

TRACKS

MAGAZINE

Virginia-Maryland College of Veterinary Medicine | FALL / WINTER 2018



**COMPANIONS LEAD
THE FIGHT
AGAINST CANCER
+
SPECIAL
GRATITUDE EDITION**



ON THE COVER

John Rossmeisl, the Dr. and Mrs. Dorsey Taylor Mahin Professor of Neurology and Neurosurgery and principal investigator for the canine malignant glioma study, walks with his patient Emily, a 10-year-old Portugese water dog who was diagnosed with an aggressive glioma brain tumor in early 2018. Photo by Hope Bradbury

MESSAGE FROM THE DEAN



Gregory B. Daniel, Interim Dean

I'm delighted to share with you this special edition of TRACKS magazine, part of our continuing efforts to engage and inform friends of the college. As 2018 comes to a close and we reflect on our accomplishments, we are mindful of the wide community of supporters—students, faculty, staff, alumni, hospital clients, and friends—who have contributed to our success this year.

This issue includes a section focusing on some of those friends and faculty who have made a significant impact on our students and our programs—from lessening the burden of student debt to providing support that enables the growth of our clinical research and compassionate care programs. In other stories, we focus on how our college is advancing research and scholarship in translational medicine and comparative health sciences—from basic research in infectious diseases to groundbreaking clinical trials battling cancer in pets and people.

The Department of Population Health Sciences had many significant achievements this past year. The Master of Public Health program was reaccredited by the Council on Education for Public Health (CEPH). In addition, a new Bachelor of Science degree in public health was approved by the State Council of Higher Education for Virginia and accredited by CEPH. This new program will bring undergraduate students into the college for the first time. The Public Health program is central to our One Health focus with the aim of improving health for animals, humans, and the environment.

Significant enhancements to our cancer research and service programs are underway with the college's Comparative Oncology Research Center (CORC) under construction in Roanoke. Scheduled to begin seeing patients in spring 2020, the center will be housed in the Virginia Tech Carilion (VTC) Biomedical Research Addition on the VTC Health Sciences and Technology Campus. The clinic's unique co-location alongside human clinicians and researchers will allow CORC specialists and technicians to employ a true One Health approach—recognizing the linkages between animal, human, and environmental health—to cancer care and research.

In collaboration with colleagues across a broad range of disciplines, the college is creating solutions and training future leaders to address the health challenges facing society now and in the future.

We thank the members of our college family for their support and contributions to the college's strong track record in our core missions of teaching, research, and service. Here's to a new year of building on these successes.

A handwritten signature in blue ink that reads "Greg Daniel". The signature is written in a cursive, flowing style.

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Produced by the Virginia-Maryland College of Veterinary Medicine Office of Advancement

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TRACKS magazine is published bi-annually. We also send monthly updates to our alumni, students, faculty, staff, donors, and friends via our popular monthly newsletter.

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SPECIAL 17-PAGE GRATITUDE EDITION

Margie Lee (DVM '86) takes the helm of Biomedical Sciences and Pathobiology

Margie Lee (DVM '86) returned to the college in April as professor and head of the Department of Biomedical Sciences and Pathobiology. The first female head in the department's history, Lee succeeds William Pierson (DVM '84), interim head and professor of biosecurity and infection control and avian medicine, who retired from Virginia Tech in June. Her research is focused on epidemiology of meat and poultry-borne food safety pathogens, ecology and mechanisms of antimicrobial resistance, and ecology of poultry intestinal microbiome.

Lee previously served as the diagnostic laboratory director of the Poultry Diagnostic and Research Center at the University of Georgia in Athens, where she held a joint appointment as professor in the departments of Population Health and Infectious Diseases in the College of Veterinary Medicine. A two-time Hokie, she earned her bachelor's in biology in 1982 and her doctor of veterinary medicine degree in 1986, when she and her classmate, Lynn Hoban, became the first black graduates of the college's veterinary program. She then completed her master's and doctoral degrees in medical microbiology from the University of Georgia in 1988 and 1990, respectively.



Emily Koth

“ I AM HONORED TO HAVE THE OPPORTUNITY TO LEAD THE DEPARTMENT IN THIS EXCITING TIME OF CHANGE AND GROWTH FOR THE COLLEGE AND VIRGINIA TECH. ”

- Margie Lee, DVM ('86), MS, Ph.D.,
Professor and Head of the Department of
Biomedical Sciences and Pathobiology



Bertke laboratory project team members (left to right): Poorna Goswami, Ph.D. student in translational biology, medicine, and health; Jack Thompson, senior in biochemistry; Amber Abbott, junior in microbiology; and Andrea Bertke, assistant professor of infectious diseases in the Department of Population Health Sciences.

Andrea Bertke awarded NIH grant to study herpes simplex virus

The National Institute of Neurological Disorders and Stroke of the National Institutes of Health recently awarded Andrea Bertke, an assistant professor of infectious diseases in the Department of Population Health Sciences, \$1.7 million to study the neuron-specific regulation of herpes simplex viruses 1 and 2 (HSV1 and HSV2).

HSV1 and HSV2 are highly contagious and incurable. The viruses establish latency in sensory and autonomic neurons (nerve cells), from which they can reactivate to cause recurrent disease, affecting more than 250 million people in the U.S. alone, according to Bertke.

Clayton Caswell awarded NIH grant to study infectious disease

Written by JoAnna Pendergrass, DVM ('10)

The National Institute of Allergy and Infectious Diseases of the National Institutes of Health recently awarded a two-year, \$408,000 grant to Clayton Caswell, assistant professor of bacteriology in the Department of Biomedical Sciences and Pathobiology, to study the disease-causing mechanisms of *Brucella abortus*, the bacteria that causes brucellosis—one of the most common zoonotic diseases worldwide. *B. abortus* can be naturally transmitted from animals, most commonly through direct contact or consumption of unpasteurized dairy products.

Brucellae live in large immune cells called macrophages. Their ability to survive and replicate within a cell that should destroy them is key to their pathogenesis. Caswell's research project will focus on how a transport system and the amino acid gamma-aminobutyric acid (GABA) make *B. abortus* pathogenic.

Understanding how molecular pathways control *Brucella's* pathogenesis has important clinical implications, such as human vaccine development. An even more exciting potential, Caswell noted, is the development of novel therapies. "If we can target some of these pathways with novel treatments, we can interrupt the transmission of the disease. And if novel therapies can provide a quick and effective treatment, there would be less need for a vaccine."



Clayton Caswell (left), assistant professor of bacteriology in the veterinary college's Department of Biomedical Sciences and Pathobiology, and Jimmy Budnick (right), a doctoral candidate in Caswell's laboratory, will study the mechanisms of the bacteria that causes brucellosis, one of the most common zoonotic diseases worldwide.

With the new five-year grant, the team will build on their work to identify what they call the "latency lock"—the development of a molecule or antiviral that can latch onto the virus and permanently lock it in a latent state incapable of reactivation, in any type of neuron.

"In these studies, we will identify specific neuron signaling pathways that allow the virus to reactivate and determine if there are inhibitors that will prevent the reactivation process," said Bertke. "If we can put those mechanisms together, we may be able to permanently shut down the virus. Then, we'll never have recurrent disease or viral shedding, and we'll never have it spreading to other hosts."

RESEARCH FUNDING AT A GLANCE

30%

Increase in awards between FY 18 and FY 17.
The award amount has almost doubled in 5 years.

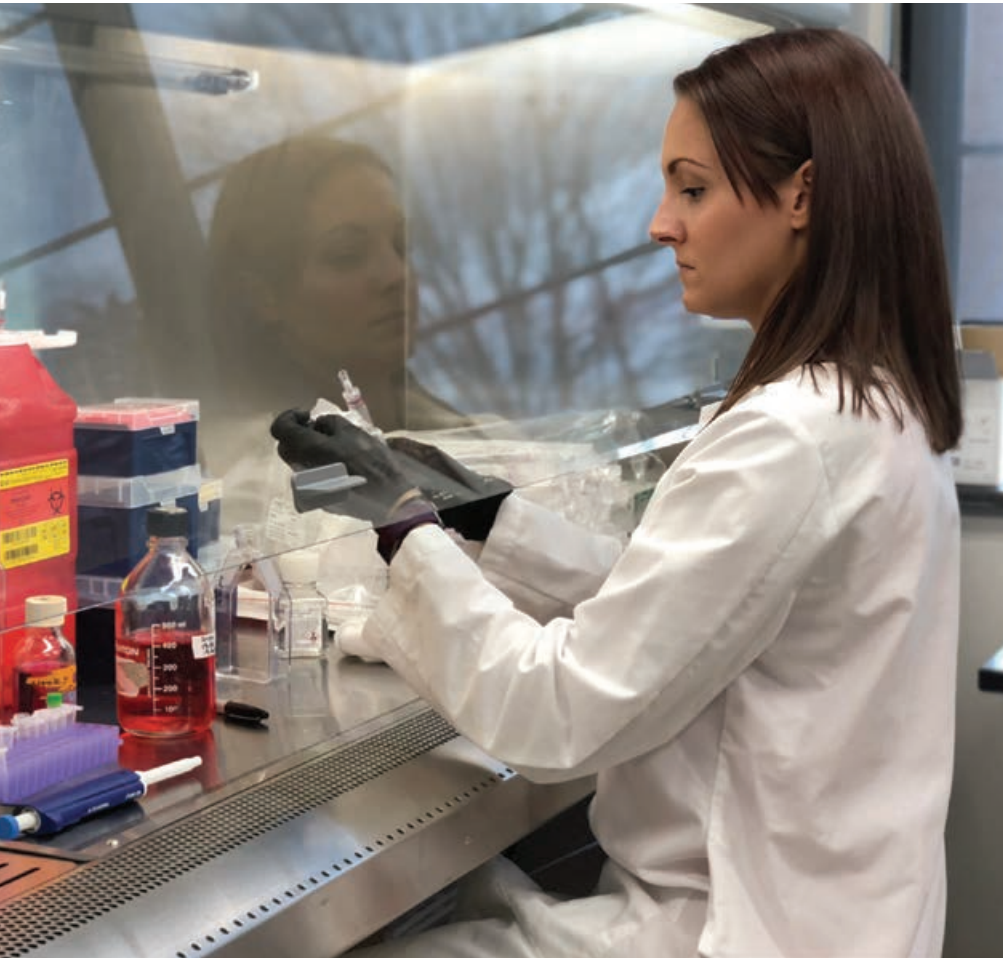
75%

Increase in research expenditures from commercial sponsored programs between FY 18 and FY 17.

\$10M+

In sponsored program awards for FY 18.

A TRADITION OF TACKLING INFECTIOUS DISEASE



Lauren Sheehan (Ph.D. '18) builds on college's decades-long record of excellence in brucellosis research and eradication.

Written by Leslie Jernegan

Over the course of her five years at the Virginia-Maryland College of Veterinary Medicine, Lauren Sheehan (Ph.D. '18) continuously wowed those with whom she worked by making scientific breakthroughs in the process.

After graduating from Virginia Tech in 2013 with a degree in animal and poultry science, Sheehan joined the lab of Clayton Caswell, assistant professor of bacteriology in the Department of Biomedical Sciences and Pathobiology, to begin her doctoral studies in microbiology.

Sheehan worked with Caswell and her fellow lab mate, James ("Jimmy") Budnick, to study brucellosis, a disease that causes spontaneous abortions in cattle and an inconsistent and sometimes fatal fever in humans. One of the most common

zoonosis in the world, there is currently no human vaccine for the disease, which, Sheehan explained in her dissertation defense, comes from brucellosis in animals being transmitted over to humans—most commonly through interaction with an aborted fetus, or through exposure to unpasteurized dairy products.

Together, Caswell's team has been seeking to better understand the molecular basis for the *Brucella* infection, and studying how two small regulatory RNAs allow the bacterium to survive in a macrophage—a white blood cell that plays critical roles in immune regulation and wound-healing. "*Brucella* has found a way to reside within our immune cells—the very cells trying to destroy it," Sheehan explained.

"The long-term goal is to make designer therapeutics to target these systems that we know are important for the bacteria to cause infection," Caswell noted. "Lauren helped lay the groundwork for understanding these small RNA pathways at the molecular level so that in the future we can target these regulatory circuits with therapeutics."



