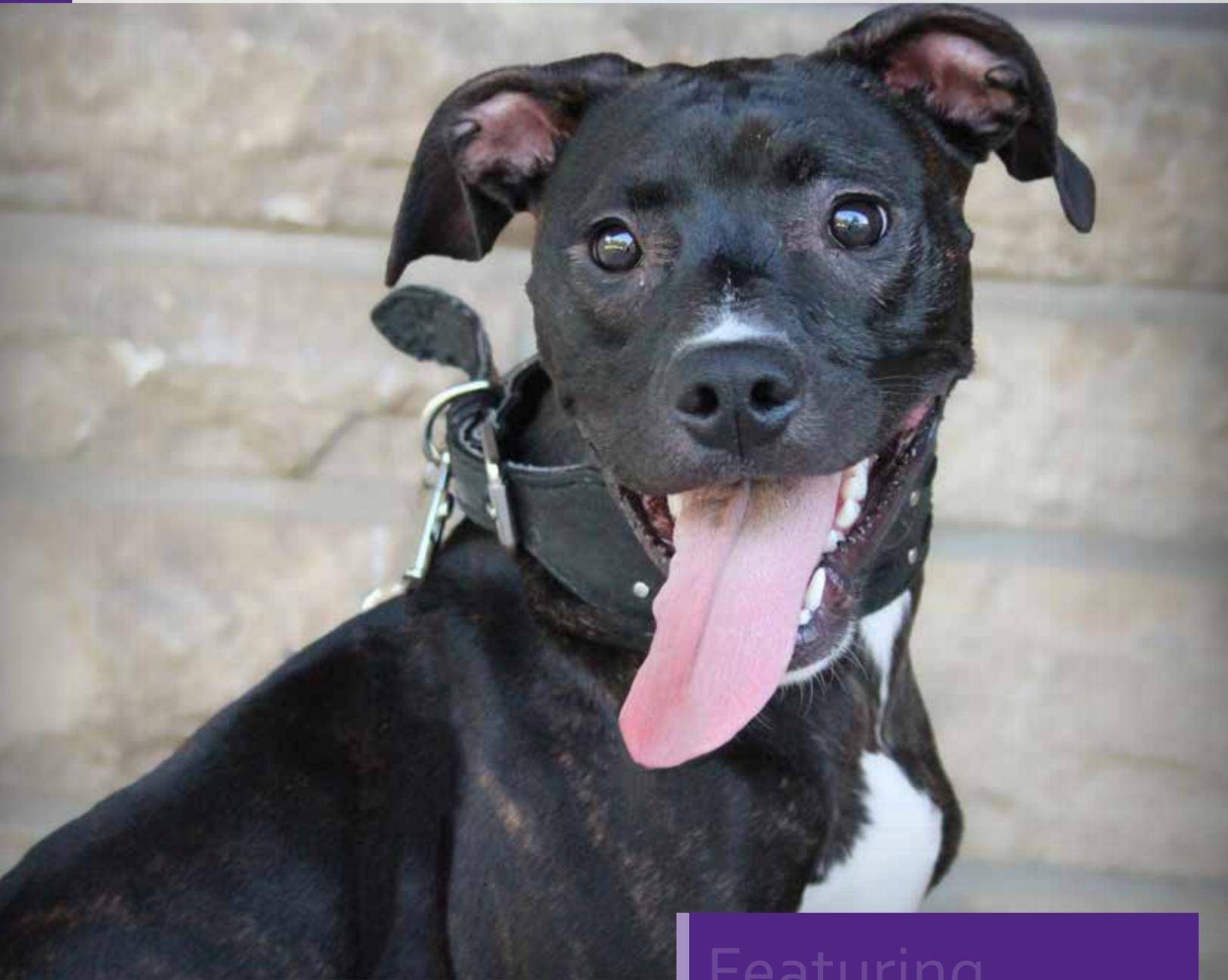


AnimalLIFE

Fall 2015



Veterinary Health Center

AT KANSAS STATE UNIVERSITY

TO DISCOVER. TO TEACH. TO HEAL.

Featuring

Mystery disease plagues puppy

Accident traumatizes barrel horse

Owner's planning saves cat's life

Exceptional residency training

The two words "animal" and "life" share the "L," because just like our pets, they are a seamless part of our lives.

I have been wonderfully fortunate to spend nearly four years at the Veterinary Health Center, working with clients, patients and clinicians, often in difficult and trying times.



Kristin Loving and Ebby

This spring, I experienced the VHC as more than just an employee or routine care client. During a daily run with my two Labradors, I noticed Ebby uncharacteristically lagging behind so I cut our run short. Back at the house, she sprawled out on the floor and fought to catch her breath. I couldn't help but fear the worst as I watched her struggle.

I quickly contacted my closest friend, a College of Veterinary Medicine alumnus, who walked me through a few observations to determine that she was not in immediate danger. After several painstakingly long hours, her breathing slowed, but by morning her wheezing and lethargy necessitated my VHC colleagues' expertise. After an exam and radiographs, she was diagnosed with a foreign-object induced pneumonia. Ebby came home and rested for several weeks with antibiotics, waiting patiently until she could return to her daily runs.

This was not as severe as many of the patients that come through our hospital, and I have experienced just a fraction of the helplessness and fear many clients face. The thoughtfulness and dedication of the clinicians and students were exactly the treatment I needed and reminded me how grateful I am to work at the Veterinary Health Center at Kansas State University and share these stories with you.

Best Wishes,

Kristin Loving

AnimaLIFE

VETERINARY HEALTH CENTER AT KANSAS STATE UNIVERSITY

Fall 2015

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Veterinary Health Center
AT KANSAS STATE UNIVERSITY

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The Veterinary Health Center and its faculty and staff are among the best in the country. We continue to set new standards of excellence, both in education and in patient care as you will see in this issue.

Faculty are striving to find better ways to treat cancer and countless other medical conditions in animals. Veterinarians like Dr. Raelene Wouda are working with physicians to bridge the gap and find solutions to solve similar conditions in people.

Our students, including residents pursuing advanced clinical training, continue to be among the best trained in the nation because of our dedicated and talented faculty.

