FALL/WINTER 2021

TRACKS

MAGAZINE

Fostering LOVE and LEARNING

Virginia-Maryland College of Veterinary Medicine

MESSAGE FROM THE DEAN

Expanding our community

As we progress through this academic year, we continue to ask two strategic questions: “How can we improve wellness, wellbeing, and sense of community within the college?” and “How can we improve the health and wellbeing of animals, people, and communities beyond the college?”

Stressors continue to swirl around us and outstanding individuals continue to step up to assist others within and beyond our college community. Students, faculty, and staff have volunteered to provide timely and convenient administration of COVID vaccines and Kathy Hosig, associate professor and director of the college’s Center for Public Health Practice and Research, is collaborating with extension specialists to address concerns of vaccine-hesitant populations. Others have invested time and energy to assist, care for, learn from, and adopt dogs from nearby animal shelters through a new college program. Hidayah Martinez-Jaka, a veterinary student in the class of 2022, merits recognition for her service as national president of the Student American Veterinary Medical Association, in addition to her service as a peer mentor and student ambassador for the college. The college is thankful to recognize Garry Morgan as our first director of Diversity, Equity, and Inclusion. Additionally, college researchers continue to innovate and gain knowledge to protect and improve health. From 2011 to 2020, college researchers published 2,008 manuscripts that stimulated 35,348 scientific citations as a result of their exciting efforts and scientific breakthroughs.

We also seek to address strategic questions collectively as a college. The small animal services facilities at the Veterinary Teaching Hospital need timely expansion. The current facilities were completed in 1987 to support four small animal clinical services (medicine, surgery, radiology, and clinical pathology), but today, an additional nine specialty services provide clinical care and educate students in these facilities. In addition to a patient treatment area with appropriate equipment for each specialty, space needs to include a touchdown location for veterinary technicians on the service, a private veterinary call station where specialists can speak with referring veterinarians, and a student “rounds” room to support teaching and communication with clients. The clinical, experiential learning process in veterinary medical education involves small groups of students immersed in a specialty for weeks at a time, but the care provided to dogs and cats and the experiential education of veterinary students is currently limited by our facilities and staffing. Ongoing demand for limited services creates increased wait times, and wait times for appointments with specialists (sometimes weeks or months) necessitate that some clients seek alternatives at very distant locations.

It is clear that we need to move forward with this expansion. Financial co-investment by a college partner would allow expansion of clinical facilities to occur in a timely fashion without increasing the financial burden on future students. Construction will notably improve experiences of faculty, staff, students, clients, and patients through an improved hospital environment. It also will increase the number of patients and clients that receive timely, compassionate and cutting-edge clinical care in Blacksburg, Virginia. Enthusiastic pursuit of this needed advancement is ongoing.

Dean M. Daniel Givens

IN THIS ISSUE

12

16

ON THE COVER: Hidayah Martinez-Jaka, a fourth-year veterinary student, walks Kane, a foster dog in the college's Canine Awareness and Responsibility Experience for Students program—better known as CARES. **Photo by** Andrew Mann

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PROFESSOR LANDS TWO GRANTS FOR THE STUDY OF BRAIN TRAUMA

Dr. Michelle Theus will be using the nearly $4.5 million in grant funding to research the impact of the immune system

By Jimmy Robertson

Being restricted to working from home and not in her lab for a good portion of the COVID-19 pandemic has produced unexpected results for Michelle Theus.

Theus, an associate professor of molecular and cellular neurobiology in the Department of Biomedical Sciences and Pathobiology within the Virginia-Maryland College of Veterinary Medicine, recently secured two grants totaling nearly $4.5 million from the National Institute of Health (NIH) for research related to traumatic brain injuries.

The money came from the National Institute of Neurological Disorders and Stroke (NINDS), an institute within NIH that provides support for health-related brain research and development. Theus is the principal investigator on these two grants and two other previously secured NIH grants, along with being one of multiple principal investigators on a grant from the CURE Epilepsy foundation studying the effects of traumatic injury and stroke on brain function.

Each grant supports a specified project to be performed by a named investigator(s) in the investigator's specific area of interest. Although funding at this level is an accomplishment for any researcher, Theus is modest about her success. "I don't know how much credit to take for it," Theus said. "With COVID, we've all been restricted to our home offices. I think being solely focused on writing grants has enabled my success. So, maybe I should give COVID credit for that."

"But I'm delighted once again to have the recognition from NINDS. I'm grateful they agree that this is a fruitful endeavor."

One grant, totaling $2.01 million, will be used to study new mechanisms that promote entry of certain white blood cells into the immune-privileged brain and how this creates a neurotoxic environment that disrupts the blood brain barrier—a barrier that prevents immune cell entry and helps keep the brain safe—and prevents proper functioning of neurons.

Theus has assembled an outstanding team of partners that include Virginia Tech Professor Chang Lu, post-doctoral fellows Elizabeth Kowalski, Erwin Kristobal Gudenschwager Basso, Eman Soliman, and John Leonard, as well as graduate student Jatia Mills.

"When that barrier is lost, and neurotoxic immune cells enter and do what it is they're programed to do, the brain is not a conducive environment for that response," she said. "Our goal is to devise innovative ways to re-tool their program, to limit their overzealous nature in a manner that enables the brain to heal as a consequence of head trauma."

The other grant, totaling $2.47 million, allows for the study of age-dependence on the immune response. Exciting new findings from her group show that immune cell transfer from juvenile animals into adult animals exposed to traumatic brain injury resulted in substantial protection. Her long-term goal is to learn how to recondition the adult or aged immune system as a therapeutic tool to limit brain damage by taking advantage of the youthful program.

As part of her overall translational approach to science, Theus will begin to glean information from her research with animals by partnering with Biraj Patel and Eric Marvin, two clinicians in the Virginia Tech Carilion School of Medicine, to apply the work

to human patient samples. She currently holds one Institutional Review Board for the upcoming proposals.

"If we understand the most efficient way to reprogram peripheral immune cells to respond within the brain-injured environment, this may open new avenues for therapy that could include preventative measures for our combat troops, or professional athletes," Theus said.

Left: Michelle Theus, associate professor of molecular and cellular neurobiology in the Department of Biomedical Sciences and Pathobiology. **Top (left):** Post-doctoral associates, Eman Soliman, John Leonard, Erwin Kristobal Gudenschwager Basso, Ph.D. candidate, Jatia Mills, and Michelle Theus (center).

Theus' interest in studying traumatic brain injuries stems from both personal and professional experiences. A close childhood friend fell while hiking at a quarry park and has been dealing with the aftermath his whole life. Professionally, her research training at institutes such as the Cleveland Clinic and The Miami Project to Cure Spinal Cord Paralysis at the University of Miami has ingrained in her the broader impacts of basic science research.

At the end of this study, she and her team hope to find a pathway that enables a young immune system to respond in a way that appropriately promotes brain repair and limits damage in both middle-aged adults and seniors.

"My team is ready and poised to do this work," Theus said. "We have much work ahead, and we're looking forward to having a lot of fun while doing it."

A little stamp can go a long way: stamps bring attention to rare livestock breeds

At your local post office, you might spot a series of stamps that highlight the beauty and variety of American livestock breeds: in a collaboration with the Livestock Conservancy, the United States Postal Service released a series of Heritage Breed Forever stamps this past May. The stamps feature images chosen by the college's own Phillip Sponenberg, professor of pathology and genetics.

Sponenberg has been involved with the Livestock Conservancy, an organization dedicated to the preservation of rare livestock breeds, since its infancy, and he has served as its technical advisor since 1978. An influential voice in the genetics and conservation fields, Sponenberg has worked closely with livestock conservationists in the United States, Spain, Portugal, and Latin America.

Sponenberg contributed to the stamp project by assessing the images of the animals, determining which photographs tell the story of the individual breeds the best.

Ten different breeds are featured on the stamps, each a part of the country's history. These heritage breeds were bred for local, specialized use but are now outnumbered by more commercial breeds—many of the breeds featured are considered critically endangered.

