

# 2015 Highlights



UNIVERSITY OF MINNESOTA

College of Veterinary Medicine

Driven to Discover<sup>SM</sup>

## *Preparing the next generation of veterinarians and veterinary researchers*

### **New graduates**

Doctor of veterinary medicine degrees were awarded to 100 students at the college's commencement ceremony at the Ted Mann Concert Hall on May 9. Also conferred were nine PhD degrees and four MS degrees. The commencement address was presented by Dr. Jeffrey Klausner, former dean of the college.

### **Veterinary education twinning project**

The college continued a veterinary education twinning project with Chiang Mai University in Thailand under the World Organisation for Animal Health (OIE) Veterinary Education Twinning Program. Part of a wider initiative to improve the capacity of veterinary services in developing countries, "twinning" is an approach that enables exchange of knowledge, ideas, and experience between two universities.

### **Rural Veterinarian Loan Forgiveness Program**

The state of Minnesota appropriated \$250,000 for the Minnesota Rural Veterinarian Loan Forgiveness Program, which provides funds for repayment of qualified educational loans for rural veterinarians. The program's goal is to recruit and retain large animal/food animal veterinarians to needed areas and facilities in Minnesota.

### **Facilities updates**

The college continued work on a variety of facilities upgrades, including the creation of "foodcentric corridor" research labs in the Animal Science/Veterinary Medicine building; donor-funded renovations at The Raptor Center; and research and teaching lab, exam room, and office renovations. The college also embarked on new projects, including new veterinary isolation facilities and the expansion of the Minnesota Poultry Testing Lab in Willmar.



### **Education Day**

The college hosted its sixth annual Education Day on May 29, when faculty and staff presented posters, attended seminars, made presentations, and participated in roundtable discussions related to education and innovative teaching methods. Education Day also included the presentation of teaching awards, including the Zoetis Distinguished Teacher Award, presented to Dr. Christie Ward; departmental and graduate advising/teaching awards; excellence in course coordination awards; and Veterinary Medical Center technician teaching awards.

### **Scholarships**

The college awarded more than 80 scholarships totaling over \$400,000 in 2015, recognizing the generous support of donors at an annual spring scholarship reception in April and a fall scholars reception in October.

### **Applications for admission**

The college's admissions office received 887 applications for the 102 seats in the fall 2016 freshman class. Five University of Minnesota students were accepted into VetFAST, an early admission program for students interested in food-animal veterinary medicine.



### **Plans for preventive health center**

The Veterinary Medical Center (VMC) approved designs for the addition of a primary and urgent care unit to meet the needs of VMC patients and better support the training and preparation of veterinary students for careers in general practice. With construction to be completed in 2016, the initiative will provide improved exam and treatment room space in the VMC.

## Discovering and sharing new knowledge

### Major research efforts

The college had research expenditures of \$24.7 million in fiscal year 2015. Major research projects included developing a highly pathogenic avian influenza planning tool for poultry farms, minimizing antibiotic resistance in the poultry production system, investigating aspects of swine health, developing a swine health monitoring project, understanding and treating canine cancer, exploring equine genetics and genomics, strengthening One Health systems, facilitating public-private partnerships, and enhancing world learning. Some of the state's funding for regenerative medicine research, clinical translation, and commercialization efforts was awarded to Dr. Bruce Walcheck in the Veterinary and Biomedical Sciences Department, whose proposal was one of six funded out of 90 applications. Walcheck received a \$500,000 grant for research on engineering human pluripotent stem cells to generate enhanced natural killer cells for cancer therapy. The ultimate goal: treating cancer using the patient's immune system.

### International Conference on One Medicine One Science (iCOMOS)

Planning continued for the second iCOMOS to be held April 24-27, 2016, at the Commons Hotel in Minneapolis. The conference will focus on the roles of medicine and science in finding solutions to complex environmental health challenges that require multidisciplinary team approaches combining science, economics, and health policy.



### Points of Pride Research Day

The college hosted its annual Points of Pride Research Day on October 7, celebrating college research and research partnerships. The Zoetis Award for Research Excellence was presented to Dr. Randy Singer, professor in the Veterinary and Biomedical Sciences Department. Dr. James Lokensgard, professor in the Division of Infectious Disease and International Medicine at the University of Minnesota Medical School, received the Distinguished Research Alumnus award, and the U.S. Department of Agriculture's Animal Health and Plant Health Inspection Service Veterinary Services was honored as Distinguished Partner. Dr. Fekadu Kassie, associate professor of oncology in the Veterinary Clinical Sciences Department, received the Mark of Excellence in Research Award. Five graduate students, postdoctoral fellows, and summer scholars received awards in the Points of Pride poster competition.

