EXCELLENCE AND LEADERSHIP IN RESEARCH, TEACHING AND SERVICE

SUMMER 2011 VOLUME ONE ISSUE TWO

THE HITCHING POST

Recognition and Honors

Dr. Richard Meadows, CVM professor and director of the Community Practice Section within the Veterinary Medical Teaching Hospital, has been named a Curators' Teaching Professor, effective July 1 , 2011.

MU College of Veterinary Medicine Dean Neil C. Olson selected three individuals to receive the 2011 Dean's Impact Awards. This year's winners are **Linda Van den Berghe, Dr. Dennis O'Brien,** and **Dr. James Creed.**

Dr. Craig Franklin was named the recipient of the Pfizer Animal Health Award for Research Excellence. Franklin is an associate professor and director Graduate Studies, Comparative Medicine Program.

Dr. F.A. (Tony) Mann was chosen by his peers to receive the Dadd Award for excellence in veterinary medicine teaching. Mann is a professor, director of Small Animal Emergency and Critical Care Services, and Small Animal Soft Tissue Surgery Service chief.

Dr. Alison LaCarrubba was named this year's Pfizer Animal Health Distinguished Teacher Award . She is a clinical instructor in Equine Ambulatory Medicine. The graduating class selects the Pfizer Teacher Award.

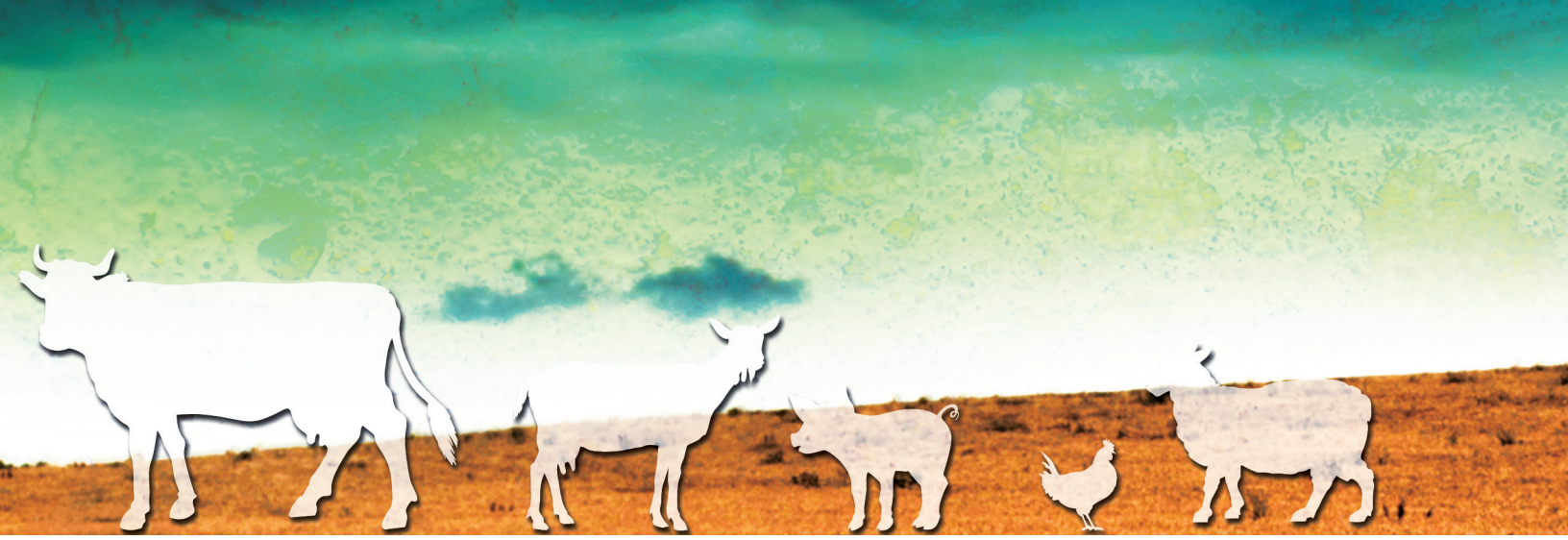
MACC HOLDS OPEN HOUSE

The new Mizzou Animal Cancer Care facility in Wentzville held an Open House June 25, 2011, to acquaint referring veterinarians with the staff and services that will soon be available. The facility is devoted exclusively to the diagnosis and treatment of cancer in pets.

