# Animol Teaching hospi



## Animal

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



Patrice Scott, "AnimaLIFE" editor, with Clyde.

### Heart of the Matter

"It's great," Dr. Rose McMurphy says about Zoey the Border Collie going home. "It doesn't always end this way."

After seven years as editor of AnimaLIFE, I understand the sentiment behind Dr. McMurphy's simple but powerful statement. Life is a circle; the problem is we never know exactly where we are on the continuum. And each animal featured in this issue was in a different place.

Holli, a disabled alpaca, is a shining example of how to live life. Owner Michelle Zumwalt says the worst aspect was not knowing how long Holli would live. Michelle now says longevity is not part of the discussion. Life is today, right now.

Hannah Montana, a once neglected Harris Hawk, is now a cherished family member. The bird of prey's vision was restored thanks to owner Ken Lockwood and donors who helped pay for cataract surgery.

Fonzie, a retired racing Greyhound and hospital blood donor, was one of the most popular Greyhounds in town. However, the magnitude of what he'd done for animals and their families came full circle when his owners, David and Rose Kreller, learned Fonzie needed a blood transfusion.

What I learned from these patients and their owners is as simple yet profound as Dr. McMurphy's observation: Treasuring what you had and appreciating what you have really is the heart of the matter.

All the best.

Patrice Scott

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#### Animol III II

#### **Contents**

- Pg. 2 AnimaLIFE Editor's column
- Pg. 4 VMTH Director's column
- Pg. 15 Referring Veterinarian Dr. Mark Pierce
- Pg. 18 Faculty Profile Drs. Chris and Lindsey Blevins

Pg. 5 New Spin on Germ Warfare

Dr. Kate KuKanich investigates the spread of diseases between humans and their pets.





Pg. 6 A Big Hit

Zoey takes a big hit then becomes 'a hit' with VMTH faculty and staff.

Pg. 9 It's a...Baby!

Pregnancy not high on list of differential diagnoses for 56-year old chimp.





Pg. 10 Hawk Eyes

Prey tell? Hannah can see you now.

Pg. 12 Roll with It

Holli's attitude determines quality of life, not her disability.





Pg. 16 Circle of Life

Fonzie gives the gift of life to others and they give back.

About the Cover

Fonzie's life came full circle going from blood donor to recipient.

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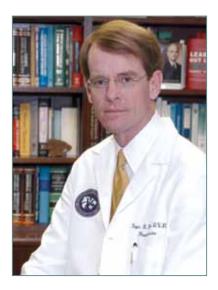
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#### AnimolLIF E



## Much to be GRATEFUL for

s I considered the articles for this edition of AnimaLIFE, it struck me there is much to be grateful for this New Year. But it's not the season that makes it special. It's what I am surrounded by every day that is truly special. I am proud to work with exceptionally talented clinicians whose commitment makes unlikely outcomes like Zoey's possible.

Our satellite teaching hospital in Omaha is another source of great pride. We are excited about the success of MidWestVET and the many ways the hospital benefits animals, pet owners, veterinarians and veterinary students from Nebraska and the region.

In our continued pursuit of excellence and to improve service to clients, patients and referring veterinarians, we have exciting news to share. It is a pleasure to announce the small animal wards and equine isolation will soon undergo renovations. We will keep you apprised of our progress!

I would like to wish you and your family a Happy New Year and thank you for supporting our hospital. It is worth noting that not one article in this magazine would be possible without one person loving one animal enough to go the distance. Success also required a referring veterinarian's support. It is with tremendous gratitude that I thank each grateful client and corporation whose contributions, large and small, made a tremendous difference in helping us provide exceptional patient care. And that, again, is something to be grateful for.

Thank you for supporting our hospital, and thank you for caring about animals.  $otin{$ 

Warm Regards,

Roger B. Fingland, DVM, MBA, DACVS Associate Dean, Clinical Programs Director, Veterinary Medical Teaching Hospital

#### Research Profile

### Dr. Kate KuKanich

# A New Spin on GERM WARFARE

n excited puppy wiggles with enthusiasm and jumps into a child's waiting arms who is quickly doused in puppy kisses. A cat leaves the litter box then snuggles with her owner on the couch. What do these two scenes have in common? Dr. Kate KuKanich.

Dr. KuKanich, assistant professor of small animal internal medicine, is a

team member of several investigative studies with the common theme of safety and the human-animal bond. "We share a close environment with our pets," Dr. KuKanich says. "What risks are involved, and how can I minimize risk of disease from certain behaviors?"

Dr. KuKanich earned a doctorate degree in microbiology and public health at the University of Tennessee before joining the Veterinary Medical Teaching Hospital faculty at K-State in 2008. There, she focused on bacterial sharing between pets and their owners. "We learned that healthy dogs and owners carry a higher-than-expected percentage of resistant E. coli in their intestines, and bacterial sharing does occur within households," she explains. "We also found that many of these E. coli possess virulence traits, giving them an advantage for causing urinary tract infections in both dogs and people."

Zoonotic diseases travel from animals to people. Anthroponotic diseases travel from humans to animals. "I am concerned about both," she says. "This is a One Health, One Medicine concept. It's important because we - all - species, live together."

News reports offer abundant stories about large-scale (zoonotic) outbreaks of E. coli and Salmonella in the food supply. Much less is discussed when an anthroponotic transmission occurs in the home.

Say, for example, an owner is taking an antibiotic, uses the restroom, but doesn't wash his hands. In the kitchen, he plunges his hand into a box of dog treats and tosses one to Missy, his happy Labrador. Days later, Missy goes to her veterinarian where she is diagnosed with a urinary tract infection (UTI). "The bacteria migrate from the dog's rectum to the vulva," Dr. KuKanich explains. "Bacteria causing UTIs originate from the gastrointestinal tract."