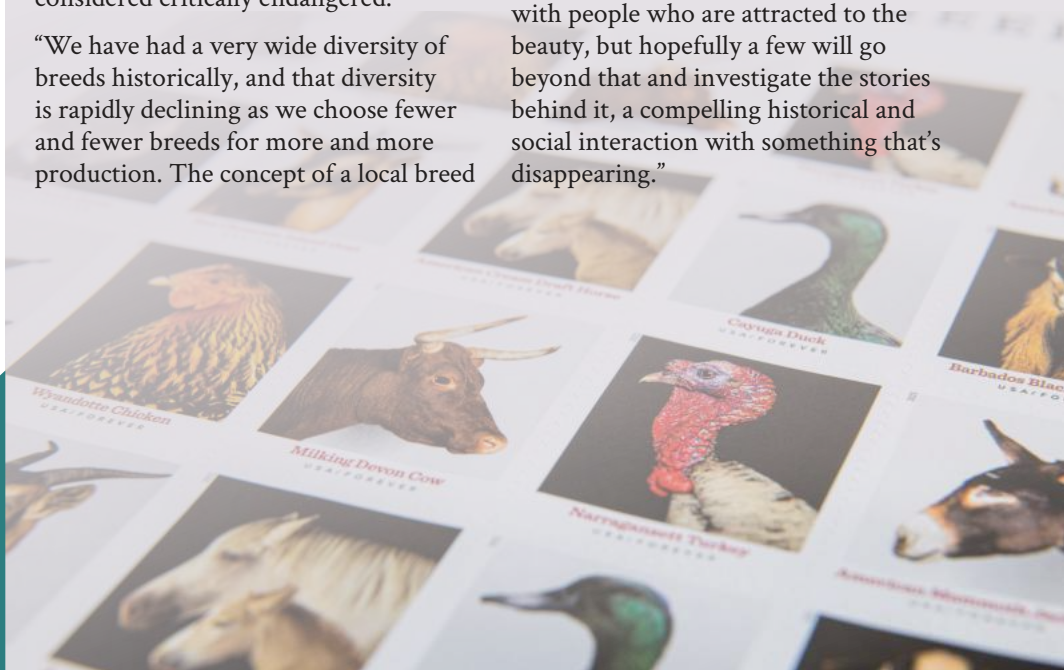
"We have had a very wide diversity of breeds historically, and that diversity is rapidly declining as we choose fewer and fewer breeds for more and more production. The concept of a local breed adapted to a local situation for a local purpose is really missing, and some of that is going to be really, really difficult to regain," said Sponenberg.

Sponenberg stressed that we need a variety of genetic options to ensure a healthy future. Some rarer breeds have unique genetic characteristics, like Jacob sheep, studied by researchers because they are the only spontaneous animal model of Tay-Sachs disease, a fatal genetic condition that affects young children.

Heritage breeds also hold great cultural value. Featured on the stamps is the mammoth jack, a breed of horse-sized donkey. The mammoth jack is a breed shaped by George Washington himself, who maintained a breeding program and stud service in the years following the Revolutionary War. The mulefoot hog, also featured, is known for its distinctive, non-cloven, "mule" hooves and are likely descended from Iberian stock brought to North America as part of Spanish colonization in the sixteenth century.

Sponenberg hopes that the stamps can bring awareness to the breeds represented here.

"They show a broader audience the beauty and utility of what's going on [with heritage breeds]. It will resonate with people who are attracted to the beauty, but hopefully a few will go beyond that and investigate the stories behind it, a compelling historical and social interaction with something that's disappearing."



Veterinary students explore research careers in summer program

Top: Elaina Davis, a third-year veterinary student at Lincoln Memorial University, was mentored by Joanne Tuohy, assistant professor of surgical oncology.

An intensive 11-week program provided hands-on reasearch training to about a dozen veterinary students from the college and partner veterinary schools. The college's Summer Veterinary Student Research Program (SVSRP) introduced students to research-focused careers outside of clinical veterinary practice.

Over the course of the summer, the students learned about research careers, developed professional skills, and conducted mentor-supported research projects. Students received training on subjects that are crucial to becoming a successful researcher, like proposal writing, reports, and research ethics.

Participating students met with scientists in federal institutions around Washington, D.C., and attended breakfast seminar events with academic institutions like medical schools and other research organizations to learn about the many careers open to veterinarians. The program culminated with students presenting their research at the National Veterinary Scholars Symposium, hosted virtually this year by Iowa State University.

> **"It is not uncommon for DVM students, after their experience in the SVSRP, to change their career thoughts from becoming practicing veterinarians to alternative careers in government, industry, and academia.**
>
> S. Ansar Ahmed,
> associate dean, research and graduate studies

"It is not uncommon for DVM students, after their experience in the SVSRP, to change their career thoughts from becoming practicing veterinarians to alternative careers in government, industry, and academia. Our survey data suggest that 55-60 percent of our SVSRP DVM summer trainees are not in traditional small animal practice, but in alternative careers, including academia, industry, or advanced training," said S. Ansar Ahmed, the SVSRP's director and associate dean of research and graduate studies, and a professor of immunology. The program encourages students to explore different career paths.

Emma Loessberg, of Richmond, Virginia, a second-year veterinary student who is pursuing a career in pathology research, said the program was a great fit for her goals.

"I hoped this program would help fill in the gaps when it came to my laboratory experience. I was also very excited about the networking opportunities that the program offered, as it was an opportunity to be exposed to less traditional careers within veterinary medicine."

The highlight of the program for many students is its nine weeks under the guidance of faculty mentors as the students conduct research on animal models of diseases. Through this, the SVSRP supports the college's focus on One Health, the approach to public health that recognizes the interconnected nature of animal, human, and environmental well-being.

Elaina Davis, a third-year veterinary student at Lincoln Memorial University, was mentored by Joanne Tuohy, assistant professor of surgical oncology. Davis spent her summer working with high-frequency irreversible electroporation (H-FIRE) on canine primary lung cancer. In this role, she collaborated with biomedical engineering students, as well as students at the veterinary college.

"For me, the most memorable part of my summer was any time I had the opportunity to see clinical cases, especially clinical trial candidates. I love research and being in a lab, but seeing the clinical patients was my favorite part of any day," said Davis.

Working alongside Nisha Duggal, assistant professor of molecular and cellular biology in the Department of Biomedical Sciences and Pathobiology, Loessberg examined the susceptibility of mosquito and bird cells to Usutu virus, an emerging arbovirus.

"I learned how to thaw and culture cells, inoculate cells with different virus strains, complete plaque assays to quantify the virus, and complete growth curves for each cell line to examine growth kinetics," Loessberg explained. She also helped with mosquito husbandry, examined house sparrows, and took blood samples from mice.

"Out of all these amazing opportunities, I would have to say my favorite was the work I got to do with the house sparrows

because it mixed research with clinical skills and was very similar to what I hope to be doing in my future career," said Loessberg.

For Davis, participating in SVSRP was an eye-opener.

"My biggest takeaway from the program is realizing that I want to work in academia. I really loved seeing Dr. Tuohy go from the research side to clinical side on any given day, and it's really opened my eyes to the possibilities within my career."

Now in its 15th year, the SVSRP equips veterinary students with the tools they need to become researchers. The SVSRP is sponsored by the National Institutes of Health, the Boehringer Ingelheim Veterinary Scholars Program, and the college.

20%

Increase in awards expenditures between FY20 and FY21. The award amount is the highest ever reported for the college.

$11M+

In research expenditures for FY21.

$10.8M+

In research awards for FY21.