Mizzou Animal Cancer Care brings diagnostic services, radiation therapy and clinical trials to the St. Louis area, making the resources of MU's College of Veterinary Medicine more accessible for veterinarians and their clients. As a result, cancer diagnosis and treatment will be more convenient, more economical and far less stressful for owners and pets.

Mizzou Animal Cancer Care offers cutting-edge diagnostic capabilities and treatment options, including

- Diagnostic x-ray
- Computed tomography (CT)
- Linear accelerator (radiation therapy)
- Clinical trials of newly-developed anti-cancer drugs.



MUTATION LINKS DOG,HUMAN DISEASES

Researchers at MU believe both man and animal will benefit from their discovery that the same gene mutation found in Tibetan Terrier dogs can also be found in a fatal human neurological disorder related to Parkinson's disease.

Fabiana Farias, doctoral candidate in the Genetics Area Program at MU, found the mutation as part of her thesis research. Dr. Gary Johnson, associate professor of Veterinary Pathobiology; Dr. Martin Katz, professor of Veterinary Pathobiology, and Dr. Dennis O'Brien, professor in the Department of Veterinary Medicine and Surgery, along with researchers from MU's College of Veterinary Medicine; College of Agriculture, Food and Natural Resources and the Mason Eye Institute, recently published the findings in *Neurobiology of Disease*.

The disease in Tibetan Terriers is called adult-onset neuronal ceroid-lipofuscinosis (NCL). Within the dogs' cells in the brain and eye, material that should be "recycled" builds up and interferes with nerve cell function. Due to this buildup, around the age of 5, the dog begins to exhibit dementia, impaired visual behavior, loss of coordination, and shows unwarranted aggression.

While there are many forms of NCL in humans, the symptoms of NCL are similar in people and dogs, and the disease is ultimately fatal for both. Utilizing the canine genome map and DNA samples from dogs diagnosed with NCL, the researchers were able to pinpoint the specific gene that causes NCL. The mutation they discovered in dogs, however, causes a hereditary form of Parkinson's disease in humans. This suggests that the recycling that goes awry in NCL may also be involved in degenerative diseases like Parkinson's.

Now, DNA from dogs can be tested to identify the presence of the mutated gene, and that test can ensure that Tibetan Terrier breeders do not pass it on to the next generation. The researchers also believe that they may be able to test potential human therapies on the animal population because they can use the DNA test to identify affected dogs before they start to show symptoms.

The publication is the result of almost 10 years of work, and the researchers believe it couldn't have occurred without the unique combination of animal and human medical science at the University of Missouri.

CVM Professor Named Prestigious Kirk Award Recipient

Dr. Dennis O'Brien, professor, veterinary neurologist and director of the Comparative Neurology Program, received the 2011 American College of Veterinary Internal Medicine (ACVIM) Robert W. Kirk Award for Professional Excellence. In 1989, the ACVIM established the award to honor ACVIM diplomates who have outstanding careers in veterinary medicine with national and international recognition for their contributions in areas such as clinical medical practice, instruction, research and public service.

O'Brien earned his bachelor's degree, master's degree in veterinary clinical medicine, doctor of veterinary medicine and doctorate in neuroscience at the University of Illinois. His research focuses on brain disease, epilepsy and movement disorders. He was named as the Chancellor's Chair of Excellence in Comparative Neurology.

VETERINARIANS HELP TORNADO VICTIM

The May 22 tornado that struck Joplin destroyed the home of Joplin High School teachers Steven and Debbie Leatherman and left their 10-year-old cocker spaniel, Sugar, missing. A relative in Kansas, combing through social network sites, discovered that a dog resembling Sugar had been taken to the Joplin Humane Society. A good Samaritan had found the injured animal in a flooded storm ditch several blocks from the wreckage that was the Leathermans' house. Paralyzed, Sugar had been unable to pull herself to safety and was in danger of drowning had she not been rescued.

Their son, Daniel Leatherman, called the MU Veterinary Medical Teaching Hospital, where veterinary neurology technologist Stephanie Gilliam advised him to bring Sugar in.