### Global food ventures

The college continued its work with global food ventures, one of four MnDRIVE projects. MnDRIVE—Minnesota's Discovery, Research, and Innovation Economy—is a partnership between the University of Minnesota and the state of Minnesota that aligns areas of university research strength with the state's key and emerging industries to address grand challenges. Global food ventures is one of four research areas identified by university faculty, deans, and corporate partners as the most promising areas for partnership. The college welcomed three new global food ventures fellows in 2015.

### Veterinary continuing education

The college offered a variety of veterinary continuing education opportunities throughout the year, including—

- **Leman Swine Conferences in the United States and China.** The college hosted the 2015 Allen D. Leman Swine Conference at RiverCentre in St. Paul September 19-21. One of the international swine community's premier events, the Leman conference drew more than 800 swine veterinarians, producers, research scientists, industry experts, and government officials from around the world. In addition to two days of presentations and seminars on topics ranging from swine diseases to production to consumer issues, the conference included a two-day preconference program, trade show exhibits, awards, and poster presentations. Held at the Nanjing International Expo Center in Nanjing, Jiangsu, China, October 11-13, the fourth annual Leman China Swine Conference welcomed more than 2,000 swine veterinarians, producers, research scientists, and industry experts. More than 100 exhibitors displayed products and services.
- **China Dairy Conference.** The college hosted the second annual China Dairy Conference in Hohhot, Inner Mongolia, China, October 26-28. Dairy experts from the United States and China spoke at the event, welcoming more than 500 participants and 70 exhibitors.
- **Minnesota Dairy Health Conference.** About 200 dairy veterinarians, producers, and other industry professionals discussed the latest developments in dairy production science, health, management, and food quality at the annual conference in May.
- **Minnesota Veterinary Institute.** With a 2015 focus on feline health, medicine, and surgery, this collaboration of the Minnesota Veterinary Medical Association, Veterinary Hospitals Association, and University of Minnesota College of Veterinary Medicine offered continuing education programs for veterinary practitioners, including lectures, wet labs, and online content.
- **Aquaponics Symposium.** The college offered a new symposium on aquaponics, the method of farming fish and crops together in a recirculating system, in 2015. More than 100 people attended the conference coordinated by Dr. Nick Phelps.
- **Camelid Health Conference.** Nearly 75 alpaca and llama owners, veterinarians, and veterinary technicians gathered at the Pomeroy Student-Alumni Learning Center in February for the Camelid Health Conference. Coordinated by Dr. Anna Firshman, the conference focused on cria care and biosecurity.

## Serving our community in Minnesota and around the world



### Response to avian influenza outbreak

An avian influenza outbreak affecting 9 million birds in 23 Minnesota counties kept the college and university busy in the spring of 2015. Among the units involved in HPAI (highly pathogenic avian influenza) response were the Veterinary Diagnostic Laboratory (VDL), Veterinary and Biomedical Sciences and Veterinary Population Medicine departments, departments of Animal Science and Applied Economics, Extension, The Raptor Center, the Mid-Central Research and Outreach Center in Willmar, and the shared Minnesota Poultry Testing Laboratory of the VDL and Minnesota Board of Animal Health, as well as veterinary public health residents and graduate students. The university hosted a stakeholder conference, “HPAI: Refining the Response,” in June.

### Funding for veterinary isolation lab, poultry testing lab, and research

When the Minnesota Legislature convened for a one-day special session in June, it passed a bonding bill that provided \$18 million for new Veterinary Isolation Laboratories and \$8.5 million for the Minnesota Poultry Testing Laboratory in Willmar. Also passed was an agriculture bill that allotted almost \$13 million for university agriculture research, education, extension, and technology transfer, including \$2 million for avian flu research. Governor Mark Dayton signed the bills into law on June 13.

### New One Health Workforce

Under a five-year award of up to \$50 million, the college and university continued their efforts on the One Health Workforce, an international group of universities working to strengthen global workforce development against emerging pandemic threats in Africa and Southeast Asia. Faculty from the University of Minnesota’s programs in veterinary medicine, human medicine, nursing, public health, education and development, and environmental health are collaborating on the work, with the College of Veterinary Medicine in the lead. The effort is part of a United States Agency for International Development (USAID) Emerging Pandemic Threats 2 program focusing on disease surveillance, training, and outbreak response.

### Veterinary Diagnostic Laboratory

As the official laboratory of the Minnesota Board of Animal Health, the University of Minnesota Veterinary Diagnostic Laboratory (VDL) continued to be a national leader in providing

rapid diagnosis of animal diseases, identifying emerging diseases, and developing new diagnostic methods, as well as training diagnosticians and veterinarians. The VDL provides quality diagnostic services for all animal species, including necropsy, bacteriology, clinical chemistry, electron microscopy, serology, endocrinology, histopathology, immunohistochemistry, virology, parasitology, molecular diagnostics, and toxicology. A national leader in protecting animal and human health, the VDL’s full-service laboratories performed nearly 1.3 million procedures in 2015, working 17-hour days during the spring avian influenza outbreak.