MAJOR RESEARCH GRANTS

More than $100,000

May – August 2021

STING-mediated Response in Traumatic Brain Injury
Principle Investigator (PI): Alicia Pickrell, School of Neuroscience (SON)
Co-Investigators (Co-I): Michelle Theus, Department of Biomedical Sciences and Pathobiology (DBSP)
Total Award: $200,000
Funding Agency: Commonwealth Health Research Board

Interstitial Fluid Flow in Alzheimer's Disease Progression
PI: Jennifer Munson, Department of Biomedical Engineering and Mechanics (BEAM)
Co-I: Michelle Theus, DBSP; Michelle Olsen, SON; Ian Kimbrough, SON
Total Award: $1,358,020
Funding Agency: National Institutes of Health (NIH); National Institute of Aging

Divergent Age-Dependent Peripheral Innate Immune Response after Traumatic Brain Injury
PI: Michelle Theus, DBSP
Co-I: Chang Lu, Department of Chemical Engineering (COE)
Total Award: $1,590,000
Funding Agency: NIH; National Institute of Neurological Disorders and Stroke (NINDS)

Training the Veterinary Public Practitioner
PI: Valerie Ragan, Department of Population Health Sciences (DPHS)
Co-PI: Cassidy Rist, DPHS
Total Award: $241,000
Funding Agency: United States Department of Agriculture (USDA)/National Institute of Food and Agriculture

Novel Mechanisms Suppressing the Pro-resolving Phenotype of Peripheral Innate Immunity Following Traumatic Brain Injury
PI: Michelle Theus (DBSP)
Total Award: $1,250,000
Funding Agency: NIH; NINDS

Mobility-based Outbreaks in Virginia Early Response System (MOVERS): Using Real-time Mobility Data to Develop an Infectious Disease Outbreak Early Warning System for Virginia
PI: Nick Ruktanonchai, DPHS
Co-PI: Corrine Ruktanonchai, DPHS; Rachel Silverman, DPHS
Total Award: $100,000
Funding Agency: The Thomas F. and Kate Miller Jeffress Memorial Trust

Development of Feed Additives for the Treatment and Prevention of Cryptosporidiosis in Dairy Calves
PI: Jennifer Zambriski, DPSH
Co-I: Sierra Guynn, Department of Large Animal Clinical Sciences
Total Award: $225,813
Funding Agency: Land O'Lakes

Ultrasound-guided Histotripsy Ablation of Canine Brain Tumors Through an Acoustically Transparent Cranial Window
PI: John Rossmeisl, Department of Small Animal Clinical Sciences (DSACS)
Co-I: Eli Vlaisavljevich, BEAM; Rell Parker, DSACS; Brittanie Partridge, DSACS
Total Award: $104,000
Funding Agency: American Kennel Club

USDA Veterinary Services Terminology Support
PI: Julie Green, DBSP
Total Award: $227,273
Funding Agency: USDA-Animal and Plant Health Inspection Service (APHIS)

The Role of Obesity on Alphavirus Disease Severity
PI: James Weger-Lucarelli, DBSP
Co-I: Xin Luo, DBSP; Tanya LeRoith, DBSP; David Xie, DBSP
Total Award: $275,000
Funding Agency: NIH/National Institute of Allergy and Infectious Diseases (NIAID)

Leaky Gut Drives Autoimmunity via Bacterial Flagellin-Mediated Activation of TLR5
PI: Xin M. Luo, DBSP
Co-I: David Xie, DBSP
Total Award: $275,000
Funding Agency: NIH/NIAID R21

Determinants of Usutu Virus Bird-to-Mosquito Transmission
PI: Nisha Duggal, DBSP
Co-I: James Weger-Lucarelli, DBSP; Angela Bosco-Lauth, Colorado State University
Total Award: $425,785
Funding Agency: NIH/NIAID

Enhancing Electronic Reporting and Data Transmission
PI: Tanya LeRoith, DBSP
Co-I: Carolyn Sink, Virginia Tech Animal Laboratory Services (ViTALS); Jennifer Rudd, ViTALS
Total Award: $100,429
Funding Agency: USDA APHIS

Mobile vaccine clinic at Claytor Lake State Park in partnership with the Virginia Tech COVID-19 Crushers, New River Health District, Virginia Department of Health, and the Edward Via College of Osteopathic Medicine.
Photo by Kristin Rose Jutras

Mobile vaccine clinics are making COVID-19 vaccines more accessible to the community

A group of dedicated and creative Virginia Tech students and faculty, in partnership with the Virginia Department of Health (VDH), are working to make vaccines more available to the community with mobile vaccine clinics.

COVID-19 Crushers is a dedicated group of undergraduates, graduate students, and faculty ambassadors from Virginia Tech helping to spread facts, not fear, about the coronavirus in the New River Valley. The COVID-19 Crushers have held 11 vaccine clinics and vaccinated more than 600 people in the New River Valley community. They have held clinics at a wide variety of places, including restaurants, mobile homes, and Claytor Lake.

"Many people come to the lake with their family and friends, so we are able to educate and vaccinate large groups of people at a time. This helps protect our community as a whole," said Fernanda Gutierrez, one of the founding members of the COVID-19 Crushers and a Master of Public Health graduate student who has been integral in getting these mobile vaccine clinics operational.

Gutierrez and Teagan Neveldine from the COVID-19 Crushers and Carla Finkielstein, an associate professor at the Fralin Biomedical Research Institute at VTC, provide support to Spanish speakers at the mobile vaccination clinics and have created COVID-19 education and outreach materials in Spanish and English that are accessible to nonnative speakers with the help of the Fralin Life Sciences Institute communications team. Gutierrez and Neveldine have shared and displayed these materials at workplaces and community centers around the New River Valley.

"I am so impressed with these students," said Finkielstein, an associate professor of biological sciences and director of the Virginia Tech Molecular Diagnostics Lab in Roanoke. "Fernanda and Teagan have knocked on the door of every restaurant and grocery store in the New River Valley encouraging owners and their staff to get vaccinated. They have arranged mobile clinics, rides to vaccination sites, and texted individuals one by one to ensure they make their second dose appointments."

Mobile vaccine clinic staff members look for areas where they can make vaccines easily accessible to remote areas, underserved populations, and people who lack access to transportation. "Our education and outreach and mobile vaccine clinics allow us to meet community members where they are," said Neveldine.

TBMH doctoral student crowned first-ever Miss Virginia Volunteer

Photo courtesy of Breana Turner

Breana Turner, a first-year student in the Translational Biology, Medicine, and Health Graduate Program at Virginia Tech, has made history as the first-ever Miss Virginia Volunteer, earning a $10,000 scholarship.

With a master's degree in public health from the college, Turner built a community outreach mentor and empowerment program, Sisters with Ambition. The program helps girls in middle and high school gain confidence, foster healthy relationships, set goals, and learn valuable professional development skills.

"Even though I'm a mentor to these middle and high school young women, I aspire to be a role model that is real," Turner said. "They inspire me more than I inspire them."

Welcome new students!

The college welcomed new DVM and graduate students during Orientation week over Aug. 16-20, 2021. The 126 DVM students received various college and class introductions, as well as facility tours, and even experienced a day of team-building and problem-solving activities at a local retreat center near the college. Our new DVM and MPH students collaborated during a Community Lunch Event, where they worked together in teams on a One Health project and also interacted with the Virginia Tech therapy dogs.

Orientation week offers new students their first exposure to classmates and college programs. It provides a plethora of information and exposure to new and exciting opportunities, intertwined with team-building exercises designed to boost their leadership, self-confidence, and communication skills.

The week culminated with the DVM Class of 2025 White Coat Ceremony, held in the Moss Arts Center at Virginia Tech. The students received their official lab coats, stethoscopes, and a welcome to the profession from the VMCVM Alumni Society, the Virginia Veterinary Medical Association, and the Maryland Veterinary Medical Association.

WELCOME, NEW FACULTY

May 1 – Nov. 1

3 Administration

6 Large Animal Clinical Sciences

10 Biomedical Sciences and Pathobiology

9 Small Animal Clinical Sciences

2 Population Health Sciences

Garry Morgan

> **"With this new position at the college, we are continuing our commitment to grow and sustain a thriving, diverse, and inclusive College of Veterinary Medicine community.**
>
> - M. Daniel Givens, dean

Garry Morgan named director of diversity, equity, and inclusion

Garry Morgan has been named the first director of diversity, equity, and inclusion at the college.

In alignment with InclusiveVT, the Principles of Community, and the college's 2020-2021 Diversity Action Plan, the college seeks to recruit and support students and faculty from underrepresented minority groups, make a veterinary medicine education more accessible, provide educational opportunities, and expand awareness within the college community.

As director, Morgan will serve on the college's Executive Board as a valuable voice in advancing the college's goals.

Morgan says that being the first director of diversity, equity, and inclusion at the college is a responsibility not to be taken lightly.

"Ultimately, I seek to provide leadership and advocacy for members of our community so each of us can be accountable for our part in supporting an increasingly diverse and complex global environment."

