



CVM unveils Strategic Plan to guide three-year mission and priorities

The College of Veterinary Medicine has just unveiled a new Strategic Plan to guide the college's mission, vision and priorities from 2017 to 2019, to begin immediately.

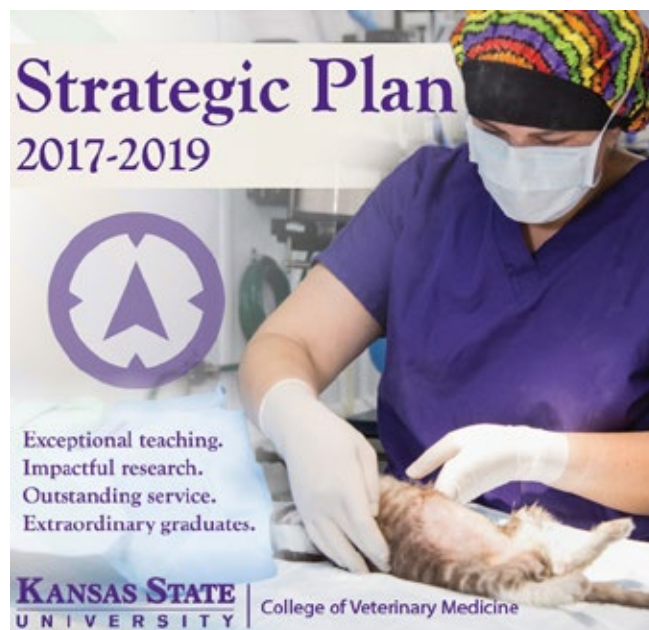
"Our mission is dedicated to the advancement of the health and welfare of animals, people, the environment and the veterinary profession through excellence in teaching, research, service and public service," said Dr. Tammy Beckham, dean of the college. "We are committed to a professional degree program with broad training opportunities across a comprehensive range of companion and exotic animals, and livestock species. Our focus is on initiatives that address important societal needs at a local, national and global level. We are looking to build on things we do well and make improvements in areas where we think we can be better."

The college will work collaboratively and cooperatively among all its units to advance each of these priority areas:

- Extraordinary graduates
- Exceptional teaching and enhanced learning
- Lower cost of education for DVM degree
- Outstanding food animal programs
- Responsive, collaborative research enterprise

- Societal impact through service and outreach
- A culture of respect and collegiality

Some of the key actions for implementing the strategic priorities include: providing clinical experiences and skills in all years of the DVM curriculum; implementing structural changes to the curriculum; identifying steps to reduce the aggregate cost of earning a DVM degree; building on our outstanding food animal programs to further realize our excellence in this area; enhancing outreach to veterinary practices, food producers, ranchers and state and federal agencies; targeting collaborative research opportunities and funding; delivering programs that translate knowledge and discovery to achieve local, national and international impact; creating a new staff council to advocate for all staff in the college; and providing opportunities for professional growth and development for all employees.

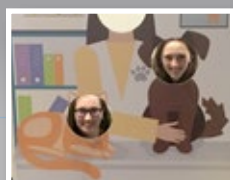


Through concerted engagement via surveys, strategy focus teams developed a set of strategic recommendations that formed the foundation of this new plan.

"Our leadership has now defined a new vision for our college: exceptional teaching, impactful research, outstanding services and extraordinary graduates," Dean Beckham said. "I truly believe we now have a great road map for the next three years."

More information is posted online at: www.vet.k-state.edu/StrategicPlan.

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K-State group attends Veterinary Student Day 2017 at the CDC



Dr. Ellyn Mulcahy, Hannah Seger, Marie Keith, Chester McDowell, Zezhong Zheng and Dr. Jessica Green tour the Centers for Disease Control in Atlanta, Georgia.

A group of K-Staters recently got a chance to learn about “the Secret Life of Pets and Vets” at Veterinary Student Day 2017, held at the Centers for Disease Control headquarters in Atlanta, Georgia.

K-State’s Center of Excellence for Emerging and Zoonotic Animal Diseases (CEEZAD) funded travel for two veterinary students and two more students were funded by the Master of Public Health program. The group included Hannah Seger, a dual DVM/Ph.D. student; Marie Keith, third-year student and MPH student; Chester McDowell,

first year; Zezhong Zheng, second year; Dr. Ellyn Mulcahy, MPH director; and Dr. Jessica Green, education program coordinator for CEEZAD.

“Attendance at the CDC Veterinary Student Day 2017 enabled our students to hear directly from veterinarians at the CDC engaged in One Health research, education and service,”

said Dr. Mulcahy. “The experience clearly illustrated the important public health roles for veterinarians in emerging disease surveillance, epidemiology, community outreach and engagement.”

