Equine Emergency and Critical Care Service Helps Take Stress Out of Late-Night Emergencies

It’s the middle of the night, and the Equine Hospital at the Colorado State University Veterinary Medical Center takes on an almost other-world feel. White lights illuminate the corridors while outside a velvety darkness seems to muffle sounds coming from within. It’s quiet, except for the occasional sighing or whinnying of a horse, and the regular footsteps and soft-spoken words of critical care nurses and veterinary students making their rounds.

The horses, many critically ill or recovering from surgery, are tucked in for the night, though their care providers keep a careful watch.

The quiet, however, doesn’t last long. An emergency colic is on the way in and the staff quickly prepares for the horse’s arrival. The on-call surgeon is rousted from her bed and, in what seems like a blink of the eye, the Equine Hospital is transformed from a calm oasis of slumbering horses to an all-out trauma center. Shortly, the panicked owners arrive with their horse, a repeat colic patient, and the equine team is ready to go.

Welcome to just another night with the Equine Emergency and Critical Care Service at Colorado State University’s Equine Hospital. The service is open 24 hours a day, 365 days a year, and offers emergency medical and surgical services to critically ill large animal patients.

“The majority of the horses we see consist of colics and lacerations,” said Dr. (continued on page 2)
Dear Friends,

I’d like to welcome you to the second edition of the Equine Hospital Newsletter and hope you find the information contained in these pages valuable to you whether you are a horse owner, veterinarian, or just interested in what’s happening with horses at Colorado State University. 

I recently was appointed Head of the Equine Hospital Section taking over for Dr. Dean Hendrickson, who did a great job in guiding our section. I plan to continue efforts begun by Dr. Hendrickson in educating the public about who we are and what we do, working to increase our caseload to provide more clinical cases to better teach our students, and having our new faculty members participate in more outreach activities so all of our clients and referring veterinarians can get to know them.

We are working hard to continually improve the services we offer to our clients and veterinarians, as well as to constantly challenge ourselves to be the best teaching program we can be. We feel that our new electronic records and referral letters have greatly improved our communication to clients and referring veterinarians. However, this year, we plan to conduct a survey of our clientele and veterinarians to find out what additional things we can do to serve them better. One of our newer programs, the Equine Emergency and Critical Care Service, already is impressing clients with their expertise and round-the-clock equine medical and surgical care. You can read more about what they do in this edition of the Equine Hospital Newsletter. Enjoy, and I look forward to hearing from you soon.

Best Regards,
Gary Baxter, DVM
Head, Equine Section

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Equine Emergency and Critical Care Service, continued from page 1

Diana Hassel, an Assistant Professor in the Department of Clinical Sciences and one of two board-certified equine surgeons assigned to the service. "Our name for one of the stall areas is Colic Aisle because we do get so many colic cases. We also see to a lesser extent severe lameness, fractures, pneumonia, neurology cases, injection abscesses, and just about anything else that can go wrong in the middle of the night – which is just about anything when it comes to horses."

CSU has long treated emergency and critical care equine cases but had not had a dedicated service until January 2005 when the Equine Emergency and Critical Care Service was officially up and running. The service is now overseen by Dr. Hassel and Dr. Eileen Sullivan, who both have Board Certification in Equine Surgery as well as advanced training in Equine Emergency Medicine and Critical Care. Dr. Sam Hendrix, who completed his residency in equine surgery at Colorado State, also helps in the service and shares on-call duties with Drs. Sullivan and Hassel. Assisting them are veterinarians in the equine medicine and surgery residency programs, along with senior veterinary students. Providing 24-hour triage and nursing care are certified veterinary technicians, again assisted by senior veterinary students.

"My goal upon coming to Colorado State in 2004 was to start this program, and so far it has been excellent," said Dr. Hassel. "We just started student rotations this fall, so students have the option to do a one-week rotation with us, and we hope to be able to eventually offer a residency program in equine emergency and critical care."

The Equine Hospital features adult ICU stalls, mare-foal stalls, foal pens, a neonatal foal table, a separate isolation facility for infectious diseases, individual video monitoring of the colic aisle and isolation stalls, and a fully padded neurology stall with sling capabilities. The Equine Hospital has access to 24-hour clinical pathology and chemistry blood analysis and ventilator capabilities for neonates. Board-certified specialists in theriogenology (reproduction), anesthesia and radiology are also on call, along with a fully staffed surgical team for emergency surgeries.

Along with specialized facilities, patient monitoring is a key component of the Equine Emergency and Critical Care Service. Colic cases are watched continually. Complete physical exams are conducted every three to six hours, or as needed. The service also has the capability of stall side advanced monitoring including continuous EKG, central venous pressure, arterial blood pressure, ultra sound and biochemical analysis of blood. A comprehensive set of diagnostic tools also are available, including radiography, computerized tomography (CT), ultrasound, nuclear scintigraphy, and magnetic resonance imaging (MRI).