All of this, however, would be meaningless without clients like you. We depend on your support to continue to train superior veterinarians and discover innovative treatment options.

I remember one patient that demonstrated the same passion that our students and faculty demonstrate every day. Sadie visited us after she was caught in a fire at her local kennel. She was badly burned, and the fire had caused her kidneys and liver to fail. I performed a six-hour surgery to close her wound almost two months after the fire. After weeks of treatment in the hospital, Annette Fairbanks, Sadie's owner, went to great lengths to provide at-home care. The 2-year-old lab's will to live, and to fight, ultimately led to her recovery. I want to dedicate this issue to Sadie, our AnimaLIFE cover girl of Fall 2004. She lived out a long and healthy life, but sadly passed away last fall.

This story represents the many wonderful attributes of the VHC. Sadie's will to live, a committed owner and a dedicated primary care veterinarian, combined with VHC expertise, gave her the ultimate gift of a loving, happy and fulfilling life.

We have many patients, who, like Sadie, are an inspiration to us and drive us to improve. We send our most sincere thanks to all who have entrusted us with the care of a pet. You make the VHC a better place.

I hope you enjoy this issue of AnimaLIFE. Thank you for supporting our hospital and thank you for caring about animals.

Warmly,



Roger B. Fingland, DVM, MBA, DACVS
Director, Veterinary Health Center
Executive Associate Dean, College of Veterinary Medicine

Portrait: KSU Photo Services



It was a long road to the Land of Oz for Dr. Raelene Wouda; literally, a few trips around the world!

Dr. Wouda has pursued her goal of becoming a veterinarian since she began volunteer weekend work at a small general practice in Brisbane, Australia two decades ago. Dr. Wouda has moved through a variety of positions, each one a stepping stone to finding her true passion within veterinary medicine.

Dr. Wouda joined the VHC a year ago after stops in Brisbane, London, Philadelphia, Wisconsin and Melbourne. She completed two residencies in small animal medicine and oncology, with a fellowship in hematology and transfusion medicine in between.

At the time Dr. Wouda was studying oncology, there were very few veterinary oncologists in Australia. She took the opportunity to study in the United States where she found her passion in oncology and clinical research. Dr. Wouda enjoys working with oncology patients and their families, as well as the challenge of improving the care of those patients by exploring new treatment methods. Her mission is to improve her patients' quality of life and outcome in part by conducting clinical trials.

"Clinical trials help healthcare professionals, including veterinarians, physicians, pharmacists and others, evaluate

new treatments and diagnostic tests for various diseases, including cancer," Dr. Wouda said.

"The treatments and tests in a clinical trial have typically been previously tested in a laboratory setting, and have demonstrated potential as improved therapies or diagnostics based on this pre-clinical data," Dr. Wouda said. Clinical trials may range from testing a new medication to a novel drug combination or diagnostic test.

Clinical trials benefit future veterinary patients, but patients involved today have access to novel therapeutics and, in some cases, special financial considerations are available. The oncology service currently has four clinical trials that are open to patients of the VHC.

"Many clients who participate in clinical trials have an altruistic personality and a strong desire to help not only their own pet, but also to contribute to enhancing healthcare for the pets of the future," Dr. Wouda said.

These clinical trials help our four-legged friends and humans because Dr. Wouda is working with physicians and researchers in human medicine. She recently gave a talk at the University of Kansas Medical Center about the concept and benefits of veterinary oncology and the One Health Initiative, and she is one of more than 100 scientists involved in multidisciplinary research at the Johnson Cancer Research Center at Kansas State University.

"Comparative medicine combines human health, animal health and environmental health," Dr. Wouda said. Veterinary oncology is an especially important field in the One Health initiative. "Bench top and rodent models of diseases, such as cancer, are problematic because they do not allow for genetic variability, an intact immune system or accurate modeling of metastasis," Dr. Wouda said. "Our pets develop spontaneously-occurring tumors just like us, while sharing many of the same biological and environmental factors."

Veterinary oncology is an important area of research because humans and dogs can develop similar types of cancer with many shared characteristics, including how they respond to therapy. From a practical perspective the veterinary studies can often be accomplished in a more timely manner. "There must be better ways to treat our patients," Dr. Wouda said, and she will continue her quest to discover and develop those treatments at the VHC. ▾

View current clinical trial opportunities at vet.ksu.edu/VHC/services.



Disease in Disguise

Veterinarians rush to solve Sasha's mystery illness.

Sasha's routine spay seemed anything but routine, or at least that's what her owner, Deb Gillette, thought when three days after her surgery, Sasha continued to be lethargic and painful.

Five days after her spay procedure and on her first day without pain medications, Sasha's sister and best friend, Passion, tried to play with her, but Sasha yelped in pain. Deb began petting her to calm her when she noticed Sasha's body temperature seemed higher than normal. She asked her husband, Marcus, if Sasha felt warm, which he confirmed. "I called the veterinarian that afternoon and told them Sasha was not doing well," Deb said.

At her veterinarian's office, Sasha was indeed running a fever of 103.5, and was believed to have an infection from the recent surgery. They sent her home with antibiotics and instructions to call in a few days if she was not better.

"We took her home on Thursday. Friday she started vomiting," Deb said. In addition to the vomiting, Sasha developed a dry cough. Deb took Sasha back to the veterinarian who speculated that the vomiting was a side effect of the antibiotics.

Sasha's condition continued to deteriorate as she became more painful and she began to walk unsteadily. Her weaving and wobbling as she walked scared Deb and she immediately took Sasha to the emergency veterinarian.

The emergency veterinarian examined Sasha and thought she might have Wobbler's syndrome and kennel cough.

Wobbler's syndrome is a neurologic disease of the spine that affects a dog's ability to walk and can eventually lead to paralysis.

The veterinarian recommended Sasha see a veterinarian who specialized in physical therapy to treat the Wobbler's syndrome. The next morning, Deb took Sasha to a physical therapy appointment where she received low grade laser therapy and returned home. That night, Sasha took a turn for the worse.