From the student perspective, Hannah said, “I felt this event was beneficial, not only to my current education, but also to my future career objectives. Some points that I really took away from the event besides the fact that you should not touch bats, kiss chickens, or that camel beauty pageants are an actual thing is just how

much of an impact veterinarians can be in the health of humans, animals, and our environment.”

Speakers from the CDC and other organizations provided their perspectives on topics such as emerging zoonotic and infectious diseases, global health challenges and strategies, migration and epidemiology in action.

Dr. Green added, “This program was a great way for veterinary students who are interested in careers in public health to learn more about the work that is possible for veterinarians in this field including opportunities related to One Health and emerging zoonotic and infectious diseases. This overlaps with CEEZAD’s overall mission and workforce development initiatives; two veterinary students from other schools who participated in CEEZAD’s 2016 BSL-3 Training/Transboundary Animal Diseases Summer program were also at this CDC program. CEEZAD is pleased to have been able to assist K-State students with travel expenses to attend such a meeting.”

Research collaboration pushes exercise past the ‘red line’



Dr. David Poole

Like an engine tachometer has a red line for measuring peak performance, humans and animals also have their upper limits for exercise and sports performance. A researcher

from Kansas State University released new findings about how to “cross the red line” with collaborators from the universities of Kent and Exeter in the United Kingdom. These findings provide insight for better

understanding a variety of human and animal diseases.

“Fatigue and an inability or unwillingness to exercise are major indicators of pathology and conditions such as heart failure, diabetes and a host of respiratory, neural and metabolic diseases,” said Dr. David Poole, who is a professor with dual appointments in anatomy and physiology in the College of Veterinary Medicine and kinesiology in the College of Human Ecology at Kansas State University. “This is very often what brings the patient — human or animal — into the clinic or hospital.”

Dr. Poole’s collaborators are Dr. Mark Burnley, an exercise physiologist from the University of Kent, and Dr. Anni Vanhatalo, a physiologist at the University of Exeter. Their article, “Critical Power:

An Important Fatigue Threshold in Exercise Physiology,” was published in the November 2016 issue of *Medicine and Science in Sports and Exercise*.

“As part of our article, we explored the fatigue processes that occur below and above the critical power,” Dr. Burnley said. “The critical power concept allows us to determine if certain physical tasks are feasible for the individual in question, whether it was early humankind running down prey on the African plains millennia ago or the contemporary patient, athlete, or in the case of Bryan Allen, a human trying to fly across the English Channel under his own power. Knowing where the red line is, and knowing when to cross it, will always be a key part of human endeavour.”

VHC team implants pacemaker into Zelda the ferret

A team of veterinary specialists at Kansas State University recently performed the Veterinary Health Center's first-ever surgical implant of a heart pacemaker in a ferret named Zelda.

Zelda's owner, Carl Hobi, Olathe, Kansas, had noticed in December his pet ferret's behavior had changed. As the owner of two other ferrets, Zelda's behavior was quite conspicuous.

"She would not eat all her 'soups,' which is homemade duck soup I make for ferrets, and she would lay down more often than she normally does," Hobi recalled. "I thought she was just not feeling well, so I gave her some Benadryl for a day or two. She seemed fine again for a few days and then she would do the same with laying down more. I was having to fight with her to eat her soup."

Hobi is a freelance videographer and storm chaser for 41 Action News, Kansas City, and for Live Storms Media. He has his own chase team, KC Storm Trackers. Hobi is employed by Pioneer College Caterers, a food service management company. He is also a volunteer board member with the Kansas City Ferret Hotline, a ferret rescue group. He said Zelda came from the rescue group before he became a board member.

"I tried to treat her with pepto for a day or two, figuring her stomach was upset, but when that did not help, I took her to the Parkville (Missouri) Heights Animal Hospital," Hobi said. "They did an EKG, and it was reading something like 70 and should be 240 and also her heart beats were low. Their veterinarian, Dr. Diane Barr, said Zelda should see a cardiologist and that I should take her to the VHC."

This was right before Christmas break when Hobi had planned a trip home to Pittsburgh, Pennsylvania.

"Zelda was in 17 states over Christmas and got to meet a capybara, pig, opossum, skunks and squirrels," Hobi said. "About two years ago, she had a blockage from finding and chewing off a piece of a rubber toy and almost died from that, but, surgery was obviously a success.



A collage shows Zelda the ferret before and after pacemaker surgery. The radiograph reveals the implantation of the pacemaker in the abdomen, where it will help Zelda maintain her heart beat at a normal rhythm for ferrets.

