

HEARTBEAT

UC DAVIS VETERINARY HOSPITAL

FALL 2015

Special Edition



UCDAVIS
VETERINARY MEDICINE

Welcome to the first special edition of **HEARTBEAT**

Dear Friends,

We are pleased to bring you the first special edition of *Heartbeat*. Twice a year, we look forward to sharing highlights of the latest developments at the UC Davis veterinary hospital and stories about our inspiring patients and their caring families.

We appreciate notes of thanks and praise from families to our faculty, staff, residents and students. These expressions of appreciation are truly uplifting for our veterinary team, dedicated to finding innovative solutions to help animals.

Continually discovering new knowledge and developing groundbreaking procedures, we are committed to staying at the forefront of veterinary medicine. The UC Davis School of Veterinary Medicine was recently recognized as the top-ranked global leader in veterinary medicine, a testament to our school's community and high standards of excellence.

Creating a path of excellence, our world-renowned veterinary experts and highly trained staff treat more than 50,000 patients a year, ranging from cats to dogs, to horses and exotic species. Patients benefit from the comprehensive care of 34 clinical specialties, supported by services such as diagnostic imaging and laboratory diagnostics. Together, our team works to provide attentive and personalized care for each patient.

We are grateful that you have entrusted us with the healthcare of your companion. We know your beloved



Dr. Jane Sykes, BVSc (Hons), PhD, DACVIM
Interim Director, UC Davis Veterinary Medical Teaching Hospital

animal is seen as an important member of your family, and we consider each patient a member of **our family**.

Sincerely,

A handwritten signature in blue ink that reads "Jane Sykes".

Dr. Jane Sykes, BVSc (Hons), PhD, DACVIM
Interim Director, UC Davis Veterinary Medical
Teaching Hospital
Professor, Department of Medicine & Epidemiology

Pint



On the front cover

Hi, my name is Pint! One of my favorite activities is retrieving the kick-off tee at UC Davis football games. To keep me healthy for game days, I rely on my friends at the UC Davis veterinary hospital.

The hospital is really special to me and my family, not only because my owner works here, but the amazing team saved my grandma's life. Thankfully, she is doing fine now.

Please come along with me in this and upcoming special editions of *Heartbeat* to learn more about the UC Davis veterinary hospital. Also, be sure to watch my video on the UC Davis School of Veterinary Medicine's YouTube channel: youtube.com/UCDVetMed. 🐾



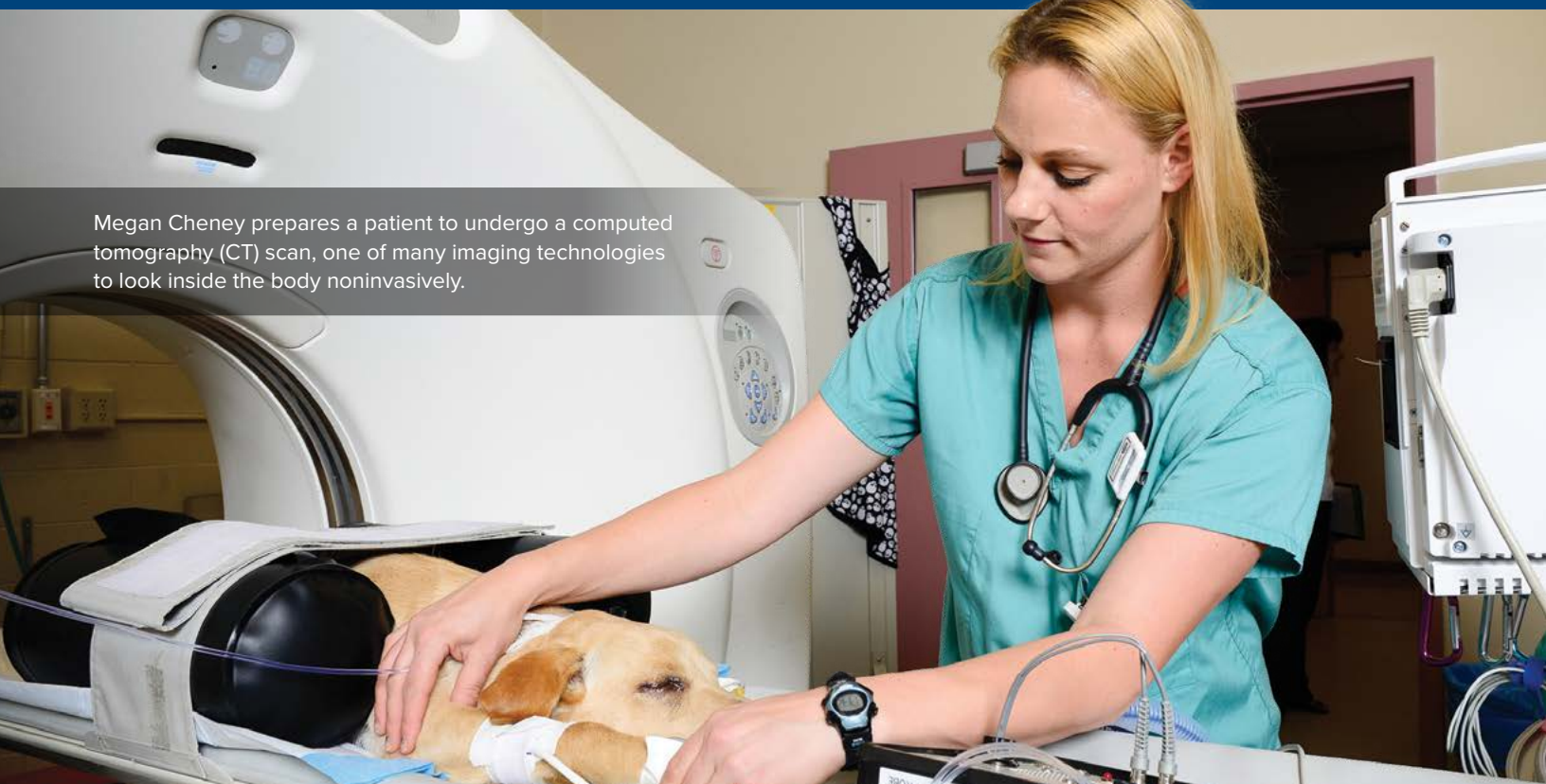
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Joining forces to help patients

