Integration is the key component of a new study, not only in its methods, but in a strategy to collaborate with researchers at other universities and another country: Canada. With a goal to improve food safety in beef and dairy cattle systems, Dr. H. Morgan Scott, E.J. Frick Professor of Veterinary Medicine in the Department of Diagnostic Medicine and Pathobiology, has put together a comprehensive research project strong enough to merit a $2 million grant from the USDA that was awarded Sept. 1.

Dr. Scott’s collaborators come from the University of Guelph, Angelo State University, Texas Tech, Texas A&M, Cornell, Colorado State and the Public Health Agency of Canada. The progress and achievements of the integrated project will be formally evaluated by the award-winning Office of Educational Innovation and Evaluation (OEIE) at Kansas State University.

“Our overall goal is to identify, evaluate, and implement practical interventions for managing antibiotic resistance in beef and dairy cattle systems,” said Dr. Scott. “We focus on the longstanding problem of resistance emergence, dissemination and persistence among enteric bacteria. If pathogenic bacteria resistant to antibiotics enter the food chain, treatment of humans can be complicated. We will employ a variety of methods to assess and then improve the quality of evidence contained in education and extension materials such as veterinary curricula and commodity specific prudent-use guidelines.”

Dr. Scott notes the importance of collaborating with other schools as well as the importance of working outside the research lab. “We want to employ molecular microbiology to discover the mechanisms underlying several paradoxical responses of resistant strains to antibiotic selection pressures,” Dr. Scott said. “Next it will be critical to field-test practical interventions designed to effectively manage antibiotic resistance levels in production as well as near-slaughter phases of beef and dairy cattle systems. Scientifically proven interventions will be shared with interested parties and decision-makers in the cattle industry who will be encouraged to further evaluate those methods in their production systems. Decision-makers also will be warned of ineffective interventions.”

“Dr. Scott is one of the most well-respected, internationally recognized epidemiologists in North America,” said Dr. M.M. Chengappa, University Distinguished Professor and department head. “He is also an outstanding leader who can articulate complex topics in very simple terms.”

Dr. Scott’s work will take him and his lab students on the road visiting feedyards and dairy production facilities, working directly with cattle.
My name is Ryan K. Miller and I am a captain in the U.S. Army Veterinary Corps Reserves. I am a 1992 alumnus of Wellington (Kan.) High School, Fort Hays State University 1996 and Kansas State University College of Veterinary Medicine in 2000.

I am currently deployed to Afghanistan on my second tour. My job here in Afghanistan is to travel to the villages and work directly with the local Afghan veterinarians, para veterinarians and farmers to improve their livestock and agriculture management. Our unit is called Cooperative Medical Assistance (CMA). We provide training seminars at village district centers, working with nongovernment aid agencies, Coalition forces and U.S. military forces (Agriculture Development Teams – ADT, Civil Affairs teams, USDA, USAID, etc.) to provide technical advice and expertise on projects throughout Afghanistan.

Our unit also works with the two veterinary colleges and several agriculture colleges located in Nangarhar and Kabul, along with several agriculture schools. The students are very knowledgeable, but they don’t get many chances to have hands-on experiences with the animals. We work with the Afghan students and farmers on examinations, treating animals (de-worming, suturing, diagnosing diseases, etc.) and using better livestock management techniques (forages and feeding, milk production, etc.).

Our goal is to make the Afghans more self-reliant so they can go out, do things on their own and share their knowledge with others.

The CMAs part of the Civil Military Operations agricultural development mission is critical to the counteringurgency. About 85 percent of the Afghans are dependent on farming for their livelihoods. Typical Afghan farmers are trying to sustain enormous families with food grown on about a half-acre to an acre of ground, often using beasts of burden to pull wooden plows. In this calorie-deficient diet where people often slowly starve in the winter, the per capita income is about $400 per year.

There is a major focus on education, with the ADT specialists training Afghan extension agents to further train Afghan farmers — “training the trainers” in military slang. Much of the development programs are designed toward efforts to “put an Afghan face” on development work, with ADT and Civil Affairs teams endeavoring to partner with Afghan provincial ministries, particularly the Department of Agriculture, Irrigation and Livestock (DAIL) to improve agriculture practices.

Working with the Afghan government can be a frustrating job because of all the corruption. Many times intertribal conflicts among the Afghans themselves play out in government offices. There are officials misappropriating equipment and money, ghost employees who only show up for paydays, and officials who lack basic organizational skills.

The majority of animals here in Afghanistan are sheep, goats, donkeys, some cattle and an occasional camel. Animals here in Afghanistan are usually much thinner and smaller than what we see in the United States. Forage (animal feed) is a limiting factor due to the lack of rainfall. Forages are mostly grown on irrigated land, and this competes with human food production. The predominant system of irrigation is via canals into open fields — flood irrigation, which is very inefficient.

Most of the villages we travel to and work in are receptive to our presence. The people are generally interested in what we have to offer. They are also curious to talk to an American about agriculture in the United States.