"With this new position at the college, we are continuing our commitment to grow and sustain a thriving, diverse, and inclusive College of Veterinary Medicine community. We are resolutely dedicated to creating and maintaining an environment that allows all members of our college community to learn and grow to their full potential," said M. Daniel Givens, dean of the college.

Morgan looks forward to learning more about the college's academic programs and getting to know the college community and their needs.

"I recognize there are challenges to achieving this goal, but I invite members of the college community to join me in a collective learning process as we seek to eliminate barriers or faculty, staff, and students."

Veterinary college receives competitive grant for small animal reproduction residency


Nicole Sugai

A $100,000 grant from the American Kennel Club, the AKC Canine Health Foundation, and the Theriogenology Foundation will bring a new theriogenology resident to the college.

The Small Animal Theriogenology Residency Program grants funding for a full-time resident to study theriogenology, the physiology of animal reproductive systems and reproductive health.

The grant is highly competitive: seven colleges have received the grant since it was established in 2016, and the college is one of only four to receive it multiple times. The college last won the Small Animal Theriogenology Residency grant in 2018.

Julie Cecere, clinical associate professor of theriogenology and coordinator for the residency, said that winning the grant twice points to the strength of the program.

"[Winning again] is significant to me because these organizations feel that we have fulfilled our mission. The continued support, financially and publicly, gives us the confidence to keep doing what we're doing."

"I am very proud the college was chosen to receive this prestigious grant for the second time. Having a successful program with AKC/AKCCHF/TF sponsorship will help distinguish our college and our theriogenology program as one of the national and international leaders in small animal clinical theriogenology and research," said Orsolya Balogh, JoAnne S. O'Brien Professor of Theriogenology.

Over three years, the incoming resident will earn a masters in biomedical and veterinary sciences, write a grant, conduct a research project, and study for board certification through the American College of Theriogenologists.

Nicole Sugai was selected as this year's resident. Growing up, Sugai and her family showed standard poodles in the conformation ring, and when she was a teenager, she grew more interested in the breeding side of the purebred dog world.

After earning her bachelor's in biology and evolutionary anthropology from the University of Michigan, Sugai entered veterinary school at the University of Illinois at Urbana-Champaign. There, she worked with theriogenologists Fabio Lima and the college's own Jaime Stewart, assistant professor of production management medicine. Sugai's experience in veterinary school cemented her passion for theriogenology.

Sugai spent two years working in private practice before entering the small animal theriogenology residency. She still loves showing standard poodles and is an AKC Breeder of Merit.

The college stood out to her because of its canine focus and its variety in caseload.

"You do so much work with such a range. It's a lot of conformation AKC dogs, hunting dogs, multiple lines—not just one type of dog," Sugai said.

Sugai will join the Veterinary Teaching Hospital's team of board-certified theriogenologists, who provide routine and emergency reproductive services to breeders and producers of small and large animals.

"Nicole stood out as one who wants to get specialty training in small animal medicine to be able to go back to private practice and take that special training to serve the greater good in the purebred community. She has that zest to continue to do research," said Cecere.

For Sugai, theriogenology centers on the responsibility to create a better future.

"We need to think with puppies, kittens, anything we bring into the world: Are we doing a service to the community? To the world as a whole? We want to make sure we are making the healthiest possible choices."

Thanks to the grant from the AKC, AKC Canine Health Foundation, and the Theriogenology Foundation, Sugai will gain the training and expertise to make future puppies healthier.

"I am looking forward to the new knowledge and experiences she brings to us, and to see her establishing connections with our breeders. It will be great to watch her grow through the years and become an accomplished theriogenologist by the end of the program," said Balogh.

Jennifer Davis awarded 2021 Zoetis Excellence in Teaching Award

Jennifer Davis, associate professor of clinical pharmacology (B.S. '94, DVM '98), has won this year's Zoetis Excellence in Teaching Award. The Zoetis award is a nationally recognized honor for a faculty member at each veterinary school in the United States.

The committee observed that Davis uses a multimedia approach to teaching that accommodates different learning styles and keeps students engaged in their clinical pharmacology studies.

After earning her DVM from the college, Davis completed an internship at Mississippi State University in equine medicine and surgery. She then completed a residency in equine internal medicine at North Carolina State University, receiving a Master's degree in specialized veterinary medicine, followed by a residency in veterinary clinical pharmacology, and a Ph.D. in comparative biomedical sciences. After teaching at NCSU for 10 years, she returned to the veterinary college in 2017.

"I came back here as faculty, and I've worked with so many colleagues who taught me as a student. I owe where I am now to them," said Davis.

Kylene Kehn-Hall

Dynamic new graduate course examines pandemic

Led by Kylene Kehn-Hall, professor of virology in the Department of Biomedical Sciences and Pathobiology, a multidisciplinary graduate course called "COVID-19 (SARS-CoV-2)" featured different lecturers each week.

"Over the past year and a half, people who don't classically study virology have really delved in, taking what they know in other disciplines to help with the pandemic. That's very important because we can't look at just the virus, we have to look at it from many different viewpoints," said Kehn-Hall.

IN MEMORIAM

KENT C. ROBERTS

Kent Clayton Roberts, one of the founders of the Virginia-Maryland College of Veterinary Medicine, died on Aug. 24. He was 95.

Roberts was the son of a veterinarian who followed in his father's footsteps before becoming a national leader in his profession. Roberts joined the Navy and served in World War II before earning his DVM from the New York State College of Veterinary Medicine at Cornell University in 1951. He then opened a small and large animal practice in Purcellville, Virginia, which he operated for nearly 30 years.

Roberts held many leadership roles in the veterinary profession, including president of the Virginia Veterinary Medical Association and president of the Virginia State Board of Veterinary Examiners.

He arrived at Virginia Tech in 1980 as one of the first faculty members to join the new veterinary college.

In 1994, Roberts was named a professor emeritus by the Virginia Tech Board of Visitors in recognition of his exemplary service. Roberts officially retired in 1995, but he continued to volunteer in support of the school until moving with his wife, Shirley, to a retirement community in Williamsburg, Virginia, in 2007.

After Roberts' retirement, he and his family created the C.R. Roberts Professorship in Clinical Veterinary Medicine to honor Roberts' father, Clarence Roberts, who started as a dairy practitioner before moving into corporate veterinary medicine.

In recognition of all that he had done for the college, as well as his lifetime achievements, contributions to the profession, and philanthropic donations, Roberts was presented with the John N. Dalton Award, the college's most prestigious honor, during the college's commencement ceremonies in 2009.

Fostering LOVE and LEARNING

CARES partners with local shelters to mutually benefit dogs and veterinary students.

by Sarah Boudreau

In August, the college began fostering dogs from local animal shelters through their new Canine Awareness and Responsibility Experience for Students program—better known as CARES. Dogs in the program will receive top-notch medical care and the socialization they would not receive in a shelter. Students learn how to conduct examinations, administer monthly preventatives, and perform basic medical procedures through their first year Professional Foundations course and Normal Animal Clinical Skills labs.

Through CARES, the college will foster dogs during the fall semester. In the spring, the college will use student- and faculty-owned dogs for teaching labs.

In the lab classes, multiple faculty and veterinary technicians guide first- and second-year students through basic procedures like physical examinations, vaccinations, and catheter placement. Students practice techniques on a model before progressing to a live animal.

"A lot of other veterinary programs use shelter animals to help train their veterinary students, but they frequently just go out to the shelters for the day to learn techniques on the dogs, and they don't have dogs housed in their facilities. Our students have had really positive things to say about their daily interactions with the dogs we house," said Jennifer Hodgson, associate dean of professional programs and professor of microbiology. She described the program as "a win-win" situation.

Fostering frees up valuable resources and space in shelters while CARES dogs live in top-notch facilities that have been given the seal of approval by Virginia Tech's Institutional Animal Care and Use Committee and the American Association of Lab Animal Care.

"The dogs are so grateful. They've got food, they've got these wonderful people walking them, they've got clean runs and air conditioning—it's pretty sweet. They think this is a country club," said Mel Kegley, manager of multidiscipline laboratories.