DIAGNOSTIC IMAGING SERVICE AT THE HUB OF THE HOSPITAL'S MISSION

Megan Cheney prepares a patient to undergo a computed tomography (CT) scan, one of many imaging technologies to look inside the body noninvasively.



Our patients inspire our team at the UC Davis veterinary hospital to deliver the best possible care. When a beloved animal is ill or injured, veterinary specialists join forces to pinpoint the underlying condition so that the best course of treatment can be determined.

Recently, the power of the hospital's comprehensive approach saved Corvus, a 10-year-old Labrador retriever, after ingesting pieces of a rug. Because of his declining condition, Corvus' owners rushed him to the veterinary hospital. An ultrasound performed by a member of the Diagnostic Imaging Service revealed the exact location where a piece of the rug was blocking his entire small intestine. Surgeons from the Soft Tissue Surgery Service were then able to promptly relieve the obstruction by removing the offending material.

Pinpointing illness and injury

As with Corvus, the Diagnostic Imaging Service plays a vital role in locating and characterizing the underlying cause of an illness or injury for the vast majority of patients at the hospital. Members of the imaging team, while largely working behind the scenes, are at the hub of the hospital's

mission. They interface with nearly all 34 specialty services at the hospital and are available for emergency consults 24 hours a day, 365 days a year.

Using advanced imaging technology, veterinary radiologists are able to look inside an animal noninvasively for clues about a



Michelle Connell (left), Dr. Erik Wisner and Jennifer Harrison study CT scans of a patient to determine the cause of illness.

medical condition. The medical images are critically important to helping patients reach a positive outcome. Patients experience less suffering and benefit from a more precise diagnosis, and better surgical planning and follow-up therapy, if needed.

At the forefront of diagnostic imaging

The Diagnostic Imaging Service offers state-of-the-art imaging technologies, comparable to that found at a modern human hospital. Services include digital radiography (x-ray), fluoroscopy, ultrasonography, computerized tomography (CT), magnetic resonance imaging (MRI) and nuclear medicine.

Bringing a unique advantage to developing innovations, the imaging team works closely with other specialists in the School of Veterinary Medicine and also harnesses the power of collaboration with experts in diverse disciplines across UC Davis.

A recent example, veterinary radiologist Dr. Mathieu Spriet teamed up with biomedical engineer Dr. Simon Cherry and medical physicist Dr. Ramsey Badawi. Through their collective efforts, the UC Davis veterinary hospital was able to perform the first known positron emission tomography (PET) scan on a horse. Also essential to making this important breakthrough was industry partner, Brain Biosciences, Inc., which provided a high-resolution portable PET instrument.

A PET scan provides the ability to obtain cross-sectional images and information from both bones and soft tissue. While more work is needed before the technique becomes available for patients, it is likely in the near future that PET scans will become highly useful in the investigation of complex equine lameness cases.

Clinical excellence

The imaging team includes seven faculty who are board certified by the American College of Veterinary Radiology



The veterinary hospital is equipped with digital radiography systems to capture electronic images of the body without the use of film.

and two faculty specialists in large animal ultrasound. All are recognized as leaders in their field who advance the discipline through groundbreaking clinical care, scientific writings and invited speaking engagements at scientific symposia.

Helping to fulfill the need for highly skilled veterinary radiologists, the hospital has the largest and most successful diagnostic imaging residency program in the nation, with seven residents and one intern.

