Staff Council hands out High Five and more!

By Piper Brandt

The CVM Staff Council announced its annual staff awards at a luncheon held Jan. 31.

Gina Scott, chair of the Staff Council, said the council launched the awards program in 2018.

“The purpose of the staff awards is for us to take the opportunity to recognize the hard work of our CVM staff,” Scott said. “It gives us a chance to say thank you and that we appreciate their contributions to the college. Recognizing the accomplishments of others brings a sense of family to our college. Part of the awards include a cash prize to confirm our commitment to supporting our people.”

“As we enter our second year of Staff Council Awards, it is evident this initiative will become a time-honored tradition,” said Dr. Bonnie Rush, dean of the veterinary college. “It is a pleasure to honor our hard-working and committed staff, and we intend to continue the Staff Council awards for many years.”

The recipients are as follows:

**High Five Award:**
- Randy Juracek, radiation therapy technologist. Presented to an employee who has gone above and beyond in enhancing one or more components of the college’s mission.
- Culture, Collegiality and Compassion Award:
  - Sun Johnson, custodial specialist. Presented to an employee who enhances a feeling of belonging for all of the CVM.
- Commitment to Excellence Award:
  - Presented to six employees who have gone beyond in enhancing the CVM’s mission. Recipients: Nick Hensphill, radiologic technologist; Dave Hoffman, recruitment coordinator; Joel Sanneman, confocal facility manager; Xiaorong Shi, research assistant; Rhonda Steele, project assistant; and Gina Jensen, junior surgery laboratory manager.

Diagnostic team develops new method to improve food safety

By Piper Brandt

Researchers recently developed a faster, more efficient method of detecting Shiga toxin-producing E. coli, or STEC, in ground beef, which often causes recalls of foods such as ground beef and vegetables, STEC can cause illnesses with symptoms including abdominal pain and diarrhea. Some illnesses caused by STEC may lead to kidney failure and can be life-threatening.

“Some E. coli strains do not produce Shiga toxins and thus do not affect human health as much,” said Dr. Xuming Liu, research assistant professor. “Because cattle feces and ground beef can contain harmless or less pathogenic E. coli along with pathogenic E. coli strains in a complex sample matrix.”

“The new dPCR test was developed for research and food safety inspections that require shorter turnaround and high detection accuracy.”

Nominees and recipients gather at the Staff Council awards luncheon. See more pics at Lifelines online.

New function discovered in protein biology of E. Coli

(Left to right) The research team included Colin Stoy, technician; Dr. Lance Noll, senior scientist; Elizabeth Porter, lab manager; Dr. Jianfa Bai; Ying Wang, Ph.D. candidate; Junsheng Dong, visiting scholar; Nanyan Lu, bioinformatician; and Cong Zhu, pre-DVM student; Dr. Xuming Liu, research assistant professor.

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News from the College of Veterinary Medicine at Kansas State University

Kansas State University College of Veterinary Medicine

More Lifelines online at www.vet.k-state.edu/lifelines/2002.html
Study develops new vaccine method to fight cattle disease

By Piper Brandt

Researchers at the CVM, in collaboration with Iowa State University, have developed a new vaccine delivery platform to produce long lasting protection against anaplasmosis infections.

Bovine anaplasmosis, caused by the blood-borne parasite, Anaplasma marginale, is the most prevalent tick-transmitted disease of cattle worldwide and causes significant disease loss to beef producers in the United States.

"Currently, a common strategy to control anaplasmosis is to provide mineral or feed containing the antibiotic chlortetracycline to cattle on pasture," said Andrew Curtis, doctoral graduate research assistant in the laboratory of Dr. Hans Coetzee, professor and head of the anatomy and physiology department. "This practice has raised concerns about the potential emergence of antimicrobial resistance in bacteria that may pose a risk to human and animal health. Although there is an experimental vaccine available to control anaplasmosis, this has not been evaluated in published research studies and requires multiple injections."

The objective of the study was to develop a single-dose implant platform that provides long term immunity against anaplasmosis infections by releasing vaccine contents over an extended period of time.

This new single-dose vaccine, which is administered in the back of the ear, has been shown to provide protection against clinical anaplasmosis for up to two years and could potentially help make anaplasmosis control more accessible and convenient to livestock producers.

Andrew Curtis and Dr. Hans Coetzee co-develop a vaccination method via an ear implant.

Research newly published research from the CVM provides the first investigation into how feed and feed ingredients may be playing a role in the spread of two swine viruses of global significance.

"Classical swine fever virus (CSFV) and pseudorabies virus (PRV) are two of the top four transboundary animal diseases of economic and welfare significance. Recent changes in PRV strain virulence and CSFV geographic distribution are of great concern for these trade-limiting diseases."

"The emerging threat of CSFV and PRV being reintroduced into US commercial swine is significant and preventing entry is critical for the US pork industry," Dr. Niederwerder explained. "The route of introducing and transmitting swine viruses through feed has been recognized since the 2013-2014 outbreak of porcine epidemic diarrhea virus. However, the stability of CSFV and PRV in imported feed ingredients had yet to be investigated."

CSFV and PRV in imported feed are a possible threat to US pork production. (Photo by Vidar Nordli-Mathiesen on Unsplash)

Spring commencement moves to Bramlage

The 2020 spring commencement for veterinary medicine, which has traditionally been held in McCain auditorium, has been moved to Bramlage Coliseum. The ceremony will take place on Friday, May 15 at 4:00 pm.

Dr. Kate KuKanich was awarded a $15,000 grant from the 2020 Boehringer Ingelheim Veterinary Scholars Program, which will support student stipends for the program.

Ron Orchard, second-year student in veterinary medicine and public health graduate student, will be a keynote speaker at the KSU 2020 Community Engagement Symposium on March 23.

Drs. Mike Apley and Matt Miesner along with other K-State faculty members, Drs. Daniel Thomson, Fadi Aramouni, Dale Blasi, Steve Enslay, Mark Haub, KC Olson, Travis O’Quinn, and Anthony Taroff received $48,500 in funding from the Kansas Beef Council for their research study, “A comparison of chemical composition, toxicology screening, estrogenic activity, taste panel evaluation and price of meat substitutes compared to ground beef.”

CVM News Ticker

Drs. Chris Blevins and Dylan Lutter, with the assistance of Ashley VanMeter and Alison Brunnner, presented Barn Night at High Horse Stables on Jan. 15. Dr. Lutter presented on equine performance medicine and demonstrated stretches that clients can do with their horses. Dr. Blevins discussed preventative medicine, biosecurity, nutrition and more.

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