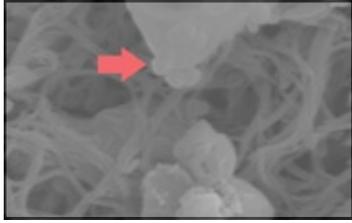


## New insight on BRD CVM presents annual preclinical teaching awards



An electron micrograph of *Mannheimia haemolytica* in a bovine lung. (Photo credit: Ravindra Thakkar and Dr. Charan Ganta.)

By Piper Brandt

A new study on the treatment of non-responding cases of bovine respiratory disease, known as BRD, conducted by Dr. Hans Coetzee and his collaborators from Iowa State University, sheds light on the relationship between drug treatments and the emergence of antimicrobial resistance.

The study, “Association between antimicrobial drug class for treatment and retreatment of bovine respiratory disease (BRD) and frequency of resistant BRD pathogen isolation from veterinary diagnostic laboratory samples,” was published in the December 2019 issue of the journal PLOS ONE.

Antibiotics that are used to treat BRD are broadly classified into two groups: namely those that prevent growth of the bacteria — i.e., bacteriostatic — and those that kill the organism — i.e., bactericidal. Although 90% of BRD relapses are reported to receive retreatment with a different class of antimicrobial, the impact of antibiotic selection — bactericidal or bacteriostatic — on disease outcomes and the emergence of antimicrobial resistance has not been investigated, according to Dr. Coetzee.

The focus of the study is determining the association between antimicrobial class selection for treatment and retreatment of BRD relapses and antimicrobial susceptibility of *Mannheimia haemolytica*, *Pasteurella multocida* and *Histophilus somni*.

Dr. Coetzee is a professor and head of the anatomy and physiology department.

Three faculty members have been recognized for preclinical teaching excellence in the CVM. Drs. Matt Basel, Ryane Englar and Dan Thomson were each named as the respective top teachers for the first, second and third years of instruction, as voted on by each respective class of students for their teaching efforts in the 2018-2019 school year.

“Beginning in 2004, the college has utilized these annual awards to recognize faculty for their exceptional teaching efforts in the preclinical stages of the veterinary curriculum,” explained Dr. Peggy Schmidt, associate dean for academic programs and student affairs.

Dr. Basel was presented with the 2019 Boehringer Ingelheim Teaching Excellence in the First Year Award in recognition of outstanding instruction of first-year veterinary students.

Dr. Basel is a clinical assistant professor in the Department of Anatomy and Physiology.

“I really enjoy teaching in the first-year curriculum and the veterinary students at Kansas State are some of the best students I’ve ever met,” Dr. Basel said. “It’s



Students in the CVM voted for Dr. Dan Thomson, Dr. Ryane Englar and Dr. Matt Basel as recipients of the college’s 2019 preclinical teaching awards.

very gratifying to know that the students appreciate my efforts and I appreciate them just as much!”

Dr. Englar, clinical assistant professor and clinical education coordinator for clinical skills, was named recipient of the 2019 Bayer Teaching Excellence Award, which is presented in recognition of outstanding instruction of second-year veterinary students. Dr. Englar joined the faculty at K-State in May 2017, where she was hired to help fulfill a priority in the college’s Strategic Plan of providing clinical experiences and skills in all years of the Doctor of Veterinary Medicine curriculum.

“Working with students is my greatest passion,” Dr. Englar said. “From the moment they matriculate into the program, they are our colleagues and leaders of the veterinary

profession. It is exciting to see their inner spark ignite as they discover their greatest strengths and contributions as future doctors of veterinary medicine. I thank them for being a gift to this profession and want them to know that my door is open to them, always.”

Dr. Thomson was chosen as recipient of the 2019 Teaching Excellence in the Third Year Award

sponsored by Zoetis. He earned a bachelor’s degree in animal science in 1990 and a Doctor of Veterinary Medicine in 2000, both from Iowa State University. Dr. Thomson has also completed a master’s degree in ruminant nutrition from South Dakota State University in 1993 and a doctorate in ruminant nutrition from Texas Tech University in 1996.

“Teaching students is a privilege and an honor,” Dr. Thomson said. “This is such a humbling award. We are blessed to have the best students and alumni in the world. It is an honor to be a part of this great faculty. We all have so much to be thankful for at Kansas State University.”

### Dr. Annelise Nguyen to serve as associate director of Johnson Cancer Research Center

Dr. Annelise Nguyen, associate professor of diagnostic medicine and pathobiology, will serve as the new associate director for the Johnson Cancer Research Center at Kansas State University. She succeeds Dr. Mark Weiss, professor of anatomy and physiology, who previously held this position.

While retaining her responsibilities in the veterinary college, Dr. Nguyen will also support the mission of Johnson Cancer Research Center. She will be under the leadership of Dr. Sherry Fleming, who succeeds Dr. S. Keith Chapes, who retired in December 2019.

The Johnson Cancer Research Center is a multidisciplinary composed of faculty researchers and students who are working hard to unravel the complexities of cancer.