"We were standing in the kitchen when I asked my husband, Marcus, 'Where's Sasha?' They turned around just in time to see Sasha collapse to the floor and vomit. 'We immediately took her to the emergency veterinarian,' Deb said, now terrified of losing Sasha.

The Gillettes raced back to the clinic where they waited until 2 a.m. while the emergency veterinarians treated Sasha, whose temperature had skyrocketed to 105.6. The veterinarians gave her fluids and took radiographs, and at 3:30 a.m., Deb got a call. This time, the diagnosis was meningitis and the veterinarian referred Sasha to the Veterinary Health Center.

Deb and Marcus carefully loaded Sasha into the vehicle and left their home in Wichita for the VHC around noon. Upon arrival that afternoon, Dr. Sarah Guess, small animal internal medicine resident, examined Sasha.

"It was obvious that she had a lot of neck pain," Dr. Guess said. "She held her head down and wouldn't look up at us.

The thing that stood out was you could tell she wanted to be near us and wanted to be a really good girl, but she was in so much pain. We were really worried about her.”

Deb and Marcus waited at the hospital until about 7 that evening while Dr. Guess treated Sasha. “That night we did bloodwork and based on my physical exam finding and the test results, I recommended a spinal tap. I didn’t want her to wait until Monday,” Dr. Guess said. She told Deb they were going to call in the anesthesia personnel and do the tap on an emergency basis.

That evening, Dr. Guess carefully guided a spinal needle into the area at the base of Sasha’s skull to collect cerebrospinal fluid. She submitted the fluid for tests. “In the cerebrospinal fluid, we saw a diffuse population of cells that weren’t cancerous, but highly inflammatory,” Dr. Guess said. “Sasha had a form of meningitis that’s not associated with bacteria or viruses. We call that steroid-responsive meningitis-arteritis.”

This form of sterile meningitis shows up classically in young dogs. “We don’t know what causes sterile meningitis in dogs,” Dr. Guess said. “I wish we did so we could prevent it. Like many of the meningitis diseases in humans, we don’t know the cause. Some are due to a virus or a bacteria and some are corticosteroid-responsive, which is the best possible case.”

“We don’t know what causes sterile meningitis in dogs. I wish we did so we could prevent it.”

- Dr. Sara Guess

That night the team started Sasha on IV corticosteroids hoping for the best in the morning. “The next morning there was a dramatic change in her attitude,” Dr. Guess said. “She was also moving her neck more and starting to eat for us, which was really great because she hadn’t eaten for us prior to that.”

Deb and Marcus had returned home to care for their other dogs, but were surprised to receive a phone call from Dr. Heather Vaske, another small animal internal medicine resident, the next morning.

“Dr. Vaske said Sasha was responding to the steroids and they would release her Tuesday afternoon,” Deb said. Deb came up that night to see her. “She was a totally different dog. I was so happy,” Deb said. “She was up and running around and her tail was wagging and she was starting to

bark.” This was surprising and fortunate news for a dog that had collapsed in front of her just a few days prior.

They checked her out of the VHC the next day, but had a few stops to make before heading out of town. “We stopped at Wal-Mart and PetSmart to get her everything we needed to take care of her,” Deb said. “She had to be in a bed with a raised head or pillow for her neck.” They also purchased an elevated food bowl to keep from straining her neck.

At home, Sasha, the 9-month-old puppy, had strict activity restrictions for 28 days. “I’m not going to lie, she didn’t like it,” Deb said. Deb diligently administered Sasha’s steroids every 24 hours for six weeks. “If we stopped too early it could cause relapse,” Deb said.

Sasha’s 28 day therapy is now complete and she is back to full speed, running and playing with her sister. “Drs. Vaske and Guess and the students were wonderful,” Deb said.

Treatment of such a dangerous disease requires excellent home care as well. “Sasha’s owners were awesome,” Dr. Guess said. “We were immediately all on the same page to do what was best for Sasha, and willing to do what needed to be done.”

“Even though steroid-responsive meningitis-arteritis is the second most common inflammatory central nervous system disease of young dogs, it is often overlooked,” said Dr. Ken Harkin, small animal internal medicine professor and section head. “It can be a daunting prospect to put a young dog on high doses of corticosteroids, especially if there is a concern for an infection. Dr. Guess took the necessary diagnostic steps so Sasha could be treated with confidence and for the appropriate duration to maximize the chances for a great outcome. We’re obviously thrilled Sasha responded so well.”

What seemed to be a routine surgical complication, ended up being an unrelated life-threatening condition for Sasha. Thanks to persistent owners, and a team of veterinarians including primary care, emergency and VHC doctors, Sasha can now run and play with her sister, Passion! ▼



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The Veterinary Health Center Miles Fund provides endowed support for indigent animal care, new clinical or research equipment, animal health studies and VHC facilities.

Donors to the Miles Fund receive a car window decal to acknowledge your support of the VHC and its missions to investigate animal diseases and provide cutting-edge care for our patients and the public we serve.

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Racing to Save Miss Julie X

Kasey Etbauer's journey to save her beloved race partner.



Photo Credit: Photo Makers

Miss Julie X had her eye on another win as she burst through the gate of a Salina, Kansas arena. Julie was ready to add another title to her resume. As they came out of the gate, her owner and rider, Kasey Etbauer, could feel the arena surface was less than favorable, however Julie did not hesitate as she rounded the first barrel and built momentum into the second turn.

In one heart-pounding moment, Kasey felt Julie falter and tried to slow her down, but Julie is a gritty competitor and refused to stop. She finished the run and came out of the arena gingerly holding her leg.

Hailing from Goodwell, Oklahoma, Julie and Kasey are frequent competitors on the rodeo circuit. The pair built quite a reputation competing at the Kansas Professional Rodeo Association (KPRA) finals, qualifying for the Prairie Circuit Rodeo, and winning a number of other futurities, derbys, and professional rodeos.

"I've had horses long enough to know that when they are non-weight bearing, either something broke or it's an abscess, and I knew it wasn't an abscess," Kasey said. "I knew instantly that something very bad had happened."

