several research funds for general equine research. For more information on these research funds and how you can support WSU's research team, contact Lynne Haley at 509-335-5021 or lhaley@vetmed.wsu.edu. To learn more about Seattle Slew, please visit his Web site at www.seattleslew.com or e-mail questions@seattleslew.com.

Join Us at the Fourth Annual Ride for Research Event!

A prize ride, barbeque dinner, and auction are just some of the activities planned at the fourth annual Ride for Research hosted by the Washington State Horse Council and member organizations. Proceeds from the event benefit the Washington State University College of Veterinary Medicine's equine research programs.

The Ride for Research takes place Friday through Sunday, June 20–22, at the Evergreen Sportsmen's Club on 12736 Marksmen Rd., in Littlerock, Washington (near Olympia). Events include a Friday evening social from 6:30 to 10:00 p.m. and a prize ride beginning at 8:00 a.m. on Saturday, followed by an evening auction and barbeque dinner. An open ride caps off the weekend on Sunday.

Camping is free during the weekend. Entry fees for the prize ride are \$20 for adults and \$15 for youths 13 years old and younger. Additional tickets for the ride cost \$5. Previous top prizes for the ride included saddles, bridles, saddle blankets, and veterinary services. Supporting organizations for the event include



A busy campground at last year's Ride for Research.

Backcountry Horsemen of Washington, Washington State Horsemen, Woodbrook Hunt Club, and the John Wayne Pioneer Wagons and Riders.

Each year, the event attracts about 150 riders, and has brought in approximately \$32,000 over the past three years to support WSU's College of Veterinary Medicine and equine program. Specifically, these dollars support research into a procedure called navicular suspensory ligament desmotomy, and provide supportive funding for equine veterinary residents and outreach to the equine community.

The WSU College of Veterinary Medicine is staffed with many outstanding equine clinicians and researchers who are leaders in many areas of equine research, including sports medicine, pain management, joint disease, advanced medical imaging, and new techniques in

laparoscopic surgery. Additional studies are underway on equine digestive and infectious diseases, as well as the immune responses to disease in horses and foals. The college recently opened a new equine research barn that is critical for research into equine infectious diseases, as well as a large animal reproduction teaching barn that will house the college's breeding, reproductive research, and teaching program.

For more information about the event and directions, contact the Washington State Horse Council at 360-352-5883. For those who cannot attend, but are interested in supporting the equine research programs at the WSU College of Veterinary Medicine, contact Lynne Haley at 509-335-5021 or lhaley@vetmed.wsu.edu.

Tongue Piercing in Horses

It's not a new fad and probably not what you're thinking. Horses sometimes accidentally become wounded by pieces of metal or wire, splinters of wood, and even grass awns that become lodged in their tongue, mouth, or throat as they eat. These and other foreign bodies can cause serious medical problems and great discomfort for a horse within hours or days after being punctured.

"Within 24 to 48 hours, owners usually begin to notice that their horse is in pain and won't eat," said Dr. Macarena Sanz, a WSU third-year equine medicine resident. "The horse may also have increased salivation, a swollen tongue or cheeks, and bad breath.

"A lot of owners think the problem is caused from an insect bite or sting, but it is more likely from a foreign body that got lodged in the mouth," she said. "If the problem was caused by an insect, such as a bee, fly, or spider like a black widow or brown recluse, the swelling should decrease with time. The same is true of mild lacerations. If a foreign body is the culprit, the swelling will remain or even get worse after two or three days. Until it is removed, the problem will not go away."

Owners that notice their horse has a swollen mouth may attempt to administer pain medication (anti-inflammatory drugs) like phenylbutazone (Bute®) or flunixin meglumine (Banamine®). "When you have a horse with a swollen mouth or tongue, you must be very careful when administering anti-inflammatories or some antibiotics if the horse is not drinking," Dr. Sanz said. "These drugs (phenylbutazone and flunixin meglumine) can be very hard on the horse's kidneys if they are not drinking enough water, and can cause severe kidney damage. These drugs should be administered if indicated by a veterinarian so the dose and frequency of administration are correct."

If the swelling remains after a couple of days, it is important to seek veterinary attention as the object usually requires

surgical removal. Pain, dehydration, anorexia, infections, and other associated problems are also cause for concern. Unfortunately, the offending object can be hard to diagnose because often it is buried in soft tissue that becomes swollen.

