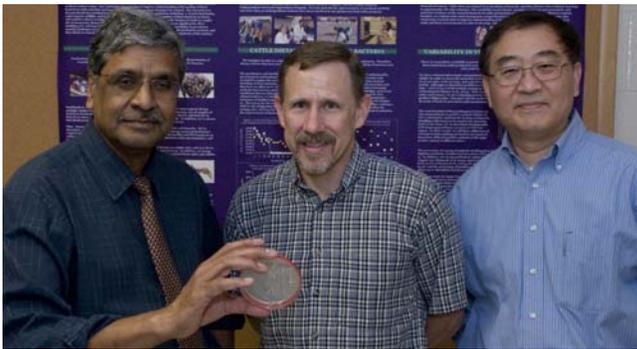




## E. coli O157:H7-in-cattle research draws grant

### National Institute of Food and Agriculture grants \$465,000 to Dr. Nagaraja's research team to study E. coli O157:H7 in Beef Cow-Calf Operations



**Dr. T.G. Nagaraja looks over a sample with Dr. Mike Sanderson and Dr. Jianfa Bai.**



**Drs. Ludek Zurek and David Renter are also part of the research team.**



**E. coli O157:H7 represents a serious health issues to cattle producers and the food supply.**

Size doesn't always matter when it comes to human health. The smallest bacterium that is harmless to cattle can be deadly once the food supply is contaminated. That's why Dr. T.G. Nagaraja finds it's important to learn as much as possible about E. coli O157:H7.

"The more we know about how E. coli O157:H7 operates in cattle and its environment, the better our ability to come up with strategies to control it," said Dr. Nagaraja, University Distinguished Professor of microbiology. "This new project involves collaborative interaction with other disciplines such as entomology, production medicine and epidemiology."

The USDA agreed that this was a good approach, so it has awarded Dr. Nagaraja a \$465,000 grant through the National Institute of Food and Agriculture (NIFA), to be effective starting September 2010. The full project title is "Ecology of E. coli O157:H7 in Beef Cow-Calf Operations from Ranch to Feedlot."

"We will be collecting samples from several feedlots and slaughter houses in Kansas and Nebraska," Dr. Nagaraja said.

The project's co-investigators are Dr. David Renter, associate professor of epidemiology; Dr. Mike Sanderson, professor of production medicine; Dr. Jianfa Bai, assistant professor of molecular biology; and Dr. Ludek Zurek, associate professor in microbial ecology.

"This grant is super," said Dr. M.M. Chengappa, head of the Department of Diagnostic Medicine and Pathobiology and University Distinguished Professor. "It's become more and more important that we perform research through collaborations with different departments. Dr. Nagaraja has assembled a team of experts who will help look at this problem from many different perspectives."

Dr. Nagaraja said the grant will help provide funding for graduate assistants, supply costs and travel necessary for gathering research samples.

NIFA focuses on investing in science and solving critical issues impacting people's daily lives and the nation's future through federal funding and leadership for research, education and extension programs.

# MPH program awards two for excellence

Outstanding accomplishments in public health and contributions to Kansas State University's Master of Public Health program have earned a recent graduate of the program and a K-State faculty member honors.

Dr. Jennifer Akers, a veterinarian and clinical assistant professor at K-State's Veterinary Medical Teaching Hospital, was named the 2010 outstanding Master of Public Health student. The 2010 outstanding Master of Public Health faculty honoree is Dr. Lisa Freeman, associate vice president for innovation at K-State Olathe and a veterinarian and professor of pharmacology in the department of anatomy and physiology at K-State's College of Veterinary Medicine.

The awards were presented by Dr. Carol Shanklin, dean of K-State's Graduate School, at the Excellence in Public Health awards reception April 5 at K-State.

Dr. Akers earned her Master of Public Health degree, with an emphasis in infectious diseases and zoonosis, from K-State in December 2009. Her major professors were Dr. Justin Kastner, assistant professor of diagnostic medicine and pathobiology, and Dr. David Renter, a veterinarian and associate professor of diagnostic medicine and pathobiology.