Dr. Hassel said while rewarding, working in equine emergency care also has its challenges; long, unpredictable hours being one of them.

“When you get a call in the middle of the night, the adrenaline kicks in, and you just go,” said Dr. Hassel. “We do treat some very challenging clinical cases which really keeps us on our toes. It’s especially rewarding when we get to send home horses that have recovered from a serious illness or injury. That’s pretty much what we’re about, giving those horses the best chance possible at a full recovery and sending them home happy and healthy.”
Surgery Helps Sandy Four Legs Get Back on Her Hooves

When Sandy Four Legs came to the Equine Hospital at the Colorado State University Veterinary Medical Center, her owner Sandy Roy had several good reasons to be concerned. Her horse was in obvious pain, she was producing buckets of reflux and, in 1997, Sandy Four Legs had surgery to alleviate a severe impaction. Though the cause of colic was unknown, Sandy Roy knew her horse might be in for a rough ride.

Colic, which means pain in the abdomen, is one of the most common equine problems, afflicting approximately 10 percent of the equine population in the United States annually. Pain in the abdomen can have many different sources, ranging from innocuous to life-threatening. The challenge in treating colic is that it is often difficult to tell early on whether the cause of abdominal pain is something as simple as gas, which usually resolves fairly easily, or something more life-threatening such as inflammation of the small or large intestines, or displacement or torsion of the bowel. Because of this uncertainty, all cases of abdominal pain are taken seriously.

For Sandy Four Legs, tests and exams didn’t reveal very much about what was going on. Sedation helped quiet her, and her medical team became hopeful that with time, fluids and drug therapy they might be able to turn the colic episode around without surgery. By Sandy’s fourth day at the hospital, it became obvious that surgery would be necessary. The team was no longer able to control her abdominal pain and the decision was made to do surgery to determine if the cause of Sandy Four Leg’s colic was something that could be corrected.

“I called Sandy Roy and asked her if this was something she wanted to proceed with,” said Dr. Eileen Sullivan, a surgeon with the Equine Emergency and Critical Care Service, and Assistant Professor in the Department of Clinical Sciences. “Sandy Roy and her horse have a pretty amazing bond. Sandy calls Sandy Four Legs her animal soul mate and you could see how dedicated these two were to each other. Sandy Roy’s answer was pretty straightforward; we needed to help Sandy Four Legs.”

Sandy Four Legs went into surgery and had 70 percent of her large colon resected (removed) that night. After a month’s stay in the Equine Hospital, she returned home to finish convalescence. Today, Sandy Four Legs continues to thrive, and has resumed her status as the alpha mare.

Large Colon Resection Surgery Pioneered at Colorado State University

One of the most common causes for colic admission to the Equine Hospital at Colorado State University is large colon disease. Though there are a variety of causes of large colon disease, the climate and horse population seem to contribute to the prevalence of this disease in Colorado, and makes effective treatment a high priority at the Equine Hospital.

Large colon disease can be caused by large colon displacement, where a portion of the colon has moved to an abnormal position in the abdomen. It also can be attributed to a volvulus or “twist” of the colon, as well as more localized causes including loss of blood supply, segmental death and neoplastic tumors. Large colon resection surgery, where a portion of the colon is removed, often is the treatment of choice for these conditions in order to prevent reoccurrence of future colic, colic surgery and even death.

The surgical technique for large colon resection was pioneered at Colorado State University by Dr. Ted Stashak and others. Research manuscripts describing the procedure and results to the veterinary community were first published in 1986. Since that time, several other veterinary institutions have adopted the technique to treat cases of colic attributed to large colon disease.

Recent studies have shown that horses can have up to 75 percent of their large colon resected and still return to a normal, however more carefully monitored, life. Horses with a colonic resection adapt to the changes in their digestive system, though owners may need to be more conscientious of feeding a high quality diet to maintain adequate nutrition due to decreased absorption. Large colon resection, though not for every horse with colic, is a viable option to treat large colon disease and increases the chances that the horse and its owners will be spared future devastating colonic episodes that may endanger the horse’s life.
Horses Present Unique Set of Challenges to Anesthesiology Team

Imagine that you are a doctor and your patient weighs 1,000 pounds and has four legs. The sheer logistics of getting your patient into a surgical suite, to say nothing of administering anesthesia and performing the actual surgical procedure, would be a feat unto itself. This is the situation faced by equine veterinarians every day at the Colorado State University’s Equine Hospital. Fortunately, the Anesthesia Service, which consists of a team of board-certified anesthesiologists and veterinary technicians, is on hand to ensure each anesthesia goes as smoothly as possible.