Missy doesn't respond well and has to be put on a different antibiotic. That's because the owner unwittingly introduced an antibiotic resistant bacteria to his dog's gastrointestinal tract when he gave her the germ-coated dog treat. "It is this type of scenario, sharing resistant bacteria in either direction, that we are concerned about and designing studies to further investigate," she adds. Dr. KuKanich is a member of multiple



Dr. Kate KuKanich with her Old English sheepdog, Ollie, and cat, Rocky.

research teams investigating a vast array of issues affecting the One Health concept. One study examines methods to increase hand washing in human hospitals. "We are studying hand hygiene practices in the hopes of reducing hospital-acquired infections and the effects of various motivational tools in outpatient clinics and hospital cafeterias." Her quest to reduce hospital-acquired infections extends to veterinary clinics as well. "We found veterinary clinics do an excellent job eliminating Gram-negative bacteria such as E. coli, but we were able to provide cleaning suggestions to better eliminate enterococci (bacteria) from surfaces."

Other investigations relate to safety at petting zoos and Crohne's disease (CD). "My goal is to help make petting zoos a safer place for kids to have hands-on educational experiences with animals, by teaching the importance of good hygiene," she says. In another study, Dr. KuKanich is researching the organism Mycobacterium avium paratuberculosis (MAP) that is responsible for Johne's disease in cattle and long-suspected to contribute to CD in humans. CD is an extremely painful condition that attacks the body's intestinal system.

The key to maintaining a close relationship with your pet and staying healthy is the one most suggested (or pounded in to you) by your mother: wash your hands. "Use common sense, wash your hands frequently, and teach your children about good hygiene around all animals," Dr. KuKanich advises.

Dr. KuKanich lives near Manhattan with her husband, Dr. Butch KuKanich; their Old English sheepdog, Rocky; cat, Ollie; and 12 ducks.



Story by Patrice Scott

Zoey finds comfort in the ICU resting on Blue Monkey, a gift from Dr. Rose McMurphy. The stuffed toy once belonged to Dr. McMurphy's beloved dog Gabby, who recently passed away. n accident that took only a second in the making required a monthlong hospitalization and a remarkable commitment on the part of the patient, her owners and teaching hospital faculty.

Zoey, a 4-year-old Border Collie, arrived at the hospital on June 15 at 9:12 a.m. "She was unconscious," professor of anesthesiology Dr. Rose McMurphy explains. "She had evidence of a traumatic brain injury, and she was bradycardic (low heart rate). We immediately put her on a ventilator."

The specialists evaluated Zoey using the Glasgow Coma Scale. Her prognosis was guarded.

Just hours earlier, Zoey had been dashing carefree around her Crab Orchard, Neb., farm. Zoey's owners Casey and Trudy Tagart decided at 8 p.m. it was time to enjoy the outdoors and play ball after spending time in the house. Trudy ushered Zoey and her four 6-week-old puppies to the front porch. "I feel like this is all my fault," Trudy says. "I asked Zoey if she wanted to go play ball. I went inside to get it, and that's when it happened."

Zoey's attention shifted to a crow, and the chase was on! It was great fun, until she darted across the half-mile long driveway just as a friend in a

### "I remember looking at her treatment sheet for the first time and thinking, 'Holy cow, where do I even start!'"

#### - Jessica Harrison

pickup truck was stopping by. "She was pulling herself using her front legs to get off the road," Trudy says when she reached her injured dog.

Casey rushed Zoey to an emergency veterinary clinic 65 miles away in Lincoln while Trudy stayed home to care for the puppies. Radiographs revealed a broken pelvis. The next morning, the Tagarts were given the choice to euthanize Zoey or take her to K-State — quickly. "Everyone's heard of K-State's reputation, so let's go," they concluded.

"We knew about the broken pelvis, but we didn't know what else was going on," Trudy says. They made the three-hour trip to Manhattan, and about 15 miles outside of town, Zoey began to wail.

Zoey's brain was swelling. Her body temperature was low. Her blood pressure was low. Her heart was slowing. "This is as critical as it gets," Dr. McMurphy says. "The treatment is to try to stop the swelling of the brain. We evaluated her arterial oxygen and carbon dioxide levels and monitored her heart rate, ECG and blood pressure," the critical care specialist

explains. "We gave her mannitol (to reduce the brain swelling) and within five to 10 minutes she was very responsive."

Radiographs showed another potentially life-threatening problem: a tear in her urethra. "She was leaking urine into her abdomen," Dr. McMurphy says. Zoey now needed surgery to repair the tear and to repair the pelvic fractures. "We continued evaluating her neurologic state, but she was too critical to go to surgery," Dr. McMurphy says.

Small Animal Surgery resident Dr. Marcos Unis knew this was going to be an uphill climb. "She's probably the most critically injured patient I've ever seen," he adds.

Armed with the knowledge following Zoey's physical exam and tests, her medical team had the full picture of her medical

problems. She had a traumatic brain injury, multiple pelvic fractures, a spinal fracture, sacroiliac luxation, a dislocated pelvis, partial rupture of the prepubic tendon, multiple pulmonary contusions and a ruptured urethra. She was given: oxygen; lidocane to help stabilize her heart rate; antibiotics; a fentanyl drip to control pain; IV fluids; a urinary catheter; the anti-coagulant, heparin; drugs to regulate her blood pressure; and drugs to prevent regurgitation.