Her thesis, "Addressing Curriculum Deficiencies in Veterinary Public Health: A Comparison of Other Health Professions' Experiences," provided a systematic assessment of the veterinary profession's curricular inadequacies in public health education and examined potential solutions for addressing the educational deficiency by documenting approaches from other health professions. She has already authored one peer-reviewed paper on public health education, and is working on at least one other first-author manuscript

based on her thesis work.

Dr. Akers said her greatest professional passion is to enhance public health awareness and education as it relates to infectious and zoonotic diseases. As a student, she voluntarily contributed to numerous public health education outreach activities. She has been the adviser to the K-State Public Health Club since 2007, and served as a mentor for junior K-State veterinary students enrolled in the zoonoses class. She also has spoken to the State Animal Response Team about zoonotic diseases, the Girls Researching Our World program about disaster preparedness, and local kindergartners about dog bite prevention. Dr. Akers received her DVM from Iowa State University.

Dr. Freeman has been a driving force for improved public health education, research and practice throughout Kansas. She has served on the Master of Public Health coordinating committee since 2008 and as an adviser for Master of Public Health students. Dr. Freeman also has served as a mentor to a number of K-State students, working with them one-on-one about their educational opportunities and future careers.

Dr. Freeman also has helped develop a public health collaboration network between Kansas community colleges and K-State to inform undergraduate students about public health jobs and educational opportunities. This network includes the recruitment of students interested in public health to K-State programs.

In addition, she has been a catalyst for the development of the One Health Kansas Initiative, which created new positions to support public health programs across the state to better educate the general population about the importance and interdisciplinary nature of public health. The initiative also provides information about current



**Top: Dr. Jennifer Akers receives the Outstanding MPH Student Award. Bottom: Dr. Lisa Freeman receives the Outstanding MPH Faculty Award.**

and future educational opportunities and careers.

K-State's Master of Public Health program was approved by the Kansas Board of Regents in January 2003 and admitted its first students in fall 2003. Since then, 87 students have enrolled in the degree program, with 33 graduates. Currently, the program has 43 students. The program offers integrated multi-disciplinary expertise with more than 50 primary and support faculty from eight departments in four colleges and two support units at K-State.

## Pre-veterinary student Amy Sents is K-State's newest Truman Scholar



Pre-veterinary student Amy Sents is K-State's 32nd Harry S. Truman Scholar. She is a McPherson, Kan., senior in animal sciences and industry with a minor in international agriculture. As a winner of the Truman scholarship, she will receive as much as \$30,000 for graduate studies toward a career in public service.

"We're very pleased that Amy Sents has been selected as a Truman scholar,"

said K-State President Kirk Schulz. "She is committed to serving others and is on track for an excellent career in veterinary medicine."

K-State ranks first in the nation among 500 public universities, with 32 students winning Truman scholarships since the program began in 1977. In 1996, the Truman Foundation named K-State a Truman Scholar Honor Institution.

Sents is among 60 scholars selected this year by the Truman Foundation. The scholars were chosen from 576 applicants from 245 colleges and universities. Truman scholar selections are based on commitment to public service, record of leadership and likelihood of success in graduate studies.

Sents plans to obtain a DVM and master's of public health at K-State. She then would like to work for the USDA's Animal and Plant Health Inspection Service (APHIS) in veterinary services.

Last summer Sents interned with the White House liaison office within the Office of the Secretary at the USDA in Washington, D.C. She was able to visit

APHIS headquarters.

Sents has long been involved with organizations to serve the community. She wanted a career that combined her passion for volunteering with her interests in disease and health.

"My parents impressed upon me from a young age the need to serve others," Sents said. "Through my activities on the farm and in 4-H and FFA, I developed a true passion for animals. Through safeguarding the health of livestock, I aspire to help make this world a safer place for everyone to live."

Sents will represent Kansas as an international 4-H youth exchange delegate to Germany and Switzerland from June to December. Sents has received K-State's Putnam Scholarship, Fort Dodge Animal Health Scholarship, Cargill Genuinely Better Scholarship, Agriculture Future of America Scholarship, Robert J. Dole Scholarship and other scholarships. A 2007 graduate of McPherson High School, she is the daughter of Allan and Deanna Sents of McPherson.



