



Also inside this issue of *lifelines*:



**Dr. Philip Hardwidge studies *E. coli* O157:H7. See page 2**



**Endangered tortoises get help. See page 3**



**VHC sends team to Rolling Hills Zoo. See page 4**



**GROW program hosts All 4 Animal Health. See page 4**

# Tradition of Excellence

## Dr. Ken Harkin accepts K-State's prestigious Iman Teaching Award

The CVM's Dr. Ken Harkin was one of two K-State professors who recently received \$5,000 awards in recognition of their outstanding research and teaching. The annual Dr. Ron and Rae Iman Outstanding Faculty Awards, which started in 2007, are sponsored by the K-State Alumni Association and are made possible through the generosity of Ron and Rae Iman. Dr. Harkin, a professor of Clinical Sciences, was awarded the Iman Outstanding Faculty Award for Teaching, while Dr. Zhijian Pei, professor of industrial and manufacturing systems engineering in the College of Engineering, was presented with the Iman Outstanding Faculty Award for Research.

Dr. Harkin's award honors a full-time K-State faculty member for excellence in high-quality instruction, strong relationships with students inside and outside the classroom and a reputation for scholarship and distinguished service to the university. He joined the K-State faculty in 1997 as a clinical instructor, becoming an assistant professor in 1998, associate professor in 2004 and professor in 2010. Dr. Harkin instructs fourth-year veterinary students in their clinical rotations through the internal medicine service and presents didactic lectures to third-year veterinary students in gastroenterology, hepatology, neurology and clinical hematology.

His nominator, Dr. Bonnie Rush, department head of Clinical Sciences, said, "Ken is the most decorated faculty member in the college and is our franchise player. His passion is teaching veterinary students in the classroom and in the clinic. He takes the responsibility seriously and serves as an advocate for the educational environment when the college is determining curricular or



**Dr. Ken Harkin thanks Ron and Rae Iman and the K-State Alumni Association for recognizing him with the Iman outstanding teaching award for 2013.**

structural change. In his words, "Teaching is not fancy, just 100 percent dedication every single day to students, patients and clients."

"We are so pleased to honor these outstanding K-State faculty members," said Amy Button Renz, president and CEO of the K-State Alumni Association. "We are also deeply appreciative to Ron and Rae Iman for their generous commitment to make these awards possible."

Dr. Harkin follows other CVM professors who also received this award: Dr. T.G. Nagaraja, research, 2012; Dr. Derek Mosier, teaching, 2009; and Dr. Dan Marcus, research, 2009.

## NIH grant enables Dr. Hardwidge to study E. coli O157:H7



**Dr. Philip Hardwidge studies how certain pathogens compromise the body's innate immune system.**

Often the key to any victory is to fully understand your opponent. This is especially true when that opponent is a significant food-borne bacteria such as E. coli O157:H7.

Dr. Philip Hardwidge, associate professor in Diagnostic Medicine/ Pathobiology, and his lab are seeking to fully understand how pathogens like E. coli use proteins to block a host's innate immune system. This system is the body's first defense against infection, often presented in the body's mucosal

surfaces such as those found in the intestine.

"In terms of infectious disease, this inhibition of the human innate immune response is absolutely critical for the bacteria's ability to cause an infection, so if we can identify choke points in the interaction between the bacterium and the host, we may be able to inhibit the bacterium and prevent its survival in an infected human being," Dr. Hardwidge said.

Dr. Hardwidge's lab is currently participating in a National Institutes of Health grant to explore a protein expressed by pathogenic E. Coli known as NLH-1, which inhibits an important cellular signaling pathway called IKK/FF-kB (I-Kappa-Kinase/N -F-Kappa-B).

"This protein is one example of an injected bacterial protein that is able to block the innate immune system," Dr. Hardwidge said, "so this protein has kind of an unusual mechanism that had not been seen in other bacterial or viral pathogens so we're interested

in understanding more about how this protein really works and whether it represents a good target for future therapeutics."