At the MU Veterinary Hospital, Dr. Fred Wininger, a CVM assistant professor of neurology and neurosurgery, examined the dog and noted that while she had no use of her hind legs, she retained pain sensation in her paws. He determined she had a traumatic T12-13 intervertebral disc rupture.

Time was critical, Wininger said. With pain sensation intact, immediate surgical intervention allows more than 80 percent of dogs to regain function in their legs. Wininger performed a surgical procedure known as a hemilaminectomy, which created a window in the vertebral bone allowing him to decompress the disc and hemorrhage that was pushing on the cord.

The bruising that already occurred would require time and physical therapy to heal.

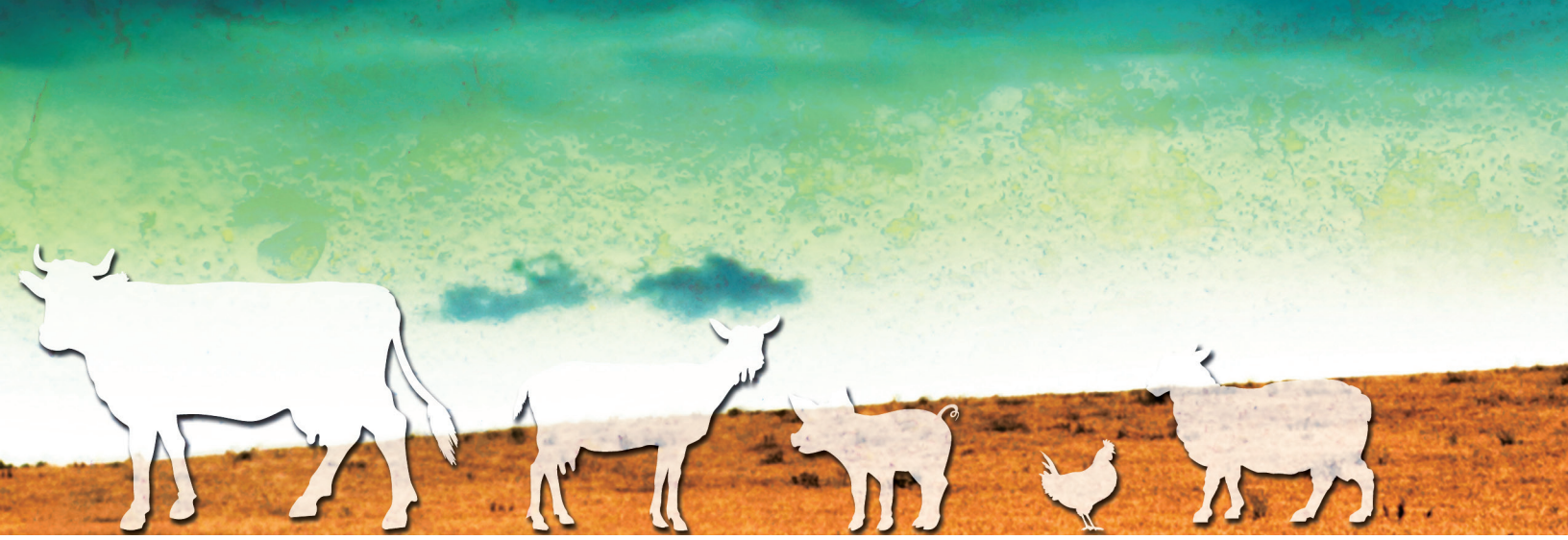
Two days after surgery, Gilliam, who provides rehabilitative therapy to veterinary neurology patients, began electrical stimulation on Sugar's hind limbs to help prevent muscle atrophy. Sugar received the treatment once per day for seven days. Gilliam also began underwater treadmill therapy once per day to find signs of movement in the dog's hind limbs.

The Veterinary Medical Teaching Hospital, through its Silent Partners Fund, and College of Veterinary Medicine absorbed the cost of Sugar's treatment and therapy.

On June 14, Daniel Leatherman collected the family's beloved pet to continue her recovery at home.

"We are so warmed by everything that has been done," he said. "It has given us back our family."