Cyril Clarke

“ WE NEED TO LEARN TO TREAT THIS BACTERIA IN ANIMALS AND ALSO IN HUMANS. WE HAVE ABOUT 500,000 HUMAN CASES OF BRUCELLOSIS PER YEAR WORLDWIDE. ”

- Lauren Sheehan, Ph.D. ('18)

Four successive generations of mentorship pictured at Sheehan's defense celebration (left to right): Lauren Sheehan; Clayton Caswell, Ph.D. mentor of Sheehan; Marty Roop, professor of microbiology and immunology at East Carolina University's Brody School of Medicine and postdoc mentor of Caswell; and Gerhardt Schurig, postdoc mentor of Roop.

Since giving a speech at the 2013 Brucellosis Conference in Chicago, just six months into her Ph.D. work, Sheehan attended and spoke at all but one of those meetings. The Brucella community is a tight-knit group of people,” Caswell said, “and she's corresponded and traded data and exchanged ideas with people in the community.”

Sheehan's collaborative efforts build on the college's decades-long record of excellence in brucellosis research and eradication. Gerhardt Schurig, professor and dean emeritus of immunology, led a research effort that began in the late 1970's and culminated in the development of the RB-51 brucellosis vaccine, which was fully licensed by the U.S. Department of Agriculture in 2001 and is now the primary brucellosis vaccine in the United States and many other countries. His collaborators in the Department of

Biomedical Sciences and Pathobiology included Stephen Boyle, now professor emeritus of microbiology, and Nammalwar (“Nathan”) Sriranganathan, professor of microbiology.

“We're living in the shadow of giants,” Caswell said. “And we're establishing sort of our own tier here.”

Sheehan successfully defended her dissertation in April. After five successful graduate years marked by seven publications, 14 presentations, and eight awards, including the college's 2016 Outstanding Doctoral Student, Sheehan chose—among multiple job offers—to join the University of California, Irvine lab of Dr. Ming Tan, professor of microbiology and molecular genetics in the School of Medicine. There, she conducts postdoctoral research in *Chlamydia* cell biology and pathogenesis.

A celebration of leadership and service



The college commemorated the service and leadership of Gerhardt Schurig, professor and dean emeritus who served as the college's third dean from 2004 to 2013, with the unveiling of his official portrait on Feb. 21. A member of the college faculty since 1978, Schurig is considered one of the world's leading brucellosis researchers. His RB-51 vaccine has become the global “gold standard” in bovine brucellosis control.

The unveiling reception—where guests included Schurig's

wife Ginger Dakin, students, alumni, as well as current and retired faculty and staff—featured accolades by Cyril Clarke, Virginia Tech's interim executive vice president and provost; Gregory Daniel, interim dean; and many former colleagues.

Painted by Blacksburg artist Leslie Roberts Gregg, Schurig's portrait now hangs in the dean's office reception area alongside those of Founding Dean Richard Talbot and Dean Emeritus Peter Eyre.



Emily Koth

Pictured (left to right) are Sharon Albright, manager of communications and veterinary outreach for the AKC Canine Health Foundation (CHF); Charles Franz, executive director of the Theriogenology Foundation; Alyssa Helms, theriogenology resident; Joann Randall, Theriogenology Foundation; Mari-Beth O'Neill, vice president of sports services of the American Kennel Club; Gregory B. Daniel, interim dean; Julie Cecere, clinical assistant professor of theriogenology; Diane Brown, chief executive officer of the AKC CHF; Natalia Guerrero, interim head of the Department of Small Animal Clinical Sciences; and Ansar Ahmed, associate dean of research and graduate studies.

“ WE ARE THRILLED TO ESTABLISH THIS PROGRAM, WHICH WILL ADVANCE THE SCIENCE OF THERIOGENOLOGY AND GENETICS FOR THE PURPOSE-BRED DOG. ”

- Diane Brown, DVM, Ph.D., Chief Executive Officer of the AKC Canine Health Foundation

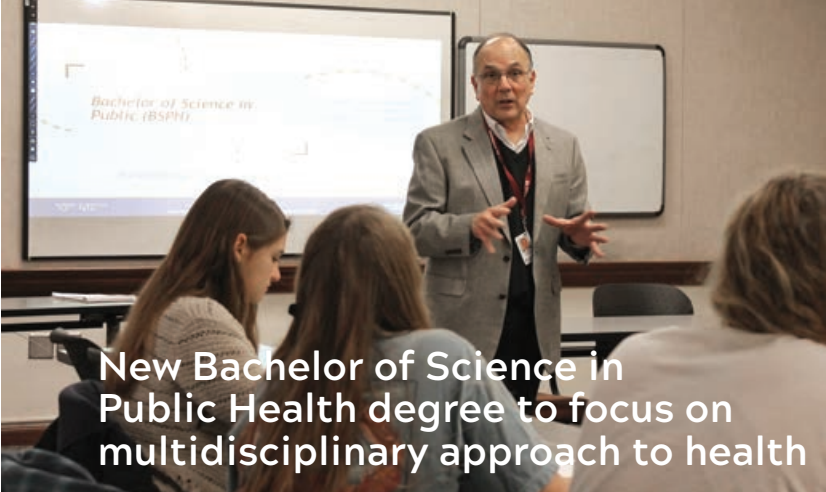
Fellowship grant funds advanced training program in reproduction

The American Kennel Club (AKC), the AKC Canine Health Foundation, and the Theriogenology Foundation recently awarded a \$100,000 grant to the college for a three-year companion animal theriogenology residency program. The college is one of two U.S. veterinary colleges with renowned expertise in genetics to receive the competitive grant this year, and one of only six veterinary programs to receive the grant since its establishment by the AKC in 2014.

The grant will pay for the training of a full-time resident focusing on clinical care and research pertaining to theriogenology—the physiology of reproductive systems and reproduction health—and genetics in dogs.

Alyssa Helms, of Knoxville, Tennessee, the recipient of the sponsored residency, began her training in July. Helms received her DVM degree, graduating with honors, in May from the University of Tennessee College of Veterinary Medicine.

Her primary focus will be on canine reproduction and genetic counseling. Helms will train under the counsel of Julie Cecere, clinical assistant professor of theriogenology, who is board certified by the American College of Theriogenologists.



New Bachelor of Science in Public Health degree to focus on multidisciplinary approach to health

Virginia Tech has expanded its ability to graduate students prepared to solve society's most complicated public health challenges by establishing Virginia's first accredited Bachelor of Science degree in public health (BSPH), approved by the State Council of Higher Education for Virginia in September and added as an accredited degree by the Council on Education for Public Health in October. The BSPH is the veterinary college's first undergraduate degree program.

The degree will be offered through the public health program in the college's Department of Population Health Sciences. The program currently hosts both master's (MPH) and

graduate certificate programs in public health through a partnership with the Virginia Tech Carilion School of Medicine. The public health program is grounded in a One Health approach, which recognizes the dynamic interdependence of human, animal, and environmental health and encompasses the interdisciplinary efforts of professionals from a wide range of specialties to protect, promote, and improve health.

In addition to classroom-based training, students will engage in hands-on learning opportunities to serve community needs and improve public health through the program's partnerships with local health departments, medical and veterinary organizations, community based organizations, and other public health and private institutions. The program will admit its first cohort of students in fall 2019 and has a projected enrollment of approximately 100 students per class for the first four years.

Top left: Kerry Redican, BSPH program director and professor of public health administration in the Department of Population Health Sciences.

Master of Public Health program earns reaccreditation

Virginia Tech's Master of Public Health (MPH) program received continuing accreditation from the Council on Education for Public Health (CEPH), an independent agency recognized by the U.S. Department of Education to accredit schools and programs of public health, through December 2025. The program, which enrolled its first cohort in fall 2010, was first accredited for an initial five-year term in 2013. It has the distinction of being the first MPH degree to be accredited at a veterinary college in the United States.

The reaccreditation process involved a detailed self-study and an on-site review of all aspects of the program's operations including governance, finances, curriculum, research, outreach, student services, and faculty. "It is wonderful to receive this endorsement of our instructional, research, and outreach programs," said Laura



Hungerford, head of the Department of Population Health Sciences. "The collaborative efforts of our staff, students, faculty, external advisory board, and community partners, as well as the great support from the college, Virginia Tech Carilion School of Medicine, and Virginia Tech administration made this success possible."

Members of the Department of Population Health Sciences present the MPH program's reaccreditation certificate: (left to right) Hannah Menefee, MPH program coordinator; Susan West Marmagas, MPH program director; Laura Hungerford, head of the Department of Population Health Sciences; Gregory Daniel, interim dean of the veterinary college; and Becky Jones, MPH program assistant.

YOUNGKIN EQUINE SOUNDNESS CLINIC

in the Fout Barn



will employ an integrated approach to patient soundness, blending traditional medicine with complementary modalities, such as acupuncture and chiropractic care.

“This creates a unique health care model where specialists travel to the patient in the clinic, as opposed to the horse having to rotate between different specialists,” said Michael Erskine (DVM '88), EMC director.

Services at the clinic will include complex lameness diagnosis, advanced imaging, nonsurgical and surgical treatments, rehabilitation, and development of best practices for athletic wellness in collaboration with owners, referring veterinarians, trainers, farriers, and other health professionals.

Clockwise from top left: Pictured (left to right) with the HokieBird at the dedication ceremony are Glenn and Suzanne Youngkin, distinguished friends of Virginia Tech; Michael Erskine (DVM '88), EMC director; Gregory B. Daniel, interim dean; and Mike Moyer, Virginia Tech's associate vice president of development. The HokieBird was among guests who enjoyed donkey rides at the event. (Left to right) EMC Advisory Council members Suzanne Youngkin and Cynthia Ingram, EMC Advisory Council Chair Beverly “Peggy” Steinman, and Glenn Youngkin. Erskine led a toast during the dedication ceremony. Guests gathered to hear special remarks.

Equine Medical Center dedicates renovated Youngkin Equine Soundness Clinic

Equine athletes of all kinds—from racehorses to hunters to family companions—in the Mid-Atlantic region will now have access to an enhanced sports medicine facility in the heart of Virginia horse country.

The renovation of the formerly open-air Fout barn into a state-of-the-art sports medicine facility, made possible by a generous gift from Suzanne and Glenn Youngkin of Great Falls, Virginia, expands the center's capacity to provide cutting-edge diagnostics and treatment for lameness and other conditions that keep equine athletes from performing at optimal potential.

“We are very honored to play a small role in Virginia Tech's big vision for integrated veterinary, farrier, and specialty care to enhance horse soundness and health,” said Suzanne Youngkin, a member of the Equine Medical Center (EMC) Advisory Council.

The clinic comprises four holding stalls, two comfortable waiting and observation areas, and a large open examination, diagnostic, and treatment area. There, specialists

For a video on the dedication event, go to: bit.ly/YESDedication

Photos by Michelle Turek



“SHILO” HOWLING BEAGLE STATUE UNVEILED

The “Shilo” howling beagle statue now adorns the lawn in front of the veterinary college. A generous gift from veterinarian Mark P. Helfat and Mendy Helfat, owners of the Larchmont Animal Hospital in Mount Laurel, New Jersey, the artwork is named in honor of the Helfat’s own beagle, Shilo, and donated in memory of Mark Helfat’s dog-loving parents, Lucile and Bernard Helfat.

The unveiling and dedication ceremony held Sept. 28 was attended by several hundred members of the college community and guests, and included a welcome from Gregory Daniel, interim dean of the college, followed by special remarks from Cyril Clarke, Virginia Tech’s interim executive vice president and provost and former dean of the college, as well as Mark Helfat.

Sculpted by Vermont artist Jim Sardonis—a friend and former prep school classmate of Helfat—and cast in bronze by Glenn Campbell of Campbell Plaster and Iron Foundry in Rutland, Vermont, the sculpture took 18 months to complete.

Clockwise from bottom: (Left to right) Cyril Clarke, Virginia Tech’s interim executive vice president and provost; Gregory Daniel, interim dean of the veterinary college; Jim Sardonis, sculptor; and Mark Helfat, donor, stand with the newly dedicated “Shilo” howling beagle statue. Guests enjoyed lunch after the dedication ceremony. Helfat delivered remarks before the statue unveiling. Mark and Mendy Helfat talked with Gregory Daniel, interim dean (left); Gerhardt Schurig, dean emeritus (center); and Peter Eyre, dean emeritus (right) before the ceremony.