“The biggest challenge for the anesthesiology team with the equine surgical patient is that we have to support the patients’ circulation and blood flow in a manner which protects the horse while it undergoes surgery,” said Dr. Ann Wagner, a Professor in the Department of Clinical Sciences and member of the Anesthesia Team. “Horses are susceptible to low blood pressure and, because they are big animals with a large muscle mass, they can develop muscle damage (myopathy) if we don’t make a concerted effort to support circulation.”

Dr. Wagner noted that since the mid-1980s surgical outcomes for horses have been steadily improving because of blood pressure monitoring and support with IV fluids and specific drugs. Techniques in anesthesia induction have been refined, including the development of specially designed induction stalls that control the position of the horse as anesthetic drugs take effect. The use of drugs also has improved as veterinarians improve their understanding of which drugs are most effective and which are contraindicated for equine patients. Extensive monitoring during anesthesia and surgery helps ensure the equine patient is doing well. Recovery following surgery still remains one of the most challenging times for the equine patient, as well as for the veterinary medical team caring for the animal.

“We can control induction, control how the horse becomes unconscious, and control the way it falls so the horse is not injured,” Dr. Wagner said.

Another special need anesthesiologists are concerned with is the tendency of horses to develop nasal congestion during surgery, especially when the body is positioned in certain ways. Because horses are nose breathers, this can result in low oxygen levels in the blood if the horse can’t breathe well following surgery. In order to prevent problems, Dr. Wagner said the anesthesiologist will leave the horse’s tracheal tube in place and continue to administer oxygen as long as they can.

The Anesthesia Team at the James L. Voss Veterinary Teaching Hospital consists of five board-certified veterinary anesthesiologists, and between 10 and 15 certified veterinary technicians with specific training in anesthesia and pain management. In addition to anesthesia for surgery and for diagnostic procedures such as CT scans and myelograms, the Anesthesia Team consults with equine veterinarians on managing post-surgical pain and other painful conditions in the equine such as colic and laminitis. The Anesthesia Team works to provide the highest level of care for each patient, while educating junior and senior Professional Veterinary Medical students in anesthesia techniques.
Fall: Pay Attention to Hay Quality, Get That Equine Influenza Booster, Open the Barn Doors and Let the Fresh Air In

For most horses, fall and winter bring quieter days as show seasons wrap up and owners gravitate to the warmth of their homes rather than a cold day on the trail. Things at the Equine Hospital slow down, too, as the incidence of diseases more common in the spring and summer taper off, and illness and injuries associated with the warm-weather activities of the athletic and recreational horse diminish. For horse owners, it’s important to keep in mind the needs of your horse during the winter months. Dr. Bruce Connally, Equine Field Service Veterinarian with the Equine Hospital, shares a few tips to keep horses healthy when the temperatures drop.

Vaccinations

Though horses receive most of their vaccinations in the spring, it’s important for horses still on the show circuit (for example, team penning) to get an equine influenza booster. Though horses typically recover well from this illness, most owners can’t afford to have their horse miss a week of competition or training.

Nutrition

This year is a tough one for horse owners, as the cost of hay has doubled. If someone is selling hay for a lower price than the rest of the market, be sure to check it carefully. Your bargain hay may not be as nutritious, may be moldy, or have an unacceptably high percentage of weeds. Hay should be green and should smell fresh, not moldy, and should have a high percentage of alfalfa and grasses. It should not be dusty. Store hay away from rain and snow, and keep covered with a tarp. Exposure to sun decreases the nutritional quality of green hay, destroying the vitamin E content that is essential to a horse’s health. You can easily check the nutritional quality of your hay by sending a sample to a testing laboratory, where energy and protein levels are evaluated.

Supplementing with grains provides horses with an additional source of energy and helps keep them from losing weight. For warmth, the best supplement is more hay. Horses are like big fermentation vats and heat is their main byproduct. Digesting hay will keep them warm through the coldest days.

Water

Be sure to have a fresh source of water for your horses. A frozen water bucket is a good way to get your horse on the fast track toward colic.

Be sure there is good air flow in the arena and barn.

Hoof and Coat Care

Ideally, have your farrier remove your horse’s shoes in the winter because ice can build up causing a variety of problems including lameness and inflammation in the hoof. If you must leave shoes on, check with your farrier regarding snowball pads that prevent the buildup of ice and snow, and be sure to check your horse’s hooves regularly.

Horses grow a good winter coat and, if allowed to do so, don’t need blankets. But if the coat is kept short, make sure to blanket your horse well.