A local veterinarian examined Julie. "He told me it was her stifle and that it was a mess," Kasey said. The stifle is comparable to the human knee. If there was any chance to repair the stifle, it required expert care, so Kasey called the Veterinary Health Center.

Kasey had to wait until the competition was over to bring her trailer in to load Julie. "I gave her some Banamine (an analgesic) and wrapped her leg in ice," Kasey said. Then she had to drive the 60-mile stretch to Manhattan in the dark, as slowly and carefully as she could. Kasey had traveled to the rodeo alone, but a rodeo friend, and owner of a previous VHC patient, rode with her to the VHC.

"They were ready for us," Kasey said. When she arrived, Dr. Dylan Lutter, clinical assistant professor of large animal emergency, and Dr. Nathan Canada, equine surgery resident, unloaded Julie. After an initial examination, they determined that the injury was in Julie's pastern area just above the hoof, and they recommended radiographs to determine the diagnosis.

As the team returned from taking radiographs, Kasey was preparing for bad news. "They said she had a subluxation of the pastern, which translated to, she tore all the ligaments around the joint," Kasey said. "My first words were "I just need to know if you can you save her. I don't care if I ever run her again." Kasey had owned the 16-year-old horse since Julie was 3. "She's like family to me," Kasey said.

*I just need to know if you can
you save her. I don't care if I
ever run her again. She's like
family to me,*

- Kasey Etbauer

Everyone agreed that surgery was the best option. Fortunately, the VHC is home to one of the most highly regarded equine orthopedic surgeons, Dr. Elizabeth Santschi, professor of equine surgery. The team applied a specialized splint for lower limb injuries to make Julie more comfortable until surgery the next day.

Dr. Santschi arrived the next morning to look at Julie. "It was great that she arrived so quickly," Dr. Santschi said. "With appropriate first aid and quick arrival, we had the best patient possible to go into surgery that day."

"Dr. Santschi called me the next day and visited with me and explained what was going to happen and when they were going to do the surgery," Kasey said. "She suggested that as much as she knew I hated to, I should head home

Discovering Hope

Visualizing Lameness

Dr. Liz Santschi

and they would take care of her and let me know when she would be able to come home.”

“Once we had Julie anesthetized and were able to manipulate her leg without causing her pain, it was clear that she had done substantial damage to her tendons and ligaments at the back of her limb,” Dr. Santschi said. “We do a lot of elective pastern fusions, and the damage in Julie’s leg was obviously much worse.”

Over the next couple of hours in the surgery suite, Dr. Santschi placed two plates on the dorsal, or front, surface of Julie’s pastern joint after removing the cartilage from the joint. She secured the plates with 10 screws and after closing the incision, placed a half-limb cast on the injured leg. “This surgery required more hardware than usual because of the complete loss of support at the back,” Dr. Santschi said. “Julie would need to rely on the plates and screws alone to stabilize her leg, so we made sure it was very strong.”



A radiograph shows Julie’s pastern after surgery with 10 screws to stabilize her leg.

Once the surgery was completed, the long and challenging road to recovery began. Julie stayed in the hospital for a week and received medications to prevent infection and treat her pain. Jen Panzer, VHC equine surgery technician, owns a boarding facility where they planned for Julie to spend the next few weeks recovering before the six-hour trip to Oklahoma. Jen carefully watched Julie daily and reported to Dr. Santschi and Kasey. After just a few days, Jen noticed a sore starting to form at the top of the cast. She informed Dr. Santschi and Julie returned to the VHC for a cast change and continued care.

As soon as she was strong enough, 23 days after her accident, Julie was loaded into Kasey’s trailer to head home. She would only be there for a couple of days as the Etbauers had arranged for their veterinarian, Dr. Chris Morrow in Amarillo, Texas, to continue her rehabilitation and full time care at his practice.

Dr. Santschi worked closely with Dr. Morrow while he cared for Julie. “She requested x-rays every so often. He gave her updates on how she was traveling and how the cast was

doing,” Kasey said. “After she was out of the cast, Dr. Santschi wanted a special shoe made with a long extension out the back and a wedge to support the back of the foot.”

“Dr. Morrow was a very big part of her recovery and he deserves a lot of credit.” Dr. Santschi said.

Julie finally returned home and began moving more. “She had been confined to a stall for almost six months. Now, she’s gradually working out to a bigger turnout,” Kasey said. “With the whole ordeal, she lost weight, but she’s gained it all back and looks good.”

“I would recommend the VHC to anyone. I had never used them because I live far away, but I couldn’t have asked for a better team of people. They kept me updated regularly, she had excellent care and Dr. Santschi still checks on her and lets me know if she wants to see a new set of x-rays. They are amazing. They worked closely with my veterinarian and he spoke very highly of Dr. Santschi. “For such a bad situation, it was a good experience.”

While Julie is officially retired from running barrels, she has been a successful embryo donor, and there are two recipient mares pregnant with Julie’s offspring. Kasey and her husband, Dan, a National Finals Rodeo champion, run a breeding and training program where Julie will be a star. She will not race again, but her legacy in the arena will undoubtedly live on through her foals. ▼



Kasey regularly sends pictures and video to Dr. Santschi so she can monitor Julie’s progress.



Dr. Santschi requested a special wedge-shaped shoe to support Julie’s foot.



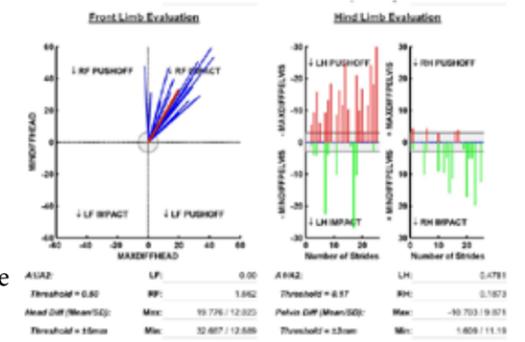
Improved lameness treatment is an important mission of the Veterinary Health Center equine service and the service continues to grow in capability and expertise, partially thanks to Dr. Elizabeth Santschi, professor of equine surgery.

Dr. Santschi joined the VHC last year and brings a wealth of knowledge to the equine service in the area of orthopedic surgery and lameness. She will play a leading role in the Equine Performance Testing Center planned for the VHC.