The dogs were selected by Kegley and Virginia Edwards (B.S. '07, DVM '12), instructor and a canine behaviorist, who spent countless hours assessing dogs for the program. The 28 dogs that made the cut were determined to be friendly, not dog aggressive or selective, and not food or toy aggressive. They also passed a screening for heart problems.

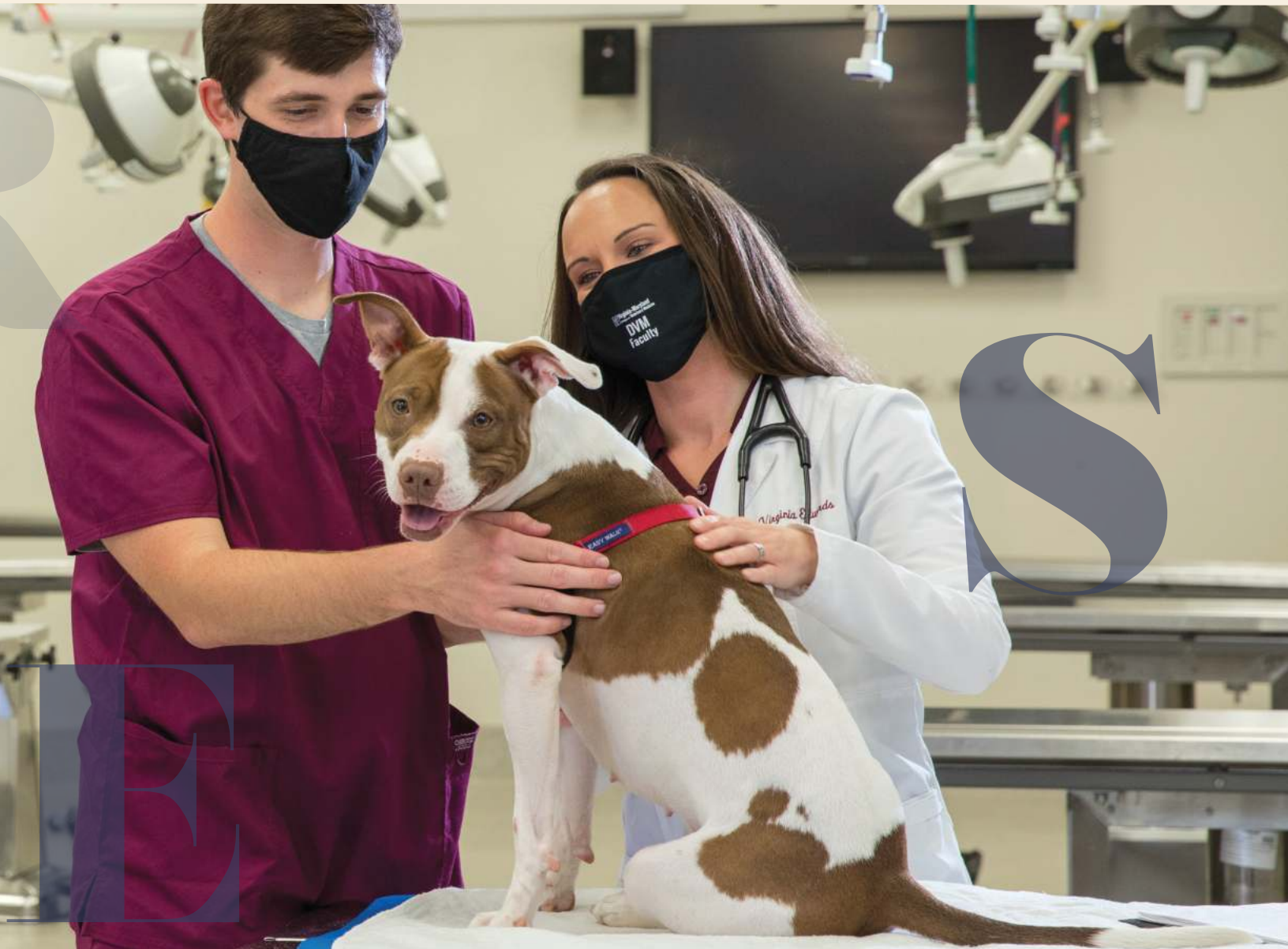
Kegley and Edwards arrived back at the college with a variety of dog breeds, ages, and personalities. This year's CARES dogs range from four months to five years old, from twenty pounds to eighty pounds, and from terriers to shepherd mixes. Kegley noted that the variety represents what veterinary students might see in clinical practice.

Some of the dogs had underlying health issues like skin problems or Lyme disease, and they immediately received treatment upon arrival at the college. By the time they leave the program, all CARES dogs will be fully vaccinated, spayed or neutered, and will have received other preventative treatment like flea/tick and heartworm preventatives donated by Boehringer-Ingelheim.

Hodgson noted that if the dogs had medical problems while in the CARES program, they would immediately have access to the highly skilled specialists at the Veterinary Teaching Hospital.

The college fosters dogs from three local shelters—Pulaski County Animal Control, the Regional Center for Animal Care

Left: Dakota Melton, a third-year DVM student, and Mel Kegley, manager of multidiscipline laboratories, examine Kane, a foster dog who is in the college's CARES program. **Right**: Bryce Cooper, a third-year DVM student, and Virginia Edwards (B.S. '07, DVM '12), instructor, examine Darla, a foster dog.



[In CARES,] it's a really nice relationship we have with the animals, to learn from them and to also care for them and give them homes. Being able to have that behavioral experience from the very beginning is amazing. From the student perspective, having shelter dogs in our program is invaluable to our education.

- Hidayah Martinez-Jaka,
a fourth-year veterinary student

& Protection in Roanoke, and Mercer County Animal Shelter in West Virginia—building upon the college's history of involvement with shelter medicine.

The college has a longstanding relationship with Washington D.C.'s Humane Rescue Alliance, one of the oldest humane societies in the country, where students have completed rotations and earned valuable hands-on experience. On the local level, students gain further surgical experience through the Shelter Medicine and Surgery clerkship, where they work at local shelters, as well as Mountain View Humane, a low-cost spay and neuter clinic that serves southwestern Virginia and southern West Virginia.

"Veterinarians need to be involved in their local community. Veterinarians have a unique opportunity to give back to both humans and animals. You don't get that in a lot of professions, so I try to emphasize to students that this is something we are offering to the community, and we should continue to figure out how they could give back to their community once they've graduated," said Meghan Byrnes, the leader of the Shelter Medicine and Surgery clerkship.

Shelter experience is useful for veterinary students because even if they do not pursue careers in shelter medicine, many pets they might see in clinical practice have been adopted from shelters.

"Knowing what an animal has gone through previously living in a shelter system will give you a good perspective on how to educate a client about how to take the best care of their pet," said Byrnes.

Through the CARES program, first year students assist in the day-to-day care of the fostered dogs, socializing them and getting them prepared for their new homes.

According to Kegley, "Everything is a teaching moment. Students might think that they are going to just be performing surgeries, but they're going to have a lot of people coming in with questions about their pets' behavior: my dog's doing this, my dog's doing that, how do I get them housebroken? The socialization part and the behavior part—you can't put a value on that."

"Our students get to do daily handling, things that they wouldn't get to do if they were just going out to a shelter. Having that day-to-day handling really makes a difference," said Hodgson. She said that the experience is particularly valuable for students from large animal backgrounds or who have not handled many dogs.

Hidayah Martinez-Jaka, a fourth-year veterinary student, agrees.

"I and many of our student population didn't really grow up with indoor pets like dogs. I didn't grow up exposed to animals in that way, and lived far away from clinics where I could shadow or work at," explained Martinez-Jaka.

"[In CARES,] it's a really nice relationship we have with the animals, to learn from them and to also care for them and give them homes. Being able to have that behavioral experience from the very beginning is amazing. From the student perspective, having shelter dogs in our program is invaluable to our education."

Adoption applications began pouring in within weeks of the dogs' arrival at the college. Many of those applications came from first year veterinary students who fell in love with the dogs they worked with.

As Martinez-Jaka put it, "What better home for a pet than with a student who's going to be a veterinarian?"

Left: Virginia Edwards, examines foster dog, Sweetie. **Top right**: Hidayah Martinez-Jaka, DVM class of 2022, plays with Kane in the college grove. **Bottom right**: Hidayah Martinez-Jaka walks foster dog Bandit.

