

AAVPT presents awards to CVM professor and pupil

By Piper Brandt

A CVM professor and his research student recently earned accolades at an international conference held in Overland Park, Kansas.

Dr. Butch KuKanich, professor of veterinary clinical pharmacology and assistant head of the Department of Anatomy and Physiology, along with his graduate student Ally Fitzgerald, a third-year from Lakewood Ranch, Florida, were chosen as recipients of prestigious awards from the American Academy of Veterinary Pharmacology and Therapeutics at its Biennial Symposium.

Dr. KuKanich received the AAVPT Teaching Award, given in recognition of significant teaching activities in veterinary clinical pharmacology and therapeutics. The award is presented every other year during the AAVPT



Ally Fitzgerald and Dr. Butch KuKanich accept their awards at the AAVPT Biennial Symposium.

Biennial Symposium to recognize exceptional and sustained service either to AAVPT, or to the profession of veterinary, comparative pharmacology, or therapeutics at large.

"I am honored to receive this award," Dr. KuKanich said. "I believe that our primary job as faculty is to teach veterinary and graduate students making this award so meaningful."

Ally Fitzgerald, Dr. KuKanich's research scholar, won the

ACVCP/AAVPT Graduate Student Research Award for her oral presentation, "Evaluation of a Novel Opioid Formulation Containing an Abuse Deterrent in a Clinical Trial of Dogs Undergoing OHE." In this clinical trial, Fitzgerald worked alongside Dr. KuKanich where she assisted with initial patient exams, surgical preparation and subsequent evaluations and data collection. Ally participated through the Veterinary Research Scholars Program at KSU.

"It is such an honor to have been chosen for this award!" Fitzgerald said. "I thoroughly enjoyed working with Dr. KuKanich and the rest of the research team on this project. I hope to see this methadone formulation available to veterinarians around the country!"

New study on transmission of African swine fever



A new study conducted by veterinary researchers at Kansas State University sheds new light on a threatening swine disease: African swine fever, or ASF.

The research team, headed by Dr. Megan Niederwerder, assistant professor in diagnostic medicine and pathobiology, look at the degradation of African swine fever virus in animal feed ingredients to understand the potential for disease spread through contaminated feed.

Up to now, data has been limited. Niederwerder's latest study titled, "Half-Life of African Swine Fever Virus in Shipped Feed," examines the possible risk of African swine fever virus spreading to the United States through imported feed.

The article, which has just been published in the journal *Emerging Infectious Diseases*, provides more accurate half-life measurements that confirm the virus can survive a simulated 30-day transoceanic voyage in contaminated plant-based feed and ingredients.

"This study provides additional evidence supporting the potential risk that feed may play in the transboundary movement of African swine fever," Niederwerder said. "Our latest work provides robust half-life estimates, which include standard errors and confidence intervals, and characterizes the stages of viral decay over time for ASFV in animal feed ingredients."

Detailed analysis shows that the half-life of African swine fever virus in feed ranges from 9.6 to 14.2 days after exposure to varying temperature and humidity conditions simulating transoceanic shipment. This means it would take approximately two weeks for the total viable virus concentration to decay by half its original count under the conditions of a transatlantic voyage.

CVM Students participate in unique summer opportunities

By Piper Brandt

This summer, CVM students traveled near and far to participate in unique classes, tours and internships. Three second-year students, Tyler Blackwood, Cassandra Kroncke and Tori Matta were among many who experienced a wide array of opportunities available to veterinary students.

Tyler interned at Kinsley Feeders near Kinsley, Kansas, where he gained insight on the feedlot sector of cattle medicine.

"I like the large numbers, the herd health protocols and the preventive medicine aspect of the field, as well as the concentration of numbers that one deals with on a day-to-day basis," Tyler said. "Being constantly surrounded by cattle is a feeling that cannot be replicated."

Cassandra visited the Department of Defense's Holland Military Working Dog Hospital at Lackland Air Force Base in San Antonio, Texas, where she shadowed Lt. Col. Matt Takara, a

board certified internal medicine veterinarian.

The Holland Military Working Dog Hospital is responsible for providing comprehensive veterinary care for all military working dogs at the base, and for working dogs worldwide.

"During this opportunity, I learned about how veterinary work is completed in the military as well as different opportunities available to veterinarians in the military," Cassandra said. "There are multiple opportunities to travel to other countries to connect with people of different cultures and to provide communities with the best possible veterinary care."

Tori, an aspiring zoo veterinarian, travelled to India through the International Veterinary Study Tours elective.

"I have always wanted to travel to India so I jumped at the chance," Tori said. "Our group got to experience many different aspects of veterinary medicine including a veterinary college,

a state government hospital, a shelter, livestock farms, two zoo hospitals and a wildlife rehabilitation center."