Winter Riding

Winter riding can be a good outing for both you and your horse. If you work your horse so hard that he gets hot and sweaty, be sure to cool your horse down well.

If you’re riding in an indoor arena, monitor the air quality of the arena. High levels of ammonia and dust can trigger infections and allergies in the horse. Be sure there is good air flow in the arena and barn. Horses in indoor stalls are more likely to contract pneumonia than those living outside because they are exposed to higher levels of the particulates and chemicals that irritate their lungs. Horses also can easily overheat in barns and arenas that are kept at too high a temperature. Indoor temperatures should be kept to 50 degrees or less. If it’s stuffy, put a coat on and open the barn doors.

Winter’s freezing temperatures, cold winds, and snow can be hard on horses, but with the help of their owners who can provide good feed, adequate water, and healthy places to be, most horses manage just fine.
Equine Practitioners Get to the Point with Acupuncture

Dr. Gary Baxter is the first to admit he was a skeptic when he signed up to take an equine acupuncture course. As Head of the Equine Hospital and a board-certified equine surgeon, he questioned the plausibility and effectiveness of this ancient Chinese healing system. But increasingly frustrated by the limitations of Western medicine for the treatment of chronic lameness, particularly back problems, he decided to give acupuncture a shot.

“I’m fortunate to be at an institution where forward-thinkers recognize the importance of exploring complementary treatments, but within the context of creating scientific basis for their viability,” said Dr. Baxter.

Traditional outlooks on acupuncture express the technique’s effectiveness as the ability to normalize the flow of “qi,” or energy, through the body. The more scientific explanation holds that applying acupuncture needles to specific points on the body stimulates various sensory receptors. These receptors then stimulate the nerves that transmit impulses to the central nervous system. The body then releases neurotransmitters and pain-killing hormones both locally and centrally.

“’For me, acupuncture is one more tool in my toolbox of treatments for my equine patients,” said Dr. Baxter. “While I’m still a novice, acupuncture is helping to increase my diagnostic skills as well as expand the use of non-traditional analgesic tools for post-operative pain, something which we are always interested in as the post-operative recovery of horses is especially challenging.”

Dr. Timothy Holt, an Assistant Professor in Clinical Sciences and an affiliate of the Integrated Livestock Management Program, has been providing acupuncture services to clients of the Equine Hospital for a number of years. Dr. Baxter said much of the initial impetus for acupuncture services, as well as the chiropractic services Dr. Holt offers, came from the clients themselves. They wanted for their horses what was working for them.

“As a research and teaching institution, as well as a hospital interested in providing client services, we have a responsibility to our clients to ensure that what we are doing is based on scientific evidence,” said Dr. Baxter.

Colorado State University has long been a leader in pairing traditional and complementary veterinary medicine. Dr. Narda Robinson founded the Complementary and Alternative Medicine, or CAM, service at Colorado State’s Veterinary Medical Center nearly 10 years ago. Since then, the program at the University has grown considerably, pushing forward into areas of research that will upgrade the practice and promote education about science-based alternative medicine among veterinarians.
Eye on Clinical Research and Patient Care
Research and Clinical Updates

Limb Deformities in Foals Best Treated Early: Waiting Too Long Can Cause Permanent ALDs and Lead to Lameness

Foaling season is just around the corner and veterinarians at Colorado State University’s Equine Hospital would like to remind horse owners to be on the look-out for angular limb deformities (ALD) in their new-born foals. Early intervention is key to successfully treating these conditions, and owner awareness and action are crucial to getting foals the care they need when ALDs are at their most treatable stage.

“Limb deformities most commonly occur at the carpus (knee), fetlock (ankle) and tarsus (hock),” said Dr. Ty Wallis, a resident in Equine Surgery at the Equine Hospital. “Foals can normally be slightly angled at the knee, or toe out slightly, but angular limb deformities go beyond what is considered normal. These problems can be corrected, but there is a limited window of opportunity to do so. It is not uncommon for owners to bring foals in for correction beyond this time frame, and it really affects the long-term outcomes for the foals.”

Early intervention is most crucial for ankle deformities as the growth plates in this area close at 3-4 months of age meaning the foals need to be evaluated and potentially corrected by 4-6 weeks of age at the latest. Deformities at the knees and hocks, where growth plates close closer to 12 months of age, can be treated later (3-4 months of age), depending on the angularity. Since more dramatic angular limb deformities need to be treated earlier, it is vital to have an early evaluation and frequent monitoring by a veterinarian.