"Many objects like wood are hard to diagnose and find, but metallic objects are easier because they show up more clearly on a radiograph or x-ray," Dr. Sanz said.

At the WSU Veterinary Teaching Hospital, horses with swollen mouths or tongues are sedated and receive an oral exam to check for wire and other objects. "Sometimes, a bad tooth can cause similar symptoms, especially if material is not found in the tongue," Dr. Sanz said. "If the material is not found during the oral examination, radiographs or ultrasound imaging are used in attempt to diagnose the problem."

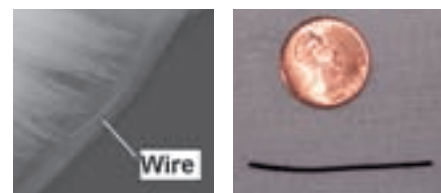
When the object is located, the horse is sedated, the area is blocked with a local anesthetic, and the material is removed. If the object is in a complicated area, such as the throat, the horse is put under general anesthesia before it is removed.

"After we remove the object, the horse is put on antibiotics for three to five days because most of the time an abscess forms around the foreign body," Dr. Sanz said. "The abscess usually drains when the object is taken out and we don't suture the incision closed because we want to let it continually drain and heal from the inside out."

In addition to antibiotics, anti-inflammatory drugs are also administered as needed, and the incision cleaned for five to seven days.

"If the owner prefers, the horse can stay at the veterinary teaching hospital during that time, or it can go home depending on how comfortable the owner is with the post-surgical care," Dr. Sanz said.

Because horses have to eat, and some have an affinity for chewing on things like wooden fences, it can be hard to prevent a



A radiograph of a lateral view of a horse's skull with a wire in its interdental space.

This is the wire shown in the radiograph at left after it was removed from the horse's mouth.

horse from getting a splinter or pierced with a foreign object. But many cases can be traced to a few sources that are preventable.

Horses with metallic splinters are often stuck when eating out of tractor tires that were cut in two and converted to feeding troughs. Hay containing problematic grass awns from species such as bristle grass or foxtail grasses (*Setaria spp.*), wild barley and foxtail barley (*Hordeum spp.*), and needlegrass (*Stipa spp.*) is another source for blisters, lesions, and ulcerations in a horse's mouth.

"Mechanical irritation and sores from grass awns are completely preventable," said Dr. Patricia Talcott, a WSU associate professor who provides diagnostic toxicology services for the Washington Animal Disease Diagnostic Laboratory (WADDL) in Pullman. "It is important for owners to know what they are purchasing when buying hay, and to be able to recognize components in the hay they feed. If owners have questions about what is in their hay, county extension services are very useful and can help identify which grasses are present."

Hay and plant samples can also be sent to Dr. Talcott at WADDL for identification. For more information, contact her at 509-335-9696 or ptalcott@vetmed.wsu.edu. For horses with swollen mouths or tongues, contact the WSU Veterinary Teaching Hospital at 509-335-0711 for an appointment or emergency.

Count Me In

It is our privilege and desire at WSU to provide the best veterinary care to the many formidable equine athletes and companions who are treated at our hospital. Through the generosity of many individuals who support quality health care and the WSU College of Veterinary Medicine's mission of teaching, research, and service, we are able to continue our work and plan for the future with confidence.

The largest part of what we do is made possible by the encouragement, collaboration, and financial contributions of our generous public. Through each thoughtful gift, WSU is making a difference in the lives of our students, the equine industries of Washington, and the region. These gifts enable us to greatly

enhance the scope of our equine veterinary services and allow us to continue to provide world-class health care for horses throughout the Pacific Northwest.

We would be honored if you would choose to become a partner in the important work that goes on here. If you are interested in supporting the advancement of Washington State University's renowned equine medicine and surgery section, please contact:

Dr. Richard DeBowes, Associate Dean of Veterinary Development, 509-595-8015 or debowes@vetmed.wsu.edu

Lynne Haley, Director of Veterinary Development, 509-335-5021 or lhaley@vetmed.wsu.edu

Fires: Emergency Planning for Your Horse

If a wildfire breaks out that requires evacuation, and a beloved horse won't load into a trailer, what's the best thing to do? This is just one of many stressful situations that can happen during a fire.

