



lifelines

News from the
College of Veterinary Medicine
at Kansas State University

December 2016

Vol. 11 No. 12

Faculty lead VFD sessions



Dr. Gregg Hanzlicek speaks about VFD in Stockton, Kansas.

A group of faculty members has been spending the past year reaching out to provide information about the Veterinary Feed Directive (VFD) that is being issued by the Food and Drug Administration.

“We have had the opportunity to be present at state veterinary continuing education meetings as well as meetings with producers and feed manufacturers and distributors,” said Dr. Michael Apley, professor of production medicine and clinical pharmacology.

Other faculty members in the college and at the KSVDL have also been reaching out: Dr. Dan Thomson, Dr. Brian Lubbers, and Dr. Gregg Hanzlicek. Each has made presentations and spoke at regional meetings both in and outside of Kansas.

Read more in Lifelines online: www.vet.k-state.edu/lifelines/1612.html.

CEEZAD attracts global zoonotic disease and biosecurity experts to annual meeting

More than 100 of the world’s leading experts in zoonotic diseases reported on developments in pathobiological research at the annual meeting of the Center of Excellence for Emerging and Zoonotic Animal Diseases (CEEZAD). The three-day session included a workshop on universal vaccines, vaccine platforms and future concepts, and took place Oct. 31-Nov. 2 at the Lied Lodge in Nebraska City, Nebraska.

Dr. Jürgen Richt, CEEZAD’s director, said the meeting featured presentations on the most pressing topics in the area of food animal disease control and biosecurity.

“I was thrilled both at the depth of knowledge presented at the conference as well as at the enthusiasm of participants for what they heard,” Dr. Richt said. “Participant after participant told me how much they learned about the most recent developments in the field of zoonotic disease research and vaccine development and production, and how encouraged they were by what they heard.”

The meeting attracted experts in the animal health industry from every continent. In addition to presentations, sessions also featured “gap analyses” where experts defined gaps in their areas of expertise and challenged one another regarding the next steps to be taken in each field of study.

Among the highlights, Dr. Roy Curtiss III, head of the Curtiss Labs, member of the National Academy of Sciences and a faculty member at the Department of Infectious Diseases and Pathology at the University of Florida’s College of Veterinary Medicine, reported on new platform technologies for dealing with Salmonella outbreaks.

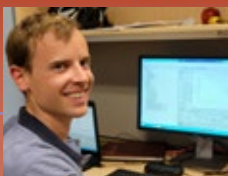
Dr. Will Fischer, a scientist at the Los Alamos National Laboratory, reported on the search for a universal Foot-and-Mouth disease vaccine. Dr. Fischer described how he perfected “mosaic” vaccine cocktails that displayed a multitude of variable antigenic epitopes.

Read more in Lifelines online: www.vet.k-state.edu/lifelines/1612.html.



A panel discussion at the annual CEEZAD meeting with top zoonotic disease experts.

Inside this issue of *lifelines*



Belgian scholar studies modeling.

See page 3



Pets & people pose for holiday pics

See page 3



Microscopic mission.

See page 4

'What I learned at LSU's Animal Welfare Symposium'

By Cyndi Davidson, class of 2018

The Humane Society Veterinary Medical Association (HSVMA) hosted its second annual Animal Welfare Symposium at Louisiana State University (LSU) School of Veterinary Medicine on Nov. 12, and I was fortunate enough to attend. The symposium was free to all veterinary students and veterinarians, and I was granted a travel stipend from the HSVMA to help defray the cost of travel. As the only student from the Kansas State University College of Veterinary Medicine to attend, I wanted to share my experience in hopes of inspiring more students to attend next year.

On the morning of the symposium, attendees were greeted with a fabulous breakfast spread, including a first for me — vegan cream cheese! The morning lineup of speakers began with Dr. Susan Krebsbach, veterinary adviser for the HSVMA, where she reminded us that animal welfare incorporates three components: body, mind and nature. All three of these values must be considered when evaluating animal welfare, but one or more are often compromised in favor of reducing cost or maximizing profit. This talk challenged me to rethink what I thought I knew about the definition of animal welfare and gave me an appreciation for how difficult it is to standardize it for all species.