COMPANIONS LEAD *the FIGHT* AGAINST CANCER

ADVANCING TRANSLATIONAL MEDICINE
THROUGH CLINICAL TRIALS OFFERS HOPE FOR
IMPROVED HEALTH IN PETS AND PEOPLE

WRITTEN BY ALISON ELWARD



Hope Bradbury

When Emily, a 10-year-old Portugese water dog, started having seizures in early 2018, her owner Laura Kamienski of Portersville, Pennsylvania, was shocked and scared. A specialist in Pittsburgh performed an MRI of Emily's brain, and the results showed a brain tumor. Kamienski was devastated. "I sat in the middle of the exam room at the hospital and sobbed," she said.

Kamienski was referred to the college's Veterinary Teaching Hospital to enroll Emily in a clinical study led by John Rossmeisl, the Dr. and Mrs. Dorsey Taylor Mahin Professor of Neurology and Neurosurgery in the Department of Small Animal Clinical Sciences.

The study aims to determine the safety of a new chemotherapeutic drug—molecularly targeted cytotoxins—and drug delivery method in the treatment of brain tumors in dogs. Funded by the National Institutes of Health (NIH), it is a collaboration between the college and the Thomas K. Hearn Brain Tumor Research Center at the Wake Forest School of Medicine.

After performing an MRI, Rossmeisl confirmed that Emily had an aggressive glioma brain tumor, notoriously difficult to treat—in both animals and people—and always fatal. It is the same type of cancer that claimed the lives of Senator John McCain in August and his colleague Ted Kennedy in 2009.

Without treatment, Emily had two-and-a-half months to live. [Continue on page 16](#)

Left: John Rossmeisl, the Dr. and Mrs. Dorsey Taylor Mahin Professor of Neurology and Neurosurgery and principal investigator for the canine malignant glioma study, and Alaina Cargill, fourth-year veterinary student, examine Emily, a 10-year-old Portugese water dog and the 15th dog enrolled in the study.

“
**WE ARE JUST ENJOYING EACH DAY
 THAT WE HAVE...IF IT WEREN'T
 FOR THIS TRIAL, SHE'D BE GONE
 BY NOW.**”

- Laura Kamienski, Emily's owner



Rossmeisl and Laura Kamienski, of Portersville, Pennsylvania, discuss Emily's promising MRI results during a visit in June.

Continued from page 15

Radiation therapy was the only option in Pittsburgh, and specialists there estimated it would have given Emily just a few additional weeks. Kamienski, wanting the best possible option for her beloved companion, decided to enroll Emily in the trial led by Rossmeisl, making her the trial's 15th participant.

“I had to sign her up—she's a member of my family, she's my everything,” Kamienski said. “She has gotten me through some serious hardship over the years. It was my turn to do the same for her.”

Kamienski paid for the cost of the initial MRI to confirm Emily's diagnosis; the study covered the treatment and follow-up examinations.

Rossmeisl explained that response to the experimental treatment has varied among study participants. “There are multiple sub-types of gliomas. The tumors are different, so their genetics are different,” he said. “We've had some tremendous success stories with dogs living for a year with their tumor shrinking and others having no response.”

In addition, the study design called for the drug dosage to increase progressively; it has doubled six times since the study began in 2014.

Emily received the treatment in April. The drugs, which are designed to affect only cancerous cells while leaving healthy cells unharmed, were injected directly into her tumor using a procedure called convection enhanced delivery—performed by inserting specialized brain-specific catheters directly into the tumor, and slowly infusing the drugs over a several hour period. During the MRI-guided procedure, Rossmeisl's team

watched the drug cover the tumor, confirming they had achieved the treatment goals.

Back at home, Kamienski noted Emily's seizures had ceased and “she's back to being herself.” A follow-up MRI in June showed the drug was killing parts of the tumor, which had shrunk by more than 50 percent. According to Kamienski, Emily resumed enjoying her favorite activities with her companion Leo, a 2-year-old Portugese water dog, especially romping in the woods and swimming in lakes and creeks.

December marked eight months since Emily's treatment in the study. “We are just enjoying each day that we have,” Kamienski said. “If it weren't for this trial, she'd be gone by now. I knew at the start that it's not a cure,” Kamienski said. “But it gave me hope and has given her more time.”

ADVANCING TREATMENT FROM CANINE TO HUMAN PATIENTS

The study's results thus far are promising, so much so that the NIH's National Cancer Institute recently awarded a \$9.2 million grant to help a research team—including Rossmeisl and other cancer researchers, engineers, surgeons, and veterinarians from Virginia Tech and Wake Forest University—in advancing the same treatment methods into human trials within the next several years. The five-year grant will fund four different approaches to treating glioblastoma, the most common and deadliest form of brain cancer in adults. **Continue on page 18**

Right: Members of the Veterinary Teaching Hospital's anesthesia team take Emily to the hospital's diagnostic imaging service for a magnetic resonance imaging (MRI) procedure.



“ THE DATA FROM OUR STUDY IN DOGS WILL INFORM BOTH ANIMAL AND HUMAN TRIALS, SO IT’S MUTUALLY BENEFICIAL. ”

- John Rossmeisl, DVM, MS, the Dr. and Mrs. Dorsey Taylor Mahin Professor of Neurology and Neurosurgery in the Department of Small Animal Clinical Sciences

Continued from page 16

Waldemar Debinski, director of the Brain Tumor Center of Excellence at Wake Forest Baptist Medical Center, is the principal investigator for the grant. The team’s work started 16 years ago when Virginia Tech and Wake Forest researchers set out to find a treatment for glioblastoma, which has a median human survival rate of about 14 months in its most aggressive form, according to the American Brain Tumor Association.

Rossmeisl explained that clinical research involving canine companions with naturally occurring cancer can be a pathway to accelerate drug development for human cancers.

“The canine model is as close as you can get to doing it with a person,” said Rossmeisl, explaining that the FDA has said that it is willing to use the dog data from the trials as a safety indicator for developing human trials. “The dogs are benefiting from this treatment, and eventually these drugs are intended to benefit humans. The data from our study in dogs will inform both animal and human trials, so it’s mutually beneficial.”

According to Rossmeisl, the projects of the new grant are novel in that they use newer, improved versions of the technologies or drugs based on results obtained in the lab as well as in clinical trials. “We are evaluating various combinations of these unique approaches as they may have synergistic and additive anti-cancer effects,” he said.

The multidisciplinary team also includes Virginia Tech researchers Rafael Davalos, a professor of biomedical engineering and mechanics who co-wrote the grant; John Robertson, a research professor of biomedical engineering and mechanics; and Scott Verbridge, an assistant professor of biomedical engineering and science. Also on the team are Chris Rylander, formerly of Virginia Tech and now an associate professor at the University of Texas at Austin, and Akiva Mintz, formerly of Wake Forest and now a professor of radiology at Columbia University Medical Center.

A GROWING COMPARATIVE ONCOLOGY PROGRAM

In addition to these research partnerships, the college is a member of the Comparative Oncology Trials Consortium (COTC), a network of 20 academic comparative oncology centers, centrally managed by the NIH National Cancer Institute’s Comparative Oncology Program, which runs clinical trials in dogs with cancer. Through the consortium, the college and other COTC centers are united with study sponsors to support multicenter clinical trials of investigational therapeutics.

The college is now expanding enrollment in comparative oncology studies—those involving spontaneous, naturally occurring cancers in companion animals to advance the diagnosis and treatment of cancer in pets and people—like the one that helped Emily.

Dogs often develop the same or similar cancers as humans, and they get cancer at roughly the same rate as humans. Cancer will affect one in three dogs during their lives, and is now the leading cause of death in dogs and in cats over age 10.

Some trials at the college provide pets with access to leading-edge technologies and novel therapies that have already been tested and used in human patients. For example, a current study in canine patients is investigating the use of high-intensity



Pioneering study investigates focused ultrasound to advance cancer treatment in dogs and people

A research team led by Nikolaos Dervisis, associate professor of oncology in the college’s Department of Small Animal Clinical Sciences, launched a new clinical research study this spring to investigate focused ultrasound therapy in the treatment of dogs diagnosed with solid tumors. Funded by the Focused Ultrasound Foundation, the study aims to determine whether high-intensity focused ultrasound (HIFU)—a technology that uses precisely-targeted heating as a non-invasive means to destroy cancer cells—can effectively stimulate an anti-tumor immune response in dogs. The college is one of the first two U.S. veterinary schools partnering with the foundation to test the technology—which has been used successfully in humans—in dogs. Solid tumors are some of the most common tumors in dogs. While surgery is the standard and most effective therapy, complete tumor removal is not always possible. Because of the limitations of current treatment options, immunotherapy—treatment that stimulates a patient’s own immune system to fight cancer—is an active area of research.

Top: Nikolaos Dervisis, associate professor of oncology in the college’s Department of Small Animal Clinical Sciences. **Bottom:** 9-year-old cocker spaniel Maddi Lynn Grace, the first dog treated in the study.



Emily Koth

focused ultrasound (HIFU) in the treatment of solid tumors, which has been shown to activate the immune system in humans, leading to more effective destruction of cancer cells.

To accommodate this program expansion, the college's new Comparative Oncology Research Center [page 20]—currently under construction on Virginia Tech Carilion's (VTC) Health Sciences and Technology Campus in Roanoke, Virginia, and scheduled to begin seeing patients in spring 2020—will serve as a center of excellence for comprehensive animal cancer care and research, including comparative oncology trials. Housed in the VTC Biomedical Research Addition, the clinic's unique co-location alongside human clinicians and researchers will allow veterinary oncology specialists and technicians to employ a One Health approach to cancer care and research, offering hope for a brighter future for pets and people battling cancer.

BRIDGING LABORATORY DISCOVERIES AND PATIENT CARE

In addition to nationally recognized oncology research, the college's clinical research program includes specialties in cardiology, neurology, internal medicine, radiology, and regenerative medicine. Using a translational "bench-to bedside" approach, researchers aim to take laboratory findings directly to clients in a clinical setting to achieve meaningful health outcomes.

Working closely with veterinary patients and their owners, referring practitioners, as well as funding partners—including federal agencies, private foundations, individual donors, and biotech and pharmaceutical companies—the college's Veterinary Clinical Research Office (VCRO) facilitates clinical trials and translational research studies that advance a common goal of improving animal and human health. Current studies are tackling diseases such as mitral valve disease and glioblastoma in dogs, hyperthyroidism and inflammatory bowel disease in cats, and equine protozoal myeloencephalitis (EPM) in horses.

"Through our work in translational medicine and research, we further the college's mission of providing compassionate clinical care and creating new medical knowledge," said Gregory B. Daniel, interim dean of the college. "Our ability to develop and deploy new approaches to diagnosing and treating disease is due to the shared commitment of our faculty experts and their collaborators, the clients who bring their animals to our hospitals for treatment, our sponsors and donors, and our referring practitioners, including specialists in our Collaborative Research Network."

Established in 2014, the Collaborative Research Network enables specialty practices in Virginia and Maryland to build unique partnerships with researchers as well as to participate in the college's cutting-edge research. For example, when a practice in the network identifies a mass on an MRI that looks like a glioma, they reach out to the college's VCRO to connect the patient's owners with relevant clinical trials happening at the college.

"Because the number of cases seen in the greater Washington, D.C., Richmond, and Baltimore areas far exceeds the number seen in Blacksburg, this specialist referral network has increased our ability to complete clinical trials quickly," said Mindy Quigley, clinical trials coordinator at the college. "And by increasing the number of cases within our studies, the results and findings have greater scientific merit."

"We want the very best for our patients," said Quigley. "I love connecting an owner with an innovative care option for their beloved pet and knowing that our efforts made a difference in a patient's health outcome."