While it may seem a remote possibility, the Washington Department of Natural Resources fights about 1,000 wildfires a year throughout the state, with approximately 70 percent occurring in eastern Washington. Wildfires are just one instance in which horses and their owners can find themselves unexpectedly involved in an emergency situation. Barn fires are another risk to think about.

Having a plan in case of a fire may save an owner the heartache of losing a horse, or prevent it from becoming stranded, trapped, lost, or injured during such an event. It can also reduce the risk of harm to the owners themselves or rescue workers that come to their aid.

All horse owners should develop an evacuation plan with at least three escape routes, especially if there are a large number of horses to deal with. Horse trailers should be kept in good working condition, first-aid kits available, and horses halter-trained and trained to load. It is also helpful to identify other people who can help an owner evacuate horses, especially if one or more trips are required to move them all.

Local fire department officials can help develop an escape plan, as well as provide recommendations on how to control brush, create firebreaks, and make barns and stables as fire-safe as possible. Their involvement will also help familiarize firefighters with the location of the farm, the number of animals there, and where to find large volumes of water in case of a fire.

Once a fire escape plan is made, it should be displayed at the barn and distributed to anyone who boards a horse there. Put copies in the glove box of all vehicles too. Some owners also place a plan in a watertight plastic bag and tape it on the inside roof of their trailers.

To reduce the fire fuel load, regularly clean off leaves and other vegetation from roof surfaces and clear brush at least 30 feet away from all buildings. Also know how to use a fire extinguisher and make sure each canister is ready for use and that there are a sufficient number of them in plain sight.

It's estimated that 80 percent of agricultural building fires are due to faulty electrical wiring. If an owner uses or owns an older barn or stable, it may be a good idea to critically evaluate the structure and have an electrician inspect the electrical systems, such as the wiring, fuses, breakers, and bulbs.

If constructing a new barn, owners may want to consider using fire-resistant material on the exterior of a barn and roof and constructing non-combustible walls between storage areas for hay, feed, and stable areas. It is also helpful to have access to a corral large enough to hold all the horses on a premise, and to have a halter and lead rope at every stall door in case of an evacuation.

Veterinarians can also be consulted about disaster preparedness and emergency management operations. They can educate horse owners and others about caring for animals and what their responsibilities are during a disaster like a fire or flood, and help owners prepare for horses with special needs.

"Veterinarians can provide specific advice about handling individual horses, and prescribe medications to have on hand for horses with special needs, such as in the case of a horse with trailer anxiety," said Dr. Julie Cary, a Washington State University assistant clinical professor of equine surgery and emergency care and board-certified equine surgeon. "In this case, sedation drugs can be kept on hand to help the horse relax enough to load."

Owners that want to familiarize themselves with local, state, and federal disaster polices can also seek information from their local fire department, the Washington State

Emergency Management Agency, and the Federal Emergency Management Institute.

Another important preparation measure is to permanently identify horses with lip tattoos, freeze brands, or microchips. These markings or devices are useful in reuniting owners with their horses in case of a fire or other disasters in which a horse is left behind, escapes, runs away, or becomes housed in a shelter. Electronic or radio frequency identification devices are newer forms of identification that owners can consider. Multiple identification methods used on the same horse provides a greater chance for establishing ownership through fail-safe redundancy.

It is also a good idea to take and keep on hand front and side view photographs of each horse on a farm, herd records, proof of ownership, and registration papers. In an emergency, owners can mark their horses with a livestock paint stick, paint or etch their hooves, clip phone numbers in their hair, or place identification tags on their halter.

"If a horse runs away and gets into a place they cannot get out of and needs rescuing, owners should contact their veterinarian to see what special equipment might be needed," Dr. Cary said. "Electric companies and fire departments may also be able to help, or even a neighbor with a front-end loader."

No matter the planning, if a fire breaks out and a person is in imminent danger, get away, stay away, and don't go inside a burning structure for any reason. Call 911 and await help from a safe distance.

For more information, contact your local fire department or for veterinary assistance, the WSU Veterinary Teaching Hospital at 509-335-0711.

Thanks to Dr. Kelli Taylor, DVM, a 2008 graduate of the WSU College of Veterinary Medicine, who provided much of the information for this article.

Why Bring Your Horse to WSU's Veterinary Teaching Hospital?