"Zelda was still not feeling well, so on Christmas Eve, I took her to Avets in Monroeville, Pennsylvania. Dr. Christopher Norkus [editor's note: Dr. Norkus was a resident in anesthesiology and analgesia at Kansas State University from 2012-2015] ran some tests on her. The EKG revealed a heart rate of 70 beats per minute. After other tests, they said she had a third degree AV block in her heart which was responsible for the slow heart rate, so Dr. Norkus told me to take her to K-State for pacemaker implantation."

Zelda was admitted to the VHC, where she was examined by Dr. James Carpenter, professor, Dr. David Eshar, assistant professor and Dr. Loudon Wright, intern, from the wildlife and zoo medicine section in the College of Veterinary Medicine. Confirming that Zelda's heartbeat was very slow, Zelda was then examined by Dr. Justin Thomason, a cardiologist and clinical assistant professor.

"We performed an echocardiogram, EKG, and chest X-rays, which demonstrated Zelda was a good candidate for pacemaker implantation," Dr. Thomason explained. "As with a human patient, this condition called for

the implantation of a pacemaker to help increase Zelda's heart beat and provide her a good quality of life."

Dr. Thomason consulted with the other interventional team members at the VHC: Dr. Emily Klocke, clinical associate professor of small animal surgery and Dr. David Rankin, clinical professor of anesthesiology.

"This was the first time I had ever performed this particular procedure on a ferret, although I have performed it on dogs before" Dr. Klocke said. I was very concerned about how small our patient was and whether I could successfully suture the pacemaker leads to her beating heart without causing severe bleeding. Our anesthesia service, led by Dr. David Rankin were very instrumental in the success of this procedure."

"Dr. Klocke's work was truly magical," said Dr. Eshar. "There are only a few millimeters of within the heart's wall for suturing the leads from the pacemaker. The pacemaker is the same as what would be used in a human patient, but we had to order a special set of leads for Zelda, since these would not be inserted through the veins. It's a very delicate procedure to make everything work correctly."

[Read more at Lifelines online.](#)

Experts convene at Sustainable Crops-Livestock Summit



Two colleges at Kansas State University, agriculture and veterinary medicine, joined forces and expertise for a common mission. Together they held an inaugural Sustainable Crops-Livestock Systems Summit at the K-State Alumni Center Jan. 9.

"Sustainability means that the needs of the present are met without compromising the needs of future generations," explained Dr. Keith Hamilton, executive director of international agricultural programs in the College of Veterinary Medicine. "Today, sustainability, including a sustainable food supply, is the biggest long-term challenge facing humanity. As demands on the agriculture sector continue to be driven by population growth, ecosystems are being pushed beyond their limits."

The colleges convened experts from across campus to look for ways to improve and enhance the sustainability of mixed crop-livestock systems both nationally and internationally. A pair of renowned international experts were brought in to jumpstart the summit and stimulate group exercises that followed the presentations.

Exploring role of animals as Zika hosts

Ph.D. student Dr. Izabela Ragan, DVM class of 2014, has recently collaborated with Colorado State University scientists to co-author "Investigating the Potential Role of North American Animals as Hosts for Zika Virus," published online on Feb. 1. The research found many different animals — including cattle, chickens, frogs, and goats — are not hosts for Zika.

"We know that nonhuman primates are important in the sylvatic cycle of Zika virus, but little is known about whether animals common to North America have a role as hosts for the virus," said Dr. Ragan.



Dr. Izabela Ragan explains her research project at Phi Zeta 2013.

CVM News Ticker

Dr. Mike Apley presented at the Feedlot Receiving, Calf Health & Well-Being Conference hosted by K-State Research & Extension and Oklahoma State Extension at Oklahoma State University on Jan. 9. Dr. Apley's presentation was entitled, "Antimicrobial Selection." He also presented, "The Future of Antibiotics" at the Minnesota Pork Expo on Jan. 16-17.

Dr. Robert Larson spoke at the Sabetha, Kansas, veterinary meeting Jan. 17 and presented, "Nutritional considerations for heifer development; Pre-breeding examination of beef heifers", at the Western Canadian Bovine Practitioners meeting in Saskatoon, Saskatchewan, Canada, on Jan. 18-20. From Jan. 19-22, Dr. Larson attended the Missouri VMA Convention in Columbia and presented on Interpreting Dx tests; Dx herd repro problems; Econ of vet services; BVD and Trich control.

Dr. Sara Gonzalez presented a teaching workshop at the Faculty Exchange for Teaching Excellence annual workshop on the K-State campus Jan. 27.



Working with Zoo Sprouts at the Sunset Zoo, from left, Matthew Olcha, Dr. James Carpenter, and Landon McQuilliams and Carie Bikson.

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