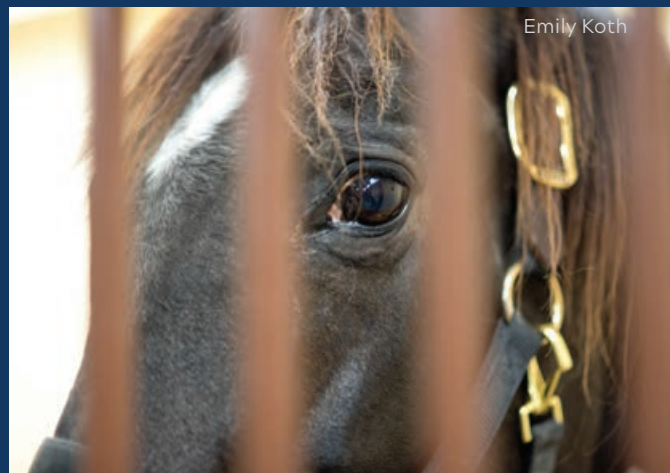
Jenny Kincaid Boone, university writer; Olivia Coleman, mobile journalist; and Mindy Quigley, clinical trials coordinator, contributed to this article.

Recently featured on CBS News.
Go to: bit.ly/CBSNews_caninebraincancer

STUDY EXPLORES GENETIC PREDISPOSITION TO DEVASTATING EQUINE NEUROLOGIC DISEASE

Sharon Witonsky, associate professor of equine field service in the Department of Large Animal Clinical Sciences, is leading a study that aims to determine if there is an underlying genetic predisposition for horses that develop Equine protozoal myeloencephalitis (EPM), one of the most common and devastating equine neurologic diseases in the U.S. Through

the study, researchers hope to advance their understanding of the mechanisms of immune dysfunction by identifying whether genetic changes in the host immune response are present in EPM affected horses. With this knowledge, they aim to identify immune therapeutics to restore protective immunity and improve clinical outcomes.



Emily Koth



The **FUTURE** of **CANCER CARE** and **RESEARCH**

The college's Comparative Oncology Research Center, currently under construction on Virginia Tech Carilion's Health Sciences and Technology Campus in Roanoke, Virginia, offers hope for a brighter future in cancer care for pets as well as for people.

Written by Mindy Quigley

Canine and feline cancer patients in the Mid-Atlantic region and beyond will soon have a new, state-of-the-art facility where they can receive treatments.

The college's Comparative Oncology Research Center (CORC), scheduled to begin seeing patients in spring 2020, will be housed in the Virginia Tech Carilion (VTC) Biomedical Research Addition, a new building currently under construction on the VTC Health Sciences and Technology Campus in Roanoke.

The center will accommodate the relocation and expansion of the medical oncology service from the Veterinary Teaching Hospital in Blacksburg and will serve as a center of excellence for comprehensive animal cancer care, research, and learning.

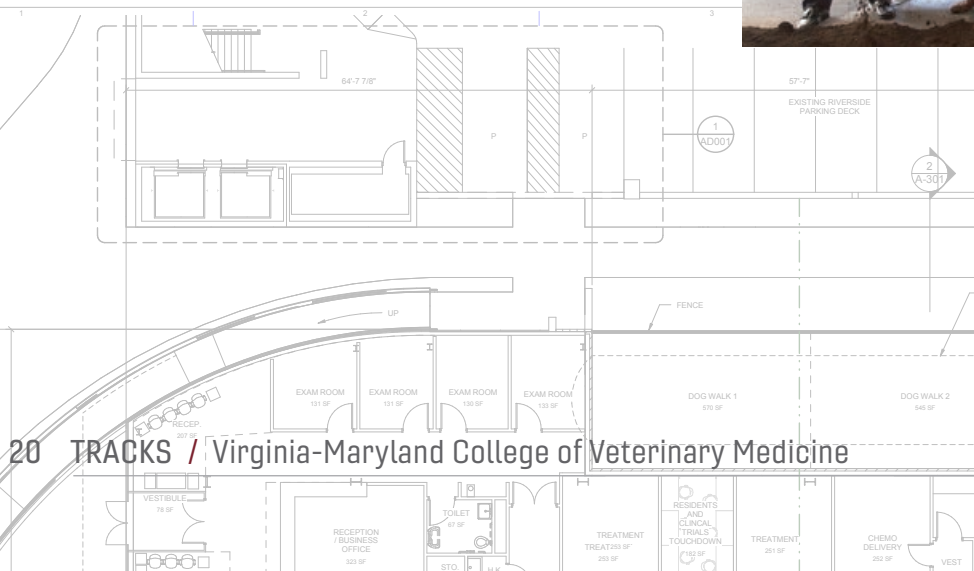
The facility will treat all types of veterinary cancer, as well as offering dog and cat owners the opportunity for their pets to participate in research and enroll in clinical trials. A \$3.28 million investment in a linear accelerator will enable the clinic to house the region's only radiation oncology service for pets.

"Our patients will be able to visit one location for different services such as surgery, radiation, and chemotherapy, and even advanced diagnostic imaging," said Nick Dervisis, associate professor of oncology in the veterinary college's Department of Small Animal Clinical Sciences. "Once the new facility opens, all those services will be under one roof."

The clinic's unique co-location alongside human clinicians and researchers allows CORC to embrace a true One Health concept that recognizes the linkages between human, animal, and



Top: The Comparative Oncology Research Center will be housed in the 139,000-gross-square-foot Virginia Tech Carilion (VTC) Biomedical Research Addition in Roanoke. Renderings by AECOM. **Bottom:** From left, Roanoke mayor Sherman Lea, Virginia Tech President Tim Sands, VTCRI Executive Director Michael Friedlander, former Virginia Gov. Terry McAuliffe, Carilion Clinic CEO Nancy Howell Agee, and Carilion Clinic CMO Patrice Weiss break ground for the new VTC Biomedical Research Addition in Roanoke in October 2017.



environmental health. Because companion animals often develop the same or similar cancers as humans, therapies can be developed to help human patients as well as offering new treatments for companion animals.

One example of this is the college's signature research program in neuro-oncology, which focuses on tumors that are common to both dogs and people. The new facility's imaging capabilities will provide valuable insights to a team of veterinarians, biomedical engineers, and human medical researchers in the fight against these often-deadly brain cancers.

Education is also integral to CORC's mission. Clinical services will be integrated with translational research and health sciences degree programs involving the college and the Virginia Tech Carilion School of Medicine (VTCOSM) and Research Institute (VTCRI), immersing students in a best-in-class, multidisciplinary learning environment.

VTCOSM Senior Dean for Academic Affairs Richard Vari emphasized the clinic's role in integrating ideas about the common biology between humans and animals. "We've already established a strong collaboration with faculty from the veterinary college who participate in teaching and research mentoring at VTCOSM and through the veterinary college's Master of Public Health program. This new initiative will further advance student learning in support of Virginia Tech and Carilion Clinic's shared commitment to One Health."



Creating an experience similar to top-flight human comprehensive cancer centers will involve integrating pet comfort and well-being into the fabric of the facility. C. Todd Johnson, whose 10-year-old black Labrador retriever, Albert, was recently diagnosed with oral cancer at the current facility in Blacksburg, was surprised to learn about the array of treatment options available to dogs. "I've never been through cancer with an animal before, but we've had a lot of cancer in my family. Fortunately, we're in a situation where we can travel and get the treatment Albert needs. He's like one of my children, and I'm going to do whatever I can to prolong his quality of life," Johnson said. "The idea that this will soon be available in our area is wonderful."

Dervis echoed those sentiments. "The vision of CORC is to be a regional and national driver of research excellence and cancer care. But as veterinarians, at the end of the day, our goal is to give our patients the chance to live their lives to the fullest."

CANCER RESEARCH INCLUDES FOUR BROAD CATEGORIES



BASIC RESEARCH

seeks to understand the fundamental aspects of nature. It provides the foundation for advances against cancer.



CLINICAL RESEARCH

tests drugs, medical devices, or other interventions in animal and human patients to improve all aspects of patient care.



POPULATION-BASED RESEARCH

explores the causes of cancer, cancer trends, and factors that affect the delivery and outcomes of cancer care in specific populations.



TRANSLATIONAL RESEARCH

moves basic research findings into the clinic and clinical research findings into everyday care. In turn, results from clinical and population-based studies can guide basic research.

Source: National Cancer Institute

Kristin Eden (DVM '10, Ph.D. '18) brings One Health perspective in new role at Virginia Tech Carilion



Kristin Eden and Irving Coy Allen, assistant professor of inflammatory disease in the veterinary college's Department of Biomedical Sciences and Pathobiology.

Written by Leslie Jernegan

To some it may seem unlikely that a two-time graduate of the Virginia-Maryland College of Veterinary Medicine (VMCVM) at Virginia Tech would go on to teach and do research at a human medical school; to Kristin Eden, it makes perfect sense.

Eden earned her bachelor's degree cum laude in biochemistry from Virginia Tech in 2006 and her DVM from the college in 2010. She completed a three-year veterinary anatomic pathology residency at Texas A&M University, becoming a Diplomate of the American College of Veterinary Pathologists in 2013, before returning to Virginia Tech to pursue her Ph.D.

Most recently, Eden accepted the role of assistant professor at the Virginia Tech Carilion School of Medicine (VTC SOM) in the department of Basic Science Education. In addition to teaching

medical students, she will continue her research on inflammatory bowel disease and colorectal cancer, which was the focus of her Ph.D. work in the laboratory of Irving Coy Allen, assistant professor of inflammatory disease in the veterinary college's Department of Biomedical Sciences and Pathobiology.

Eden's past roles as a graduate student mentor at the veterinary college and clinical teacher during her residency helped her realize her desire to stay in academia and teach. What attracted her to VTC SOM was the progressive curriculum, which is heavily focused on problem-based learning, a hands-on pedagogical approach that reinforces critical thinking through self-directed, small-group learning and context-specific problems.

"This week alone, I was helping out with a workshop on congenital diseases and discussing a disease

with a pediatric gastroenterologist. I said, 'Oh, we see that in horses all the time,' and she was so interested and wanted to know more about the disease from the veterinary medicine perspective," Eden said. "That's why I wanted to stay in academia—not only to teach, but to be exposed to all these different people and perspectives and to stay immersed in a culture that embraces a cross-disciplinary approach to research and medicine."

2018 Research Symposium provides an exhibition platform for graduate student work

Master's and Ph.D. students at the veterinary college, as well as graduate students from the University of Maryland's Department of Veterinary Sciences, gathered to present their research findings at the 29th Annual Research Symposium held this past spring. With graduate students and residents providing oral and poster presentations, the event highlighted the college's research focus on One Health, which seeks to integrate animal, human, and environmental health.

The event featured keynote speakers Jennifer McQuiston (DVM '97, MS '98), deputy director of the Division of High Consequence Pathogens and Pathology within the Centers for Disease Control's National Center for Emerging and Zoonotic Infectious Diseases, and Amy Pruden, the W. Thomas Rice Professor in the Department of Civil and Environmental Engineering at Virginia Tech, as well as alumni speaker Tim LaBranche (DVM '03, Ph.D. '05), senior director of drug safety evaluation at Blueprint Medicines in Boston.

Local children learn the value of nutrition through Market Kids program

Thanks to a partnership between the New River Health District and the Virginia Tech Public Health program, 20 local youth have a better understanding of fruits and vegetables, healthy food preparation, and local food systems through participation in Market Kids, a 13-week summer program.

Master of public health students Harper Lovegrove and Dylan Allanson served as co-coordinators of the program for their practicum, an experiential learning opportunity that serves as a bridge between academic training and applied public health practice.

Lovegrove and Allanson applied for, and were awarded, VT Engage's John E. Dooley Student Engagement Grant, totaling \$1,500 to assist in the implementation of the program.



Olivia Coleman

Market Kids is based out of the Farmacy Garden in Christiansburg, Virginia. Participants engaged in a variety of activities at the garden, including a blind fruit-and-vegetable taste-test, a live presentation from a professional beekeeper, and a lesson on the basics of composting.

For a video on the Market Kids program, go to: bit.ly/MarketKids

After analyzing students' work, a panel of faculty judges chose winners for the top oral presentations and posters in both master's and Ph.D. student categories; the prizes were presented to the winners that evening at the awards banquet, held at the Inn at Virginia Tech.