Every day, veterinarians at Washington State University's College of Veterinary Medicine provide state-of-the-art medical care for animals and crucial information for owners and referring veterinarians. From horses, dogs, and cats to parakeets, cattle, alpacas, llamas, and iguanas, animals from all walks of life are treated in our world-class clinical teaching facilities.

WSU's Veterinary Teaching Hospital operates 24 hours a day, with regular business hours from 7:00 a.m. to 6:30 p.m., Monday through Friday. It is a full service hospital serving the Pacific Northwest and western Canada. The teaching hospital is also part of the Department of Veterinary Clinical Sciences, one of three academic departments in the College of Veterinary Medicine. The hospital offers services to both large and small animals, as well as some nearby livestock units.

The VTH is a state-assisted \$38 million facility that opened in September 1996. Each year, WSU treats about 15,000 animals. The nearly three-acre facility encompasses the hospital, clinical laboratory, medical imaging, and epidemiological surveillance service, all under one roof. The central core provides space for surgery suites for small and large animals, clinical pathology, seminar rooms, administrative areas, reception, special medicine and diagnostic areas, and the state's only pharmacy dedicated exclusively to animals.

The VTH enjoys the finest medical imaging capabilities available to veterinary medicine. WSU is one of the most advanced veterinary hospitals in the world with sophisticated systems, including magnetic resonance imaging (MRI), computerized tomography (CT scan), and nuclear scintigraphy (bone scanning). Digital radiography and computer aided radiography are also available. Of note, WSU is one of the only veterinary colleges in North America currently equipped with MRI equipment capable of evaluating lameness and neurological disorders in horses.

WSU's VTH also features a linear accelerator, one of the most advanced machines in the world dedicated to cancer treatment in animals. While most commonly used for dogs and cats, it has also been used to treat cancer in horses. Other sophisticated diagnostic and treatment technologies are avail-

able as well, including ultrasound, endoscopy, arthroscopy, laser surgery, and therapeutic technologies including surgery, medical management, and radiation therapy.

Client animals are treated by renowned specialists who are in the process of training compassionate and capable future veterinarians. Faculty in the Department of Veterinary Clinical Sciences conduct research to enhance current knowledge of diseases, diagnostics, and treatment. WSU veterinarians lead in many areas of equine research, including sports medicine, pain management, joint disease, advanced medical imaging, and new techniques in laparoscopic surgery. Additional work is also being pursued on equine digestive and infectious diseases, as well as the immune responses of horses and foals to disease.

Appointments and Hours

Equine appointments can be made at the WSU Veterinary Teaching Hospital by calling 509-335-0711. No referral is necessary. Equine Medicine appointments are scheduled on an individual basis. Equine Surgery consultation appointments are scheduled on an individual basis to be performed later in the week. Equine Theriogenology appointments are scheduled on an individual basis at a time most convenient for both the animal owner and the clinician.

Appointments may be scheduled directly by individual service areas. A 24-hour emergency service is also available for both small and large animals. Please call 509-335-0711 if you are bringing in an animal as an emergency so our veterinarians can prepare for your arrival.

What to Expect

A trip to the WSU Veterinary Teaching Hospital is unlike a trip to most veterinary practices. Upon arrival, clients register at the Admissions Desk. A senior veterinary student, or in some cases an intern or resident, obtains a complete medical history from the owner or caretaker and performs an initial physical examination.

More than one graduate veterinarian will likely examine your horse while it is at WSU. Most of the equine services at WSU function in a team configuration with a senior clinician, intern, and resident—all



A horse undergoing an MRI examination at WSU.

veterinarians—present, so examinations and treatments generally take more time than they would in the private sector. Since WSU is also home to some of the world's best equipment, most notably medical imaging, there are often delays due to demand for diagnostic and therapeutic procedures.

As with any medical facility, horses with true medical and surgical emergencies take priority over regularly scheduled appointments. In most cases, the hospital staff can give a reasonably accurate estimate of the approximate time necessary to adequately evaluate your horse and provide service. Because teaching is an integral part of the services we provide, most people accept some delays in order to obtain the most thorough and comprehensive examination for their horses that is available anywhere in the world.