Dr. Wallis noted that there are three primary reasons for ALD: disparate growth at the growth plates; malformation of the bones in the knees and hocks, called the cuboidal bones; and ligamentous laxity most common in the knees, where foals are born with weak ligaments. Depending on the cause, treatment can be splinting (ligamentous laxity); periosteal stripping, where small incisions are made in the covering of the bone (the periosteum) to release tension and speed up growth on one side; and transphyseal bridging, also known as screws and wires, where “bridges” go across the growth plate to control growth on one side allowing the short side of the bone to catch up. Another condition in foals occurs when the tendons down the back of the leg are contracted resulting in a club foot. This also can be most successfully treated early on, potentially alleviating the need for surgery later, or at least leading to a more successful outcome.

“Not treating early can result in permanent angular limb deformity and lameness down the road,” said Dr. Wallis. “We encourage owners who see something abnormal in their foals to bring them in sooner rather than later. We’d like to see these babies get off to a good start in life, and healthy strong limbs are an important part of their growth and proper development.”

Stem Cell Therapy Proving Valuable in Treatment of Tendon and Ligament Tears

Stem cells have the ability to act as a repair system for the body because they can divide and differentiate into the cells of the target tissue. Clinicians at the Equine Hospital in conjunction with the Orthopaedic Research Center (ORC) have been using stem cells to primarily help repair tendon and ligament tears, with encouraging results.

Dr. Laurie Goodrich, Assistant Professor in Equine Surgery and Lameness, noted that stem cells used in therapy originate primarily from the patient’s bone marrow in the hip and sternum, or sometimes from fat in the buttocks. The harvested stem cells are then grown in culture for 2 ½ to 3 weeks and are then put back into the tendon or joint to assist in repair and healing. Stem cells from fat are not “culture expanded” and therefore are fewer in number compared to bone-marrow derived stem cells. Dr. John Kisiday, an Assistant Professor with the ORC, cultures the stem cells for the Equine Hospital and, in collaboration with Drs. David Frisbie and Wayne McIlwraith, is conducting studies on stem cell therapy.

The results of stem cell therapy for arthritis and for cartilage injuries are more uncertain, with additional studies required to determine efficacy.

“Tendon and ligament studies suggest that stem cell therapy increases repairs and improves prognosis for the equine patient,” said Dr. Goodrich. “Return to performance for sport horses that receive stem cell therapy increases from 40 percent to between 70 and 75 percent. We do encourage owners to consider stem cell therapy as early in the disease process as possible for the best outcome.”

For additional information on equine stem cell research at the Orthopaedic Research Center, visit the ORC Web site at: www.equineortho.colostate.edu.
Meet the Equine Hospital’s Nursing and Support Staff

Surgical Nurses
Kimberlee Alexander

Kimberlee Alexander joined Colorado State University in 2001 and now works as a surgery technician in large animal surgery. Prior to coming to CSU she worked in a private small animal practice as part of the surgical team. Her duties include preparing equipment for surgery, the preparation and positioning of the equine patient for procedures, post-operative radiographs, and performing scrub nurse duties. Kimberlee also helps with continuing education courses and teaches veterinary students who are rotating through the surgery service.

Kimberlee and Todd, her husband, have a one-year-old daughter named Gracelyn, and two dogs, Dakota and Bailey. She has ridden horses all her life and is now passing on that love to her daughter. In her spare time, she and her family enjoy camping, boating, hiking in the mountains, gardening and family time.

Lynette Johnson

Lynette Johnson came to Colorado State University in 1984 and currently works in equine surgery as the surgical supervisor. Prior to starting at CSU, she worked in two small animal practices and an emergency center in Denver. Lynette has been supervisor of the equine surgical facility for 20 years. As lead in the surgical unit, some of her duties include general surgery management and sterile prep and positioning of patients, intra-operative radiographs, preparation of surgical equipment, surgical support of emergency procedures, and catheter placement. She also supervises and trains all students who support the surgical facility for after-hours emergency surgery and teaches in the Front Range Community College veterinary technician program.

Lynette’s husband, Steve Johnson, is also a 1986 graduate of the Professional Veterinary Medical Program at CSU and is currently State Senator for Colorado District 15. They have three appaloosa horses, two Jack Russell terriers, a cat, two goats, and one duck. Lynette’s hobbies include riding and training her horses, sewing, playing and watching ice hockey, and hiking. In election years, she spends time working on her husband’s campaign.

Debbie Popichak

Debbie Popichak, a surgery technician in equine surgery, joined CSU in 2005 after working for more than 20 years at the Carson Valley Veterinary Hospital in Minden, Nevada. Her responsibilities include surgical clips, sterile preps and patient positioning, intra-operative radiographs, scrub nurse duties and attending to surgeons’ needs. She assists with lameness exams, catheter placement and administering sedation. She also instructs veterinary technicians doing their internships from Front Range Community College and helps train students in the Professional Veterinary Medical Program.