Members of the MU College of Veterinary Medicine Strategic Advisory Board held their first meeting on May 16 with all nine members joining Dean Neil C. Olson and Ron Cott at Reynolds Alumni Center. In order to solicit valuable outside guidance, the Strategic Advisory Board (SAB) has been established to advise the CVM. The SAB will focus on recommended courses of action for five to 10 years in the future. The members are (seated, from left), Carolyn Henry, Lynn Allen, Bruce Addison, George Buckaloo, (standing, from left) Neil Olson, George Tomazi, Dennis Cloud, Bud Hertzog, R.C. Ebert and Tom Lenz.



Gilbreath-McLorn Professor for Comparative Medicine Passes Away

Dr. John K. Critser, Gilbreath-McLorn Professor for Comparative Medicine at the MU College of Veterinary Medicine passed away March 21, 2011, at Boone Hospital Center. He was 57.

Dr. Critser was born Nov. 7, 1953, in Galesburg, Ill. He received a bachelor's degree in biology and philosophy from Ripon College in Ripon, Wis., a master's degree in veterinary science and a doctorate in animal science from the University of Madison, Wis. He was a Fellow in the Department of Obstetrics and Gynecology at the Mayo Clinic in Rochester, Minn. His first position was as director of Andrology/Cryobiology at Methodist Hospital of Indiana. His first faculty appointment was in the Department of Physiology/Biophysics at Indiana University's School of Medicine. He went on to also have appointments at the Purdue School of Veterinary Medicine.

He became the director of the Cryobiology Research Institute at Indiana University in 1997. Critser came to the University of Missouri in 2001 when he was recruited as the Gilbreath-McLorn Professor for Comparative Medicine at the MU College of Veterinary Medicine. He served as chair of Veterinary Pathobiology for two years. He was a member of the Research Animal Diagnostic Laboratory faculty and oversaw cryopreservation and reproductive services.

He authored or co-authored more than 190 publications. In collaboration with other faculty, he was instrumental in establishing the MU Mutant Mouse Resource and Research Center and the Rat Resource and Research Center, both of which serve as critical repositories for valuable rodent models. He also was an active participant in establishing a similar resource for swine (National Swine Resource and Research Center).

Critser was an advocate for the development of the Center for Comparative Medicine. He was passionate about training graduate students and postdoctoral fellows. He nurtured them during their training and mentored them as they matured professionally.

He enjoyed hiking, photography, and working with zoos on conservation efforts for endangered species.

He is survived by his wife, Elizabeth, of 33 years; his children, Paul and Rebecca; his daughter-in-law, Julie, and his grandson, Henry.

Boyd Receives MLA Award

C. Trenton Boyd, AHIP, FMLA, head librarian the University of Missouri Zalk Veterinary Medical Library, was honored with a Medical Library Association Fellows Award for his outstanding contributions to excellence and achievement in health sciences librarianship. The Medical Library Association (MLA) confers this award to a maximum of five nominees each year.

Boyd, has been a member of MLA since 1972 and is a Distinguished Member of the Academy of Health Information Professionals. He is the founding member of five national and international veterinary medical library associations including MLA's Veterinary Medical Libraries Section, where he has served twice as chair. He began the *"Basic List of Veterinary Medical Serials"* in 1978 that continued to a third edition in 2009. The list is the core list for collection development for veterinary medical serials.

Selection criteria for the award includes a minimum of 10 years' professional experience in health information science; 15 years' membership and notable leadership in the MLA; durable achievement by a sustained level of commitment to the goals of the association over a long period of time; significant scholarship evidenced by teaching, research and publication; and professional reputation supported by documentation.

MU STUDY FOCUSES ON BPA EXPOSURE

The latest research from the University of Missouri shows that BPA causes male deer mice to become demasculinized and behave more like females in their spatial navigational abilities, leading scientists to conclude that exposure to BPA during human development could be damaging to behavioral and cognitive traits that are unique to each sex and important in reproduction.

Dr. Cheryl Rosenfeld, associate professor in biomedical sciences and Bond Life Sciences investigator, found BPA-exposed male deer mice are demasculinized and undesirable to females.