Vision for the future

Diagnostic imaging is central to the UC Davis veterinary hospital, and staying at the forefront of technology is essential to patient care. While imaging technology changes rapidly, our veterinary hospital is committed to providing the best patient care through a strong collaborative approach and by embracing novel imaging technologies and shifting paradigms in veterinary imaging.

To read more about Corvus' story, see page 6. For more information about the Diagnostic Imaging Service, visit vetmed.ucdavis.edu/vmth/diagnostic_imaging.



Dr. Erik Wisner

“We are inspired by our patients and their caring families to do our very best in diagnosing a medical condition.”

– Dr. Erik Wisner, DVM, DACVR
Associate Director of Imaging Services

Corvus, a 10-year-old Labrador retriever, is a typical dog. He likes to run and play . . . and he likes to chew on things. One particular evening a few months ago, Corvus' owners came home to find a rug destroyed.

Since Corvus has a 4-legged companion, his owners were not sure which dog did it, or if either of the dogs had ingested any of the rug. When Corvus started passing pieces of rug two days later, however, it was obvious he was the guilty party. For the next three days, Corvus continued to pass bits of the rug, until he then became lethargic, started vomiting and had a decreased appetite.

Emergency evaluation

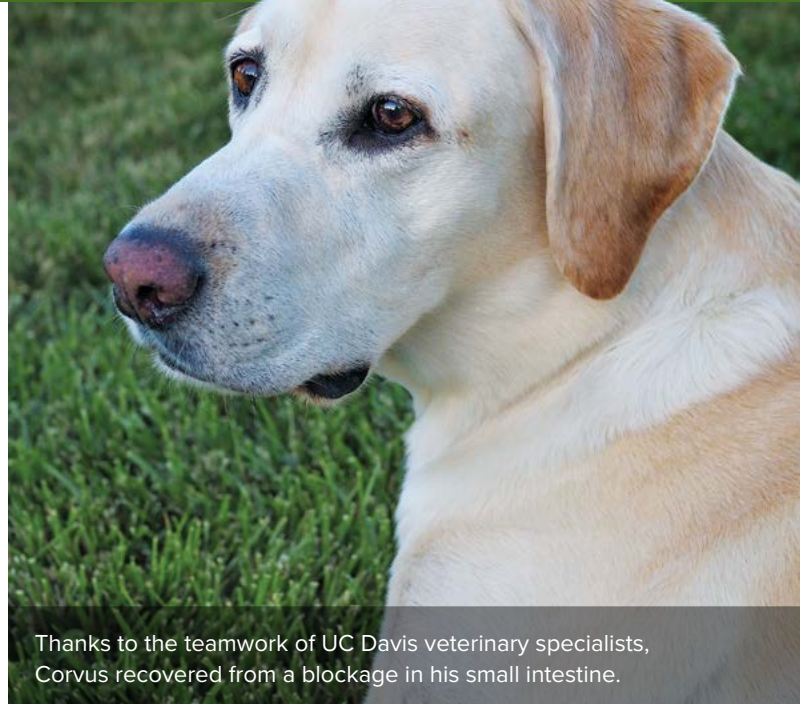
Following radiographs that showed a possible foreign object in Corvus' intestine, his owners (both veterinarians—one a general practitioner in the local community and the other a faculty member at the UC Davis School of Veterinary Medicine) were concerned about the seriousness of the situation, so they brought him for further evaluation to the Emergency Room at the UC Davis veterinary hospital.

Like an adventurous kid who seems to end up in the ER often, Corvus was no stranger to the veterinary hospital. He was previously seen by the Internal Medicine, Cardiology, and Oncology Services for radiation therapy to treat a heart-based tumor nearly a year prior.

Blockage revealed

Once at the hospital for his latest encounter, Corvus had an ultrasound performed by the hospital's Diagnostic Imaging Service. The ultrasound images determined that the rug was blocking his entire small intestine, a condition that would require immediate surgical intervention.

Corvus' small intestine was blocked from the pylorus (where the stomach connects with the small intestine) to the distal jejunum (near the far end of the small intestine). The blockage was causing a plication of his intestine, meaning it was bunched up into a much smaller area than its normal length of several yards.



Thanks to the teamwork of UC Davis veterinary specialists, Corvus recovered from a blockage in his small intestine.

Surgical intervention

Fortunately, the rug did not perforate Corvus' intestine, and the entire foreign body was able to be removed with a gastrotomy (an incision into the stomach) and single enterotomy (a surgical opening of the intestine) in the distal jejunum. Faculty surgeon Dr. Philipp Mayhew and surgical resident Dr. Stephanie Majeski, of the hospital's Soft Tissue Surgery Service, were able to "milk" the contents of the blockage through the enterotomy site for removal. Often times, intestinal blockages of this nature will require multiple incision sites. So removing the entire blockage utilizing only two sites made the surgery generally safer for Corvus.

As every surgery carries with it some level of risk, and despite the surgeons' best efforts, Corvus developed post-operative complications, including a severe bout of pancreatitis (due to the pancreas being impacted by the sutured intestine) and an incisional infection. He remained hospitalized with supportive care for a few days before going home on numerous medications.