Not long after Dr. Santschi arrived, she introduced the Lameness Locator to the VHC. “The Lameness Locator is a wireless computer based system that gives us quantitative results. In other words, it can measure the degree to which a horse is lame,” Dr. Santschi said. “It can be particularly helpful in cases of multiple limb lameness, which can be difficult to perceive and discriminate with just the naked eye. The locator is able to detect asymmetries that are more subtle than you can see with your own eyes.”

According to Dr. Santschi, lameness is detected by observing asymmetry between the two front legs or the two hind legs. “The Lameness Locator has accelerometers that

are placed on the head and on the top of the croup or the horse’s hindquarters and it is able to measure the asymmetry in between strides. There is also a gyroscope that is placed on the right front pastern that will tell the machine which leg is on the ground at a given time which helps the machine determine laterality, in other words, which leg is most asymmetric.”



The chart figures demonstrate different detections of lameness for front leg evaluations (left side line-graph) and hind leg evaluations (right side bar-graphs).

The Lameness Locator uses charts, like the one pictured, to evaluate each limb. “It’s valuable because it gives the clients a graphical representation of the horse’s lameness,” Dr. Santschi said. “There are some clients that have a performance issue but don’t think their horse is lame. I can use this system to show them their horse really is lame. Sometimes they think it’s lame on the left front leg when it’s really the right front that is the source of the horse’s lameness. It helps by giving us another piece of the puzzle when we are trying to interpret and treat lamenesses.”

The Lameness Locator allows clients to visualize their horse’s condition, and it also serves as a training tool for students. “It’s very valuable for students because it brings home the message that asymmetry is the best way to determine if a horse is lame. It really does help them learn to connect what they are seeing with their eyes and what they are seeing graphically represented on the computer,” Dr. Santschi said.

The Lameness Locator will also serve as a valuable clinical research tool in analysis of post-surgical patients. Dr. Santschi hopes to use it to assess improved comfort of arthritic patients after a novel surgical procedure. ▼

Tough Love

How will you ensure your pet receives the care it needs if you can no longer provide it? Enroll your pet in the Perpetual Pet Care Program and know it will receive the best care available.

Can anyone love your pets like you do? Many of us think it would be impossible and have wondered what would happen to our pets if we could no longer care for them. Thankfully, there are people in this world like Jen Free.

Jen is a large animal technician at the Veterinary Health Center. About two years ago, she adopted two mature cats, Toughy and Beauty, whose owner had enrolled them in the Perpetual Pet Care Program (PPCP) at the College of Veterinary Medicine. The PPCP is designed to care for pets when owners are unable to provide the care needed. In this program, the owner creates a fund that will provide for the animal's care throughout its life.

One morning, Jen noticed Toughy acting strangely. "She didn't sleep in bed with me and she didn't come to breakfast," Jen said. The second morning Toughy did not come to breakfast, Jen knew it was serious and she needed to visit the VHC. "She's a very reclusive cat. She sleeps with us and comes to eat, but she doesn't want to be held and loved on," Jen said. "We tore the house apart to get to her."

Once the feisty Toughy was contained, she was admitted to the Internal Medicine service at the VHC. Among the initial diagnostics was a urine sample and the clinicians noticed blood in her urine. Upon further examination, they noticed an irregularity in her heartbeat. Dr. Justin Thomason, assistant professor of cardiology, was called in and performed an echocardiogram. He found Toughy had hypertrophic cardiomyopathy (HCM), which was not severe and can be managed with medication, but did affect how the rest of her stay in the hospital was handled. HCM is a thickening of the walls of the ventricles which can affect blood flow through the heart.

Because of the bloody urine, the internal medicine doctors pursued the bladder as the main cause of Toughy's discomfort. Through radiographs, they found she had a stone in her bladder that was too large for her to pass and too large to dissolve with other treatments. The surgery team would need to be called in quickly as Toughy's condition would only worsen.



Dr. Emily Klocke, Dr. Julie Ann Gervais, resident, and Hillary Wolfe, fourth-year veterinary student, closely watch Toughy after surgery.

Dr. Emily Klocke, associate professor of surgery, led the surgery team through a routine cystotomy, a surgical incision into the bladder. "We make an incision into the bladder to remove the stone and flush the bladder and urethra to remove crystals," Dr. Klocke said. "Then we take a sample of the bladder mucosa to test for bacteria and perform a mineral analysis to prevent further stones." Toughy's test results showed a common type of stone but no infection, which was unusual and means she would be at risk of developing stones again.

As a reclusive feline, Toughy was not a fan of all the attention and upon returning home, required some time before she warmed back up to Jen.

While Toughy may not have enjoyed her time away from Jen's home, it was critical for her survival. The PPCP and Toughy's previous owner made this surgery possible. "It's wonderful that she was able to have this stone removed," Dr. Klocke said. "Everything was in place to take care of her as her previous owners would have wished."



The bladder stone, circled in red, was nearly 2 cm long.

"PPCP saved her life," Jen Free said. "I love her, I would cry my heart out if something happened to her." Surgery was the only option for Toughy. The PPCP will provide support throughout the rest of Toughy's life, and the funds that are not used for Toughy's care will support the College of Veterinary Medicine, as the previous owner wished. ▼

Is your pet enrolled in the Perpetual Pet Care Program?

For more information about the PPCP, contact the Development office at 785-532-4378 or visit PPCP.vet.ksu.edu.

Want to learn more?

New veterinary technician intern classes will begin each year in January and June. For more information about this program, contact Lisa Bryant at 785-532-3941 or lbryant@vet.k-state.edu.

Training Technicians



Katherine Barker and Lisa Bryant played an important role in implementing the Veterinary Technician Internship Program.

A veterinary technician is a loving hand, a lifesaver, a teacher and so much more. They are essential to any veterinary practice, often working behind the scenes to provide every patient with compassionate and thorough care.

At the Veterinary Health Center, we train everyone from veterinary students to board-certified clinicians, and now, veterinary technicians. We are happy to introduce our Veterinary Technician Internship Program.