"The BPA-exposed deer mice in our study look normal; there is nothing obviously wrong with them. Yet, they are clearly different," said Rosenfeld, associate professor in biomedical sciences in the College of Veterinary Medicine and investigator in the Bond Life Sciences Center. "Females do not want to mate with BPA-exposed male deer mice, and BPA-exposed males perform worse on spatial navigation tasks that assess their ability to find female partners in the wild. This study sets the stage for BPA researchers to examine how BPA might differentially impact the behavioral and cognitive patterns of boys versus girls. Investigators looking for obvious BPA-induced differences, such as chromosome deletions or DNA mutations, could be missing subtle behavioral differences that eventually lead to long-term adverse outcomes, including demasculinization of male behaviors with ensuing decreased reproductive fitness."

"We can use this evolutionary approach to the study of BPA to determine the best way to assess differences in the risks to boys and girls to early exposure to this chemical," said Dr. David Geary, MU Curators' Professor of Psychological Sciences.

This research has been published in the *Proceedings of the National Academy of Sciences*. Rosenfeld collaborated with Geary and Dr. Todd Schachtman, professor of Psychological Sciences. The primary author was a graduate student in the MU Interdiscplinary Neurosciences Program, Eldin Jašarević, who conducted most of the experiments.

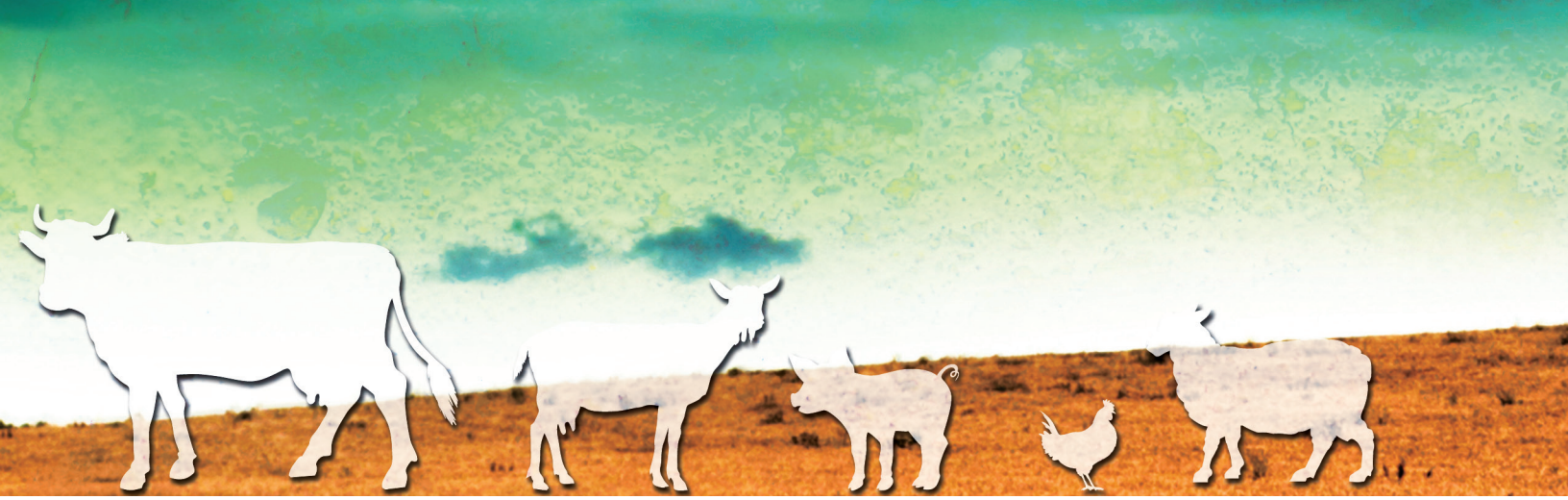
MU College of Veterinary Medicine Graduates 69 New Veterinarians

Dr. Marty Becker, author and veterinary correspondent for "Good Morning America," addressed the 62nd commencement of the MU College of Veterinary Medicine. Becker, a pioneer in the movement to recognize the positive link between pets and people, is an adjunct professor at the MU CVM, as well as at his alma mater, Washington State University, and the College of Veterinary Medicine at Colorado State University.