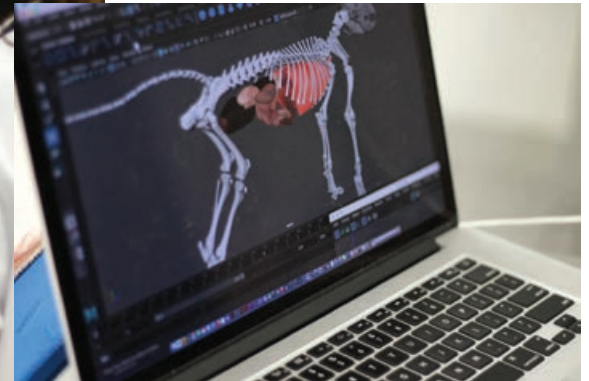
Jenna Giangarra (MS '18) and Melissa Mercer (MS '18) received the Outstanding Master's Student Presentation awards. Sarah Khatibzadeh and Lauren Trager (DVM '14) received the Outstanding Master's Student Poster awards. Dylan McDaniel (Ph.D. '18) and Ashwin Ramesh received the Outstanding Ph.D. Poster awards. Kristin Eden (DVM '10, Ph.D. '18), and Quighui Mu (Ph.D. '18) received the Outstanding Ph.D. Student Presentation awards.

A faculty and a staff member were also recognized at the banquet. The Zoetis Award for Veterinary Research Excellence was presented to John Rossmeisl (MS '03),



the Dr. and Mrs. Dorsey Taylor Mahin Professor of Neurology and Neurosurgery and associate head of the Department of Small Animal Clinical Sciences. Doris Tickle, laboratory technician in the glassware service laboratory, was honored with the Outstanding Co-Worker Recognition Award.

Keynote speaker Jennifer McQuiston (DVM '97, MS '98) and alumni speaker Tim LaBranche (DVM '03, Ph.D. '05) posed with graduate students for a group photo after the morning poster session.



Virtual reality brings dog's anatomy to life for veterinary students

Written by Jenny Kincaid Boone

"I literally stood inside the rib cage," said Sara Farthing, first-year veterinary student.

The aspiring small animal veterinarian was using a new technology available at the college that brings a dog's anatomy to life.

The virtual reality (VR) experience, created by Thomas Tucker, associate professor in Virginia Tech's School of Visual Arts and fellow with the Institute for Creativity, Arts, and Technology, shows up close the organs inside the skeletal system of a dog.

There is no other way to study a dog's organs and bone structure as intensively, said Michael Nappier, assistant professor of community practice in the veterinary college's Department of Small Animal Clinical Sciences.

Nappier heard about Tucker's past work with VR and puppy motion capture. He contacted Tucker about his idea, and Tucker ran with it. The project received a \$3,000 University Libraries Open Education Faculty Initiative Grant, which requires that the software be publicly released under an open license for use by other universities and veterinarians as part of Virginia Tech's land-grant mission.

"This open source tool brings forward the ability for students to develop a better spatial understanding," said Anita Walz, an open education, copyright, and scholarly communication librarian for University Libraries at Virginia Tech. "If this can help them learn faster or more thoroughly, I think it's really exciting."

Above: Veterinary students try out a new virtual reality experience, created at Virginia Tech, that allows them to see and study a dog's anatomy. **Top right:** This is one view of the virtual image of a dog that users see when they put on the VR headset.

For a video on the virtual reality experience, go to: bit.ly/caninevirtualreality

GRATITUDE

Gratitude is not only about being thankful, but also about showing appreciation for everything that we have received. Our donor base consists of alumni, faculty, staff, hospital clients, and community members, all of whom are essential partners in progress for our college and hospitals. This section of our college magazine focuses on recognizing some of our wonderful donors and highlighting how they have made an impact on scholarships, research support, hospital growth, and so much more. Because of our donors, we are able to consistently strive to new heights in veterinary medicine, public health, and biomedical research. We are extremely grateful for every opportunity provided by their generosity. ▼



Emily Koth

CREATING ACCESS & OPPORTUNITY

The increasing burden of student debt is a growing issue in the veterinary community. The college has taken consistent steps to offset this burden, but we are now taking these efforts to the next level. That is why support for our scholarship program from community members is essential. Our goal in the next few years is to at least double the support available in student scholarships. Our scholarship donors play a critical role in allowing our students to focus on becoming the most compassionate and complete caregivers to animals.



Peter Eyre, professor and dean emeritus of the college.
Photo by Emily Koth

Taking Student Debt to Task

Dean Emeritus Peter Eyre is determined to find innovative solutions to the problem of mounting student debt.

Written by Mindy Quigley

The rising cost of professional medical education, including veterinary medical education, leaves many graduates confronting significant debt challenges as they begin their professional lives. Lucky for them, Dean Emeritus Peter Eyre has a passion for advocacy on behalf of students who are facing these challenges.

For the past two years, Eyre has served on the college's Educational Debt Taskforce, a group that combines faculty from the college with outside advisors who can bring to bear expertise on a variety of debt-reduction strategies. The scope of the problem never left him daunted. "Change doesn't happen merely because we say it should. It takes leadership and determination,"

Eyre said. He has no doubt that addressing educational debt in a serious way will be difficult and controversial; however, "the debt burden poses an existential threat to the veterinary profession and we can't ignore the challenge."

During nearly two decades of service as the college's dean from 1985-2003, Dean Eyre was a relentless advocate for students and for excellence in veterinary medical education. In retirement, his commitment to students has only grown.

"Dean Eyre continues to be forward-thinking and persistent in creating momentum to change veterinary education for the better," said Jacque Pelzer, director of admissions and student services. "From editorials written in influential veterinary publications to his advocacy during meetings, he uses his stature

“
THE DEBT BURDEN POSES
AN EXISTENTIAL THREAT
TO THE VETERINARY
PROFESSION, AND WE CAN'T
IGNORE THE CHALLENGE.”

- Peter Eyre, BVMS, Ph.D.,
Dean Emeritus

in the veterinary community to be a voice for students.”

Eyre's support extends beyond words and into his activities, such as serving as a career mentor and providing financial support for the Eyre Family Scholarship in One Health. His goal for the scholarship, awarded each year to a deserving DVM student at the college, is to provide a model for how philanthropic gifts can reduce the financial burden on individual students.

“The scholarship, and others like it, are a small part of a much larger and more complex range of solutions. It will take dedicated, sustained effort to meet this challenge,” Eyre said. In Peter Eyre, students have a relentless supporter who's on their side and who's up for the fight.



Rebecca Deemer and her beloved dog, Cubby.

Committed to Making a Difference

Written by Beth JoJack

When Philip and Rebecca Deemer brought their border terrier Cubby to the veterinary college in late 2007, they didn't get the happy ending they wanted. The staff diagnosed Cubby with pancreatic cancer. “We ended up having to put her down there,” said Rebecca Deemer.

The Deemers, of Hot Springs, Virginia, were touched by the sensitivity that the faculty, staff, and students demonstrated. “People were just amazing about the whole situation,” Rebecca recalled. “That really was our first introduction to Virginia Tech veterinary medicine.”

During that initial connection with the college, the Deemers became aware of the financial burden that tuition can present to students. “So Bec and I said to ourselves afterwards, ‘You know, these kids are great,’” explained Philip Deemer, a financial advisor. “Maybe we could do something, just kind of set up a small scholarship... just provide a little bit of money to help them out.” The Deemers made a commitment to give over the course of five years.

During that time, the couple made additional trips to the teaching hospital. While the Deemers were in Blacksburg with their dog Boomer for cataract surgery, a vet assistant mentioned to the couple that the veterinarian was making do without having the most up-to-date equipment. Philip and Rebecca had another talk. “Maybe what we really want to do is set up a scholarship on a more permanent basis, not just every five years,” the couple decided. “Maybe we really want to do something even beyond that to help with the veterinary school and all the people associated with it.”

Working with the development office, the Deemers set up a bequest to establish an endowment at the veterinary college. Their endowment will sponsor scholarships and provide funding for the teaching hospital to purchase cutting-edge technology, year after year. Although neither of the Deemers are alumni of Virginia Tech, they feel a strong connection with the university. “This isn't our college,” Philip Deemer said. “But it is our place to go when we need care and where we believe what we're doing will make a difference. That's important to us.”

A Faculty Member's Impact

Written by Maggie Jaronski

One of the most exciting things about the veterinary college is the constant growth and expansion of not only its facilities, but also its educational programs. The Master of Public Health program in the Department of Population Health Sciences is a relatively new program that expands degree opportunities for students wanting to pursue careers in public health. This program focuses on the college's One Health initiative, which centers on bringing veterinarians, physicians, and other scientists together to address public health threats affecting people, animals, and the environment.

David and Sheryl Aday, of Williamsburg, Virginia, recognize the global impact of funding for public health students and have established themselves as leaders in providing scholarship funding for these students in the college. In 2004, they created the Ryan C. Aday Award in memory of their son, Ryan, who was a student at Virginia Tech in what is now known as the Master of Public Health program.

"I just cannot say enough good things about him," reminisced Kerry Redican, professor of public health administration, program development in health education, comparative health care, and public health systems in the Department of Population Health Sciences. Redican was an influential part of Ryan's success in the college and went the extra mile to help Ryan graduate after he became ill. "He was an excellent student. In the midst of being ill, his coursework was of consistently high quality," Redican shared. It was very important to Ryan that he received his degree, and having compassionate faculty members who are invested in their students' success made that a reality.

Ryan's relationship with Redican is the spark that initiated the Adays' support of the college, and they have funded their award every year since. The Adays continue to give to honor Ryan's memory, and because they understand the growing need for scholarship funding. "I am pleased to see [Ryan's] legacy live on." Redican concluded, "In the midst of such a tragedy, we have been able to do something positive, and for that we are very grateful."

“ IN THE MIDST OF SUCH A TRAGEDY, WE HAVE BEEN ABLE TO DO SOMETHING POSITIVE, AND FOR THAT WE ARE VERY GRATEFUL. ”

- Kerry Redican, MSPH, MPH, Ph.D.,
Professor in the Department of Population Health Sciences



David and Sheryl Aday with their two scholarship recipients, Rebecca Sherrod ('17) (left) and Annie Loyd ('17) (right) at the 2017 Spring Awards Ceremony.





Understanding the Value of an Education

Written by Beth JoJack

Otto and Betsy Wegman first became acquainted with the veterinary college when their daughter Laura enrolled as a doctor of veterinary medicine (DVM) student in 1998. “We came up for an open house before she went in,” Betsy Wegman explained.

Their fondness for the college grew exponentially after the couple moved to Blacksburg with a number of elderly animals in tow. The Wegmans’ dog Jack was the first to visit the Veterinary Teaching Hospital for a torn anterior cruciate ligament in his knee. There, the couple learned their beloved pets could go to the hospital’s Small Animal Community Practice for their regular preventive care visits. “That was just icing on the cake,” Betsy Wegman said. “I didn’t need to go anywhere else, and we got the best available care.”

On several occasions, staff members and students at the veterinary school impressed Betsy by asking about one animal when she was at the community practice or the teaching hospital with another member of her menagerie. “It was like they were real people to them,” said Betsy Wegman. “I think the brightest and best students at Virginia Tech

are in that vet school,” she added, before admitting: “My other daughter, [a Virginia Tech aerospace engineering alumna], doesn’t like me to say that.”

After the Wegmans’ daughter—who became Laura Schultz after getting married—graduated in 2002, the couple asked her to recommend a way they could do something for the veterinary school to show appreciation for the care that has been given to their pets. She suggested they donate to the Student Veterinary Medical Fund, which helps students pay for emergency medical expenses for their own pets.

Later, the Wegmans funded the Samantha Grace Schultz scholarship in memory of Schultz’s daughter, who died in infancy. “It was our way of keeping her front and center for us,” Otto Wegman said of the gift. The Wegmans have continued giving to the fund named for their granddaughter over the years, making it an endowed scholarship, one that will benefit students in perpetuity.

“We understand the value of an education,” Otto Wegman said. “We know it’s a lot more expensive now than it used to be, so we’re just trying to help out.”



Otto and Betsy Wegman at the college’s 2016 Spring Awards Ceremony with their scholarship award winner, Katie Margulies (DVM ’16).

1/4

of DVM students received
DONOR-SUPPORTED
SCHOLARSHIPS in 2017.

SCHOLARSHIP GIVING

College holds first annual Evening of Gratitude event

In April, the college hosted its inaugural Evening of Gratitude event, which provided a special opportunity for the college to express appreciation to those who have generously supported students through scholarship funding.