This internship program is a one year, post-graduate rotating small animal internship designed to give new technician graduates experience in an academic environment, training with registered veterinary technicians and board-certified veterinary specialists.

"This program will provide veterinary technicians the opportunity to expand and refine their skills," said Lisa Bryant, director of the Veterinary Technician Internship Program.

Technicians accepted into the internship program will have the opportunity to rotate through core services including internal medicine, radiology, surgery, anesthesia, ICU along with other elective services. "Interns will have opportunity to assist with complex cases and procedures not normally seen and performed in a general practice setting," Lisa said.

Katharine Barker, registered veterinary technician, interned at the VHC this past year. "My internship allowed me to expand my knowledge and skills as an RVT," Katharine said. "In school you only had time to do technical skills once or twice. During my internship, I worked primarily with small animals and was able to see and do many things you wouldn't routinely do as a veterinary technician in a private clinic."

This program allows the VHC to develop relationships with schools of veterinary technology and their students, which benefits everyone. "As part of the recruitment program, our registered veterinary technicians travel to technician schools and present lectures and labs to the students educating them about VHC specialty services and the veterinary technician role in a specialty hospital. Academia can be very intimidating to both new and seasoned technicians; we're working to take some of that mystery and intimidation out of the equation," Lisa said.

After the internship, the technician interns may apply for full-time positions at the VHC as they are available. "I have accepted a position in the Oncology department starting in August," Katherine said. Katherine chose to stay at the VHC because the quality of medicine practiced here makes a difference in our patients' lives. ▼

Dystocia Distress

Liesal Henson watched Hansi go hide as she normally did when it was time to lay her eggs. Hansi, a 7-year-old Cockatiel had laid many eggs in her years and Liesal was used to her routine of hiding as she laid an egg.

This particular session started the same way. Hansi went to her usual spots, but Liesal noticed Hansi seemed to be straining and she was not producing an egg. This continued for a few days and Liesal knew something was wrong. "Hansi was just not herself," Liesal said.

Liesal began doing her own research. A book about bird care led Liesal to believe Hansi might be suffering from egg binding which is the inability to pass an egg.

Liesal and Hansi made the trip to the Veterinary Health Center. Dr. Dana Lindeman, exotics and zoological medicine intern, examined Hansi and palpated a large abdominal mass.

Dr. Lindeman and Dr. David Eshar, assistant professor of exotics and zoological medicine, ordered radiographs for Hansi which, as expected, revealed an egg of normal size and shape - Hansi just needed assistance passing it.

Egg binding, or dystocia, can happen as a result of calcium deficiency. "Birds in captivity require a well-balanced diet of wholesome fruits, vegetables and avian pellets and minimal seeds and human food," Dr. Eshar said. "Female birds use

large amounts of calcium to produce their eggs and then there is not enough calcium for muscle contractions to push the egg out."

Hansi received calcium gluconate injections and fluids at the VHC while she rested overnight in an incubator.

"I called at 9 in the morning and Hansi had still not passed the egg," Liesal said. It did not take long after Liesal's call for Hansi to make progress. The zoological medicine team gave Hansi another treatment and approximately 20 minutes later, at 9:35 am she laid a perfectly normal egg.

"Not all cases of dystocia or egg binding can resolve in such an uneventful manner," Dr. Eshar said. "Often times surgical intervention is required including a full abdominal surgery, which would require a specialist's knowledge and expertise to perform this high-risk micro-surgery."

Hansi's quick recovery allowed her to return home with Liesal. "She's my pal and my pet. She's a big part of my life," Liesal said, glad to have Hansi back. ▼



Dr. Megan Wilson, first year resident (left) assists Dr. James Roush (middle), in surgery.

Resounding Results

Some people believe the number 13 is lucky, but luck has no place in veterinary medicine specialty board certification. Exhaustion, hard work, hundreds of patients and thousands of hours, are just a few of the challenges in becoming a board-certified specialist.

At the Veterinary Health Center, the Small Animal Surgery service has built a reputation over the past 18 years of excellence in training residents. The last 13 small animal surgery residents passed the boards on their first try, a stunning accomplishment by both the individual residents and their American College of Veterinary Surgeons-boarded surgery mentors at the VHC.

The small animal surgery residency program is a grueling three years of training under a board-certified surgeon. It is a competitive program; many qualified veterinarians do not get a spot at all, despite years of application. Applicants must first achieve a DVM and complete a one-year internship before pursuing a residency.

Residents spend three years as house officers at the VHC. They see patients, teach students, conduct research projects and write papers, all while studying for their ultimate goal: passing specialty board exams.

Even harder yet, are the board exams. With a 30 percent pass rate in the first year, many residents will take it, not just once or twice, but even four or five times. Not at the VHC, though. VHC Residents for the majority of the last two decades have passed on their first time and, in the past twenty-five years, always by their second attempt. "The first-time pass streak of 13 residents started when Dr. Walter Renberg arrived in 1998," according to Dr. James Roush, Doughman Professor of Small Animal Surgery. Dr. Walter Renberg, small animal surgery professor and section head implemented a weekly Journal Club to ensure residents stay up to date with new material in surgery journals from the last five years. They study academic journal articles weekly for the three years they are at the VHC in addition to having access to the two years of journal club notes prior to their arrival. "This intensive review makes a big difference in the written portion of the ACVS exam," Dr. Roush said. In addition, surgical residents attend weekly rounds that include house officer presentations, book reviews and patient rounds.

Many veterinary hospitals are also challenged with meeting case minimums for their residents. "If a resident isn't able to see enough of certain types of cases such as neurology, we would have to send them to another facility during their residency," Dr. Roush said, but our recent residents have met all their case requirements here at the VHC. The VHC is committed to providing each resident with an adequate number of opportunities to learn the necessary skills.

"One of the reasons I wanted to complete my residency at the VHC was actually because of their

pass rate on boards," said Dr. Megan Wilson, the newest small animal surgery resident to join the service, said.