Dr. Wendy Wolfson, assistant professor of shelter medicine at LSU, gave a talk titled, "A Practitioner's Role in Addressing Neglect, Cruelty and Dog Fighting," that I felt to be very empowering. She stressed that veterinarians should not feel intimidated to report cases of suspected animal abuse. Dr. Wolfson gave us a glimpse into the rapidly expanding field of veterinary forensic science, where I learned that a skin biopsy can tell you the age of a scar and that maggots can reveal time and location of death, provide DNA, and can be used for toxicological analysis.

Dr. Barry Kipperman, a private practitioner in the San Francisco area, gave a talk on farm animal welfare, and he proposed a question that greatly resonated

with me as a student. He asked, "Is it consistent with our oath for veterinarians to support intensive confinement practices?" As we discussed the use of swine gestation crates and poultry battery cages — two hot topics in the realm of animal welfare — it got me thinking how a lot of farming practices deemed acceptable may not be consistent with what is outlined in the veterinarian's oath. Dr. Kipperman challenged us to avoid complacency and to speak up and take action whenever we feel improvements should be made to the status quo.

Other topics covered in the symposium were beef cattle welfare, equine welfare issues, commercial dog breeding ("puppy mills"), the impact of costs of care on animal and veterinarian well-being, and an inspiring presentation by Dr. Barry Kellogg, a seasoned world traveler and expert on disaster-relief coordination. Dr. Kellogg shared pictures and stories of his 50+ year career of taking risks, refusing to say no, and actively seeking opportunities to make a difference. His talk created a palpable electricity in the room as our heads filled with ideas on how to make a meaningful impact on the world.



Cyndi Davidson, front right, attends an animal welfare lecture during a special symposium held in Baton Rouge, Louisiana.

On the following day, Nov. 13, a small group of us visited the Pen Pals Animal Shelter at the Dixon Correctional Institute in Jackson, Louisiana. The animal shelter began as an emergency respite for animals displaced by Hurricane Katrina in 2005, and later Hurricane Gustav in 2008. The not-for-profit shelter became a permanent fixture in 2010, and provides training to carefully screened offenders who care for the animals housed there. What impressed me the most about the facility was how the dogs quieted down immediately after our group walked away — the anxious barks and appeals for attention were not an ongoing cacophony, which to me signified the dogs were generally calm and comfortable in their surroundings. The offenders in charge of the dogs do a commendable job of addressing those three pillars of animal welfare: mind, body and nature, which was very satisfying to observe.



Cyndi joins a tour of the Pen Pals Animal Shelter at Dixon Correctional Institution. She is in the back row, center.

Belgian pharmacokinetics researcher studies modeling in ICCM



Dr. Ronette Gehring, left, hosts Dr. Mathias Devreese, a visiting scholar from Belgium, at the ICCM to help him learn pharmacokinetic and pharmacodynamic modeling.

An effort to better understand how medicines move in and through animal populations has brought a Belgian researcher named Dr. Mathias Devreese to K-State this fall to learn advanced compartmental modeling with pharmacokinetics experts in the Institute of Comparative Computational Medicine (ICCM). He leaves this December with new knowledge and a strong sense of new family.

“Since the day I got here, I found that people are really friendly here and you

really feel part of the K-State family,” said Dr. Devreese, who is an assistant professor at Ghent University in Belgium. “Here it’s like one big family. Back home, the university is one big place, but it’s all scattered around the city, so you don’t really feel that connection with other colleges or other faculties.”

Dr. Devreese has worked closely with Dr. Ronette Gehring, associate professor in the anatomy and physiology department at the veterinary college. He also been working with

Dr. Jim Riviere, director of the ICCM, MacDonald Endowed Chair in Veterinary Medicine, Kansas Bioscience Eminent Scholar and University Distinguished Professor. Dr. Devreese’s visit to Kansas State University was supported by a grant from the Fleming Research Foundation.

“Mathias was an absolutely joy to interact and work with,” Dr. Riviere said. “His European perspective also broadened many of our discussions related to our developing global food animal residue

avoidance program. Such international study visits are a clear example of the drawing power of the ICCM.”