A study in MAROON and ORANGE

The legendary feline detective, Furlock Holmes, unravels a veterinary mystery

Illustrations by Steven White

I have come to learn in my years as aide-de-camp to Furlock Holmes, that most renowned of feline detectives, that a knock on the door at midnight usually bodes ill.

I, as was my habit of a winter's evening, lay curled upon a cushion in front of the fire, gnawing at a braided strip of rawhide. Furlock, lacking a suitable occupation for his capacious mental endowments, had consoled himself with a snoot full of catnip, and now reclined languidly upon the windowsill, his faculties possessed by that powerful intoxicant.

"Watson," he called, shaking off the influence of the catnip. He sprang up from his sentry post, alert, his tail aloft. "A vehicle approaches."

A heavy tread fell upon the stairs, followed a moment later by an insistent knock.

"Enter," Furlock called, bounding from the windowsill to the top of his cat tower. His ice blue eyes were keen as he took stock of our visitor. "Welcome, Dean Givens," he purred. "Please take a seat by the fire."

"How did you know who I am?" the Dean sputtered, occupying his place upon the chair we reserve for our human clientele.

"Deduction." Furlock inclined his delicate, triangular head toward the window. "You arrived in a well-used truck with Alabama license plates—the trappings of someone accustomed to farm life recently arrived in Virginia, and yet, your well-tailored clothes indicate that you hold a superior station. The maroon and orange of your tie provided the final clue. It's an objectionable color combination, favored only by the denizens of a certain locale within the New River Valley of Virginia. Pray, tell us what brings you here at this late hour."

The Dean's eyes flitted to my dog bed. "Is he…?"

I dropped the rawhide from my mouth, concealing it under my paws.

"Anything you can say to me, you can say to my companion," Furlock interrupted. "I assure you that he is a hound of the greatest judiciousness."

"I have a matter of considerable delicacy and seriousness to discuss with you," the Dean began. "I hope I can rely upon your discretion. You see, a valuable shipment of stethoscopes has gone missing."
The Dean proceeded to describe a most extraordinary chain of events. The veterinary college had recently established a new program, employing dogs from area shelters to assist in the teaching of the veterinary students. On the very eve of the introduction of this new program, the stethoscope of every student in the program had vanished, as if into thin air. Extensive police investigations had turned up neither evidence nor suspects.

"Pray, tell me, Dean. In what manner do these dogs assist the students? Do they teach?"

"In a manner of speaking, yes," the Dean replied.

"Do they hold doctorate of philosophy degrees, as does my companion, Dogtor Watson?" Furlock asked.

"No," replied the Dean. "In fact, it's quite rare for dogs to capitulate to involvement in graduation ceremonies. Dogtor Watson, and the late esteemed psychotherapist Moose Davis, Ph.D., are some of the very few canine scholars to do so."

I admit that my tail wagged of its own accord upon hearing myself mentioned alongside such revered company.

"The dogs in our program," continued the Dean, "participate in teaching by serving as models for our students to learn skills and procedures such as examinations and safe handling techniques. The program is set to begin in two days' time, but without their stethoscopes, the students will be powerless to perform complete cardiovascular and respiratory exams on the dogs."

"I see," Furlock said. "Most intriguing. If I'm not very much mistaken, I believe this to be the work of my vile nemesis, Professor Meowriority!"

The Dean's eyes widened in horrified surprise at the mention of the notorious cat burglar's name.

Furlock leapt from his perch on the cat tower. "Come, Watson, the game is apaw!"

›› The adventure continues on our website…
vetmed.vt.edu/news/tracks-magazine

Living your best life, piggy style

New study examines quality of life in mini pigs

By Mindy Quigley

Mini pigs' popularity has grown over the past two decades, and professor of theriogenology and interim department head of Large Animal Clinical Sciences Sherrie Clark and clinical assistant professor of nutrition Megan Shepherd wondered how pig owners view their pigs' happiness.

"There's been a lot of research on indicators that a pet dog or a cat is happy, healthy, and thriving, but with mini pigs, we don't really have a standardized way to measure their quality of life," Shepherd said.

Partnering with Mazuri Exotic Animal Nutrition, Clark and Shepherd developed a survey tool to measure quality of life (QOL) in pet mini pigs. They designed a questionnaire they hope will form the basis of a QOL instrument that can be used to facilitate communication between owners, veterinarians, and their pig pals.

Left to right: Megan Shepherd (DVM '06, PhD '12) , clinical assistant professor of nutrition, Sherrie Clark (B.S. '92, DVM '96), professor of theriogenology and interim department head of Large Animal Clinical Sciences, mini pig, Lilah Hayden with owners Brandy Hayden and Shaun Respess.

For this study, healthy pet mini pigs aged one year or older have a single wellness visit. The pig's owner will complete a survey about their pig's quality of life while some basic data is collected about the pig.

Participants receive a $100 discount off the cost of their appointment. The cost of any additional treatments or diagnostic procedures undertaken during the visit are not covered by the study.

›› For video, go to **bit.ly/mini-pig-study**.

DEAR WAGNER

Wagner Dunleavy, therapy dog, provides pet-to-pet advice on relationships, wellness, lifestyle, and more

Dear Wagner,

I'm the proud owner of a well-trained, middle-aged human. Mostly, things between us are great. He understands my need for personal space and is very obedient. However, he insists on taking me for what he calls my "annual checkup," which he claims is good for my health, especially now that I'm getting older. This not only involves leaving my territory, but also being subjected to the stench of dogs, freshly sanitized rooms, and strange humans. How can anything so horrific be good for my health? My human says the Veterinary Teaching Hospital will be better than the places we've been before, but I'm not buying it. Any advice?

Sincerely,
Practically Cat-atonic

Dear Cat-atonic,

I'm sorry you've had bad experiences with previous wellness visits.

While I understand your discomfort at the thought of leaving your home turf, in this case, I think your human is right. I know you're thinking that's just because I'm a dog, and dogs always side with humans, but please hear meow-t.

The Veterinary Teaching Hospital is different from other veterinary clinics. It holds a gold-level Cat Friendly Practice® certification from the American Association of Feline Practitioners, which means they go out of their way to treat feline friends with gentleness and respect. You'll find separate feline waiting, treatment, and boarding areas to minimize unfamiliar smells. (This is one subject where you and I will have to agree to disagree. I adore unfamiliar smells!)

The teaching hospital's highly knowledgeable staff has undergone special training in recognizing subtle signs of sickness and pain in cats. You mentioned that you're getting older. Did you know about 50 percent of owners only bring their cats to the vet when the cat gets sick or injured? Admit it—you're worse than dogs when it comes to covering up discomfort or illness. At the teaching hospital, you can be sure you'll be checked out for common senior cat ailments like dental problems and chronic kidney disease before they cramp your kitty style.

Yours in good health,
Wagner

p.s. While you're there, ask Dr. Nappier to show you his famous "kitty burrito" swaddling technique!

Wagner completed his advanced training through Service Dogs of Virginia in 2018. He currently assists in individual and group therapy and outreach activities through Virginia Tech's Cook Counseling Center.

Siamese Cat Rescue gift in memory of volunteer

A generous gift by the Siamese Cat Rescue in memory of their longtime volunteer Debrarae Karnes will support the next generation of veterinary professionals. The organization, based out of Locust Dale, Virginia, endowed a scholarship that will support small- and mixed-track veterinary students. In addition, they gifted $100,000 in current use dollars to be used for additional scholarships and recruitment funds.

The rescue originated when rescue director Siri Zwemke was on the lookout for a Siamese cat of her own. The search opened her eyes to the need for a dedicated Siamese cat rescue to serve the eastern United States.

Founded in 1998, the Siamese Cat Rescue began as a network of volunteers and foster homes and grew to include physical shelters, and, at its height, boasted 900 volunteers. The rescue is proud to have helped over 12,000 Siamese cats find loving homes.

After adopting her own cat through the rescue, Debrarae Karnes volunteered for many years. She was one of the first volunteers in what was affectionately dubbed the "Meezer Express"—the rescue's transportation system where drivers relayed cats across the eastern third of the United States, recognizing one of the breed's nicknames.