The exploration of these host/pathogen interactions requires the lab to use multi-disciplinary approaches including using animal models and advanced technologies such as quantitative PCR.

"One of beauties of QPCR, or Quantitative PCR, is that it gives a really reliable and easily to define comparative number of gene expression," said Mike Hays, a microbiologist who works in Dr. Hardwidge's lab. "It looks at a snapshot in time in that cellular environment and it could tell us at that snapshot in time, in that window, what the expression levels are of the genes that we're interested in."

Understanding how these bacterial proteins function in the host/pathogen interaction may also have exciting applications for other human diseases.

To learn more watch this month's video report at Lifelines online: [www.vet.k-state.edu/depts/development/lifelines/1312.htm](http://www.vet.k-state.edu/depts/development/lifelines/1312.htm)

## CVM promotes Dr. Michael Kenney to head A&P department



After concluding a national search, the CVM has announced the promotion of Dr. Michael J. Kenney to the position of head of the Department of Anatomy and Physiology.

"We are very pleased to have Dr. Kenney serve in this role," Dean Ralph Richardson said. "His expertise as a researcher along with his energy and passion for higher education will help move the

department and college forward in contributing to K-State's 2025 goal of being a top 50 public research university."

Dr. Kenney was previously the associate head of the anatomy and physiology department and became the interim head in 2011. He has also been serving as the college's director

of the Veterinary Biomedical Sciences Graduate Program and the Basic Research Immersion Training Experience (BRITE) program, and co-director of the Veterinary Research Scholars Program.

Dr. Kenney received his Ph.D. from the University of Iowa in 1988 and completed postdoctoral training in central autonomic neurophysiology from 1988-1990 in the Department of Pharmacology at the College of Medicine, Michigan State University. He joined the Department of Anatomy and Physiology at K-State as an assistant professor in 1992, was tenured and promoted to associate professor in 1996, and promoted to professor in 2002.

Dr. Kenney's research is focused on understanding regulation of the sympathetic nervous system by combining central and peripheral electrophysiological methods with molecular biological techniques to study mechanisms regulating central sympathetic outflow.

## Dr. David Eshar seeks to protect endangered tortoises

In a recent trip to Israel, Dr. David Eshar set out to understand more about the desert tortoise, an endangered species found in the Mediterranean region. The present population size is estimated to be between 2,520 and 3,150 individuals depending on parameters used, of which around 1,890 to 2,360 of those tortoises would be adults. In order to best protect this species, Dr. Eshar and his colleagues hoped to collect information regarding the quantitative,

morphologic, and cytochemical features of blood cells and biochemical analyses of clinically healthy Desert tortoises. This information, found by collecting blood samples from captive tortoises, can be used to establish normal reference values.

Because of the imminent extinction these tortoises face in the Mediterranean, captive breeding and reintroduction schemes have been successfully used over the past 10 years. However, one major concern of both captive-bred and wild

tortoises is health. Hematologic and biochemical data is imperative for the management of both healthy and diseased animals. By obtaining these novel study results and its meaningful clinical contribution, K-State displays commitment to the advancement of exotic animal and wildlife medicine knowledge.



**The desert tortoise is one of the smallest tortoise species; adults can only get to about 13 centimeters in shell length and weigh up to 300 grams.**



**Dr. David Eshar examines a desert tortoise together with keepers and veterinarians at the breeding colony in the Tisch Family Zoological Gardens in Jerusalem, Israel.**

## Rhinoceros procedure proves successful

**By Kristin Loving, VHC Communications and Client Relations Coordinator**

Dr. James Carpenter, professor of zoological medicine, and Dr. Warren Beard, professor of equine surgery, led a team from the VHC at K-State to assist Rolling Hills Zoo in treating a patient of massive size on Nov. 8. A 2-ton, 34-year-old, white rhinoceros named Milton, was immobilized so VHC specialists could biopsy a mass on the animal's abdomen.

The white rhinoceros, native to Africa, is one of five endangered species of rhinos and is actually closely related to the horse.