"Once she was stable, the neurological exam showed that Zoey had no anal tone," Dr. Unis says. "That's a bad sign and probably due to her spinal fracture. She was basically a paraplegic with no voluntary movement."

On June 17 at 11 a.m. Zoey was stable enough for the surgeons to repair the urethral tear. The four-hour procedure went well. However, Zoey started to develop a serious condition called Disseminated Intravascular Coagulation (DIC). This occurs when the balance between bleeding and clotting is disturbed. "Ultimately, patients with DIC can't clot their blood and bleed into the GI tract," Dr. McMurphy explains. "Zoey required fresh frozen plasma and several blood transfusions." She would require five blood transfusions throughout her hospitalization.

Surgeons still needed to repair Zoey's pelvic fractures. However, to be a surgical candidate, Zoey needed a platelet count greater than 200,000. Hers was 20,000. "It was impossible to take her to surgery because of the DIC." The risk of catastrophic hemorrhage was too great.

Taken just days before the accident, a healthy Zoey nurses her pups.

Zoey didn't feel like eating so her caloric intake was poor. "Nutrition is critical in a multi-trauma patient," Dr. McMurphy says. So a gastric feeding tube was placed to allow clinicians to supplement Zoey's calorie intake.

Comfort comes in all forms. This time it was critical care for the heart and soul. Dr. McMurphy clearly recognized how hard Zoey was fighting to stay alive. She brought in her beloved Gabby's favorite stuffed toy, Blue Monkey, to be a constant companion for Zoey in ICU. (Gabby passed away earlier this year.)

This act of kindness reinforced the Tagarts' decision to come to K-State. "When I heard about Blue Monkey, I knew Zoey was in warm, loving hands," Trudy says. "I loved it because I knew she had something there to cuddle up with and feel secure." In fact, one of

Trudy's favorite photos was taken during her and Casey's weekly trips to the hospital when Zoey was resting with Blue Monkey.

It was several days of intense supportive care before Zoey was strong enough for the surgery to repair her pelvic fractures. Senior veterinary student Jessica Harrison was assigned to Zoey's case. "I remember looking at her treatment sheet for the first time and thinking, 'Holy cow, where do I even start!' But, Zoey made it easy. "She had so many treatments that

needed to be done, including rotating her every four hours, medicating her and drawing blood twice a day. Patients usually get a little cranky in ICU because they get tired of us. Not Zoey. Every time I would come to do her treatments, or just come to sit with her, she was always happy to see me."

Seven days following her emergency arrival, Zoey was taken to surgery to repair her pelvic fractures. "A week is a long time to wait on a pelvic fracture, but we didn't have any other option," Dr. McMurphy says. Her blood pressure dropped during the procedure, and she needed another blood transfusion. Other than those two issues, Dr. Unis says the procedure went well. She would spend another week in ICU.

On June 30, Zoey celebrated a milestone: she left the ICU. She was one giant step closer to going home. On July 6, Zoey was discharged. Dr. McMurphy shares the satisfaction of being part of a case like Zoey's, and watching her go home. "It's great. You can't describe it. It doesn't always end this way."

Jessica is grateful to have been part of Zoey's health care team. And, she believes that "team" made the critical difference in those critical hours. "Teamwork and really high standards of care are what it takes to treat a patient like Zoey," Jessica says. "And that is exactly what she got. It was great to be part of it."

When Zoey returned for a recheck, Trudy says it took quite a while to get from their car to the exam room, but not because of a medical problem. "When we came, it took about 10 minutes just to get inside. All these people kept coming up saying, 'Hey, Zoey,' and she'd start wagging her tail. Everybody heard we were there and they came to say hi."



Zoey (front) at home with her four pups.

# It's a... Baby!

Story by Patrice Scott Photo by Dave Adams

Some pregnancies are a surprise. Others, it turns out, are destined for the record books.

Meet Susie, the world's oldest known chimp to give birth in captivity. She is also the third oldest chimp in North America. Susie's "surprise" led to national and international media attention. Perhaps the most surprised are the people closest to her.

Dr. James Carpenter, professor of zoological medicine, says Susie's keepers noticed subtle changes in the 56-year-old. They conducted a brief palpation and reported a firm and slightly distended belly. "At that point, you start going through reasonable differential diagnoses," he says. "Abdominal disease including neoplasm (tumor) was at the top of the list. You prepare yourself for bad news in a situation like this."

However, caregivers had to find out exactly what was wrong, and on June 14 a group of faculty traveled to the zoo to examine Susie. "We organized a team that consisted of three different hospital services: exotics, large animal and radiology," Dr. Carpenter explains. "We darted Susie with immobilizing drugs, intubated her with an endotracheal tube, administered gas anesthesia, put in an IV catheter; then Dr. Biller performed an ultrasound evaluation on her."

Dr. David Biller, professor of radiology, will always remember the moment. "The room is full of people," he says. "I put the probe on and all of the sudden, there it was. 'This abdominal mass has a heartbeat,'" he announces to the crowd. "I was looking for an ovarian, splenic, or GI (gastrointestinal) mass. I was surprised and elated to see the bony skeleton and heartbeat of a fetus."

Dr. Carpenter shared the joy. "We were all ecstatic," he says. "No matter how long you've been in the field, animals always come up with something to surprise you." Susie was about two-thirds through her pregnancy.



Susie excitedly shows off baby Siri, which means secret in Swahili, to onlookers at Sunset Zoo.