Over the next several weeks, his condition improved slowly but surely. Each recheck showed an increased weight and decreased clinical signs. Eight weeks post-operatively, he was back to his old self, enjoying hikes and playing with his companion . . . but staying away from rugs.

Innovative prostate cancer treatment helps **Kopper**

Kopper, a 14-year-old Belgian Malinois, was being treated last year for a paralyzed larynx and megaesophagus at his home state's University of Tennessee's veterinary hospital. An examination also revealed a tumor in his prostate. Veterinarians there were familiar with Dr. Bill Culp's clinical trial here at UC Davis to evaluate a new procedure to treat prostate cancer in dogs. So Kopper and his owners traveled the 2,500 miles to California to see Dr. Culp.

The treatment is similar to a procedure that has taken hold in the past few years in human medicine for non-cancerous prostate enlargement. Known as prostatic transarterial embolization, this procedure is emerging as a minimally invasive alternative to other prostate cancer therapies.

Advanced imaging (CT and MRI scans) is performed, allowing an assessment of the prostate tumor and associated blood supply. Once the blood supply has been mapped, the tumor is accessed minimally invasively

(interventional radiology techniques) utilizing fluoroscopic guidance (real time "x-rays"). Catheters are placed, and the blood supply to the tumor is identified. Material can then be injected into the blood vessels supplying the tumor, which causes a blockage of the vessels, thereby cutting off the blood supply and accompanying nutrients to the tumor. The size of the gland and tumor decrease as cells die from lack of blood supply.

Kopper's recovery from the surgery was uneventful, and he returned home to Tennessee within a few days.

Dr. Culp worked with Kopper's local veterinarian for his recheck exam to ensure his recovery was uneventful. To date, Kopper's prostate has decreased in size, and he has been doing well.

The hope for Kopper and all dogs undergoing this minimally invasive treatment, is that a decrease in tumor size will improve the quality and length of life for dogs with prostate cancer.

Kopper, a retired K-9 officer, is pictured here with Dr. Bill Culp, who is conducting a clinical trial to evaluate a new procedure to treat prostate cancer in dogs.



Veterinary Center for Clinical Trials

Dedicated to finding innovative solutions to benefit pets and their families, the School of Veterinary Medicine established the Veterinary Center for Clinical Trials to help advance both animal and human health. Our veterinary clinicians are evaluating novel therapeutics and medical devices that have the potential to improve the diagnosis and treatment of diseases.

A veterinary clinical trial is a study focused on assessing the effectiveness of new therapies, medical devices and diagnostic tests not yet available in clinical practice. Preliminary studies must first establish that the new methods are safe and have the potential to work better than existing methods. If the results are promising, veterinary clinical trials can be initiated to assess these new methods in companion animals.

Clinical trials are specifically designed to benefit enrolled patients while at the same time advancing scientific knowledge. Participation of a pet in a clinical trial is strictly

voluntary and enrollment occurs only with the consent of a pet owner. Currently, there are more than 90 clinical trials in progress at the veterinary hospital. Studies span a broad range of clinical specialties including, but not limited to, dentistry, genetics, neurology, oncology, ophthalmology, pain management and surgery.

The Veterinary Center for Clinical Trials works in collaboration with specialists in both veterinary medicine and human medicine. This strong partnership brings together the brightest minds at the forefront of discovering the latest advances in animal and human medicine. Successful outcomes from veterinary clinical trials can often lead to comparable human clinical trials, because people and animals suffer from many of the same disorders.

For more information about the Veterinary Center for Clinical Trials, please visit vetmed.ucdavis.edu/clinicaltrials or call (530) 752-5366.

Spotlight: A COMPASSIONATE

Why I give

Marcia Messmer

Over the years, I have shared my home with cats, dogs, birds, horses and even a very special rat. I loved them all, but in the end, the guinea pigs are my favorites! My love affair with the species began almost 20 years ago, when a wager lost to my son resulted in the purchase of a guinea pig. I was hooked!

Cute and cuddly, with velveteen ears, perfect noses and delicate lips, I soon discovered that guinea pigs are surprisingly good companions and love human attention. Alert and responsive, each possesses a unique personality and has a special way of attracting human attention and communicating with both humans and peers. Even though guinea pigs are much more work to care for than a dog or cat, I am unfailingly grateful to be a caretaker for these delightful creatures.

I have learned that veterinary medicine for guinea pigs is often very different from that practiced on dogs and cats. Every veterinarian in the Companion Exotic Animal Medicine and Surgery Service has a specialty in exotics. I am confident that my animals always receive the best possible care. In addition, the service possesses the special equipment necessary to diagnose and treat its small patients.