Educational debt for students looking to enter the field of veterinary medicine is a concern for veterinary colleges across the nation. In 2017, 75 percent of Doctor of Veterinary Medicine (DVM) students borrowed an average of more than \$135,000 over the course of four years. By providing scholarships to these students, donors are alleviating these financial burdens and the steep debt-to-income ratio that the students face upon graduation.

During the event, more than 20 generous donors were introduced to the college's scholarship recipients. These students come from a multitude of backgrounds and are focusing their studies in a variety of areas. This gave the donors a firsthand look at what it means to be a veterinary student, as well as how beneficial financial aid is in allowing them to continue their education.

First-time donor Michael Stanton spoke regarding the importance of his decision to provide the veterinary college's first-ever full tuition scholarship. "This is not about us, it's really about you and what you are doing. It's about all the healing that you keep giving back to the animals and their families."

Grateful for their beloved dog Mariah's successful oncology treatment by Andrew Mercurio of Virginia Veterinary Centers and having witnessed how the impact of veterinarians' work



75% of our **DVM students**
in 2017 had a loan debt of

\$135,000 +





extends not only to patients but also to their families, Michael and Jennifer Stanton made the decision to establish a scholarship for a veterinary student.

Catherine Cowan (DVM '18), the college's Outstanding Graduating Student and the recipient of several scholarships, stated, "Your scholarship support and donations to the college help us students make the sacrifices necessary to pursue veterinary medical education and to give back, not only to the animals that we care for, but to their people as well."

Jacquelyn Pelzer (DVM '97), director of admissions and student services, thanked the donors for their continued support, saying, "I hope that by meeting the students personally that you will hear their stories and understand that every dollar someone gives has such a positive impact on the future of the profession."



Left page: Donor Michael Stanton. **Bottom left:** (Left to right) Gregory B. Daniel, interim dean; Jacquelyn Pelzer (DVM '97), director of admissions and student services; Michael Stanton; Courtney Sibiga Wilson, associate director of development of major gifts. **Bottom middle:** Donor Mark Finkler with student scholarship recipient Taylor Gaines (DVM '18) and Jennifer Hodgson, associate dean of professional programs. **Top right:** Catherine Cowan (DVM '18), student scholarship recipient and speaker. **Middle:** Jeffrey Parker, representing the JoLyn Foundation. **Middle left:** Keath Marx (DVM '89), representing the Southwest Virginia Medical Association with student scholarship recipient Angela Ives (DVM '20). **Bottom right:** Michael and Jennifer Stanton. **Bottom left:** John Gregg plays the trumpet. **Photos by Hope Bradbury**



PAYING IT FORWARD

The impact of our hospitals stretches through Virginia with the Marion duPont Scott Equine Medical Center in Leesburg, the Veterinary Teaching Hospital in Blacksburg, and the upcoming innovative Comparative Oncology Research Center in Roanoke. Not only do they provide comprehensive and compassionate care to our companion animals, but also they perform cutting-edge research that keeps them at the forefront of veterinary medicine. Support for these hospitals is essential to maintain the highest quality of care by assisting in crucial facility upgrades and acquiring state-of-the-art equipment.



Support Your Passion

Written by Beth JoJack

“I was always one of those crazy horse girls,” Sharon Mueller explained. Raised by a single mom, Mueller grew up in a modest house with a small yard. Even so, her mother told her if she saved up enough money, she could buy a horse. It took Mueller a year-and-a-half of lemonade stands, babysitting, and house cleaning to come up with \$150. At age 13, she was able to buy an 18-year-old Palomino, whom she named Sun Dancer. “He became the first love of my life,” Mueller reminisced.

Her dedication and success with her headstrong mustang caught the eye of a nearby Arabian farm. Instructors frequently came to the farm to give lessons, and Mueller was invited to join them. A manager on the farm also taught her the sport of carriage driving horses. “I learned a huge amount from these people,” she explained.

Juggling work responsibilities with training horses, carriage driving, and breeding her own Arabian horses, Mueller’s career path ultimately led her to adult education. In addition to teaching Equine Management at Blue Ridge

74,000+

ANIMALS TREATED

IN FY 18



Community College, she also helped inmates at the Virginia State Correctional Center prepare for their General Equivalency Diploma (GED) exams. "I found I was extremely good at it," she said. By the time she retired two decades later, Mueller had helped over 500 inmates earn their GEDs.

Mueller's relationship with the college

began when her veterinarian referred two of her foals, both critically ill, to the Veterinary Teaching Hospital. Impressed and appreciative of the care they received, Mueller decided to make supporting the hospital part of her legacy. She set up a bequest supporting the Equine Compassionate Care program and the Veterinary Clinical Research Fund. "You can't take it with you, so if you don't have kids to give it to, you've got to find another place."

Mueller is the author of three books: *22 Years Behind Bars*, *Horse Stories from Pharoh's Way*, and *Poems from Pharoh's Way-II*. She enjoys spending time with her horses on her farm Pharoh's Way, named after her foundation Arabian stallion, DA Pharohtu, and also dedicates herself to caring for and re-homing feral cats.

Left page: Sharon Mueller carriage driving an Arabian horse. **Top left:** Mueller as a child with her first horse, Sun Dancer.



Denise Clay and her beloved dog, Button.

Giving Back to the Model

Written by Courtney Sibiga Wilson

"If we don't allow students to practice, how are they going to learn?" asked Denise Clay, MD, a loyal donor and grateful client of the Veterinary Teaching Hospital. Clay began her relationship with the hospital ahead of moving to Virginia, when she became concerned about her dog's corneal ulcer and wanted to provide her with the best care. "I was able to call and make an appointment before I even officially lived here. They were happy to help."

During her first visit to the hospital, her dog Button unexpectedly had to spend the night. Clay remembers how the veterinarian and resident involved her in the process of caring for Button, checking in throughout the night.

That series of interactions introduced Clay to the hospital's client-centric approach and to the compassionate faculty, staff, and students who see thousands of patients each year. Over the years of being a client, she would witness interactions that not only involved her and her animals, but other clients and animals as well. Because of the care and compassion she observed and experienced, Clay wanted to show her support.

"I know that there are animals that need care and the owners can't afford it. The school needs the money to do research, the students need it too...It's time to give back."

As a family doctor, Clay believes in the teaching hospital model. "You're getting at least two different people with two different perspectives," she said. Students engage with clients from the initial consultation to the at-home care instructions, which provides experience vital to their veterinary careers and allows clients to interact with the best and brightest upcoming veterinarians.

When it was time for her to make the first gift, she knew just where to put the gift to make the most impact—the hospital. She wanted to help it thrive, and she continues to support the hospital today. "When you find something you love, you need to support it—it will grow."

HONORING A COURAGEOUS BATTLE

Written by Mindy Quigley and Courtney Sibiga Wilson

Grayton Friedlander has legendary status at the Virginia-Maryland College of Veterinary Medicine. Without him, it's fair to say that the college's veterinary oncology program wouldn't be where it is today.

Grayton, who passed away in 2015, wasn't a medical researcher or a veterinarian; he was a big, lovable labradoodle whose cancer journey has had long-lasting implications. His role in the transformation of the veterinary oncology service began when his owners, Michael and Sandra Friedlander, brought him to the college's Veterinary Teaching Hospital for a reoccurrence of nasal adenocarcinoma—a disease that if left untreated can be fatal within six months.

He had previously been treated for his nasal tumor by clinicians at the University of Florida with a technique called stereotactic radiation therapy, which delivers precise, high dosages of radiation to



“ IN ADDITION TO BENEFITING OUR PATIENTS AND CLIENTS, THIS GIFT ADVANCES RESEARCH THAT CONTRIBUTES TO A LARGER BODY OF KNOWLEDGE SHARED AMONG THE CANCER RESEARCH COMMUNITY. ”

- Shawna Klahn, DVM, Associate Professor of Oncology in the Department of Small Animal Clinical Sciences

a tumor. Grayton responded well to the treatment and the Friedlanders were able to enjoy many years of his remission. However, the treatment can only be performed once, so when the cancer eventually returned, they were left with few options.

By this time, the college had established its oncology service with specialists Nikolas Dervisis and Shawna Klahn, both now associate professors in the Department of Small Animal Clinical Sciences. The duo were beginning a clinical trial to test the use of gold nanoparticles and a targeted laser treatment for solid tumors in dogs and cats. The Friedlanders enrolled Grayton as the first patient in the study.

Despite returning to remission during the trial, Grayton ultimately lost his battle with cancer. To memorialize their companion's courageous fight, the Friedlanders established the Grayton Friedlander Memorial Oncology Fund benefitting oncology research.





“Grayton was our first patient in our oncology program’s first clinical trial, and through this memorial fund he’ll always be with us as we advance cancer diagnostics and treatment for beloved pets,” said Dervisis. “Michael and Sandra’s gift served as a catalyst for clinical research as we were getting started, and the conversations we had during Grayton’s treatment helped us formulate a plan for our new facility in Roanoke [page 20]. They, along with Grayton, are partners in the growth and success of our program.”

“Generous gifts from our grateful clients have a broad impact,” said Klahn. “In addition to benefiting our patients and clients, this gift advances research that contributes to a larger body of knowledge shared among the cancer research community.”

According to Michael Friedlander, who is no stranger to medical research in his role as the executive director of the Virginia Tech Carilion Research Institute, “We had almost five great additional years with Grayton, thanks to the innovative compassionate care and leading edge science provided to him by the vets at Virginia Tech and their colleagues at the University of Florida. Creating a clinical research endowment in Grayton’s name seemed a fitting way to not only honor his life, but also to invest in the development of improved therapies for other dogs like Grayton that may benefit humans as well.”

Top left page: Grayton Friedlander at the beach. **Bottom left:** Michael and Sandra Friedlander had almost five additional years with their labradoodle Grayton after his initial cancer diagnosis at Virginia Tech thanks to innovative experimental treatments he received at both the college and the University of Florida. **Right page:** Oncologist Shawna Klahn performs a checkup on 13-year-old labradoodle, Grayton.

Cavalier King Charles Spaniel crowdfunding campaign helps unlock the mystery of a common cardiac disease

Written by Mindy Quigley

The College’s cardiology service recently got a big financial boost from generous dog lovers across the country. The donors came together to support a project aimed at answering two perplexing questions—why do Cavalier King Charles Spaniels get heart valve disease at an earlier age than other breeds, and why does their disease progress more quickly?

“It’s well-known in the Cavalier community and among veterinarians that these dogs are badly affected by mitral valve disease. Cavaliers are more likely to suffer faster and

more severe progression than other breeds,” said lead researcher Michele Borgarelli.

The research group’s previous work showed how important the shape of the heart valve was to its function, so they designed a study that would map dogs’ hearts using specialized software and 3-D echocardiogram.

Using Virginia Tech’s JUMP crowdfunding platform, the group raised \$12,300 in 30 days from 90 donors. Many gifts were \$25 or less, and given in memory or in honor of a beloved Cavalier companion. One particularly generous gift came from the Cavalier Health Foundation, an



organization aimed at addressing health problems in the breed.

When the study launches in early 2019, the researchers hope to use the valve’s shape to predict disease severity so veterinarians can provide earlier, more aggressive interventions for high-risk dogs.

For a video on the study, go to: bit.ly/cavaliersheartdisease



**“ THE MORE
RESEARCH THAT
SOMEONE COULD DO,
THE MORE ANSWERS
THERE COULD BE IN
THE FUTURE.”**

- Eileen Rollyson

Giving for Future Answers

Written by Courtney Sibiga Wilson

Our alumni are an essential part of the college. Not only do they donate time, talent, and treasure, but they also play a crucial role in referring patients to our services at the Veterinary Teaching Hospital. Kristen Hitt (DVM '06) is one of those alumni, and she used that role to help her clients Dan and Eileen Rollyson when there were no other options at her practice, Mainstay Veterinary Practice in Fairfax County, Virginia.

Sugar Rollyson came to the Veterinary Teaching Hospital in 2016 with an undiagnosed illness. That visit marked the beginning of Dan and Eileen's relationship with both the college and the teaching hospital. "The visit would not have happened without Dr. Hitt. We were able to have the best of the best down in Blacksburg" said the Rollysons.

The neurology department ran tests to determine the 11-year-old collie's need for treatment. During these tests, the Rollysons and Hitt were given a tour of the hospital. "We had no idea the different types of good work you were doing," Dan Rollyson remembered. "We got to see some of things that you were doing in the larger animals...some of the offices and labs where they were doing research. We were so impressed with all the people, including the students."