Members of the Class of 2011 selected Dr. Sarah K. Spidel to give a response on their behalf. Spidel paid tribute to the dedication of her classmates, relating accounts of veterinary students who had become parents during their professional education and returned to the classroom the following week. She also talked about the diversity of the class that comprised triathletes, soldiers and musicians.

Dr. Dana Gillig, president of the Missouri Veterinary Medical Association, led the graduates in reciting the Veterinarian's Oath. Dr. Ron Cott, associate dean for Student and Alumni Affairs and director of Development, presented the class. Dr. Carrie Duran, adjunct assistant teaching professor, Dr. F.A. (Tony) Mann, professor, and Dr. Robert Youngquist, associate dean for academic affairs, conducted the investiture. CVM Dean Dr. Neil C. Olson conferred the Doctor of Veterinary Medicine degree to the class members.

Veterinarians completing internships, residencies and graduate programs also received recognition.



STUDENT SERVICES COORDINATOR HIRED

Dr. Angela Tennison's ready smile and relaxed manner belie her former career. "I was one of those crazy people holding two phones and yelling into them," she jokes of her days as an energy futures trader.

Tennison, a native of Kentucky, had always wanted to be a veterinarian, but allowed herself to be talked out of pursuing her ambition. After graduating from Millsaps College in Jackson, Miss., with a degree in business administration, she found herself in St. Louis where she worked for Cargill and Merrill Lynch for seven years in the fast-paced financial markets.

However, her desire to become a veterinarian refused to remain just a dream. She applied and was admitted to the University of Missouri College of Veterinary Medicine. At MU, she was a member of Phi Zeta and distinguished herself as the recipient of the Feline Practitioners Award and the Mary T. Wernert Memorial Scholarship.

She received her doctor of veterinary medicine in 2001 and returned to St. Louis, where she worked in the Animal Emergency Clinic. After a couple of years in emergency medicine, she accepted a position with the Bridgeton Animal Hospital, working side-by-side with fellow CVM alumni, owners Kay and Pierre Tung. Last fall, her husband's position as the human resources director for Independent Stave Company prompted the pair to relocate to Columbia with their young daughter.

Tennison said her varied experiences will help guide her in her new position at her alma mater in the recently created position of student services coordinator. Her responsibilities focus on the preceptorships students undertake as part of their professional training. Tennison will create and maintain a database of preceptorship opportunities that give MU CVM students hands-on experience in veterinary practices, animal-related industries and working with government agencies. She will gather information from students about their preceptorship experiences to help match their fellow students with the best future opportunities for their skill sets, and she will also collect information from the companies and agencies offering the experiences to determine how well the CVM is training its students for their eventual entry into the veterinary profession.

"This is my dream job," she said. "It combines business with veterinary medicine and I have the chance to work with the students."

As a student at MU CVM, Tennison undertook three preceptorships: one at a cat clinic in Philadelphia, one in Stone Mountain, Ga., and one in St. Louis. She said the position of a student services coordinator would have been helpful to her had it been in place when she was a veterinary student.

And while she isn't practicing veterinary medicine in her new job, taking care of her three cats and two dogs still allows plenty of time interacting with animals. In her free moments, she also enjoys running, reading and spending time with her family.

CVM Mascot Passes Away at 35

Faculty, staff and students at the MU College of Veterinary Medicine are mourning the passing of Louise, one half of the original mule team that served as the MU College of Veterinary Medicine's goodwill ambassadors. Louise was euthanized on June 23, 2011, at 35, after a team of veterinary professionals determined that due to her advanced years and deteriorating health she was failing to respond to treatment for a leg injury she sustained making the outlook for her recovery poor.

Louise and her mule team partner, Hillda, came to the college in 1984. Dr. Robert Kahrs, who was then dean of the veterinary school, purchased the mules from a Fayette farmer and brought them to Columbia to become the school's mascots. As the official ambassadors, they traveled throughout Missouri, attending parades, picnics, petting zoos, giving wagon rides and raising awareness of the state's mule heritage. In 1996, a second team of mules was purchased, allowing the much beloved Louise and Hillda to enjoy a well-deserved and peaceful retirement in the pasture behind the college's campus.