#### **Monkey Business**

Susie was taken off birth control a couple of years ago. "We all assumed she was beyond the age of getting pregnant because it hadn't happened with any other chimp her age," Dr. Carpenter says. "We also thought it would be advantageous to discontinue birth control drugs in light of any potential adverse hormonal effects."

Susie successfully delivered a healthy baby girl on Aug. 18. No medical intervention was necessary. She proudly displays the baby like any new mom and is nursing well. Scott Shoemaker, Sunset Zoo director, lends perspective. "The fact that Susie is 56 years of age and had a successful live birth is testimony to the excellent veterinary care she has received from the veterinarians at K-State and from the zoo's veterinary staff," he says. "Before Susie, the next oldest chimp on record to deliver a baby was 42."

Dr. Carpenter explains baby chimps usually remain with their mom until about age 5. At that point, mom is free to have another baby. The youngster typically remains with the family unit until age 8-10. Chimps in captivity may live into their 50s, compared to only 40-45 years in the wild.

Susent Zoo was founded in 1933 by Dr. E.J. Frick. He was a professor at K-State's College of Veterinary Medicine and served as zoo director until 1977.



Harris hawk's likely man-made condition was corrected thanks to a man with a generous heart and talented faculty at the Veterinary Medical Teaching Hospital.

The hawk, named Hannah Montana, was adopted in March by Ken Lockwood of Eagle Valley Raptor Center in Cheney, KS. Ken read about Hannah on a website for retired falconry birds that serves as a rescue for these birds, along with others that cannot be released back into the wild due to injuries. Hannah's description moved Ken to action. The bird of prey was less than a year old and survived stunning neglect. She weighed about half what she should.

"She was constantly tethered and hooded," Ken says of her original home. The Wisconsin weather was no match for the bird designed for semiarid regions. "She had frost bite on the tips of her wings, and they eventually rotted and fell off," he says. "She already had a cataract in her right eye. A falconer who took possession of Hannah after he heard of her plight drove her all the way here from Wisconsin because he didn't think she'd do well on an airline flight."



Story by Patrice Scott Photos by Dave Adams

Top: Dr. James W. Carpenter, Dr. Rachel Allbaugh, Hannah, Dr. Michelle Tichenor and students Erin Runnels and Sara Guengerich. The team performed Hannah's initial evaluation.

Left: Dr. Rachel Allbaugh performs microsurgery on Hannah's eyes to remove the cataracts. Ken's first order of business was simple. Bestow Hannah with simple acts of kindness she had been denied every day of her young life. "I held her in my recliner for hours," he says. "I couldn't give her enough food. She was eating, eating, eating. I was trying to win back her trust in humans."

Hannah's condition improved markedly within weeks of being in Ken's care. "She was molting, and her weight came up," he says. "Then the cataract in her left eye showed up."

On Aug. 23, Hannah arrived at the teaching hospital to be evaluated by Dr. Rachel Allbaugh, assistant professor of ophthalmology. "Ken reported navigational deficits such as bumping into objects and inability to land on her perch," Dr. Allbaugh says. "On initial evaluation, we confirmed she indeed had cataracts. Vision in the right eye was absent, and vision in the left eye was limited due to the cataract. If she were in the wild, she would have starved to death. Or, if a predatory animal sensed her vulnerability, she would have been prone to an attack."

There is no definite way of knowing why such a young bird developed cataracts, Dr. Allbaugh explains. But the specialists could safely rule out age, and there was no overt evidence of trauma or inflammation. Dr. Allbaugh believes of the remaining options — genetics, exposure to a toxic substance and nutrition deficiencies — the latter is the most likely cause. "Since she came from a situation of neglect, it seems possible the cataracts developed because she was not provided appropriate nutrition."

Ken says he decided to proceed with surgery based on three factors: Hannah is young, and a calm and very forgiving bird. And, because her condition was probably caused by a human, a human should fix it. "I feel very strongly about that."

On Aug. 24, Hannah was anesthetized for surgery. Special care was taken to reduce Hannah's stress so she wouldn't injure herself or have an abnormal reaction to the anesthetic drugs. It would take the team two hours to perform the specialized procedure to break apart the cataracts, a technique called phacoemulsification.

"The cataract in the right eye was so advanced the lens material was mostly liquefied leaving a very wrinkled and opaque lens capsule," Dr. Allbaugh says. "In order to provide a clear visual access, we removed both a portion of the front and back lens capsule. The left eye had a more typical cataract with only mild changes to the capsule, so removal of the capsule was not necessary."

Recovery would be challenging. Hannah is, after all, a bird of prey. The key would be to get her home as soon as possible.





Hannah's eyes look great five days after surgery.

The task of approaching a bird of prey to administer eye drops and antibiotics several times a day seems difficult at best. Talons designed literally for death grips could be a problem. "I've worked with falconers for 30 years, and they all wear a thick long leather glove when supporting a raptor on their hand," says Dr. James Carpenter, professor of zoological medicine. "This is the first raptor I can recall that could be handled without protection by its owner. Hannah steadies herself on his arm; she doesn't hold on with a firm grip. This bird has some degree of sensitivity for Ken, and that's a reflection of the bond between them and a direct result of the care he has given her." This is a testament to those many hours in the recliner.

Since returning home, Ken has delighted Hannah's medical team with frequent photos and updates about her progress. Every day he comes up with an ingenious challenge to test her vision. "When she's in her pen, I'll tiptoe by her, and she just watches me. The other night, I let her out at dusk and she sat there in the grass looking at all the dragonflies."