Residents work hard inside and outside of the hospital, but they have another advantage at the VHC. It is called the McNamara Fund and it provides funds for small research projects and tuition and books in addition to annual travel for residents presenting at conferences. Residents are paid a small stipend for their residency, but expenses add up quickly when you add in the costs of going to graduate school and the inability to work for any extra income because of the already long hours.

"The McNamara Fund helps us recruit the highest quality small animal surgical residents, since it provides money that would otherwise come out of the resident's pocket," Dr. Roush said. Recruiting the best residents means not only continuing the board-certification streak, but providing the best care for VHC patients.

"My mentors at the VHC pushed me in a way I have never been pushed before - with a life on the table. They had the faith and confidence in me that I initially lacked," Dr. Marian Benitez, past resident, said. "With time and their support, I was able to successfully complete the residency having done hundreds of surgical procedures and with the background knowledge base to successfully complete my board certification."

Residencies are life changing in many ways. "During my time at the VHC I met my future husband (a veterinary student) and maid of honor (another resident)," Dr. Benitez said.

With the stellar combination of passionate and dedicated faculty, talented residents and financial support, VHC residents do not need luck to extend the streak, but they can use your help. ▼

Help Support Excellence!

If you would like to support residents in small animal surgery or any of the other services, please contact the Development office at 785-532-4378 or send your donation to 103 Trotter Hall, Manhattan, KS 66506.

Dr. Trisha Ostrom claims her story is the “ordinary” story of a veterinarian, but her persistence and passion to find solutions for her patients makes her anything but ordinary.

Dr. Ostrom grew up in Wichita and as a shy child, found her comfort in the world with animals. She knew being a veterinarian required a strong set of communication and people skills. When she started college at Kansas State University, she pushed herself out of her comfort zone. “I was committed to pursuing my dream, but college gave me pause. Was I really going to be able to do this?” Dr. Ostrom said.

Sparky, her Labrador, made the transition of college easier for Trisha. The dog, blind since he was 6 years old, developed prostatic cancer while Trisha was in veterinary school. As a student, she was able to learn from his diagnosis and treatment. “It was ultra-traumatic, but he would have never gotten that type of care if I wasn’t going to veterinary school,” said Dr. Ostrom who earned her degree in 1999.

Her comfort with small animals is apparent by her compassionate interactions with animals and demonstrated by the company she keeps. Beanie, a mixed breed that goes to work daily with Dr. Ostrom, is the matriarch of Dr. Ostrom’s animal family at almost 16 years old. She has three other dogs, the youngest of which is 13, not to mention the three cats that also share their home.

Dr. Ostrom and the team at Town and Country Animal Hospital in Salina, Kansas, are known for their work with shelters and passion for exploring all options to help their patients. “I enjoy working with rescue and shelter animals,” Dr. Ostrom said, as she points out their turtle in the corner of the office. Dr. Ostrom’s colleague, Dr. Bickett, had taken on a special patient a few days before. A turtle whose shell had been badly fractured, was now held together with surgical screws and wire as they wait for it to heal. The day before also brought a Mississippi kite bird, which was examined, treated and released.

While Dr. Ostrom has a strong passion for internal medicine and enjoys surgery, she is quick to recognize when the experience of a board-certified specialist could offer the help one of her patients needs. “I try to offer it early rather than wait until there is nothing more I can do,” Dr. Ostrom said. “If I’ve tried and I am not successful, clients appreciate the option. Some people don’t even know that veterinary specialists are available.”



Dr. Ostrom, who sends nearly all of her referred patients to the VHC, is also a client of the VHC on occasion. When Beanie was much younger, she injured herself jumping onto the Ostroms’ bed. “Dr. Renberg (VHC professor and section head of small animal surgery) thought Beanie ruptured her disc laterally,” Dr. Ostrom said. “She jumped up on the bed and yelped and bit at her side. She was getting obvious shooting pains. He evaluated her and told me he thought it was ruptured, and pinching a nerve.” Now, medication eases the pain of that injury as well as other aging conditions.

Dr. Ostrom routinely explains the process of visiting the Veterinary Health Center to clients when she suggests referral. “I try to drive home the added value they will get,” Dr. Ostrom said. “I tell them, ‘Students are going to meet you and then the case will be presented to a board-certified clinician. A whole team will be weighing in on your case even if you don’t see it.’”

“When I take my own pets there, I really enjoy the interaction with the students. I was in their shoes and know firsthand how invested they are. You know that your pet’s going to get really good care,” Dr. Ostrom said. Good care starts with the primary care veterinarian and the VHC is fortunate to work with primary care veterinarians like Dr. Ostrom. ▼

Dear Friend,

VHC’s Small Animal Surgery service has a history of excellence and commitment to patients, clients and students.

As a team, we aim to provide advanced surgical options with an understanding and compassionate approach to healing our patients. We provide hundreds of patients each year with a greater quality of life and students, interns and residents with invaluable career experiences.

We have the following WishList that is essential to helping us accomplish our mission and every donation helps us meet our goal. For more information on assisting us with this WishList, please contact Kristin Loving at 785.532.4046 or mail your donation to VHC Development, 103 Trotter Hall, Manhattan, KS 66506 and note “Small Animal Surgery Donation” in the memo.

Dr. Walter Renberg
Professor and Section Head, Small Animal Surgery

Small Animal Surgery WishList

McNamara Endowment, Any Amount

This endowment provides annual funding for a national surgical education meeting for each SAS resident. It pays the tuition and supply costs for the MS program that is combined with the residency at KSU CVM.

Surgery Technician Enhancement Fund, Any Amount

Technicians will benefit from an endowment that provides funds to pay for continuing technician education meeting travel, lodging and other expenses not covered by state funding.

Stryker MicroPower Surgical Instruments \$32,400

New surgical drills/wire drivers are necessary to replace two aging prior model drills require frequent repair. They are used in nearly every orthopedic procedure at the VHC.

