

News from the College of Veterinary Medicine at Kansas State University

Study: medicated mother's milk offers piglets pain relief



New research led Dr. Hans Coetzee suggests NSAIDs can be administered to a sow and then delivered to piglets, via nursing, as a way to alleviate pain while processing the piglets.

New findings by researchers at the Kansas State University College of Veterinary Medicine suggest potential pain relief for piglets by administering medicine through the act of nursing.

The scientific methodology is formally referred to as "transmammary delivery." The basic concept involves injecting a sow with pain-relieving medicine which can be ingested by the sow's piglets through the milk.

Dr. Hans Coetzee, head of anatomy and physiology at Kansas State University and his collaborator, is the principal investigator of a multiinstitutional research team.

"In the swine industry, piglets regularly undergo painful procedures during process, such as tail docking and castration, which has become an emerging animal welfare concern," Dr. Coetzee said. "We hypothesized that transmammary delivery of a nonsteroidal anti-inflammatory drug (NSAID) - in this case, firocoxib - would reduce pain associated with processing in piglets. Our findings indicated this technique may safely reduce processing-induced stress and enhance production by increasing weaning weights."

Dr. Coetzee's research was funded by the National Pork Board (grant No. 16-118) and resulted in the publication of the study, as well as a provisional patent application.

Dr. Bonnie Rush becomes new CVM dean

Following a national search, Bonnie Rush has been selected as the new dean of the College of Veterinary Medicine at Kansas State University.

Dr. Rush, who has been serving as interim dean of the college since 2017, was appointed by Charles Taber, provost and executive vice president. Her appointment begins June 16.

"Dr. Rush emerged as the clear leader following a competitive national search process. With her strong history of leadership for the College of Veterinary Medicine, Dr. Rush is the right choice to lead this college and its vital teaching, research, service, and outreach programs into the future," Taber said. "The college not only supplies the state of Kansas, the nation and the world with highly trained and skilled veterinarians, it is also a leader in infectious disease research that affects both animals and humans."

As dean, Dr. Rush will be charged with leading the college

on a variety of fronts, including program development, faculty and student development, research, teaching and extension, program accreditation, diversity and the 2025 plans for both the college and the university.

The college has three academic departments, two service units — the Veterinary Health Center and Kansas State Veterinary Diagnostic Laboratory - and is home to a number of prestigious research centers and units, including the Center of Excellence for Emerging and Zoonotic Animal Diseases, Beef Cattle Institute, Center of Excellence for Vector-Borne Diseases and the U.S.-China Center for Animal Health. The college's professional degree program provides broad training opportunities across a comprehensive range of companion and exotic animals, and livestock species.

"It has been an honor to serve as the interim dean," Dr. Rush said. "The students,



Dr. Bonnie Rush

faculty and staff of the College of Veterinary Medicine are tremendously talented and committed to advancing the missions to strengthen animal health and well-being through research, education and service. I look forward to honoring the traditions of the college, while working together to create new opportunities for the future."

THE HOT ZONE spotlights K-State as 'Silicon Valley for biodefense'

For more than 150 years, Kansas State University has been a national leader in animal health, biosciences and food safety research. The College of Veterinary Medicine has played an instrumental role in all three areas.

The mission harkens back to the university's land-grant beginnings and it is a mission that former Senate Majority Leader Tom Daschle highlighted in 2017 when he described Kansas State University as the "Silicon Valley for biodefense.".

The university and its leaders have again been recently highlighted for their biodefense efforts. Two Kansas State University veterinarians and leaders — Drs. Nancy and Jerry Jaax — and their response to an Ebola-related outbreak inspired the recent National Geographic limited series, THE HOT ZONE.

"Nancy and Jerry Jaax are leaders who expanded the university's land-grant mission through their work and expertise in biodefense," Ron Trewyn, the university's NBAF liaison said. "From their work with the U.S. Army at Fort Detrick to their work with researchers in Manhattan, Nancy and Jerry helped make K-State the 'Silicon Valley for biodefense."

In 1999, Jerry helped Kansas State University publish the "Homeland Defense Food Safety, Security, and Emergency Preparedness Program." The 100page document — informally called "The Big Purple Book" outlined the university's infectious disease research programs and the need for a facility to address three major infectious disease



A K-State team attends BSL-4 training in the BSL-4 simulator at the National Emerging Infectious Diseases Laboratory.

components: plant pathology, animal health and food processing.