Popichak and her husband, Pat, have been married for 32 years. Their daughter, Katriana, is a senior and honor student at Thompson Valley High School. Her hobbies include showing quarter horses, an activity the whole family is involved with, and spending time with her extended family. Other, non-human members of the family are a Dalmatian, an umbrella cockatoo, and two cats.

Day Nursing Staff
Kim Ellis

Kim Ellis has been at Colorado State University since 1991 and is now the nursing supervisor of the Equine and Food Animal Hospital. Prior to coming to CSU, Kim worked at the Littleton Large Animal Hospital in Colorado. As clinical coordinator, Kim manages a wide variety of personnel issues. Her nursing duties include monitoring of critically ill, orthopaedic and soft tissue cases as well as triaging emergency cases. She instructs PVM students in the areas of nursing care and equine husbandry.

Kim and her husband, Wade, have three children, Brittany, CJ, and Wyatt, as well as numerous horses and farm animals. During the spring and summer months, the Ellis family hits the road competing in National Little Britches Rodeos. During the fall and winter months, they condition and show with another family seven Percheron draft horses, competing as a show hitch. In her spare time, Ellis enjoys drawing and creating western art.

Krista Dickinson

Krista Dickinson is an equine nurse and has worked at the Veterinary Teaching Hospital for more than 20 years. She started her CSU career in small animal oncology before moving to equine off-hours emergency and critical care. Her present position is working days with equine medicine, emergency and critical care.

Krista has been a lifelong horse owner and lover. Her continuing passion is to provide quality nursing care to her equine patients, emotional support for owners, promote safe client-present euthanasia for equine patients, and continue in equine medicine to advance pain management, complementary medicine and the equine/owner bond.

Julie Roselle

Roselle received her veterinary technology degree from Front Range Community College in 1999. She is a client relations specialist for the Equine Hospital, in charge of making follow-up calls for all equine patients after they have been released from the hospital. She also is the coordinator for the junior PVM students’ equine labs. She organizes veterinarians, students and horses, and assists with teaching the labs. She enjoys designing appropriate nutritional diets to facilitate the health, healing and complete care of the hospital’s equine patients. When all that is done, she assists clinicians, students and patients in the clinics.

Roselle and her husband, Justin, who is a local farrier and calf roper, have two children, Jace and Josie. Her interests
Meet the Equine Hospital’s Nursing and Support Staff, continued from page 8

include barrel racing and making jewelry. She also enjoys rodeoing with family, particularly Jace and his POA, Dolly.

Equine Emergency Hours
Nursing Staff

Kathryn Casper

Kathy Casper got her first horse at the age of 13 and has had one (or more) ever since. For six years, she worked at a breeding/training stable where she nursed a passion for veterinary medicine. In 1996, at the age of 32, she went back to school and received an associate’s degree in veterinary technology from Colby Community College in Kansas. She worked in a mixed animal practice from 1996 until 2001 when she moved to Fort Collins and started working at CSU as an off-hours large animal critical care nurse.

In her spare time, Kathy assists her youngest daughter with training their two horses and helps her older daughter care for her son. She also enjoys working out and drawing.

Jessica Morgans

Jessica Morgans graduated from the veterinary technician program at Front Range Community College in 2002 and shortly after accepted a position as an equine emergency and critical care technician at CSU’s Equine Hospital. Jessica co-manages the equine isolation unit, assists veterinarians with after-hours emergencies, and oversees hospitalized equine patients during evening and weekend hours.

Outside of the hospital, Jessica is busy with her 7-year-old daughter, Kaylie, and their three horses. She also enjoys her newly acquired sport, snowboarding.

Kristina Perry

Kris Perry is a critical care nurse in the Equine Hospital, joining Colorado State University in 2001, coming to Colorado from Hawaii. Her primary responsibilities include taking in and caring for emergencies and other patients already in the barn. In addition, she maintains the “colic aisle,” making sure the patients are comfortable and happy.

Kris has been riding horses since the age of 8 and enjoys showing in both AQHA all-around events and hunter/jumper competitions. She currently has a dark buckskin all-around gelding named Maverick. In addition to her horses, she has two dogs (Benny and Xavier), two housecats (Mis and Fizz), and two barn cats (Spring and Autumn). Kris enjoys taking her dogs for hikes and also enjoys impressionist art.

Kit Struthers

Horses have been a part of Kit Struthers life from birth, born into a family whose business is quarter horses. Struthers worked as a nurse in the equine hospital at University of California-Davis before moving to Colorado to earn his bachelor’s degree in equine science in 1998. In 2000, Kit joined the staff at the Veterinary Teaching Hospital taking up the familiar reins of caring for patients in the equine barn after-hours as part of the emergency team.