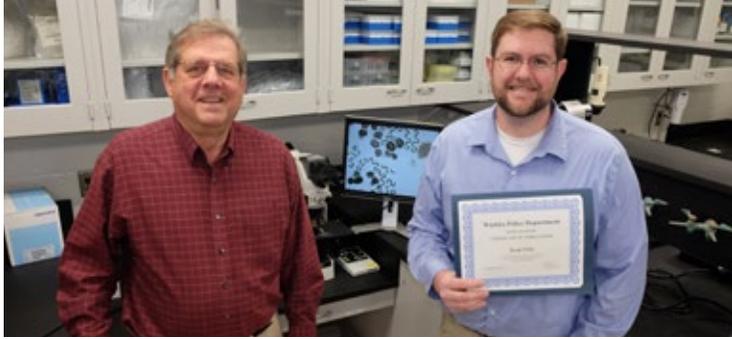
Dr. Nguyen has extensive experience in breast cancer research, including the efficacy of anticancer drugs, in vivo rodent spontaneous model, in vitro 3-D tumor model (microphysiological system), preclinical data of toxicological studies, and intellectual property for anticancer drugs.

Dr. Nguyen will begin her position as associate director on Jan. 13, 2020.



Dr. Annelise Nguyen’s extensive experience in breast cancer research makes her an ideal candidate for the position of associate director.

## Faculty receive honors from Wichita Police Department



Drs. Steve Ensley (left) and Scott Fritz received the Outstanding Citizen Assistance Plaque from the Wichita Police Department. A slide of blue-green algae is displayed on the screen behind them.

Drs. Steve Ensley, veterinary toxicologist and clinical professor of anatomy and physiology, and Scott Fritz, research associate with the Kansas State Veterinary Diagnostic Laboratory, have received the Outstanding Citizen Assistance Plaque. Matthew McKernan, horticulture agent with K-State Research and Extension — Sedgwick County, has received the Certificate of Appreciation.

The award stems from an August incident near West Kellogg in Wichita when a suspicious character tried to escape police officers by swimming into a retention pond. The teenager could not swim and disappeared underwater for 30 seconds. Wichita police officers Terry Nelson and Drew Rhoades dove into the water, rescued the teenager and brought

her to shore to administer CPR until emergency medical services arrived. All three people soon became ill after exposure to the water and doctors believed that the teenager would die.

The Wichita Police Department reached out to McKernan to test the quality of the retention pond water. McKernan helped police officers contact the Kansas State Veterinary Diagnostic Laboratory. Wichita police officers drove pond water samples to the laboratory in Manhattan, where Ensley and Fritz immediately began testing the water and found that the water had a heightened presence of a blue-green algae toxin. The test results helped medical staff treat Nelson, Rhoades and the teenager. All three people eventually made a full recovery.

## Beef experts weigh factors in breeding decisions



One of the most exciting times of the year on cow/calf operations is when the calves are born and producers can see the results of their breeding decisions.

Experts from the Beef Cattle Institute say it can also be stressful and costly if those mating decisions lead to calving difficulties, which is why much care needs to be taken when planning those matings.

As bull buying season approaches, selecting the right bull to match with the heifers was a discussion topic during a recent podcast with the team at the BCI.

Beef extension specialist Bob Weaber advised producers begin by evaluating the type of breeding system they need to be successful. “Think about what types of bulls you are going to turn out on what

Calving Ease EPDs is one criterion for consideration when deciding heifer matings, say experts at K-State’s Beef Cattle Institute. More information on this topic is available on a weekly podcast produced by the BCI.

groups of females to define what the calving ease need really is.”

One evaluation tool that producers can use in making that decision are Expected Progeny Differences, or EPDs, which are the estimates of the genetic value of the parents to project the calf’s performance. EPDs are estimated on a variety of traits among the beef breeds. The direct (CE or CED) and maternal calving ease (CEM or MCE) EPDs are often a consideration in heifer matings. The greater the number, the lower the risk for calving difficulty, Weaber said.

“Calving ease is one of the first things to think about when selecting the types of bulls to breed heifers,” said Dr. Bob Larson.

## Zoological Medicine hosts Teddy Bear Clinic



The Zoological Medicine Service presented a Teddy Bear Clinic to preschool students at the Sunset Zoo on Dec. 6. (Left to right) The VHC Team consisted of Sarah Quick (CVT), Kaylyn Hruska, Dr. James Carpenter, Mary Post and Tallin LaRue.

## CVM News Ticker



Dr. Mike Dryden, also known as “Dr. Flea,” received a thank-you plaque from the Class of 2022 for his outstanding teaching skills. He has also recently published a new book, “Top 100 Questions and Answers about Fleas and Pets.” Dr. Dryden is the course coordinator of second-year DMP Veterinary Parasitology.

Dr. Megan Niederwerder delivered the keynote address at the Swine Day at South Dakota University. Her presentation included research in regards to how African swine fever could potentially be transmitted to the United States through feed imported from southeast Asian countries and China.

Dr. Bob Larson presented two talks, Calf Health and Nutrition for Beef Cows, at the Tri-State Beef Conference in Oberlin, KS.

Dr. Hans Coetzee was nominated and accepted to be a speaker for the National Coalition for Food and Agricultural Research 2020 Lunch-N-Learn Hill Seminar Series. The purpose of the seminar series is to inform Hill Staff & other policy stakeholders about the value of public investment in food & agriculture research.

Dr. Juergen Richt, CEEZAD’s director, was named recipient of the ARS Mid-West Area Award for Excellence in Technology Transfer for Research on Swine Influenza vaccines.

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