Perhaps most importantly, the service is able to collaborate with other services at the veterinary hospital. UC Davis veterinarians routinely consult with specialists in cardiology, dermatology, dentistry and ophthalmology to formulate the best treatment plan for my animals. Several of my animals have undergone surgery at the veterinary hospital, and I am always amazed by the incredible skill of the radiologists, anesthesiologists and surgeons. Each guinea pig patient is carefully monitored and hand fed post surgery. Pharmacy and laboratory services are on site, and emergency care is available when necessary. I can't imagine taking my animals anywhere else.

Dr. Michelle Hawkins shares my belief that the life of every companion creature, no matter how small, is important. She possesses the gifts of compassion and empathy, and I know the health of my animals is as important to her as it is to me. For each case, she oversees a treatment plan and sets realistic expectations for the outcome. I trust her with the



I come to the UC Davis veterinary hospital because it has a dedicated avian and exotic animal service. This is critically important to me, because I want my animals to be treated by veterinarians who see guinea pig patients every day—not just occasionally.

lives of my pets. From this client's perspective, Dr. Hawkins sets an incredible example for everyone in the service. Every veterinarian I have encountered at the hospital shares her competence, compassion and love of exotic animals.

I believe that the UC Davis veterinary hospital is the best veterinary hospital in the state, if not the country. It is a fantastic resource for all pet owners, but especially for owners of exotic companions. I want to be sure the veterinary hospital is able to continue its high standard of service to the community and to carry on its tradition of veterinary excellence without compromise. I support its educational outreach in publicizing the amazing advances in care, treatment options and new procedures for saving the lives of our companion animals.

PARTNERSHIP

Why I care

Dr. Michelle Hawkins

While attending veterinary school, I saw that companion avian and exotic pets were underserved, and research into effective diagnostics and treatments for even basic diseases were still lacking for most companion exotics. I wanted to help facilitate an increase in best practices for patient care for these animals.

Avian and exotic pet medicine is challenging and rewarding. In exotic animal medicine, everything is important—diet, temperature, humidity, fluctuations in body weight, seasonality of sexual behavior. All of these factors can affect a disease process, and trying to collect this information can be overwhelming sometimes. For example, because we feed a formulated diet to our dogs and cats, many nutritional problems are reduced today. But in exotics, each species has different requirements, many of which we are still trying to ascertain.

Marcia is an amazing guinea pig caretaker! She provides the highest level of home care for her guinea pigs and understands how challenging diagnosing and treating disease is in our smaller companions. Because of this, we work very well together as a team. Marcia also comes to her appointments with many questions, some of which we cannot always answer—then we seek to determine what would be best practices in another species and look forward to how we can apply those practices to guinea pigs. We learn from Marcia at every appointment. She often gives us background on new coat colors, new diets that caretakers are using, and problems she and other caretakers have identified that help us to track a new or emerging disease.

An example of the power of our teamwork is when we worked together to evaluate a problem in one of her guinea pigs approximately 10 years ago. It was a disease that to our knowledge had not previously been reported. We went back to our understanding in other species to attempt to diagnose and treat. Several months later Marcia brought us a guinea pig magazine where this problem had been addressed in Europe and found that a paper had been written in German that we had not found through our literature searches. We were able to communicate with the author of the paper, received a translated version, and realized this disease was better reported in Europe.



On a daily basis, I see equal love and care for the smallest pet compared to that of more traditional pets. These cases inspire me to remember that every life is precious, that the love and compassion felt by the owner of a fish is no less than that of any other pet, and that I will, every day, aspire to bring the highest level of medicine to each and every animal I work with in my care.

The information gave us a new direction to evaluating this disease. From the original work of our German colleagues, we were able to focus on specific physiologic pathways that might be allowing the disease to occur without replicating work that had already been performed. While we have not yet solved the issue, we nonetheless have the most updated information on the disease. Now our colleagues in Europe come to us to discuss next best steps for attempting to correct this disease problem.

Patient care staff goes above and beyond

Providing the lion's share of the day-to-day patient interaction, patient care staff work around the clock to ensure the safety and well-being of animals.

The more than 200 members of the patient care staff are integral members of the veterinary healthcare team. They perform much of the monitoring and many of the treatments, feedings, groomings and walks required with each patient visit. At the forefront of monitoring patients throughout the day and night, they make sure each animal has a happy, safe and healthy stay at the UC Davis veterinary hospital.

The staff is comprised of registered veterinary technicians, assistant veterinary technicians and animal health technicians. Each has completed training programs and certifications to enable them to pursue their career paths in veterinary medicine.

Many members of the team have two- or four-year degrees in a designated area of animal science or veterinary patient care. Several are California Registered Veterinary Technicians and Veterinary Technician Specialists who are actively involved in providing continuing education to train others locally, nationally and internationally. All of the hospital's patient care staff must pass a rigorous on-going training program, and technicians must complete 20 hours of professional



Registered veterinary technician Morgan Cecil cares for a Chihuahua in the Small Animal Clinic.

continuing education every two years to keep abreast of the latest advancements in veterinary medicine.