Upon the team's arrival, Rolling Hills' veterinarian, Dr. Danelle Okeson administered anesthetics and, with the help of the large teams of Rolling Hills Zoo and VHC personnel, the rhino was stabilized in a standing position that allowed the VHC team to perform the diagnostic procedure. The VHC team led the procedure to obtain samples of the mass, a well-vascularized, external growth larger than a human hand. First, the mass was examined through an ultrasound to provide guidance through the rest of the procedure. Dr. Warren Beard then extracted samples of the mass to be examined for abnormalities.

Within minutes of the completion of the procedure, the rhino was mobile, safely walking around his secured area.

"It was a combination of great planning and organizing by Dr. Okeson and the Rolling Hills Zoo team, terrific assistance in diagnostics by Dr. Beard and the equine team, and great collaboration by the students on the zoological medicine clinical rotation! Everything was done safely. Everything was accomplished that we had planned, and it was a great and memorable experience!" Dr. Carpenter said.



**Dr. Warren Beard watches as Dr. Danelle Okeson, Rolling Hills Zoo staff veterinarian, and Dr. Patrick Loftin, equine surgery resident, image a mass in a white rhinoceros via ultrasound.**

## Dr. Steve Stockham receives Hall of Fame Award

Dr. Steve Stockham, professor of veterinary clinical pathology, has been named as the 2013 recipient of the prestigious "Veterinary Clinical Pathology Hall of Fame Award" by the European Society for Veterinary Clinical Pathology (ESVCP). This award was formally announced at the society's annual meeting in Berlin, Germany, held Nov. 6-9, but it was presented to Dr. Stockham at the annual meeting of the American Society for Veterinary Clinical Pathology (ASVCP) held in Montreal on Nov. 17.

The qualifications for the award include having practiced clinical pathology for 25 years or more and having made substantial contributions to the profession. During the presentation, he was recognized for his roles as an educator of veterinary students and clinical pathology residents, his numerous contributions to the discipline, and for coauthoring an outstanding textbook that is used throughout the world. He was especially recognized for his annual reviews of the certifying examinations of the European College for Veterinary Clinical Pathology (ECVCP).



**Dr. Steve Stockham (left) receives the Hall of Fame Award from Dr. Saverio Paltrinieri, president of the ECVCP.**

## CVM NEWS TICKER

**Cheri Ubel**, Alumni Coordinator for the CVM, has retired from her work with the college after 25 years. She was a valuable member of the CVM team and will be greatly missed. We wish her luck in her retirement!



The second annual Horse Care 101 conference was held at the K-State Veterinary Health Center on Saturday, Nov. 9. More than 150 equine enthusiasts of all ages attended the event. Dr. Robert Miller, world renowned equine behaviorist veterinarian, was the headline speaker for the day.

Congratulations to **Miranda Schremmer** and husband Heath on the birth of their son Blake Austin Schremmer. Blake was born Nov. 2 and is 7 pounds 9 ounces, and 20.5 inches.

**Dr. Laura Armbrust** recently presented 16 hours of lectures on ultrasound imaging and eight hours of hands-on ultrasound labs at CVC West in San Diego.

**Courtney Vancleave** was married Oct. 31 to Paul Dueser. Congratulations to the new Mrs. Courtney Dueser!

## All 4 Animal Health promotes animal health as career alternative



On Nov. 9, the Girls Researching Our World (GROW) Program hosted an all-day on-campus event for middle school girls interested in science, technology, engineering or math. The theme of the day, named "All 4 Animal Health," was to highlight the roles scientists, engineers and technologists play in promoting the health, nutrition and overall well-being of animals. The activities were delivered by K-State students under the supervision of the KAWSE Program Coordinator, and one or more of the GROW Committee members.

### UPCOMING EVENTS

Diagnostic Medicine/Pathobiology Seminar

**Dec. 12: Lecture by Dr. Lisa Timmons, Ph.D., associate professor in the Department of Molecular Bioscience at the University of Kansas**

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