Matta also traveled to South Africa for a wildlife conservation medicine course through WildlifeVets, an organization that manages wildlife capture practices and offers courses for veterinarians and students.



Tori Matta, second-year student, helps monitor a sedated wild elephant in South Africa.

'Hidden' road connects K-State's past with the future

A new sign on the K-State campus helps commemorate a piece of veterinary medical history that dates back more than 100 years.

A standard green and white street sign has been installed east of Coles Hall and denotes a small and obscure stretch of road that gracefully winds north from Jardine Road and up the hill behind the Equine Performance Testing Center. To the south, the road provides an entrance to parking and loading areas behind Call Hall and Weber Arena.

The road originally led to a facility that was part of the College of Veterinary Medicine known as the Serum Plant.

"The Serum Plant was established more than 100



A new sign commemorates the historical Serum Plant Road.

years ago and used to produce anti-hog cholera, or classical swine fever serum until 1948," explained Jishu Shi, professor of immunology and director of the U.S.-China Center for Animal Health. "It was an important part of the early days of veterinary medicine in Kansas and our veterinary school."

The street name is eponymous with the Serum Plant.

Bats can be problem for pets, humans this time of year

With fall approaching, Dr. Susan Nelson, clinical professor and veterinarian at the VHC says homeowners and pet owners need to be cautious of bats, which are a leading transmitter of rabies.

"Bats are more active this time of year, which means there is an increased chance of exposure to them," said Dr. Susan Nelson.

Case in point, Dr. Nelson said a bat just found in a Manhattan residence has tested positive for rabies.

"While bats are essential for our ecosystem and most bats are harmless, we need to remember that in some situations, bats can be a threat to our health," Dr. Nelson said. "Any possible contact with bats by people or pets needs to be taken seriously."

According to the Centers for Disease Control, bats are responsible for roughly 7 in 10 rabies deaths among people who are infected with the rabies virus in the U.S. The CDC says that many people do not realize that bats can transmit rabies and don't seek treatment when exposed to one. People also often don't know that they have been bitten or scratched by a bat because of the small wounds that they leave.

Bats also are a problem for animals, accounting for one-third



As a leading transmitter of rabies, bats pose a significant health risk. (stock photo from unsplash.com)

of the 5,000 rabid animals that are reported in the U.S. each year.

It is important to take these situations seriously as rabies is almost always fatal after symptoms appear, despite treatment efforts, Dr. Nelson said.

If a bat is found in your residence, Dr. Nelson recommends having the mammal tested for rabies in the following situations:

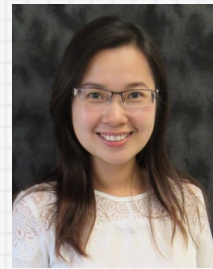
- When you are scratched or bitten by a bat.
- When you handled a bat with your bare hands.
- When you woke up and found a bat in your room.
- When unattended young children are found in the same room with a bat.
- When mentally impaired or intoxicated people are found in a room with a bat.

CVM completes 20,000th spay/neuter surgery



Fourth-year student Samantha Prester performed the K-State Mobile Surgery Unit's 20,000th spay/neuter procedure on Ray, a 6-month-old mixed breed at the T.Russell Reitz Animal Shelter in Manhattan. The Mobile Surgery Unit began operating in April 2015.

CVM News Ticker



(Left to right) Dr. Santosh Aryal, Assistant Professor, along with Tuyen Nguyen and Ramesh Marasini, Ph.D. Candidates, are part of the Nanotechnology Innovation Center of Kansas State.

The research team of Ramesh Marasini, Tuyen Nguyen and Dr. Santosh Aryal with the CVM's Nanotechnology Innovation Center of Kansas State (NICKS) released their study about strategically designed nanoscale gadolinium-based contrast agents as a method for avoiding potential side effects and improving contrast on MRI readings.

The study was featured in an Advanced Science News article. You can read it here: www.advancedsciencenews.com/making-mris-safer

Dr. Ryane Englar's third textbook, "Common Clinical Presentations in Dogs and Cats," was released by Wiley-Blackwell. "Common Clinical Presentations in Dogs and Cats" is a quick reference to essential information for diagnosing canine and feline patients, based on presenting complaints.

Drs. Alyssa Comroe and Jason Banning, along with other CVM volunteers, helped lead efforts to a successful day for T. Russel Reitz in Manhattan and the Topeka Helping Hands for the annual Clear the Shelters event. A total of 99 pets were adopted from the Helping Hands Humane Society and 61 pets adopted from TRR.

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