Kit enjoys many different aspects of the equine world and takes every opportunity to explore a new discipline or learn something new – whether it’s playing polo at UC-Davis, riding thoroughbred race horses for the track, working as a breeding manager at a stallion station, or managing shire and Arabian farms. In his off-hours, he enjoys spending time with his own horses and maintains an active role in the family horse business.

Reception Staff

Beth Heiney

Beth Heiney has been part of the James L. Voss Veterinary Teaching Hospital for many years. She started by riding in the ambulatory trucks with Drs. Shideler, Perce, Gearhart and Johnson on a weekly basis during high school in the early 1980s. During college, she was hired to work days and weekends feeding, cleaning and stocking in the large animal barn and pens. In 1992, after switching from animal science, she earned her bachelor’s degree in equine science from Colorado State University. After graduation, she was hired as a receptionist in the Large Animal Hospital.

Nancy Karraker

Nancy Karraker has been with Colorado State University since January 1985. She started out with the University as a food service worker. After advancing to Housing and then Facilities as a service dispatcher, she was hired as a receptionist for the Large Animal Hospital in April 1997. Her responsibilities include scheduling appointments, checking in patients as the animals arrive, and connecting owners with clinicians when the owners call or come to the hospital.

Equine Hospital Says Good-Bye to Claire Wilson

After six years of exemplary service, the Equine Hospital is sad to say good-bye to Claire Wilson, a neonatal intensive care nurse and important member of the Equine Hospital team. Claire has accepted a position with the Glenwood Veterinary Clinic in Glenwood Springs, Colo., where she will work primarily as a small animal technician as well as support large animal patients when the opportunity arises.

For Claire, the move is somewhat of a return home. She grew up in Glenwood Springs and worked at the Glenwood Veterinary Clinic while in high school. Claire is a graduate of Colorado State University, where she received her Bachelor’s degree in Equine Sciences. She recently passed the national veterinary technician board exam, making her a certified vet tech. She joined CSU in October 2000, coming from the Heska Corporation. We wish Claire the best of luck in her future endeavors and look forward to her progress reports from the Western Slope.
CVMBS Hosts Annual Conference in January

The College of Veterinary Medicine and Biomedical Sciences hosts its 68th Annual Conference Jan. 6-8 at Colorado State University. The conference features a variety of continuing education courses, special speakers and guest presentations, receptions, a vendor hall, as well as the kick-off to the 100th anniversary celebrations of the College. Registration for veterinarians is $285 ($325 one month and closer to conference date); $90 for veterinary technicians ($115 late); and $45 for students. For additional information or to download a registration application, visit the annual conference Web page at www.cvmbs.colostate.edu. Click on the “Continuing Education” link and then on the “Annual Conference for Veterinarians” link.

Importance of Human-Animal Bond in Equine Medicine

The understanding of the bond between humans and their companion animals has been developing in veterinary medicine for almost two decades. But, for most of that time, efforts toward supporting the human-animal bond were focused on those humans who had small animals like cats and dogs. Colorado State University, long at the forefront of providing emotional support for clients, also recognizes the importance of the bonds between people and their larger companion animals, including horses and ponies, llamas, alpacas and pigs.

Krista Dickinson, a member of the Equine Hospital’s day nursing staff, has been spearheading the hospital’s efforts in providing emotional support to clients who are dealing with traumatic injuries or illnesses in their equine animal companions. Dickinson has been working closely with the staff at Colorado State University’s Argus Institute for Families and Veterinary Medicine, receiving training and developing communication skills that in turn will help the hospital’s clients.

The Argus Institute leads veterinary medicine in making the emotional support of people as much a priority as the medical care of their companion animals.

Dr. Ryan Carpenter New Surgery Resident

Dr. Ryan Carpenter, a 2005 graduate of the University of California, Davis, veterinary medical program, has started his equine surgery residency at Colorado State University. Dr. Carpenter is interested in orthopaedic surgery and fracture repair, as well as gene repair for equine orthopaedic disorders.

Dr. Carpenter grew up in Southern California and, after graduating from UC Davis, worked at the Santa Anita, Hollywood Park, and Del Mar racetracks helping to care for between 800 and 1,000 thoroughbred racehorses. That experience reaffirmed the direction he wanted to take in his veterinary career and, after a year at the track and lots of experience treating lameness, he began his equine surgery residency.

Dr. Carpenter and his wife, Nicole, have two cats and a dog. In his spare time, Dr. Carpenter enjoys snowboarding, going out to eat, and relaxing.