Things did not go as a dog owner would hope, and Sugar's condition continued to deteriorate. A few weeks later, on June 23, she was euthanized; unfortunately, the illness was never conclusively diagnosed. The Rollysons reflected on their time at the Veterinary Teaching Hospital and wanted to memorialize Sugar in a way that made sense to them by donating to "one of the most impressive organizations we've ever been affiliated with," Dan Rollyson stated. "If they couldn't save her, nobody could."

The Rollysons made their first gift in 2016, in memory of Sugar, allocating it to the Clinical Research Excellence Fund. Their second gift, in 2017, was in memory of their collie Annie, who passed away from complications of old age. They continue giving to research to increase the possibility of finding answers in cases like Sugar's. "The more research that can be done, the more answers there will be in the future," Eileen said.

The Rollysons are also in the process of setting up a legacy gift for the college to benefit research, in hopes that it will make a difference for others. "Hopefully, someday, somebody won't have to go through what we went through. It would be worth all the work and money we saved up," Dan continued. "Because of the competency, and the love, the ability



to communicate, and the treatment that we received."

The Rollysons' relationship with the college and hospital continues to grow. They have returned for a more in-depth tour and enjoy staying in touch with faculty members. Their hope is to continue their connection with the vet school to help it succeed.

"We look for organizations that will benefit the things we love, like our animals, and put the money to good use. [We want the school to] keep educating students and cranking out doctors of the same caliber that we observed at the Veterinary Teaching Hospital and we want to be a part of it after we're gone."



Left page: Sugar Rollyson
Top (left to right): Martha M. Larson, professor of radiology in the Department of Small Animal Clinical Sciences; Karen Inzana, retired professor of neurology in the Department of Small Animal Clinical Sciences; Kris Hitt (DVM '06); and Megan Alayo (DVM '17) with Sugar Rollyson. **Bottom:** Dan and Eileen Rollyson with their dogs Sugar (left) and Annie (right).

GOING ABOVE & BEYOND

From mentoring students to providing essential funding for scholarships and groundbreaking research, faculty and alumni are the core of our college and hospitals. They are our advocates, advisors, and leaders. Whether our alumni branch out to other locations or stay at VMRCVM and become part of our faculty, we are grateful for their support and could not continue to expand without them.



Giving from One Generation to the Next

Chip (DVM '87) and Caroline (DVM '87) Godine reflect on their 30-year journey that began in Blacksburg

Emily Koth

Written by Courtney Sibiga Wilson

“Chip was the first person I met in our class,” Caroline Godine (DVM '87) recalled.

Caroline had gone to Day Spring Church that morning in 1983, with her roommate, where Richard “Chip” Godine (DVM '87) attended. Both Chip and Caroline were incoming first-year students at the veterinary college and were scheduled to attend their class picnic that afternoon at Sinking Creek. Caroline’s roommate helped her get to Sinking Creek and introduced them, since she remembered seeing Chip at church that morning.

The pair hit it off instantly and would spend the next four years getting to know one another through Christian Veterinary Fellowship, bible study, prayer group, potluck dinners,

but mostly by studying together and attending the same classes eight hours a day.

“We knew enough that we wanted to be in the same area after we graduated,” Chip said. The pair first worked in Eastern Virginia, with Caroline working in a mixed practice in Northern Neck and Chip in Yorktown at a small animal practice. Within one year of graduation, they were married and ready for their next adventure together.

The next several years brought changes in their lives, both professional and personal. They moved around Virginia and had the opportunity to co-own practices. Chip spent time as a traveling ultrasonographer and serving as an active member of the Virginia Veterinary Medical Association



Emily Koth



(VVMA), including roles as president and representative. During this time the Godines welcomed four children; Caroline was able to homeschool the children, filling in as a relief vet once a week. She enjoyed homeschooling and felt as if she was raising the next generation of veterinarians. “I had the luxury of being married to Chip, and owning a practice with him, I would go into work one day a week...and that’s how Lina got so interested. She would come into work with me.”

The Godines share a pride for their alma mater and enjoy sharing in the experiences with their daughter. She frequently emails them about what she learned in class that day and passes along information. “She keeps us cutting-edge,” Chip chuckled. “What are you learning? What’s the latest?” Caroline laughed and continued, “She keeps us learning; we never know it all.”



“ I JUST ALWAYS HAD A GREAT FEELING ABOUT OUR ALMA MATER. I WAS ACTUALLY ACCEPTED [SOMEWHERE ELSE] AND I CHOSE TO GO TO TECH...”

- Caroline Godine, DVM ('87)

The Next Generation

Lina Godine is a fourth-year student at the college, and has worked as a vet assistant in the summers at her parents’ practice, Ruckersville Animal Hospital. “It’s been amazing to have her share stories of the same professors that we had. That is mind boggling,” Caroline laughed. She remembered the faculty during her time at the vet school, “The professors were mentors, and they weren’t just professors. They guide you, they encourage you, they help you regain the vision and focus.”

“I’m really happy for her. I think she has not only really wanted it, but she is really suited to be a veterinarian,” Chip reflected.

The Godines have stayed engaged with the college over the years by attending reunions, making gifts, mentoring students, and serving on alumni boards. Caroline shared, “I just always had a great feeling about our alma mater. I was actually accepted [somewhere else] and I chose to go to Tech, to the Virginia-Maryland school. I got a great education because we were just 80 in a class. It felt like family. We lived together, we played together, we fought together, we learned together.”

In the summer of 2017, in honor of their 30th reunion, the Godines gave a transformational gift in support of research and classroom renovation. Chip expressed that since becoming a veterinarian, he has always felt a part of two families: the veterinary community and VMCVM alumni. “First, veterinarians are amazing people...and we need to support one another. The other family is your veterinary school family where you were formed, where you overcame a lot of challenges in order to succeed...don’t take that for granted; the significance of that and where you are today.”

Left: Caroline and Chip Godine at their alma mater with their daughter, Lina Godine (DVM '19). Top (left to right): A naming gift opportunity by the Godines, “Excel, Mentoris, Ut Prosim.” The Godines performing an X-ray on a dog in their early years of owning their own veterinary practice. Bottom: The Godines in their practice.

A Faculty Member's Legacy

Written by Maggie Jaronski

If you graduated from the veterinary college, Marion Ehrich, professor emerita of pharmacology and toxicology and co-director of the Laboratory for Neurotoxicity Studies, has influenced your life. "I was here on the first day. I taught the first class, on their first day," Ehrich shared, reflecting on her time at the college. Ehrich is a loyal faculty member and donor who not only gives to the graduate program each year, but also supports our Doctor of Veterinary Medicine students through the establishment of a scholarship.

Ehrich began her career in Blacksburg as a postdoctoral research associate at what is now the Center for One Health Research. In 1980, she was hired by the veterinary college; the college was brand new, and Ehrich taught the first students - and every graduate of the college since then.

“ I LOVE THIS VETERINARY COLLEGE; IT IS MY WORK HOME. THE STUDENTS, THE STAFF, THE FACULTY COLLEAGUES ARE GREAT...I AM TRYING TO PAY FORWARD WHAT THE COLLEGE HAS GIVEN ME.”

- Marion Ehrich, MS, RPh, Ph.D.,
Professor Emerita of Pharmacology and Toxicology

When speaking about her motivation to give to the college, Ehrich reflected on an experience with her students when her father, Herman Fiedler, passed away. "I found out at 5:00 a.m. and taught an 8:00 a.m. class. After the lecture, I told the students that I would not be proctoring their pharmacology exam the next day because of what happened...and the students sent flowers out to Minnesota for the funeral. It was very touching."



Emily Koth

Top: Marion Ehrich in the college grove in 2017, at an alumni reunion on the same day her retirement reception was held. **Right:** Ehrich and her scholarship recipient, Mary Catherine Hurley (DVM '08), at the Spring Awards Ceremony in 2007.





Hope Bradbury

Marion Ehrich has played the piano at the college's commencement ceremonies for the past 33 years.

At that point, Ehrich realized how caring the students were during a tough time in her life, and wanted to give more than just her time and expertise back to them. "My dad loved visiting this place," Ehrich reminisced, and therefore decided to establish the Fiedler Scholarship as a way to honor her father and support the students that have been such a big part of her life.

Ehrich's involvement with her students continues well beyond their graduation ceremony. "Students

have turned into faculty. It has been wonderful to see them grow, and I am proud of every single one of them," she said. Her dedication is evident by all the time she continues to invest, even following her recent retirement. When asked why she continues to give each year to the college, Ehrich explained, "I love this veterinary college; it is my work home. The students, the staff, the faculty colleagues are great... I am trying to pay forward what the college has given me."

THE COLLEGE

COMES TO YOU

The college aims to provide more opportunities for its community members to stay engaged, even if they can't make the trip to Blacksburg.

We are excited to now be working with alumni and donors throughout the country to open their homes for an evening with faculty, alumni, clients, and donors to learn about the current and future projects of the college.

These dinners will be a great opportunity for you to meet other animal advocates in your area, and find out how you can make an impact. If you are interested in hosting and becoming an ambassador for the college, reach out to our advancement team to get your opportunity started.

Office of Advancement
540-231-0465 | cvmadvancement@vt.edu
vetmed.vt.edu/development

THANK YOU!

We take our responsibility to invest in the future of veterinary medicine very seriously and your gift impacts our ability to do so.

The college is making many important advances in both animal and human health. Support from our community members is critical to our work in training future veterinarians and public health professionals, operating our clinical facilities, and continuing innovative research. Gifts such as yours are a significant reason why our reputation for excellence is spreading.

Please accept our gratitude for your support and confidence in our programs.

To support the college or learn more about ways to give, contact our Office of Advancement at 540-231-0465 | cvmadvancement@vt.edu or visit us online at vetmed.vt.edu/development



Brooke Nelson

John H. Rossmeisl named Dr. and Mrs. Dorsey Taylor Mahin Professor

John H. Rossmeisl, professor of neurology and neurosurgery and associate head of the Department of Small Animal Clinical Sciences, was recently named the Dr. and Mrs. Dorsey Taylor Mahin Professor by the Virginia Tech Board of Visitors.

The Dr. and Mrs. Dorsey Taylor Mahin Endowed Professorship was established to recognize and reward a senior faculty member in the Virginia-Maryland College

of Veterinary Medicine for demonstrated excellence as a clinician and who exemplifies professionalism and compassion to owners and pets. The appointment is for five years and is renewable.

Additionally, Rossmeisl recently received the Zoetis Award for Veterinary Research Excellence. The Zoetis award is a nationally recognized honor for a faculty member at each veterinary school in the United States. The award seeks to “foster innovative research, on which the scientific advancement of the profession depends, by recognizing outstanding research effort and productivity.”

A member of the Virginia Tech faculty since 2003, Rossmeisl’s research has been dedicated to the development of new therapies for malignant brain tumors. His work is helping both veterinary and human patients, and he is considered to be among the top researchers in the world in the area of canine neuro-oncology.

He is a member of the American Veterinary Medical Association, the American College of Veterinary Internal Medicine, the Virginia Veterinary Medical Association, and the American Association of Veterinary Clinicians.

Jennifer Hodgson honored with national teaching excellence award

The Association of American Veterinary Medical Colleges (AAVMC) named Jennifer Hodgson, associate dean for professional programs and professor of population health sciences, as the recipient of the 2017 AAVMC Distinguished Teacher Award, presented by Zoetis.

The award, which is considered one of the most prestigious teaching awards in international academic veterinary medicine, recognizes excellence in professional veterinary medical education and is presented to an educator whose sustained record of teaching excellence and ability, dedication, character, and leadership has contributed significantly to the advancement of the profession.





R. Scott Pleasant named C.R. Roberts Professor of Clinical Veterinary Medicine

R. Scott Pleasant (DVM '84), professor of equine field service in the Department of Large Animal Clinical Sciences and director of the Equine Podiatry Service, was recently named the C.R. Roberts Professor of Clinical Veterinary Medicine by the Virginia Tech Board of Visitors.

The professorship, which recognizes teaching and research excellence, was established by Kent C. Roberts to honor the life and contributions of his father, Clarence, a veterinarian who began his career as a hard-working dairy

practitioner in upstate New York. The appointment is for five years and is renewable.