"We covered sixteen states and our transporters drove over 2.8 million miles—that's to the moon and back," said vice president Darrell Zwemke.

The "Meezer Express" was a key part of the rescue, and Karnes volunteered to drive the first leg of the journey, contributing countless hours to ensure that the cats reached their new homes.

"She would always volunteer. She would show up bright and early, always on time," Siri Zwemke said.

Karnes passed away in early 2020 and bequeathed half of her estate to the Siamese Cat Rescue.

However, the needs and capacity of the Siamese Cat Rescue had changed. The prevalence of trap, neuter, release programs (TNR), increased networking over the internet, and other factors altered the way animal rescues operate. Combined with an aging volunteer population and the pandemic, this meant that the Siamese Cat Rescue had to evolve into something different. Last year, the organization announced it would end its active rescue program.

The rescue wanted to ensure that Karnes' donation could go to good use despite this change. They decided to donate to a veterinary college because of the impact that veterinarians had on their rescue.

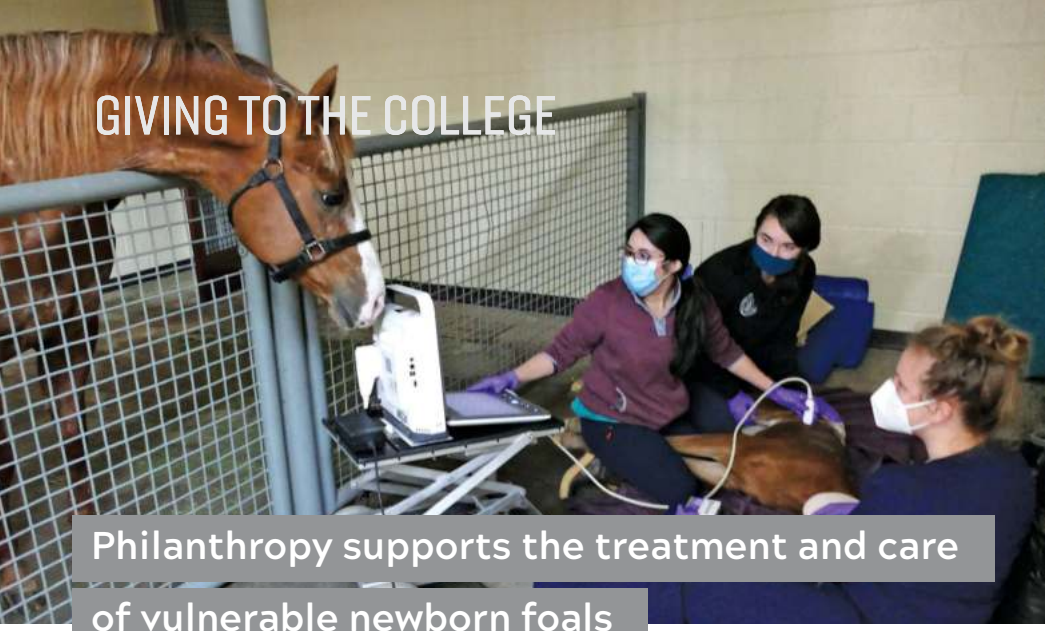
"[The rescue] worked with over two hundred vets over the years because every cat that had any kind of medical intervention went through our office first," said Siri Zwemke. "The vets were really awesome, but they were also key to a successful organization and an organization that could build a reputation for providing a healthy animal."

When deciding which college to donate to, the Virginia-Maryland College of Veterinary Medicine was a natural choice because of Virginia Tech's and the college's reputation. Another longtime volunteer, Kay Carlson, worked at the college's Center for Molecular Medicine and Infectious Diseases for 23 years, and that connection cemented the college as a choice.

An endowed scholarship fund ensures that this gift in memory of Karnes will leave a lasting legacy.

"We are glad to help Virginia Tech's veterinary college, and it's doubly good that we get to honor Debrarae as well," said Darrell Zwemke.

> "We are glad to help Virginia Tech's veterinary college, and it's doubly good that we get to honor Debrarae as well.
>
> - Darrell Zwemke



Philanthropy supports the treatment and care of vulnerable newborn foals

Many horse owners dream of breeding their favorite mare and seeing a healthy foal gamboling around their pasture. When all goes well, foals thrive under the care and devotion of their dam, but occasionally a foal is compromised at birth, rejected by their dam, or inadvertently injured and requires specialized treatment and care.

The Marion duPont Scott Equine Medical Center Neonatal Intensive Care Unit (NICU) is dedicated to the treatment and care of critical equine neonates and the monitoring and care of high-risk mares.

During the 2021 foaling season, the center's board-certified internal medicine and surgery experts and theriogenologists treated sixty-eight foals. Foals are the center's most vulnerable patients, requiring very specific facilities, equipment, and 24/7 monitoring and care.

Neonatal foals often arrive unable to stand. They may suffer from cardiovascular or respiratory compromise due to inadequate lung development, viral or bacterial infection, or meconium aspiration. Severely compromised foals often have to be physically separated from their dams for clinical or safety reasons.

Philanthropy has touched all aspects of the center's neonatal services, not only enhancing diagnostic equipment and upgrading facilities, but also supporting the advancement of clinical knowledge.

Thanks to philanthropic support, the center has specialized facilities that create the perfect environment for handling and treating delicate neonatal foals. Philanthropy has provided foal boxes adjacent to ICU stalls, non-slip flooring in treatment areas, and Tempur-Pedic orthopedic mattresses for the recumbent foals. Foal boxes ensure that the mare stays closely connected to her foal through smell and touch while the foal receives round-the-clock treatment, ensuring a successful reunion when mare and foal are together again.

Diagnostic imaging technology purchased with philanthropic funds significantly augments physical examination of neonatal foals.

> "Philanthropic funding will continue to be our cornerstone. Generous donors enhance our ability to provide life-saving treatment and care to our youngest and most vulnerable patients and support our reputation for excellence in this specialized field of veterinary medicine."
>
> - Michael Erskine, EMC director

The Equine Medical Center's cardiac ultrasound is used for the assessment of heart issues in newborn foals. Congenital cardiac defects such as ventricular septal defects, tricuspid valve atresia, tachycardia, and tachypnea can all be assessed using this imaging modality.

Ultrasonography is used for abdominal, umbilical, and thoracic assessment and computed tomography (CT) is used to more sensitively diagnose osteomyelitis (bone infections) in foals.

Generous philanthropic support enabled Emily Schaefer, clinical assistant professor of internal medicine, to pursue a fellowship in Equine Emergency and Critical Care in a unique collaboration with the Ohio State University's College of Veterinary Medicine. This advanced formal training led by American College of Veterinary Emergency and Critical Care board-certified veterinarians advanced Schaefer's knowledge in the assessment and support of critically ill equine patients.

Under the Beyond Horizons Plan, a three-year comprehensive strategy to enhance the center's facilities and further support clinical services, the center seeks funding to improve and expand emergency and critical care facilities currently in place within the hospital.

This comprehensive plan will enhance space utilization and workflow to promote operational efficiencies and enhance patient care, enabling the center to streamline emergency admissions procedures and expand our life-saving services.

Top left: Stephanie Hernandez, large animal clinical sciences resident, treats Ivy, a chestnut Appaloosa maiden mare and her newborn filly who suffered from dummy foal syndrome.

"Philanthropic funding will continue to be our cornerstone," said the center's director, Michael Erskine. "Generous donors enhance our ability to provide life-saving treatment and care to our youngest and most vulnerable patients and support our reputation for excellence in this specialized field of veterinary medicine."

Pekingese superstar Wasabi delights Equine Medical Center Advisory Council Chair Steinman with a Westminster win

Wasabi, the Pekingese, swung his magnificent coat, flashed his soulful eyes at show judge Patricia Trotter and nonchalantly became the 2021 best in show winner of North America's most prestigious canine event, the 145th annual Westminster Kennel Club dog show.

Since 1877, the Westminster Kennel Club dog show has been held in February each year at Madison Square Garden in Manhattan. This year, due to the pandemic, the show was relocated to the grounds of the Lyndhurst Estate, located in Tarrytown, New York, held outdoors, and for the first time was devoid of spectators.