That led to the creation of Kansas State University's biocontainment facility called the Biosecurity Research Institute, or BRI, at Pat Roberts Hall.

Communications team wins national AAVMC award

The communications program at the Kansas State University College of Veterinary Medicine consisting of Joe Montgomery, director of communications, and Audrey Hambright, public information officer — has been recognized with the Association of American Veterinary Medical Colleges' 2019 Communications Excellence Award.

K-State's program was praised by judges for comprehensive program excellence that advanced the college's strategic plan.

"Communications excellence is fundamental to institutional advancement," said Andrew T. Maccabe, the association's chief executive officer. "We congratulate our colleagues at Kansas State University for earning this distinction, and appreciate the role their work is playing in advancing the overall interests of academic veterinary medicine."

Following the completion of a new strategic plan at the college, the communications team consolidated two magazines into



Audrey Hambright and Joe Montgomery lead marketing and communications for the CVM.

one new College of Veterinary Medicine-themed magazine called Wildcat Veterinarian. The new magazine was created to advance understanding and support for key initiatives and priorities in the strategic plan, which include building awareness for their outstanding food animal programs, as well as their responsive and collaborative research and service programs.

The award includes a \$1,000 honorarium, a commemorative, and public recognition. It will be formally presented during the annual meeting of the Association of Veterinary Advancement Professionals, at 8 a.m. Thursday, Aug. 1, at the Courtyard Washington/Convention Center in Washington, D.C.

Butler collects National Livestock scholarship

Braxton Butler, third-year veterinary student from Virgil, Kansas, has been awarded a \$5,000 scholarship from the National Livestock Companies consisting of National Livestock Credit Corporation and National Livestock Commission Association.

The award was presented to Braxton at the National Livestock Annual Meetings in Oklahoma City in March.

"I am very honored to have received this scholarship from National Livestock," Butler said. "After school I plan on locating to a rural practice where I can work



Third-year student Braxton Butler aims for rural practice.

alongside National Livestock and their clients in a relationship that will hopefully benefit both local producers and the beef industry as a whole."

CVM News Ticker



The VHC welcomes its new class of interns: Back row (left to right): Drs. Jason Banning, Michael Schettler, Tess Rooney, Caitlin Moreno and Katie Mitchell. Front: Drs. Diana Montano Reynoso, Andrea Montano Hernandez, Nalani Yamada and Emily Benfield.

Dr. Mike Apley attended the American Association of Bovine Practitioners Executive Committee Legislative Fly-In meeting in Washington, D.C., with the AVMA Government Relations Division offices. This is a venue that provides updates from key federal agencies and an opportunity to visit the offices of U.S. senators and representatives.

Dr. Liz Santschi provided surgical and lameness consultation support to the Kentucky Horse Racing Commission for the week leading up to the Kentucky Derby and Kentucky Oaks races.

Drs. Walter Renberg and Raghavendra Amachawadi took 10 students to Bangalore and Mysore, India May 18-29 as part of the CS 825 International Veterinary Study Tours course. This is a faculty-led trip for students to explore veterinary medicine in a foreign country.

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Second-year student chosen for American Kennel Club scholarship

Emily Eppler, second-year veterinary student, was one of 15 students nationwide chosen for an American Kennel Club scholarship.

The American Kennel Club (AKC), which is the world's largest purebred dog registry and advocate for all dogs, makes an annual commitment to students pursuing their education in veterinary studies through the AKC Veterinary Outreach Scholarship program.

This scholarship is designed to support individuals with a background of participation in AKC events and programs, who seek to promote animal health and medicine. A total of \$35,000 in scholarship money was awarded.

"I am blessed and honored to be awarded the AKC Veterinary Outreach Scholarship," Emily said. "These funds will help support my academic goals of becoming a veterinary orthopedic surgeon as I head into my second year of veterinary curriculum at K-State. As the AKC Student Ambassador at K-State, I look forward to exploring the opportunities available with this



Second-year student Emily Eppler hopes to be a veterinary orthopedic surgeon.

new relationship between the AKC and K-State."

"The recipients of this scholarship are truly dedicated to the world of purebred dogs and the health and wellbeing of animals. They have worked hard to balance their demanding school schedules with participation in AKC events," said Mari-Beth O'Neill, vice president of sport services. "We are very proud of them and look forward to seeing their impact on the future of veterinary medicine."