Beyond caring for patients, the staff coaches, trains and monitors veterinary students and technician students in many aspects of patient care and paraveterinary techniques. The patient care staff often forms close bonds with the patients, and the love and caring showered on the animals is greatly appreciated by their owners. The faculty and hospital administrators receive many letters from owners praising the quality of care provided by our technical staff.

Thanks and Praise from Grateful Clients

"Many companies and organizations spend a lot of time training and promoting customer service but consistently fall short of their goal. In my opinion, your program is the model by which others should follow. Your teaching hospital and providers are the leaders in veterinary care, and I am most grateful that we found you in our time of need."

— Karen N., Roseville, California

"To the extraordinary team at the Large Animal Clinic—we want to extend our deepest gratitude to everyone who cared for our magnificent and beloved Chip. Your team, led by Dr. Nieto, could not have been more caring and understanding. The team was a shining example of dedication and compassion."

— Mark & Julie B., Santa Rosa, California

"We had a wonderful visit with the Ophthalmology Service. The doctors were terrific and loved our service dog Gulliver. What a fantastic group of people. Thank you for your help."

— Herb & Faye V., Meadow Vista, California



Equine specialists helped Bossy's Cookies recover from botulism

Bossy's Cookies, a newborn pony/paint-cross filly, was brought to the UC Davis veterinary hospital at 10 days old for a progressive neurological disorder.

Following three days of normal activity since birth, she was down for prolonged periods in her stall, staggering around and unable to rise on her own. Her owners initially suspected a neck injury, as she was not able to raise her head or neck and seemed to have abnormal range of motion through her cervical spine.

If assisted, Bossy's Cookies could stand and was able to nurse if her head was supported in the proper position. But she could not lift her head to reach the udder on her own, as it dropped instantly if support was removed.

Declining condition

Initially when she went down, Bossy's Cookies' attitude seemed positive and responsive, but she became quieter and weaker as days progressed. She was not standing as long or walking as well, and spent most of her time in lateral recumbency.

Bossy's Cookies was examined by her veterinarian near her home in the Inland Empire region of Southern California. Radiographs showed no damage to her spine or fractures of any kind. Euthanasia was considered, but her owners weren't



Bossy's Cookies, pictured above, recovered from botulism after month-long hospitalization.

quite ready to give up. They heard about the equine experts at UC Davis, so they loaded up Bossy's Cookies and her dam and drove the nearly 400 miles to Davis for one last effort to save her life. In route, they stopped every two hours to let the filly nurse.

Once at UC Davis, Bossy's Cookies was examined by the Large Animal Clinic's Equine Surgical Emergency and Critical Care Service, as well as the Equine Medicine Service. Dr. Gary Magdesian, an expert in neonatology and critical care thought that she had signs of a neuromuscular disease, especially botulism.

Testing for botulism

Dr. Magdesian conferred with Bossy's Cookies' veterinarian back home and decided it was worth testing for botulism, which is potentially treatable. Because time is of the essence with botulism, treatment for it began immediately.

Electrophysiology testing conducted by hospital research associate Dr. Colette Williams and clinician Dr. Monica Aleman was compatible with botulism. Polymerase chain reaction testing confirmed that Bossy's Cookies was positive for Type A botulism, which relaxes the entire muscular system by inhibiting nerve transmission to the muscles.

Life-saving treatment

Type A botulism tends to be the most severe form. When treated properly, Type A botulism patients can make a full

Botulism can be a fatal illness caused by a toxin produced by bacteria. In horses, botulism can occur three different ways:

1. Toxico-infectious botulism, where young foals eat spores from the environment which proliferate inside their gut, allowing the organism to produce toxins;
2. By eating toxin that's already been made in spoiled feed or water, generally caused by anaerobic conditions in the feed or the presence of dead animals in the feed;
3. Wound botulism, where a bacterial organism proliferates in a necrotic wound.

Continued on page 12

Equine specialists helped Bossy's Cookies recover from botulism (continued from page 11)

recovery, but that can take several weeks. Dr. Magdesian, along with resident Dr. Jamie Prutton, fourth-year student Anatasha Plummer and the hospital's patient care team, began treating Bossy's Cookies with botulism antitoxin and intravenous penicillin.

When Bossy's Cookies first arrived at UC Davis, she was too weak to eat. Tube fed at first, she was able to eat on her own shortly after beginning the botulism antitoxin treatments. She started to make other improvements also—gradually at first, but then more significant strides to indicate a recovery.

Within a week, she made efforts to stand on her own. By two weeks, those efforts became stronger, as she was nearly able to stand. At three weeks, she was able to stand with minor assistance and eager to be up and walking around her stall. By four weeks, Bossy's Cookies stood on her own and was bright and active. Now at home, she continues to get stronger daily.