Endowed Small Animal Surgery Resident \$1 million

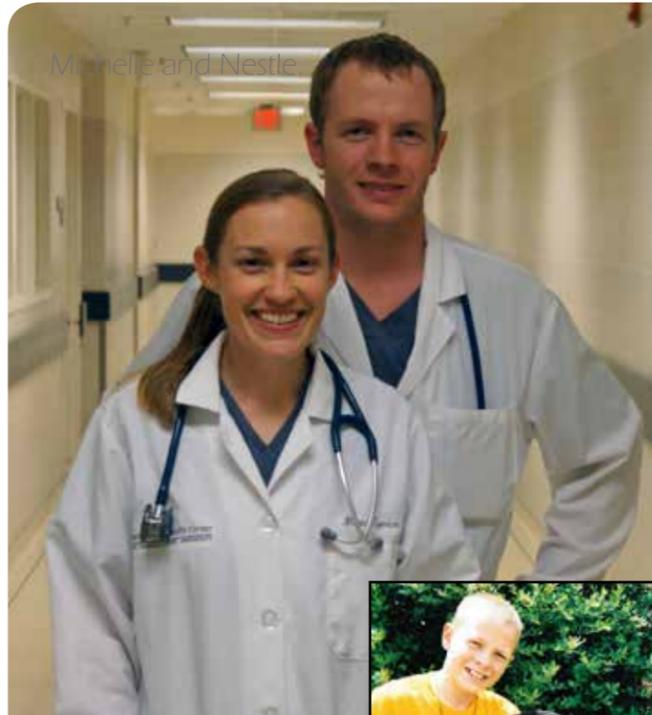
Addition of a third annually funded Small Animal Surgery (SAS) residency will enhance hospital faculty and bring top talent to the VHC.

Small Animal Surgery Remodel \$3 million

The current Small Animal Surgery suite in Mosier Hall was constructed in 1979 and requires remodeling to reflect modern work flow and sterility considerations. Remodeling the surgical area would improve conditions of many surgical procedures and efficiencies to accommodate increased surgical case load.

Student Spotlight

Megan Spencer and Bruce Figger



shadowing veterinarians. I really liked that I could talk to people, but I could have my passion for animals so it was the best of both worlds. I pursued a Master's degree in biology where I studied neonatal physiology of 9 Banded Armadillos. I got to raise armadillos, do the research and then they got to go to a facility and live out their lives. I took a year off in between veterinary school and my Master's and I was a technician for a year to see if I would like the field. I loved it. I had intended to study exotics in veterinary school. When Bruce and I started dating, he took me out to his cattle farm and I didn't even know where to stand to be safe. Bruce taught me a lot about cattle, and I got really interested in that, too. Now I'm thinking, I would just prefer to do everything, so a mixed animal practice where I can see exotics and help build that caseload, but also, especially, in emergency cases, see large animals. Bruce would really like to build up the large animal side and see cattle and horses. It would be great to work at the same practice and buy into one someday. And farm. Bruce would like to have land and cattle and farm.

(Bruce is a recipient of the Veterinary Training Program for Rural Kansas, which offers financial incentives to veterinary students to return to practice in rural Kansas. This is a competitive program that aims to bring much needed veterinary services to rural areas of the state.)

How did you two meet?

Megan: We met at the Shaft Party which is two weeks into school after the first big test of the first year - the "bones test." We met and ended up talking for a couple of hours. We were slow to start dating. Dating someone in your class is not something to take lightly. It can be awkward for your friends plus you have to spend the next several years working with them.

How has your relationship impacted your time as a veterinary student?

Megan: We try to keep our personal lives separate from our school lives. A lot of people didn't even know we were dating the first year we were together.

We study together a lot and just knowing what each other is going through is great. We each have different struggles, but it's helpful to have that understanding when you have had a difficult exam or have to go in and care for your patient in the middle of the night.

We got engaged in May, and Dr. Fingland found out about it during a budget project in our business class. If we had

a significant other, we could do the project together, so we filled it out as a married couple. We will get married a week after graduation.

Tell us about your families and the impact they have had on your career.

Megan: My family lives out of state and I don't see them as much as I would like, but they have always been very supportive and love hearing stories about school. They are there any time I need them. They come to visit and came up for Open House and White Coat Ceremony.

Bruce: My family has been really supportive, too. Dad was good about letting us practice on the cows - letting us pregnancy-check them.

Megan: He's been so good to us. He was great about letting me give injections and checking their mouths. He lets us preg-check for fun even if it takes forever.

We also have two parrots, Kiwi and Rio. They are both rescue birds and they are a big part of my life. Bruce is getting used to them even though Kiwi doesn't like Bruce. They are my pride and joy. We also have two horses.

What advice do you have for future veterinarians?

Bruce: Don't date your classmates. (jokingly)

Megan: Don't let negativity bog you down. Everyone tells you how much it costs, how much debt you will be in, but keep your eye on the horizon. Remember what your goals are and what you want to become. Also, take advantage of the opportunities to participate in things outside of the classroom, the things you do when you're not in class. People miss a lot of opportunities to go to conferences and to wet labs and that's where you get your passion back. You might get tired after a long semester and it's nice to go to a conference and meet veterinarians and remember what you want to do and also learn about new techniques and treatments.

Collectively, Bruce and Megan were in Bovine Club, Food for Thought, Student Chapter of the American Veterinary Medical Association (Bruce served as President), Exotic Club, Camelid Club and Swine Club. ▼

Why did you want to become a veterinarian and where do you see yourself after graduation?

Bruce: I knew I wanted to be active and be outside. I enjoyed working with animals and veterinary medicine just fit. I grew up on a farm and we have a Black Angus cow/calf herd in south central Kansas. I shadowed Dr. Bill Niederee in Great Bend, Kansas and I knew I wanted to treat large animals, especially cow/calf medicine, which is my favorite.

Megan: It wasn't one specific event. When I was young we lived on an exotic animal farm near Atchison, Kansas. It wasn't my parents' intention to have a farm, but a lot of animals needed homes and my parents built habitats for them and we opened it to the public. I have always been interested in unique animals and the care they needed. Dr. Carpenter (Dr. James Carpenter, VHC professor, zoological medicine) actually came to the farm when I was younger and that was great.

I was always interested in science and I thought I would be a doctor. I started shadowing doctors and then I started



Above, Bruce, age 10
Below, Megan, age 8



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Unit Update: 70 Days

15 students, 2 interns
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