Dr. Carpenter is pleased Hannah is doing so well, but he's truly excited about what this bird offers those fortunate enough to come in contact with her. "People can really see and learn about birds of prey up close," he says. "Hannah plays an important role with conservation education because people can get a better understanding of the importance of preserving animals and thereby, the importance of preserving ecosystems."

Ken held fundraisers, and donations covered half of the cost of Hannah's surgery. He paid the remainder. "We had several people who helped with donations," he says. "I want to thank them and you (faculty at the teaching hospital) for all you did to help Hannah."

The Harris hawk is named after John James Audubon's friend, Edward Harris. Eagle Valley Raptor Center receives about 150 injured or orphaned birds per year for care. This spring the center took in 42 baby owls displaced due to storms and high winds.

Story by Patrice Scott Photo by Dave Adams

# ROLL WITH





Holli, a year-old alpaca, travels around the country from her home near St. Louis attending events hoping to inspire those who might need a little inspiration. She and owner, Michelle Zumwalt, recently returned from New Jersey where they participated in Limbs in Motion. It's a marathon/fundraiser for people with and in need of prosthetic limbs. No doubt an alpaca in a wheelchair would fit right in! "She has so much to give," Michelle explains the purpose of their journey.

Holli's medical journey started when she was just 20 days old. It was Sunday, Sept. 5, 2009, and Michelle gazed out her window just as a dog temporarily housed at her alpaca rescue spooked the herd. They bolted. A short time later, Michelle went outside and discovered Holli lying motionless in the drizzle. "She struggled and struggled to get up once she saw me coming," Michelle says.

Michelle lifted the cria, ran to the house and placed her on the bathroom floor. "I turned on a space heater and used the hair dryer to warm her up," she says. "She was so cold. She couldn't get her back legs moving. I took her to the barn to try to get her to nurse

Michelle Zumwalt chats with Holli while Dr. David Anderson examines Holli's hips during her Nov. 1 appointment. Also pictured are student Brian Godsey and Valerie Smith (right).

Michelle massages Holli as Bill Silkwood, Michelle's partner, steadies Holli on her exercise ball.

to motivate her, but she couldn't stand. Then her head snapped back, and I knew she was close to expiring. She was weak, but still there. We knew something was seriously wrong and got her en route to her vet, Dr. Doug Pernikoff."

It took about 30 minutes to make the trip, and Holli's condition was deteriorating. "She was so still and quiet and didn't even want to hold her head up," Michelle says. "Dr. Pernikoff provided the emergency care. Everything was minute to minute. She was such a fighter."

Through contacts at her rescue, Michelle learned K-State was THE place to bring an alpaca, so she contacted Dr. David Anderson, professor and agricultural practices section head, at the teaching hospital. "I just decided if we were going to do this, then we were going to THE best," Michelle says.

Radiographs taken at their first of three visits to the teaching hospital confirmed Holli's back was broken. More specifically, her thoracic spine was fractured at T12 and T13. "Usually this type of injury is fatal," Dr. Anderson says. But their conversation went beyond Holli's injury as they weighed short-term and long-term options and implications.

"The primary concern was: Is it humane to pursue treatment?" Dr. Anderson asks. "You have to make an evaluation based on the level of care the owner is able to provide, and ask, 'Does the animal have the will to live?'" Clearly, Michelle was committed, Dr. Anderson explains. However, if a patient refuses to eat, drink, move or cooperate, the decision has already been made. "I saw an animal that was energetic and happy to be alive," he says.

That's when Dr. Anderson made an unusual suggestion, especially for a large animal. "We recommended Holli be fitted for a wheelchair to increase her mobility." Michelle was overjoyed. "That gave us a ray of hope," she says. "If we could get her mobile, that would save her life."

Michelle had exhausted her resources, and the reality of a wheelchair seemed a distant hope until she met knitting enthusiast, Valerie Smith, at an alpaca show. When Valerie learned Holli's story, she made a generous donation. Michelle says "Aunt Val and Uncle Dwight made it (the wheelchair) happen."

Valerie is an occupational therapist in Topeka, who plays an important role in Holli's life. "It was clear Michelle displays both the heart and commitment to assist Holli," Valerie says. "An initial goal was to determine how best to promote Holli's independence through mobility. Wheels allow Holli to be an alpaca."

Valerie's technical expertise was especially beneficial when attending Holli's medical appointments with Dr. Anderson. "I was overwhelmed with the medical information," Michelle says. "Aunt Val knew what questions to ask. We came away with everything we needed and the confidence to make good decisions."

Dr. Anderson took Holli's measurements and sent them to Pet Mobility Rehab Center, a custom wheelchair manufacturer for animals in Langley, Wash. Once Holli was fitted for it, she was off and running! Michelle and Holli started making visits to nursing homes, alpaca shows and pretty much any place they could go. Personnel from nursing homes have called Michelle about changes in residents following Holli's visits. One resident organized a birthday party to celebrate Holli's first birthday.

The work to maintain a large animal's mobility is nearly unimaginable. Holli sleeps indoors on a waterbed primarily designed for dogs with a foam topper, several layers of absorbing material and a special blanket on top. Holli must be

lifted, carried and helped into her wheelchair. She is on medications and needs topical creams applied to avoid developing sores. Michelle gives Holli two physical therapy sessions a day, and Michelle massages Holli daily to maintain muscle mass. Even with all of this, problems can arise.

"Chronically recumbent patients often develop secondary infections,"

Dr. Anderson says. But it's through an incredible network that Holli is
maintaining her health. "Michelle's dedication is amazing," he says. "She has
worked with a team of people to make sure she's doing everything she can
for Holli. It is a very unique blend of veterinary medical care and
paramedical care."