When newborn animals are hospitalized, they need around-the-clock care, especially recumbent foals. With its 24-7 emergency care staff, the veterinary hospital was the ideal place for Bossy's Cookies to receive care. Because of its ample amount of equine specialists, large animal patient care staff,



Bossy's Cookies with faculty member Dr. Gary Magdesian, fourth-year student Anatasha Plummer, resident Dr. Jamie Prutton and Bossy's Cookies' family as she was being released from the veterinary hospital.

and hundreds of veterinary students, UC Davis provided a compassionate environment in which to recover with the proper amount of care needed. Dr. Magdesian expects Bossy's Cookies to make a full recovery.

Our future veterinary leaders—making a global impact



UC Davis veterinary students are remarkable individuals who embrace the School of Veterinary Medicine's vision to lead veterinary medicine and address societal needs. **Many students have worked or volunteered all over the world.** Here are a few highlights of ways they have made a difference:

- Volunteered for the **Peace Corps** in places like Guinea and Zambia
- Cared for injured and **rescued elephants** in Thailand
- Furthered **sea turtle conservation** in Costa Rica
- Helped with **panda breeding research project** in China
- Worked on **poultry production research project** in Angola
- Assisted with **rhinoceros and baboon rehabilitation** in South Africa
- Performed **great white shark tracking** in South Africa
- Conducted **bat research** in Ecuador and **camel research** in Kenya
- Participated in **manta rays research project** in Guam

Extremely rare heart surgery saves *Vanilla Bean*

Vanilla Bean, a 1-year-old female Burmese cat from Mill Valley, California, was diagnosed by her veterinarian with a rare congenital heart defect not allowing proper blood flow through the chambers. This condition can cause too much blood to collect in one chamber, create pressure and enlarge it.

Thankfully for Vanilla Bean, her veterinarian referred her to the veterinary hospital's Cardiology Service, where Dr. Josh Stern was familiar with the condition and the rare life-saving procedure to correct it.

Dr. Stern and his team of residents, technicians and veterinary students evaluated Vanilla Bean by performing an echocardiogram (ultrasound of the heart) to assess the severity of her heart disease and to see if she was a good candidate for surgery.



Vanilla Bean was saved through a rare heart surgery that involved veterinarians collaborating with human physicians.

Vanilla Bean's condition, known as a cor triatriatum sinister, is also found in children. In his two previous surgeries to correct the condition, Dr. Stern collaborated with human cardiologists from Duke University, near where he was practicing at North Carolina State University. To help assist him now that he is at UC Davis, Dr. Stern sought out two cardiologists from the UC Davis Medical Center, Dr. Jeff Van Gundy and Dr. Jay Yeh. Also assisting from the veterinary hospital were soft tissue surgeon Dr. Bill Culp and cardiologist Dr. Lance Visser.

Together, the team of doctors began the delicate procedure of correcting

Vanilla Bean's defect, which involved opening her chest cavity to expose the heart and utilize a hybrid cutting balloon dilatation. The balloon cuts the restricting membrane between the chambers to allow blood to flow through it regularly. The surgery was a success, and Vanilla Bean slowly recovered. She is no longer in congestive heart failure and is off all medications.

Veterinarian in training: *Ross Bernstein*

When pet owners come to the veterinary hospital, one of the first team members they will meet is a veterinary student. We recently found second-year veterinary student, Ross Bernstein, hanging out with Pint.

Ross' family is originally from South Africa, but he grew up in Los Angeles and completed his undergraduate studies at Duke University. His primary area of interest is in small animal medicine, but after having spent much time in Africa, he is also extremely passionate about conservation medicine and interacting with and treating exotic animals in their natural habitats around the world.

At the UC Davis School of Veterinary Medicine, Ross considers himself incredibly privileged to be under the guidance of many brilliant and passionate veterinary professionals. He feels very lucky to be studying alongside some of the country's top veterinary students.

Ross shares his Davis home with a chocolate Labrador retriever named Monty and a domestic short-haired cat named Darius. They are fortunate to be in the good care of their future UC Davis-trained veterinarian, Ross!



Pint and Ross Bernstein

“Everyone always told me how difficult veterinary school would be, and although it is hard, I absolutely love every minute of it!”

– Ross Bernstein, Class of 2018

Meet Dr. Casey Kohen

Emergency and Critical Care Resident

Why did you choose the UC Davis residency program?

I knew the strength of the residency program from veterinary school and was aware of its reputation from talking with other students and clinicians from across the country. It also gave me the opportunity to be trained by some of the people that have had the greatest influence in my career. It seemed like the obvious choice. Also, my mom would have killed me if I spent another three years away from Northern California.

What do you plan to do at the completion of your residency?

Sleep!!! And I hope to finally devote the time to my family that they deserve and have been so patiently waiting for. My son has shared some grand plans for any new free time I may have, such as skydiving and longer backpacking or fishing trips. I probably should also think about getting a job, hopefully in the academic setting, as I have really enjoyed working with the students and Emergency and Critical Care (ECC) interns.

Are you working on a resident research project? If so, can you share a little bit about that project?

Yes, I am doing a retrospective study evaluating some laboratory result changes we see in dogs and cats that present to the Emergency Room and looking at the association with outcome in those patients. Our hope is the ability to identify patients that may need particularly close monitoring and treatment, which may improve their chance of survival.