“It has been very rewarding to host Dr. Devreese as a visiting scholar in the ICCM,” Dr. Gehring said. “We have many common interests, including pharmacokinetic and pharmacodynamic modeling, drug and contaminant residues in foods of animal origin, and antimicrobial resistance. Our students and postdocs benefited from interacting with a faculty member from another institution and continent, and we all gained a fresh perspective on shared research topics.”

“At Ghent University, we do a lot of pharmacokinetic studies in different animal species, pigs, poultry, also cockatiels, dogs, cats – a really big variety of animal species,” Dr. Devreese explained on how he decided to visit Kansas State University. “I was looking for a lab that has great expertise in pharmacokinetics modeling. Dr. Riviere and Dr. Gehring both have lots of publications on that particular subject I was looking for.”

Dr. Devreese arrived in September and plans to be back in Belgium by the second weekend in December.

Check it out at the Library

by Carol Elmore

Susie Larson from Print Graphics at the Veterinary Medical Library had an interesting and lively time with Pet Pics this year. From Nov. 2-4, with help from Andi Parrish and veterinary library student workers, Susie set up her photography studio inside the dock area on first floor to take some innovative and fun pictures of animals with their owners. Everyone loves to see pictures which feature folks and their animals. This year featured a picture of a veterinary student with her pet snake and two dogs. Who says pictures have to have only warm and fuzzy animals to be festive. Birds and fish were also featured as well as a small pony. Group pictures with multiple other animals will also be a hit as a gift this year as is evidenced by several group photos. Family groups were very special. Next November if you are hankering for a truly memorable gift for some special relative or friend, keep Pet Pics in mind as you plan your gift list.



Drs. Reif and Mulcahy show ticks to GROW students



Seventh-grade students look at ticks under the microscope during a special workshop at the CVM.

Dr. Kathryn Reif and Dr. Ellyn Mulcahy hosted two workshops entitled, “EEWWWW It’s a Tick!” for seventh graders as part of the school outreach program Girls Researching Our World (GROW) organized by the Kansas State University Office for the Advancement of Women in Science and Engineering to support and encourage girls’ interest in science, technology, engineering and math on Nov. 12.

“In this activity, students learned the basic life cycle of ticks, how ticks feed and what diseases are transmitted by ticks,” Dr. Mulcahy said. “The introductory lecture also included how to identify the most common tick species in Kansas, what to do if you are bitten by a tick, and the best ways to avoid ticks and tick-borne diseases. After the lecture portion, students tested their newly acquired skills and used microscopes to identify local tick species.”

Jenni Wright tours Coyote Rock Ranch



In June, fourth-year student Jenni Wright was chosen as one of three national recipients of a generous \$75,000 Coyote Rock Ranch Veterinary Scholarship, named for the equine ranch owned by Penelope and Phil Knight of Terrebonne, Oregon. Jenni and the other recipients were featured in a video produced by the American Quarter Horse Association.

CVM News Ticker



A total number of 45 Veterinarians and students attended the **2016 SCAAEP Fall Equine Conference**, which was very good considering it is the weekend before the fall/Thanksgiving break. Attendees enjoyed the lunch sponsored by the Kansas State Veterinary Diagnostic Laboratory, and a lot of good information was shared during the conference about colic evaluation, mare repo problems and field dentals.

Congratulations to **Dr. Sanjeev Narayanan** for being the recipient of the Samuel W. Thompson Distinguished Lecturer Award, which was given to him recently at the American College of Veterinary Pathologists annual meeting.

Dr Brad Crauer and 4th year veterinary student **Sarah Steen** were featured in the Innovation and Inspiration campaign for the K-State Foundation Magazine and inspire.ksu.edu website for the Shelter Medicine Mobile Surgery Unit. Students are not the only beneficiaries. Veterinary care — especially spays and neuters — make up a large portion of a shelter’s operating expense. Since the students perform surgery at no cost, shelters are saving between \$50-175 per animal, a significant savings when considering hundreds of animals.

lifelines is published monthly by Marketing and Communications in the College of Veterinary Medicine, edited by Joe Montgomery, jmontgom@vet.k-state.edu. Read online at www.vet.k-state.edu/lifelines/1612.html

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