Valerie explains her role in Holli's care. "My contribution as a team member is to provide technical data on rehabilitation techniques as Michelle works to make Holli stronger," she says. "Michelle and I continuously evaluate Holli's rehab needs. Holli provides a unique style of pet therapy services in her community, and we want to do everything possible to help her."

On Nov. 1, radiographs were taken of Holli's hips, and she may require surgery. "We are in good hands," Michelle says. "I know when things crop up, and they will, Dr. Anderson will have a plan to care for her."

Someday, Michelle realizes she may have to make the unthinkable decision pet owners fear. "Early on, I didn't know how long we had. I didn't know if it was minutes, hours or days. We don't need to know how long, we need to truly appreciate the time we have. If that time comes, Holli will let me know, and Dr. Anderson will take care of the rest. Until then, we're partying!"

To learn more about Holli, please visit her website at hollys-hope.com. 📚



Virgalee Shoptaugh, 92, pets Holli this summer at Hidden Lakes Care Center near Michelle's alpaca rescue in Missouri.

#### The Referring Veterinarian

Story and Photo by Patrice Scott

## Unbridled Passion

r. Mark Pierce, K-State College of Veterinary Medicine Class of 1976, owns a successful mobile equine practice in Berryton, Kan., and makes invaluable referrals to the teaching hospital when his patients need advanced care.

He was born and raised with his three siblings outside Topeka, where his Dad was a physician. Dr. Pierce can't pinpoint the moment he fell in love with horses, but it has been a wonderful relationship. "I've just always been a horse nut – always. When I was in 8th grade, Dad bought horses for all four of us."

Dr. Pierce and his wife. Linda, met in high school. They had a class together at Washburn University and began dating then transferred to K-State. "We got married in 1973, the summer after my freshman year of veterinary school," he says. "We were one of the only married couples, so everyone got to know Linda. When we go back for class reunions. people are just as happy to see her as they are to see me," he says. Linda graduated in 1975 and currently serves as director of the Early Childhood Special Education Curriculum for Topeka Public Schools.

After graduation, they returned to Topeka where he started a mobile equine

practice. "I work six counties out of my truck," he says. However, geography isn't going to determine success. "If you want to do horses, you have to be a horseman first," he advises.

Looking across the 40 acres he owns and his brother's adjoining 40 acres, 10 horses seem quite content in the pasture. The couples bought the land, and Dr. Pierce and Linda built a beautiful home seven years ago.

But what's inside matters most: family. "All of the kids were athletic, and I coached their teams," he explains. "I tried to do everything I could to give them the experiences they needed to be successful."

During those hectic years, he boarded a few horses with long-time client, Barbara Hoffer. (Read about one of Barbara's coveted horses on the back page.) Something that makes Dr. Pierce happy is having knowledgeable specialists available when needed. "I can say, 'Barbara, this is pretty serious. We need to think about going to K-State, and she will do it," he

says. "They are so smart up there (K-State). I can call and ask anything. Dr. Beth Davis is an encyclopedia. Last year, I took my own mare up to Dr. Bras to operate on her club foot. She's doing great and running around like everybody else."

Being in a profession for decades has its high and lows. "I've been practicing for 32 ½ years, and I have to say that I enjoy horses a lot, and I enjoy horse people," he says. "It's so much fun going to see people's babies. I put an old horse to sleep that was 30 or 31 years old – a horse that I have worked on since it was a weanling. That's pretty sad."

Now, the kids are grown, and the Pierces are blessed with grandchildren. "It's the most fun thing to us," Dr. Pierce says. "They love to come here and help us feed. I pick up our oldest

Dr. Mark Pierce at home with two of his broodmares.

grandson from preschool a couple of times a week, and we love having the kids spend the night."

The Pierces have three children: Kristen, a physical therapist; and Jeff and Erin, both teachers. All three have master's degrees. Kristen's sons, Justin, 4, and Chase, 1, will welcome their cousin, a baby girl, due in January to Jeff and his wife.

Story by Patrice Scott

CIRCLE OF

onzie was a racing Greyhound that spent the beginning of his life on circular race tracks. But it's the amazing, unexpected and touching way in which his life came full circle that is a lesson to humans.

Upon retirement from racing, Fonzie was adopted by the teaching hospital in 2004 and became a blood donor. Some Greyhounds have a universal blood type, making them ideal donors for a busy hospital requiring a ready blood supply.

Like all of the blood donors, Fonzie gave blood once a month for the year he lived at the hospital. Then, Fonzie retired from his second profession and needed a permanent home.

Rose and David Kreller had moved into their home in Manhattan in 1995, a spacious ranch with a half-acre backyard—a rare find in the city limits. They lived there with Hobson, a Lab-shepherd mix. Rose brought Hobson to the teaching hospital for advanced care, and that's where she read an article in AnimaLIFE about a couple from Oregon who drove to Manhattan two years in a row to adopt blood donor Greyhounds. A light bulb went off. "I had always wanted a Greyhound," Rose says.

Hobson passed away in January 2005, and the couple was "dogless" for several months. Rose was ready to adopt, but David was apprehensive. "When our other dog passed away, I knew I wanted my Greyhound, but David wasn't quite ready."

Rose and David visited the Greyhound Hall of Fame in Abilene, Kan., to research Greyhounds. They entered the lobby, and Rose was stunned to discover an unlikely connection between herself and the Greyhound world. "I walk in and there stands a bust of the man who had owned my house," she says.





bought the house from Harold and Grace

Shugart, elite Greyhound breeders. Rose recalls the Shugart's son casually mentioned their dad was involved with Greyhounds and kept two at home. That explained the muzzels and assorted dog artifacts in the shed.