What makes your work so rewarding?

I had a parvovirus case that was particularly rewarding. The clients brought in their new puppy who was terribly ill and were not given a good prognosis by their original veterinarian. They were heartbroken at the thought they would never see her again. I spoke with them daily about their puppy, who was slowly making progress each day. They were extremely grateful for everything we were doing. As she improved, my favorite part was telling the family that we hoped to call them very soon, saying their puppy was becoming annoying because she was feeling better, and needed to be picked up.

Sure enough, after seven days in the hospital, I got to make the call, "She's driving us crazy, come pick her up!" She was eating, barking, playing and acting like a puppy again. They laughed and cried and greeted her as if this was a moment they never thought they would have. I remember running down the hall to make sure I got to see their reaction when they saw her. It was one of those cases that recharges your energy to make it through all the other difficult cases we deal with. As a person looking forward to a profession as a veterinarian, this was what I envisioned—helping return a very sick and beloved pet to their family, healthy and happy.

You were also a UC Davis veterinary student—how did that training prepare you for this career path?

I had the privilege of learning from some of the most well-known experts in veterinary medicine. Additionally, I spent some time early in veterinary school rotating through the hospital in summer clinics, and getting experience with clinical medicine. I was highly influenced by Dr. Matt Mellema in the Small Animal Intensive Care Unit (ICU). As a student, I told him that I wanted to pursue specialty training in the ECC, and he did everything he could to prepare me for my future. I always knew I wanted to specialize, however it was spending time with Dr. Mellema in the ICU, and listening to lectures from the other ECC faculty, that made me realize that this was the specialty for me.



Dr. Casey Kohen and one of his lucky patients.

Keeping your pet **SAFE** during the winter holidays

While the holidays are festive and filled with traditional foods and decorations, these same items, if ingested, can cause harm to pets. Each year, the UC Davis veterinary hospital treats pets that get sick from eating holiday decorations and treats. Here are a few items to watch out for:



Holiday Lights and Electrical Cords – Pets can easily be electrocuted if they chew through holiday light cords, which are usually thin and not insulated. Respiratory distress is a sign of electrocution, as well as a burn mark across the lips or tongue. Seek veterinary care immediately if your pet has these signs.



Chocolate – This delicious treat contains ingredients that unfortunately can be toxic to pets. The darker the chocolate, the more dangerous it is. While dogs are the most susceptible, cats and other species may be affected too. It is best to avoid letting any of your pets eat chocolate. If they have eaten chocolate and show signs of anxiety, agitation or vomiting, consult a veterinarian immediately.



Poinsettia and Holly – These traditional holiday plants can cause mild irritation to a pet's mouth and may cause minor drooling, decreased appetite or vomiting. Seek veterinary care if these signs progress.



Tinsel and Curling Ribbon – While these items make beautiful decorations, they can be deadly to your pet if swallowed. Tinsel and curling ribbon can easily cause an intestinal blockage and leakage into the abdomen. If you suspect your pet has eaten these items and experiences a loss of appetite, vomiting or diarrhea, seek veterinary care.



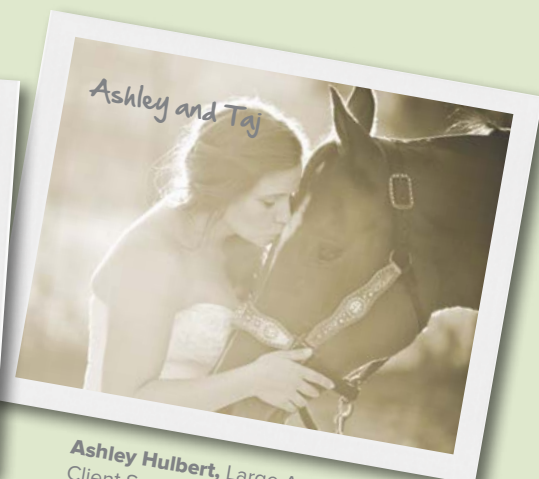
Photo Spotlight: Beloved companions of our veterinary team



Barbara Schwarz, Client Services Supervisor, Small Animal Clinic



Katie Hatch, Large Animal Clinic Care Coordinator



Ashley Hulbert, Large Animal Client Services Representative

Interested in sharing a photo of your special animal companion?
Please send your photo to development@vetmed.ucdavis.edu.



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this issue! I look forward to
sharing our next issue with you.



UPCOMING EVENTS

UC Davis Picnic Day ►
April 16, 2016

Spring Showcase
May 11, 2016

**School of Veterinary
Medicine Commencement
Ceremony**
May 21, 2016



Picnic Day –
Annual Doxie Derby

If you are interested in attending these events,
please contact us for more information at
(530) 752-7024.

Stay Connected

For Appointments Call:

Small Animal Clinic: (530) 752-1393
Large Animal Clinic: (530) 752-0290



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