Dr. Sam Hendrix Takes on New Role

Dr. Samuel Hendrix, who recently completed a residency in equine surgery at the Colorado State University Veterinary Medical Center, is now a clinical instructor with the Department of Clinical Sciences, and also works as a surgeon with the Equine Emergency and Critical Care Service.

Dr. Hendrix graduated from the Professional Veterinary Medical (PVM) Program at Colorado State University and then went on to complete an internship at the Arizona Equine Medical and Surgical Centre in Gilbert, Arizona. His primary duties as a clinical instructor include working with junior and senior PVM students in equine surgery, as well as surgery and lameness evaluations.
Listed below are items both large and small that will enhance our ability to provide quality care for our equine patients and help instruct our senior veterinary students. If you are interested in making a donation to fund any of this equipment, call Dr. Gary Baxter, Equine Section Head, at (970) 297-0382, e-mail gary.baxter@colostate.edu; or Courtney Comer, Veterinary Medical Center Development Officer, at (970) 221-4535, e-mail courtney.comer@colostate.edu.

**Large Animal Rescue Glide Equipment**

*Function:* To assist with the movement of horses that are down and cannot get up from neurological disease or trauma. It will help when getting them out of a trailer to the stall area or even just rolling them to the opposite side.

Estimated cost – $1,000

**Dental Extraction Equipment**

*Function:* This equipment is needed to extract the cheek teeth in horses without using a general anesthesia, which brings with it a whole separate set of risks for our equine patients.

Estimated cost – $7,500

**Vital Signs Monitor**

*Function:* This piece of equipment will provide the continuous monitoring of our critical equine patients’ vital parameters, particularly our neonate foals. It offers multi-parameter information including 5-lead electrocardiogram, heart rate, noninvasive blood pressure, body temperature, oxygen saturation, respiration, and the ability to monitor arterial blood pressures if necessary.

Estimated cost – $6,500

**Flushing Pump for the Olympus Endoscope**

*Function:* During the endoscopy procedure, this pump would enable us to have a continuous stream of water to rinse tissue for better visualization.

Estimated cost – $1,500

**Other Items of Interest**

- Air mattress for recovery – $5,000
- Locking-plate system – $10,000
- Farrier equipment – $500

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**Colorado State University – The Equine Hospital**

Gifts to the Equine Hospital at Colorado State University’s Veterinary Medical Center are used to support clinical care through equipment purchases, enhance the Professional Veterinary Medical Program for our students, provide funding for clinical research programs, and provide discretionary funds to the Equine Hospital section head that are used where most needed. If you would like to make a donation in support of the Equine Hospital’s needs and goals, please complete the form below and return with your gift. If you have any questions on making a donation to the Equine Hospital, please contact Courtney Comer, Associate Director of Development for the College of Veterinary Medicine and Biomedical Sciences at courtney.comer@colostate.edu or at (970) 297-4278.

Enclosed is my/our check for a gift of $ ___________

(Payable to **Colorado State University Foundation – Equine Section**)

This gift is from:  
- [ ] me  
- [ ] my spouse & me  
- [ ] my partner & me

Name ____________________________________________________

Spouse’s/Partner’s Full Name __________________________________

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Print name as it appears on your card.

Card Number ___________ /_______ (mm/yy)  
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Please apply this gift to:  
- [ ] Advances in Equine Health Fund # 57383  
- [ ] Equine Medicine Clinic Services and Research Fund #53943

Please return this form with your gift to:  

The Equine Hospital, James L. Voss Veterinary Teaching Hospital, c/o Dr. Gary Baxter, 300 W. Drake, Fort Collins, CO 80523-1678

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2007 Marks the College of Veterinary Medicine and Biomedical Sciences 100th Anniversary – Celebration to Commence at Annual Conference in January

Although the first veterinary class at the Colorado Agricultural College was listed in the College’s 1879 brochure, it wasn’t until 1907 that the State Board of Agriculture begrudgingly agreed to the creation of the Department of Veterinary Science with Dr. George Glover as the head. Nearly 100 years of Hope Care Cures later, the College of Veterinary Medicine and Biomedical Sciences is preparing to celebrate its Centennial Anniversary.

“Throughout 2007 we are planning many special events to commemorate the College’s 100th anniversary,” said Dr. Lance Perryman, Dean of the College (Dr. Perryman is the College’s ninth dean in 100 years). “This will not only be a time of celebration, but a time of reflection as we look back on how far we have come, and look forward to what the future holds for us.”

The 100 Year Celebration will kick off at the CVMBS Annual Conference on Jan. 6, 2007, with a Hope Care Cures Centennial Celebration dinner featuring a number of distinctive guests. More information is available on the Hope Care Cures Web page at www.cvmbs.colostate.edu.