A member of the college faculty since 1991, Pleasant is a Diplomate of the American College of Veterinary Surgeons, and is a member of the American Association of Equine Practitioners and the American Veterinary Medical Association.

He received his bachelor's degree from Virginia Tech, DVM degree from the veterinary college, and a master's degree from the University of Illinois.

Michelle Theus receives outstanding mentor award



Michelle Theus, associate professor of molecular and cellular neurobiology in the Department of Biomedical Sciences and Pathobiology, received the Virginia Tech Graduate School's 2018 Faculty Outstanding Mentor Award for the college.

Students who nominated Theus said she possesses the ability to translate complex concepts in neuroscience to whatever language is most relevant to the student, regardless of whether that student is from a clinical background, basic science background, or possesses no background knowledge at all.

“ DR. THEUS FOSTERS A WELCOMING LEARNING ENVIRONMENT WHERE LAB MEMBERS FEEL LIKE THEY ARE PART OF A TIGHTLY KNIT RESEARCH FAMILY. ”

- Yeonwoo Lebovitz, Ph.D. student in the Theus laboratory



Emily Koth

Chief farrier Travis Burns elected president of American Farrier's Association

Travis Burns, chief of farrier services in the Equine Podiatry Service and assistant professor of practice in the Department of Large Animal Clinical Sciences, was elected president of the American Farrier's Association (AFA) at their annual convention in March.

Burns has been a member of the AFA for 10 years and has held past positions serving as the education chairman since 2012, as well as being on the board of directors. Besides representing the AFA, Burns plans to take advantage of his leadership time to examine room for advancement, including building better relationships within the equine world in order to unify the farrier profession.



Message from the Alumni Society President

Dear Alumni,

Over the last few years serving on the Alumni Society Board, it's become readily apparent to me just how impressive and accomplished our alumni are. It has been a true honor to serve in this role.

In the past year, we have observed significant and encouraging changes in how our alumni engage with the college.

At this year's commencement ceremony, on behalf of the alumni society, I delivered a formal address to the Class of 2018, welcoming them into the veterinary profession. Reunion turnouts were impressive, with representation in the hundreds from the classes of '88, '93, '98, '03, '08, and '13. The VMA presidents from Virginia and Maryland joined alumni society members at new student orientation, and also delivered three separate talks to the incoming Class of 2022 at this year's White Coat Ceremony. We have also initiated conversations around the restructuring and refocusing of the Alumni Society Board, in an effort to better meet the needs of our alumni and reconnect them to the college.

The college has also expressed a desire to increase alumni engagement and subsequently hired one of our very own, Dr. Cassie Wedd Wagner, to serve as Director of Alumni and Referring Practitioner Relations. For those of you who do not know Cassie, she is not only a veterinarian, but also a registered nurse and has a Master of Public Health degree. I am honored to call her my friend, and know she will help to redefine what it means to be a graduate of the greatest vet school in the world.

Be on the lookout for an alumni survey in the near future. We hope to update alumni contact information, understand how the school can support continued success in your career, and hear your ideas on how we as alumni can give back to the school (this doesn't mean just monetarily!)

Thank you all for all that you do. We have immensely talented alums, and I am proud to call this college—and Virginia Tech—home.

Sincerely,

Adam Henderson (DVM '11)
Alumni Society President

Cassie Wedd Wagner (DVM '13, MPH '13) joins veterinary college Advancement team

Cassie Wedd Wagner (DVM '13, MPH '13) returned to her alma mater in June as director of alumni and referring practitioner relations.

Wagner leads engagement of the college's alumni. She also serves as the liaison between referring veterinary practitioners in Maryland, Virginia, and West Virginia and the Veterinary Teaching Hospital in Blacksburg, Marion duPont Scott Equine Medical Center in Leesburg, and Comparative Oncology Research Center in Roanoke.

Wagner received her DVM degree from the college and her MPH from Virginia Tech in 2013. She holds a bachelor of science in nursing from the University of Virginia.



Sharon Deem (DVM '88) and Bom Inman Harris (DVM '08) receive college career achievement awards

Sharon L. Deem (DVM '88), was honored with the college's 2018 Lifetime Achievement Alumni Award. This award recognizes alumni for their outstanding and continued achievements in veterinary medicine and for their overall positive impact on society. She was presented with the award at the college's DVM commencement ceremony held in May.

Deem, an accomplished clinician, epidemiologist, wildlife veterinarian and professor, has served as director for the Institute for Conservation Medicine at the Saint Louis Zoo since 2011. Her career has focused on diseases shared between domestic animals, wildlife, and people, and the impact of environmental change and human interactions on the health of wildlife populations. Deem recently returned to her alma mater to give several continuing education talks on One Health and to celebrate the Class of '88 reunion.



Hope Bradbury/Emily Koth

Left to right: Sharon Deem (DVM '88) and Bom Inman Harris (DVM '11)

Bom Inman Harris (DVM '08), was honored with the 2018 Outstanding Recent Alumni Award. This award showcases an alumnus who has a demonstrated commitment to service and has distinguished themselves professionally. She was presented with the award during the Class of '08 reunion celebration held in June.

Since graduating in 2008 as valedictorian, Harris opened her own practice and, as sole veterinarian, has been practicing in central and eastern Virginia serving 23 counties. Harris has served as a mentor to veterinary students as well as participated in the DVM admissions interview process.



Ray Kaplan (DVM '88) receives AAVP Distinguished Veterinary Parasitologist Award

Ray Kaplan (DVM '88), a two-time Virginia Tech alum and professor of veterinary parasitology at University of Georgia specializing in drug resistance in nematode parasites, was awarded the internationally recognized American Association of Veterinary Parasitologists (AAVP) Boehringer Ingelheim Distinguished Veterinary Parasitologist Award.



Bill Hunnewell

Claire Simeone (DVM '11): From saving seals to talking Ted

Claire Simeone (DVM '11), a conservation medicine veterinarian at The Marine Mammal Center headquartered in Sausalito, California, became the first veterinarian ever to be named a TED Fellow.

Since 2009, 20 new TED Fellows have been selected annually for a total of 453 fellows from 96 countries. The designees range from scientists and doctors to artists and activists.



Dan Mirolli

David Schabdach (DVM '85) named associate vice president for research and innovation

David Schabdach (DVM '85) will join Virginia Tech on Jan. 7 as associate vice president for research and innovation, serving as attending veterinarian and directing the university program for laboratory animal resources in the Office of the Vice President for Research and Innovation.

In his role, Schabdach will advance excellence in research and instruction by providing oversight and direction to ensure the highest standards of well-being and care of animals across the university, and by supporting education and training in the humane use of animals.



Emily Koth



2018: AN IMPRESSIVE YEAR FOR ALUMNI REUNIONS

Reunion classes unite over several weekends of fun, reflection, and educational advancement

Written by Cassie Wedd Wagner

This year has proven to be a huge success, with both the DVM and MPH programs welcoming their alumni back to the college over four separate weekends of fun and activities.

Inaugural MPH Alumni Weekend

The MPH program held their first annual Alumni Weekend on April 13-14. An alumni-focused discussion provided valuable feedback and insight, enabling changes to meet the new requirements

from the Council on Education for Public Health (CEPH), and ultimately leading to the program's reaccreditation in September of this year. Alumni, current MPH students, faculty, and staff gathered for a mixer Friday afternoon and reconvened Saturday at the tailgate before the annual Virginia Tech Spring Game.

DVM Alumni Weekend Reunions

Also returning to the college were the DVM classes of '88, '93, '98, '03, '08, and '13 over three separate weekends. Each gathering presented its own unique set of

opportunities for the classes to reconnect with one another, and to reflect on the years during and after their time spent at the college.

The DVM Class of '08 commemorated their 10-year reunion in June with an impressive turnout of 50 classmates. Class president Katie Lipresti took the initiative to engage her classmates in the year preceding the event. They gathered on the evening of Friday, June 22 at their favorite watering hole, kicked off Saturday with a hike to the Cascades, and



Emily Koth

“ GREAT TO SEE OLD FRIENDS AND ALL OF THE NEW CHANGES AND ADDITIONS TO THE VET SCHOOL, MAIN CAMPUS, AND THE TOWN. ”

made their way back to the college for lunch and tours. They continued the celebration in conjunction with the Beer Festival at Virginia Tech, class dinner with a slideshow of memories, and ongoing conversation and festivities into the night and Sunday morning.

Over Sept. 21-23, more than 100 alumni from the DVM Classes of '88, '93, '03, and '13 and their guests met in Blacksburg for a combined reunion weekend. The celebration began on Friday evening with a barbeque that welcomed the reunion classes as well as current and retired faculty and staff. An opportunity for continuing education kicked off a busy and fun-filled Saturday. Ray Kaplan '88, who recently received the prestigious AAVP Distinguished Veterinary Parasitologist Award, delivered the first lecture on anthelmintic resistance. Curtis Plowgian

'13 then spoke on the use of steroids in companion animals. Sharon Deem '88, this year's recipient of the VMCVM Lifetime Achievement Alumni Award for her contributions to One Health and wildlife conservation, delivered the final lecture on animal and human health at the intersection of environmental sustainability. A rededication of the Class of '88 artwork was followed by lunch and tours of the college, then the classes split ways for an afternoon of activities and class dinners.

The DVM Class of '98 celebrated their 20th reunion in conjunction with the annual college pre-game tailgate, this year on Oct. 6 against Notre Dame. Twenty-five classmates met for a weekend of fun including a Friday night dinner at Mountain Lake Lodge and Saturday morning tours at the college. They joined over 200 faculty, staff,

students, and friends of the college in cheering on the Hokies at the veterinary college tailgate held Saturday afternoon.

Connecting in 2019

As our alumni base continues to grow with increased numbers from graduating classes and expanding programs, the college will be revising its reunion experience. Next year, reunion celebrations will be held for MPH alumni on April 12-13 and all college alumni on Aug. 16-18.

All alumni are welcome to attend the reunion weekend in August, which will focus on the DVM classes of '84, '89, '94, '99, '04, '09, and '14, and will be held in conjunction with a combined small and large animal conference. We are excited about the future and implementing new ways to reconnect our many incredible alumni with one another and to the college.

▶ For a video on the September 2018 Alumni Reunion, go to: bit.ly/2018alumnireunion

Top (left to right): The HokieBird welcomes the Class of '08 to their 10-year reunion. Members from the Class of '98 gather in the Vet Med Grove for their 20th reunion and VMCVM pre-game tailgate. **Middle** (left to right): The Class of '03 in front of the VMIA at their 15th reunion. Donna Flaggs and Renee Bobotz Sykes from Class of '93. The Class of '13 in front of the college at their 5th reunion. **Bottom** (left to right): The Class of '88 in front of the VMIA at their 30th reunion. Estelle Ward '88 captures her friends and classmates celebrating their 30th reunion. An impressive attendance from the Class of '08 gathers in the third year classroom at their 10-year reunion.



UPCOMING 2019 ALUMNI EVENTS:

January 19-23 – Veterinary Meeting & Expo (VMX), Orlando, FL

February 21-23 – VVMA Virginia Veterinary Conference, Roanoke, VA

April 12-13 – MPH Alumni Weekend, Blacksburg, VA

April 12-14 – WVVMA Annual Conference, Greenbrier, WV

May 2-5 – Fetchdvm360 East, Baltimore, MD

May 2 – DC Academy of Veterinary Medicine Alumni Luncheon, Fairfax, VA

June 23-25 – MDVMA Summer Conference, Annapolis, MD

August 2-6 – AVMA Conference, Washington, DC

August 16-18 – VMCVM Alumni Reunion and CE Conference, Blacksburg, VA

October 25-27 – Potomac Regional Veterinary Conference, Greenbrier, WV

TO VIEW MORE DETAILS ABOUT THE UPCOMING ALUMNI EVENTS,

PLEASE VISIT: www.vetmed.vt.edu/alumni/events.asp

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This past August, the Marion duPont Scott Equine Medical Center (EMC) hosted a race at Saratoga Race Course in Saratoga Springs, New York, in memory of Virginia Tech President Emeritus Charles W. Steger. EMC faculty, staff, advisory council members, and guests posed for a photo with winning jockey, Jose L. Ortiz. Photo by Sharon Peart.