"Mules are reputed to be stubborn, but the truth is they're just very bright creatures," said Dr. John Dodam, chairman of the CVM's Department of Veterinary Medicine and Surgery and faculty adviser to the Mule Club. "Louise was one of the brightest, but she was also friendly and gregarious. I have been thinking about how many Missourians, now adults, who as children had their first up-close encounter with a real Missouri mule when they met Louise at a fair or a parade, and what a fun and educational experience that would have been. Louise's passing is a tremendous loss for the college, and she will be missed, but we're comforted that she enjoyed a long life and had such a positive impact on so many people."

Memorials in Louise's honor may be sent to the MU College of Veterinary Medicine Office of Development, W213 Veterinary Medicine Building, Columbia, MO 65211; or by calling 573-882-1902.

CVM FacultyAmong Mizzou Advantage Grant Recipients

The University of Missouri awarded more than $1 million in grants during the second round of funding by the Mizzou Advantage initiative. From a total of 140 submitted proposals, 28 projects were chosen. The goal of Mizzou Advantage is to promote collaboration between schools and to increase the visibility, reputation and stature of the University.

VET HOSTING TURNER-BELL

Dr. Debbye Turner-Bell, a 1991 MU CVM alumna and a former Miss America, will give the keynote address at the 2011 MU CVM Veterinary Enrichment Training (VET) orientation at the Lake of the Ozarks for the incoming class of 2015. She will offer a motivational presentation reflecting the profession and its respected societal impact.

VISION 2020

WHY ENGAGE IN STRATEGIC PLANNING?

Some college-wide strategic plans resemble a laundry list of what's been happening at the school and where they have focused efforts to date. This kind of plan is certainly easier to create, but it isn't useful for focused action, budget allocation or future direction.

Our aim with Vision 2020 is to create a Strategic Plan that will:

- set clear goals for the future of the CVM
- provide a sharpened focus and prioritized needs
- align our goals with our resources, and
- create a commitment to action.

As a result of our strategic planning process, we also hope to foster collaboration and teamwork across areas of the college. To date, we have more than 60 people from inside and outside the CVM helping to create the plan. Future communication meetings and a web forum have been established to gather additional input and feedback from anyone in the college who would like to engage in the process.

WHY DO IT NOW?

Strategic planning is a part of any effective management strategy and there are several compelling external drivers for Vision 2020:

Upcoming re-accreditation in 2013: Accreditation is the process by which an educational institution or program submits to a voluntary, non-governmental review to determine whether it meets accepted standards of quality. Within veterinary medicine, the AVMA COE develops the standards and conducts the reviews of DVM educational programs on a seven-year basis. At the CVM, we continually monitor ourselves against these standards and seek to ensure that 1) our programs meet national standards as well as our own stated mission and goals, 2) the science and art of veterinary medicine are being advanced through contemporary curricula, and 3) our graduates achieve specific learning goals and are competently prepared to begin professional practice.

Managing the financial constraints associated with decreased state funding and rising student debt load: State funding levels for veterinary schools and colleges have decreased substantially in the past few years. Difficult choices have to be made regarding where to invest resources as well as how tuition increases might impact future veterinary students. Certainly, these realities aren't unique to veterinary medicine. For example, while veterinary student debt increased 70 percent from 2000 to 2007, dental student debt increased 79 percent. The difference, however, is that potential veterinary salaries are still lower than other professions with similar educational requirements. Now averaging about $120,000 a year, veterinary student debt continues to climb and will force our best and brightest students to make strategic financial choices about the career they will pursue.

Responding to the future direction of veterinary education: Spearheaded by the AAVMC, the North American Veterinary Medical Education Consortium (NAVMEC) began meeting in 2010 to study future changes needed in veterinary medical education. The group of veterinary students, employers, and leaders in education, global health, and public policy is continuing to look at how educational models, accreditation, and licensing should best work together to create the workforce of next-generation veterinarians. Recommendations made by NAVMEC will be rolled out to veterinary colleges across the nation in the coming year and we want to be in a position to respond to these changes.

These critical forces, as well as our own assessment of our internal areas of strength and opportunities to improve, are driving the work of our strategic planning teams.

The next Vision 2020 column will focus on the specific components we will include in developing the new Strategic Plan.