Overall, the work has been very rewarding and makes a difference at the local level. My team helps the local farmers and veterinarians and they see us as a positive influence.
Getting a KIC at the Veterinary Medical Library

New technology is changing the way students look at books … and in a way that is very green.

Last spring, the Veterinary Medical Library installed a new piece of equipment: the KIC II scanner that scans printed material directly into a digital format that can be printed, e-mailed or saved on a portable USB storage device.

“We purchased our scanners three years ago when we lost our copy center,” said Roberta Johnson, senior director for administrative and IT services, K-State Libraries. “Students were coming in to photocopy material from books and journals, paying 10 cents per page. Then they would digitally scan those pages to convert the pages into an electronic form. We found a way to solve this problem and provide a service for free.”

Johnson said the Student Governing Association bought one of Hale Library’s new scanners and the library purchased two more on its own. “In each of successive years since we added our scanners at Hale Library, we have placed a new one at the K-State-Salina campus, one in the architecture library, and one at the College of Veterinary Medicine.”

Gayle Willard, director of the Veterinary Medical Library, said, “Before we had the KIC scanner, we had to send journal volumes to Hale and they were returned — lots of things going back and forth. This new ‘arrangement’ makes having the scanner a win-win-win.”

The student response in the Veterinary Medical Library has been enthusiastic.

“I find using the scanner to be very convenient,” said Taylor Green, class of 2012. “I can pull a journal from the shelves, scan the article and put the book back. I don’t have to check the journals out anymore.”

A.J. Tarpoff, class of 2012, said, “I like that I can e-mail the article to myself. That gives me the option to have the article in two formats: one electronically on my computer, and then I can print it out later if I want to.”

Willard encourages other veterinary students to use the new KIC scanner. She said staff members can assist anyone who has questions or needs help.

In memory of Calais: KSDS service dog trained by Dr. Pat Payne

Lifelines has very sad news to report — the passing of Calais, a black Labrador retriever that had been trained by Dr. Pat Payne for service in the KSDS program. Calais was diagnosed with dysautonomia, a disease that is primarily found in young adult dogs. Typical symptoms of dysautonomia include dysuria, regurgitation, purulent nasal discharge, photophobia, anorexia, and weight loss. She was being treated at the Veterinary Medical Teaching Hospital. Dr. Payne extends her gratitude to the faculty, staff and senior students who treated Calais.

“My time with Calais was challenging but fun,” Dr. Payne said. “She was a challenge to train because she was so smart and energetic. She was fun to train because of all of the times she excelled at tasks and even the times when we were not so perfect together but were trying hard. We had help from many students, faculty, staff and the administration during these last 16 months, so I know there will be many of us who are deeply saddened by her loss.”

Lifelines had originally run a story in August 2009 to introduce Calais at the beginning of her training with Dr. Payne. She had just recently returned to the KSDS for evaluation by the trainers. Had she not succumbed to her illness, she would have been brought back to the VMTH for eye certification and OFA radiographs generously provided by the college for her and other service dogs. When service dogs pass these physical tests plus personality tests, then intensive training begins as well as a search for partners.

Dr. Pat Payne enjoys some time outdoors with Calais in August 2009.
Grant Adams, son of Carol and Dave Adams, participated in the National 4-H Shooting Sports Invitational Match June 28 to July 2, in Kerrville, Texas. Grant placed first in the nation in slow-fire bulls-eye air pistol capturing gold for Kansas. The air pistol team, of which Grant was a member, placed third nationally. Prior to his participation in the National 4-H Shooting Sports Match, Grant participated in the USA National Championships, June 14-19, at Fort Benning, Ga. During this national match Grant shot men’s 10 meter air pistol and men’s 50 meter free pistol. He earned the gold medal in men’s 50 meter pistol High Class A rank. Grant ranked 4th overall in the men’s USA Junior Olympics division for both air pistol and free pistol.

Congratulations to K-State’s winners in the 2010 Smithcors Essay Contest. Elizabeth Williams, class of 2012, won first prize for “The Forgotten Giants Behind Louis Pasteur: Contributions by the Veterinarians Toussaint and Galtier.” Gail Goble, class of 2013, won second prize for “Mad Cows and vCJD: A Tale of Two Epidemics.” Jaime Stevenson, class of 2013, won third prize for “West Nile Virus: A Progression from Unknown to Endemic.”

Dr. Dan Thomson gave a series of presentations on “Animal Welfare and Kansas Agriculture” at the farm bureau offices in Allen, Greeley, Harper, Johnson and Ottawa counties. He also presented “Improvements in technology and efficiency in the beef industry” with Dr. Ben Wileman at the AABP annual convention, held in Albuquerque, N.M., Aug. 20.

Two take top employee honors in DM/P

Congratulations to: Maureen Kerrigan, Classified Employee of the Year and Xiaorong Shi, Unclassified Employee of the Year in the Department of Diagnostic Medicine and Pathobiology.