When Fonzie retired from his job as blood donor in September 2005, the Krellers swiftly adopted him. "I knew there were dogs that needed to be placed, and I wanted to give a dog a permanent home. And I really liked that it was local," Rose says. But there was one more surprise waiting at home: Fonzie's bloodline could be traced back several generations to one of the Shugart's best dogs.

Once Rose and David adopted Fonzie, it was as if they had always had him. She adores the breed and wishes more people understood them. "He was lazy. He was a lazy, peaceful soul," Rose says. "I swear he slept 22 hours a day. But he did look forward to his daily walks and his daily drive for ice cream. There were only two things that made him bark: cats and when he wanted a lick of ice cream."

She laughs about the rare occasions when he would think the inside of the house was a track or when he would show off for neighborhood dogs. He'd burst wildly, then it was time to rest ... again.

This July, Fonzie began displaying an odd array of symptoms. He was in and out of the hospital and needed three transfusions. That hit David. "Here's

> the dog who gave for others, and now he's receiving," David says. "He gave life to someone else."

"We were grateful for the resources of the KSU teaching hospital during Fonzie's illness," David says. "To have such comprehensive diagnostic and intensive care facilities here was reassuring. For us, the caring, committed and compassionate staff made all the difference."

Rose and David made the most difficult and most loving choice after weeks of trying. "I think of Fonzie as having had the most amazing life," David says. "He was born near Manhattan, raced throughout the U.S., was a blood donor, and our best friend. The Fonz lived up to his name, as everyone who knew him thought he was the coolest."

Despite Fonzie's loss, Rose took a trip this fall to meet with a group of dog lovers she met online through a blog. And Fonzie's circle of admirers is still growing.

Editor's Note: The Krellers are on the list to adopt another blood donor from the hospital.

There is little doubt Fonzie's blood ran purple.

## Specialized Training in Nebraska benefits Nebraskans

Story by Patrice Scott

Nebraska specialty hospital offers K-State veterinary students experiences that will last a lifetime.

Midwest Veterinary Specialty Hospital (MidWestVET), a satellite of the Veterinary Medical Teaching Hospital at K-State, is a referral-only specialty hospital in Omaha, Neb. In addition to providing specialty care for pets in Nebraska, Iowa and Kansas, MidWestVET offers unique academic opportunities for veterinary students. Two graduates from the Class of 2010 share their insights as both are from Nebraska and returned to their home state to practice.

Dr. Jonathan Winter, with Countryside Veterinary Clinic in Fairbury, and Dr. Cameron Duncan, with Red Willow Animal Clinic in McCook, detail the lasting effects of these training opportunities. Dr. Winter completed a two-week rotation in Omaha, which included a week at the Animal Emergency Clinic (AEC) located next door and a week at MidWestVET. Dr. Duncan completed one four-week rotation and one two-week rotation at MidWestVET and AEC along with rotations at the Henry Doorley Zoo and the Nebraska Humane Society.

Both appreciated the remarkable one-to-one student/teacher ratio with MidWestVET surgeon and Nebraska native, Dr. Mike Thoesen. "Dr. Thoesen is a really great teacher," Dr. Winter says. "He expects you to do the work and guides you through it. He does what is needed to make you become a better veterinarian. This experience definitely enhanced my ability to perform orthopedic exams."

Dr. Duncan explains that every day brought new patients, which translated into new teaching opportunities. "Students are expected to be well prepared for the cases, so I researched and studied at MidWestVET," Dr. Duncan says. "Dr. Thoesen allows students to be very involved in the cases. I learned from each one, and with such a low student to teacher ratio, my questions could be answered thoroughly."



Dr. Jonathan Winter and patient, Molly, at Countryside Veterinary Clinic in Fairbury.

There are also major differences between training opportunities at the teaching hospital versus MidWestVET. "The teaching hospital is large with students, staff and faculty with designated responsibilities," Dr. Winter says. "In a private specialty hospital, there are fewer people, which translates into heightened accountability. This turned out to be one of the best rotations I took."

Both doctors believe MidWestVET is an asset to Nebraska. Dr. Duncan believes proximity will encourage pet owners to seek advanced care. "In the past, people in this area have had to drive a long way to see a specialist, and that may have deterred some of them from being referred. The level of care

and close affiliation with K-State makes Nebraska and Omaha lucky to have MidWestVET."

Dr. Winter was happy to join his parent's practice and have easy access to specialists. "It was nice to return to my hometown to do a job that I love," he says. "It's wonderful having a great referral clinic in our own state." Dr. Duncan is also committed to supporting MidWestVET through referrals and has vowed to do so "with any patient that needs a specialist."





Dr. Cameron Duncan with his horse, Cotton, at Red Willow Animal Clinic in McCook.

Story by Patrice Scott Photos by Dave Adams

## A Couple of



## TEACHERS

rs. Chris and Lindsey Blevins, K-State Class of 2006, have a lot in common. They are both veterinarians, both are on faculty, and they are expecting their first child on the very same day!

Dr. Chris Blevins, assistant professor of Equine Field Service, transitioned from being a farm boy to going on farm calls. He takes routine care to the farm – the very job he admired growing up on the family farm in Highland, Kan., with his parents and two sisters. "Man, that look likes fun," he thought while watching three K-State veterinarians work on animals over the years. (They were Dr. John Andres, Dr. Wayne Meyer, and Dr. Irvin Schwalm.) "I was raised around animals and liked the sciences in high school and college. Luckily, veterinary medicine remained an interest."