Owners may stay with their horses during most initial examinations and some diagnostic procedures. However, there are some procedures, such as radiographs, nuclear scintigraphy, and surgery, where owners are not permitted because of safety, sterility, or infection control concerns. Daily visitation is allowed for hospitalized horses, but the timing and length of the stay may be limited and should be scheduled with the attending clinician. In some instances in which a horse is in intensive care or an isolation unit, owners are not allowed to visit except with special arrangements through the hospital staff for the same reasons noted above. All visitors need to check in at the front desk at the time of arrival.

Payment Policy

Fees comparable with private practices are charged for all services provided by the VTH, with payment due in full at the time of service. Clients with animals treated as

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Veterinary Teaching Hospital
Department of Veterinary Clinical Sciences
College of Veterinary Medicine
PO Box 646610
Pullman, WA 99164-6610

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outpatients will be given an estimate of the cost before the service is provided, with payment due upon completion of the visit.

Clients with hospitalized animals will also be given an estimate, with prepayment of half the estimate due upon admission. The other half is due when the animal is discharged.

Directions

The WSU Veterinary Teaching Hospital is located on the Washington State University campus in Pullman off Stadium Way and Grimes Way across from Lighty Student Services Building. To get to the hospital, turn off of Stadium Way heading east onto Grimes Way. Then take the second right hand turn heading south on Ott Way where a brown sign on the corner says “Veterinary Hospital.”

Maps to the WSU College of Veterinary Medicine can be found at www.vetmed.wsu.edu/maps. Washington State University Campus maps can be found at www.wsu.edu/campusmap.

Transportation and the Horse Van

Horse owners often choose to bring their horses to the WSU Veterinary Teaching Hospital themselves. But for convenience, WSU also offers a horse van service that transports horses to and from western Washington to the Veterinary Teaching Hospital in Pullman on a weekly or bi-weekly basis. The main pick-up point for horses west of the Cascade Mountains is at Donida Farms, with directions posted on the WSU Equine Web site at www.vetmed.wsu.edu/depts-equine/directions.asp. For more information about this transportation option, contact the Veterinary Teaching Hospital at 509-335-0711.



WSU's Dr. Robert Schneider and equine surgery veterinary technician Jill Connolly exam a horse.

Parking

Space for short and long-term parking is available at the hospital for all sizes of horse trailers and vans. Agricultural animal and equine owners may pull their trailers through the security gate to park on the east side of the hospital. If parking for several hours, clients will be directed to a longer term lot. For those with RVs, parking is not allowed overnight, but the receptionist in the front lobby can recommend an appropriate place to park on campus.

Those having business with the VTH can park in the lot directly in front of the main entrance. Clients must sign in at the reception desk during regular business hours when parking in this lot.

Self-Referrals or Veterinarian Referrals

Owners may seek treatment for their own horses without a referral. If a private veterinary practitioner refers a client, he or she should call WSU and speak to the accepting service regarding the animal's physical condition, where it is coming from, anticipated arrival time if an emergency, and any other pertinent information. If the case is not an emergency, the

accepting veterinarian may transfer the caller to make an appointment.

We welcome referrals from our colleagues in private practice for a variety of reasons, but most importantly because it is an invaluable part of our professional veterinary education program. Referring practitioners are encouraged to keep updated on the progress of the animals they refer to our hospital, and there are a number of ways this can be done.

WSU Veterinary Teaching Hospital Switchboard

| | |
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| Main Hospital Switchboard and Emergencies | 509-335-0711 |
| Equine Appointments | 509-335-0711 |
| Agricultural Animal Appointments (Non-Theriogenology)..... | 509-335-5377 |
| Theriogenology (Equine and Ag Animal)..... | 509-335-0741 |
| Small Animal Appointments..... | 509-335-0711 |
| Dean's Office | 509-335-9515 |
| Department Chair..... | 509-335-0738 |
| VTH Fax Number | 509-335-3330 |
| Billing | 509-335-0711 |
| Pharmacy | 509-335-0736 |
| Pet Partnership Program | 509-335-7347 |
| Pet Loss Hotline | 509-335-5704 |

Want to know more about our equine clinical services, research, and accomplishments, or receive our quarterly newsletter online? Visit the equine Web site at www.vetmed.wsu.edu/depts-equine, or the WSU Veterinary Teaching Hospital Web site at www.vetmed.wsu.edu/depts-vth/equineServices.aspx.

To subscribe to the online newsletter, go to www.vetmed.wsu.edu/depts-vth/EquineNews.

Also feel free to call 509-335-0711 for equine appointments or emergency care.