Bred and handled by David Fitzpatrick and based in Adams County, Pennsylvania, three-year-old Wasabi is co-owned by Fitzpatrick, American classical archeologist Iris Dove, who sadly lost her fight with COVID-19 in April last year, Sandra Middlebrooks, and Beverly "Peggy" Steinman, Advisory Council Chair, Virginia Tech's Marion duPont Scott Equine Medical Center.

Described as a 'leading lady of the turf,' Steinman's focus has historically been firmly fixed on riding and competing horses. On Christmas Day 1938, at the tender age of four, Steinman's father presented her with a very special black and white pinto pony named "Skippy." Steinman and Skippy became inseparable and had many adventures together, instilling in Steinman a lifelong passion for horses.

Having decided that a Pekingese would be a perfect canine companion, Steinman's relationship with breeder Fitzpatrick began when she was introduced to him by a friend. Mutual respect burgeoned into a firm friendship, which culminated in Steinman's shared ownership of wonder dog Wasabi.

Steinman credits Wasabi's confidence and ultimate success to the training and constant attention lavished on him by Fitzpatrick.

Wasabi has, on occasion, visited Steinman at her home in Lancaster, Pennsylvania, much to the disgust of her devoted companion, a Pekingese named Hamilton, who is Wasabi's distant cousin. Kinship aside, Hamilton would rather not share Steinman's affections with another Pekingese!

Over several decades, Steinman's kelly-green racing silks with a candy pink sash have visited the winners' circle of many race tracks, but to emerge victorious on a first attempt at Westminster is especially wonderful.

Far left: Wasabi the Pekingese, Best in Show at the 145th Westminster Kennel Club Dog Show. **Far right**: Beverly "Peggy Steinman" and the late Charles W. Steger, Virginia Tech's president from 2000 to 2014.

THE COLLEGE THANKS YOU

Your support of our students, research, teaching, and clinical care is humbling. Contact us to learn how you can help:

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

Make a gift online at
vetmed.vt.edu/make-a-gift

CONNECT 2021 WAS A SUCCESS!

On Sept. 17-18, the college hosted over 350 attendees for the Connect 2021 events, with a record number of new mentors and attendance for Mentor Day. Students, alumni, and veterinarians from across multiple states gathered for mentorship, focused career conversation, continuing education, and the celebration of individual accomplishments and for a renewed sense of community as visitors reconnected again, in-person!

As part of the events, the Alumni Board of Directors met for their semi-annual meeting, and discussed future opportunities for alumni engagement.

A college celebration welcomed all attendees in the college Grove for dinner and festivity, continuing the conversations and connections made throughout a busy day of mentorship and career mixer activities. Saturday featured a six credit CE program of alumni speakers, and an alumni awards ceremony where Drs. Tim Fan (B.S. '91, DVM '95), Cyndie Courtney (DVM '11), and Anne Zajac, professor emerita of parasitology were presented their awards. The college was very pleased with the outcome and turnout of these events and looks forward to making "Connect" an annual tradition.

Special thanks to all of the alumni, students, current and retired faculty and staff, as well as our state veterinary medical associations and sponsors who made this event possible.

For video, go to **bit.ly/mentor-day-2021**

Distinguished alumni award winners speak at Connect 2021

The college recognized the achievements of alumni through its annual awards: the Lifetime Achievement Alumni Award for a graduate of more than 10 years, the Outstanding Recent Alumni Award for a graduate within the past 10 years, and the Outstanding Faculty Alumni Award for an influential faculty member who is nominated by alumni for his or her contributions to student and alumni education and mentorship.

This year's awardees were Tim Fan (B.S. '91, DVM '95), Cyndie Courtney (DVM '11), and Anne Zajac, respectively.

All three awardees received their awards on Sept. 18 as a part of Connect 2021, an event where the college community comes together for reunion, mentoring, and continuing education opportunities. The winners also presented continuing education lectures at the event.

Lifetime Achievement Alumni Award: Tim Fan (B.S. '91, DVM '95)

Tim Fan's career as a comparative oncologist has shown the importance of One Health principles and how veterinary medicine can help human medicine. His work has expanded our understanding of animal bone cancer, which in turn can inform treatment of cancers in humans.

"I am thrilled to be recognized by my veterinary college alma mater and honored to receive the Lifetime Achievement Alumni Award. My education and training from the college laid an important foundation for me to build upon and promoted my curiosity as a clinician and scientist to advance veterinary medicine for the benefit of pets and pet owners. I am proud to be part of the VMCVM family and impressed with the continued growth and excellence in teaching, service, and research that the college continues to pursue."

Outstanding Recent Alumni Award: Cyndie Courtney (DVM '11)

Cyndie Courtney is changing the veterinary profession for the better.

Courtney is an associate veterinarian at Grandview Animal Hospital in Grandview, MO, and as "The Jerk Researcher," she offers practical, down-to-earth insights on teamwork by speaking, writing, and consulting on the topic of workplace conflict.

Courtney says that her veterinary school education showed her the power of working with others.

"My time at the college taught me the importance of collaboration. Not only would I not have been as successful without our amazing study group, but I believe our whole veterinary school class focused on lifting each other up and helping each other out," said Courtney.

2021 Alumni Award Recipients:
Left to right: Outstanding Faculty Alumni Award, Anne Zajac, professor emerita of parasitology; Outstanding Recent Alumni Award, Cyndie Courtney (DVM '11); and Lifetime Achievement Alumni Award, Tim Fan (B.S. '91, DVM '95).

Outstanding Faculty Alumni Award: Anne Zajac

A widely beloved professor, Anne Zajac has transferred her enthusiasm for parasitology to scores of veterinary students.

A member of the Virginia Tech community since 1986, Zajac taught a variety of undergraduate, graduate, and veterinary courses and has advised master's and doctoral students. In 2021, Zajac was conferred the title of professor emeritus by the Virginia Tech Board of Visitors in recognition of her exemplary service to the university.

"The most rewarding part of working at the college is knowing that I have played a part in the education of the wonderful veterinary graduates, who in the past and present contribute to animal and human health."

Upcoming 2022 Events:

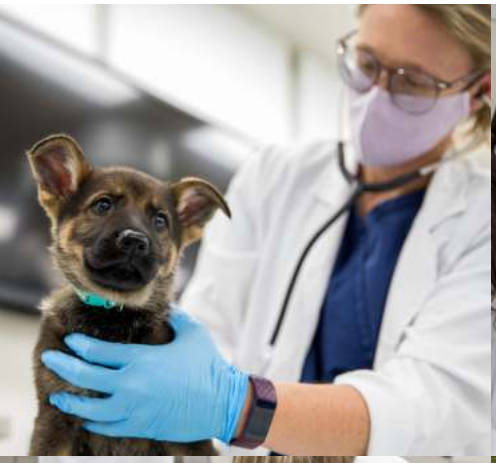
Jan. 11, 13, 18, 20, 2022 – VMCVM Equine CE Series, Virtual
Feb. 23-24 – Virginia Tech Giving Day
Feb. 24-26 – VVMA VVC, Roanoke, VA
Feb. 24 – VVMA VVC Alumni Social, Roanoke, VA
Feb. 26 – VMCVM Alumni Board of Directors Meeting, Roanoke, VA
March 19 – VMCVM Open House, Blacksburg, VA
March 26 – Class of 2024 White Coat Ceremony, Blacksburg, VA
Spring 2022 – Small Animal CE Program, Virtual
June 23-25 – MDVMA Summer Conference (Alumni Social TBD), Ocean City, MD
Aug. 2-6 – AVMA Conference (Alumni Social TBD), Philidelphia, PA

Virginia-Maryland College of Veterinary Medicine

VA-MD College of Veterinary Medicine
205 Duck Pond Drive
Blacksburg, VA 24061

vetmed.vt.edu

On Oct. 24, the college's theriogenology club hosted Puppy Palooza. Veterinary students worked with reputable breeders who brought in 18 German shepherd and Australian shepherd puppies. Puppy Palooza is an opportunity for pre-clinical veterinary students to perform examinations, vaccinations, and microchipping. **Photos by** Andrew Mann



For video, go to **bit.ly/puppy-palooza-2021**