### By Carol Elmore

Last month I discussed the National Agricultural Library's online resources. Another important information resource for agriculture and veterinary medicine is the Agriculture Network Information Center [www.agnic.org](http://www.agnic.org) (AgNIC). It is maintained and governed by the AgNIC Alliance which includes the National Agricultural Library as well as

## Check it Out at the Library

### "Agriculture Network Information Center"

60+ other institutions and organizations including Kansas State University. AgNIC provides agricultural information and resources in areas such as rural sociology, agribusiness, and food safety in addition to many other areas. Kansas State's partners include Beef Cattle <http://agnicbeef.org/> (a collaboration of the Beef Cattle Institute <http://beefcattleinstitute.org> and Hale Libraries) and also Grain Milling & Processing,

Kansas Rangelands, and Kansas Wildflowers & Grasses. Through AgNIC Kansas State University College of Veterinary Medicine's Beef Cattle Institute is accessible to a national as well as international audience.

Specific services that are available through the AgNIC portal are Web sites, databases, institutional repository resources, image collections, documents and publications all dealing with agriculture,

environmental, and food related disciplines. Many of the articles in the databases are full-text. AgNIC also has a calendar and news links that are continually updated. What is not included in the portal are proprietary, most commercially supported information, fee-based resources, and highly sensitive information that might impact national security. The resources that are presented are selected by member standards and are objective and authoritative. What sets AgNIC apart from other agricultural Web sites is that it is composed primarily of academic and research institutions and government agencies.



Under the microscope:

**Dr. Barbara Lutjemeier**

Special Projects Assistant  
Department of  
Anatomy and Physiology



**Place of birth:** Marysville, Kan.

**Family Information:** I am married to Joe Hodson, a recently retired conductor for the Union Pacific railroad. My daughter, Jessica, is a graduate from Emporia State, is married, living in Wichita and continuing her education in interpretive sign language. My son Jacob, is a fall graduate of Kansas University and has moved to Manhattan to start his own business.

**Pets:** Two dogs, Spike and Buster, and one cat, Peeper Roo.

**What is something new you have always wanted to do or try?** I believe we should embrace each new decade of our lives instead of dreading them. So during my 30th decade I ran three marathons, for my 40th, I went skydiving (and I threw in scuba diving for good measure), for my 50th decade I want to run 50 miles. Not that I am anywhere near 50 years old!!!

**What is your favorite spring activity?** Anything outdoors, especially working in my gardens.

**When have you had a moment when you surprised yourself?** The first time I ran 10 miles without stopping.

**CVM News Ticker**



**Dr. David Anderson receives the Coughlin Award from Tennessee CVM Dean Jim Thompson.**

**Dr. David Anderson**, professor and head of Agricultural Practices, was honored in February as a Coughlin Visiting Professor at the University of Tennessee's Annual Conference for Veterinarians. The Coughlin Professor series is made possible through a generous donation to the College of Veterinary Medicine at the University of Tennessee by the Coughlin family and recognizes leaders in veterinary medicine. Dr. Anderson gave four seminars on bovine surgery and two seminars on diseases of llamas and alpacas during the conference.

**Dr. Mike Apley** presented at the NCBA Beef Safety Summit in Dallas on March 4. Topic: "Current knowledge on the impact of antibiotic use in cattle production on resistance development."

**Dr. James Carpenter** presented at Oklahoma State University in Stillwater on April 6. Topic: "International Opportunities: Wildlife Adventures in Africa ... from Immobilizing Rhinos to the 'Big Swing.'"

**Dr. Kerry Bilicki**, former resident, passed all parts of the ACVS exam on her first attempt! She is the eighth consecutive small animal surgery resident to pass on the first try.

**President Schulz gives leadership lessons to SCAVMA**



**K-State President Kirk Schulz answers some questions from SCAVMA President Adam Lukert and Dr. Meredith Jones, assistant professor in agricultural practices, after giving a lecture on leadership principles. Dr. Schulz was a chemical engineering professor and administrator prior to working in upper administration.**