Today, it's Dr. Chris who conducts equine-only annual examinations within 60 miles of the hospital. His service provides routine dental care, lameness evaluations, emergency calls, reproductive services, vaccinations, deworming and Coggins testing.

Dr. Chris earned a bachelor's degree in animal science/pre-vet at K-State in 2001. He started veterinary school in 2002 and completed a master's degree in animal science/reproductive physiology in 2004. He graduated with his DVM in 2006. However, the big life-changing event occurred in 2002 during freshman orientation when he sat next to veterinary classmate and future wife, Lindsey.

"It was a really terrific wedding," Dr. Lindsey says, smiling. "Everybody had a lot of fun." She explains it was a bit stressful planning the Jan. 1, 2005 wedding and getting through the holidays, but it was worth it. The holidays might have a new twist this year as the couple expects their first child in December.

Dr. Lindsey's childhood was spent with a sister and two brothers in Hartington, Neb., where the family owned a hobby farm just outside of town and raised chickens and bucket calves. "Both of my parents were raised on farms. My dad's a pharmacist and mom's a nurse. I guess I never imagined being anything else but a veterinarian. On my  $16^{\text{th}}$  birthday, I got a horse instead of a car."

Upon high school graduation, Dr. Lindsey attended Briar Cliff University in Sioux City, Iowa, on a basketball scholarship. "Basketball was a big passion in my life," she says. Dr. Lindsey carefully mapped out her life, and it was proceeding nicely. "It was all a plan," she says. "I'm a goal-oriented person."

After graduation in 2006, the couple moved to Sheridan, Ind., where Dr. Chris completed a one-year internship at Janssen Veterinary Clinic and was considering a residency in theriogenology (reproduction.) Meanwhile, Dr. Lindsey worked in a small animal practice. "It's hard your first year out. That whole first year is an uphill climb," she says. "You learn you know more than you think and not as much as you thought you did all at the same time."

The couple moved to St. Joseph, Mo., the following year to be closer to family after Dr. Chris decided not to pursue a residency. He worked at Savannah Veterinary Clinic, a mixed animal practice. "Who knew," Dr. Chris jokes about working on small animals. "Lucky thing I completed a pet health rotation in veterinary school," he jokes.

Moving to Manhattan was always in the couple's plan, but neither imagined they would be back so soon, especially as faculty. However, fate stepped in one evening when Dr. Chris logged onto the computer after work. "I was on the Internet and saw the posting for this job," Dr. Chris says. "Lindsey and I love Manhattan and always thought we'd end up here, maybe retire here."

Dr. Chris moved to Manhattan and joined the faculty in 2008. Dr. Lindsey remained in St. Joe and worked in a small animal practice and at Hill's Pet Nutrition as an independent contractor before accepting her current position as assistant professor in the hospital's Pet Health Center. "I was so excited to learn about this job opening, but you also have the fear of disappointment," she says.

Laughter is a great antidote for the Blevins. "Chris loves jokes and recycles them," she says. "It's a good thing he only has students for two weeks at a time on Equine Field Service. He doesn't have enough jokes for a longer rotation!"



Dr. Lindsey Blevins demonstrates how to perform a wellness examination on kitten, Romad, to student Ashley Larsen.

Transitioning from student to practioner to teacher within a few years of graduation is one more thing the couple has in common. "I think we have a good perspective on what the students are going through," Dr. Lindsey says. "I think we can provide them with insight and support."

Dr. Chris is impressed with the way his wife interacts with students. "She puts herself in the student's shoes," he says of Dr. Lindsey's teaching style. "She tries to let the student be as hands-on as possible and challenge them to take on as

much responsibility as possible. Lindsey wants them to think and to figure out how they will handle the same situation in practice."

Teaching, Dr. Chris has learned, poses challenges. "Now I can really appreciate how hard it is to teach and keep the students engaged," he says. "I never thought about that until I was on the other side. Graduating from Kansas State University puts a different twist on my job. I feel obligated and invested in every student's veterinary success. I am proud of the profession and this university."

In his fleeting spare time, Dr. Chris enjoys fly fishing, horseback riding (team roping), snow and water skiing and vacationing with family and friends. Dr. Lindsey enjoys reuniting with the close knit friends she played basketball with. "When one of us isn't pregnant, we enjoy getting together and playing in the annual Whoopers & Hoopers tournaments in Hastings, Neb."







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### AnimoLIFE



### H.O.R.S.E. Anyone?

ow do you play a game of H.O.R.S E. at K-State?
Long-time teaching hospital client Barbara Hoffer spells it C.L.E.M.E.N.T.E.

Barbara and husband, John, are diehard K-State basketball fans and named their precious foal Clemente after Denis Clemente, star guard for the team that progressed to the Elite Eight in the NCAA tournament.

The Hoffers brought one of Barbara's prize mares to the teaching hospital soon after foaling because his condition teetered on critical. The newborn foal was sired by their seven-time world champion stallion, Not Kiddin Me. Making this situation even more touching was that the sire's father (the foal's grandfather) died from a senseless gunshot. This young colt has very precious bloodlines and simply had to live.

After learning about his namesake, a delighted Denis made a trip to the teaching hospital. "It's pretty cool," Denis says while visiting the colt.

In addition to taking care of mom and baby, the equine faculty surprised Barbara with an autographed Clemente jersey and a framed photo of both of K-State's Clementes. "That my mare and baby Clemente are now thriving is a testament to the outstanding skills and dedication of the equine staff," Barbara says. "But to arrange something like this for me – with such kindness – at a difficult time, is a testament to their generosity of heart."

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