### Veterinary Medical Center

The most advanced, full-service referral care center for large and small animals in Minnesota, the University of Minnesota Veterinary Medical Center (VMC) sees more than 35,000 appointments annually, with specialists available in all areas of medicine and surgery. More than 50 of the veterinarians on staff have undergone several years of additional training to become board-certified specialists in a particular area of veterinary medicine. In 2015, the VMC acquired a new linear accelerator, began offering urgent care services, and approved plans for the addition of a primary and urgent care unit in 2016.

### University of Minnesota Equine Center

In addition to conducting research, providing veterinary education through internships and residencies, and treating patients, the Leatherdale Equine Center hosted a variety of events at the Barena Arena and Nutrena Conference Center, including horse shows, riding clinics, horsemanship camps, and the annual Challenge of the Unwanted Horse. The West Metro Equine Practice provides ambulatory care in the western suburbs of the Twin Cities.



### The Raptor Center

The Raptor Center (TRC) opened the new Douglas Dayton Educational Wing, completed a new strategic plan, and treated 843 birds of prey in 2015, as it prepared to renovate its visitor center and launch Raptor Academy, an online instructional lab. TRC also continued its work training veterinarians and veterinary students from around the world and presenting educational programs to thousands of people of all ages.

## Center for Animal Health and Food Safety

The Center for Animal Health and Food Safety works to improve global animal health, food safety, and public health by building veterinary public health capacity, providing risk assessments and policy summaries, facilitating collaborative research, responding to emerging foreign animal diseases, and presenting major programs such as Engaging Intergovernmental Organizations and the Global Health Institute.

## Minnesota Urolith Center

The Urolith Center's goal is to reduce the worldwide incidence of urinary disease in companion animals and enhance the veterinary and nutritional care of pets with urinary tract disorders. In 2015, the center celebrated the analysis of its millionth urinary stone since it was established in 1981.

## VetCamp

Developed and taught by DVM students and sponsored by the Minnesota Veterinary Medical Foundation, this program for students in grades 9-12 engaged students with interactive, hands-on learning activities and games.

## Donor support

The College of Veterinary Medicine received approximately 7,900 gifts totaling more than \$7 million in 2015. Major gifts included two \$1 million planned gift commitments, one for The Raptor Center and one for the Veterinary Medical Center, as well as continued support from industry partners for companion animal and food animal work, support for a new standing equine MRI from grateful clients, and increased support from alumni and friends for student scholarships and fellowships.

## Distinguished achievements

### Siehl Prize

Dr. Stan Diesch, class of 1956, whose innovations helped bridge the gap between animal and human health, was one of three



recipients of the Siehl Prize in Agriculture, an annual award from the University of Minnesota's College of Food, Agricultural and Natural Resource Sciences. As a professor of veterinary medicine and large-animal/public health veterinarian, Diesch established the Minnesota Food Animal Disease Reporting System that became the prototype for the national reporting system.

### Endowed chair

Dr. Andres Perez was appointed Endowed Chair in Global Animal Health and Food Safety. The endowed chair engages individuals and organizations in the integration and dissemination of knowledge that promotes innovative, responsible, and effective solutions to animal health and food safety challenges at the local, national, and global level.

### Presidential advisory council

The U.S. Department of Health and Human Services, U.S. Department of Agriculture, and U.S. Department of Defense appointed Dr. Peter Davies and Dr. Randall Singer to the Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria.

### International task force

Dr. Ned Patterson was named to the International Veterinary Epilepsy Task Force, a group created to streamline the process and create a common language for researching, diagnosing, and treating epilepsy in dogs and cats.

### Avian practitioner of the year

Dr. Pat Redig, professor and cofounder of The Raptor Center, received the T.J. Lafeber Avian Practitioner of the Year award at the Association of Avian Veterinarians annual conference.

### Public health hero

Dr. Russell Currier, class of 1967, received the Iowa Public Health Heroes Award from the University of Iowa College of Public Health.



### Outstanding achievement award

With a career spanning military service, rural private practice, the poultry industry, higher education, and veterinary consulting, Dr. Peter Poss, class of 1957, was honored with a University of Minnesota Outstanding Achievement Award in 2015. The Outstanding Achievement Award is conferred on graduates or former students of the university who have attained unusual distinction in their fields or professions

or in public service and who have demonstrated outstanding achievement and leadership on a community, state, national, or international level.

### MVMA recognition

At the Minnesota Veterinary Medical Association (MVMA) annual meeting, Dr. Mike McMenemy, class of 1969, was honored with the Veterinarian of the Year Award. Dr. Arno Wuenschmann, associate professor and pathologist in the Veterinary Diagnostic Laboratory, received the Outstanding Faculty Award; Dr. Marie Culhane, CVM alumna, associate professor, and pathologist, received the Distinguished Service Award; and Paul Maravelas, curator of the Minnesota Veterinary Historical Museum, received the Veterinary Service Award.