## Spring/Summer 2016

Magazine of the Virginia-Maryland College of Veterinary Medicine

## New horizons

The horse ambulance

0



If the shoe fits

# IN THIS ISSUE

## Features

### New horizons

4

8

10

3

13

Situated in the heart of Virginia's horse country, the Marion duPont Scott Equine Medical Center in Leesburg offers a renewed focus on clinical service

### The horse ambulance

Fourth-year veterinary students gain practical experience with the college's Equine Field Service

### If the shoe fits

Veterinarian Scott Pleasant and farrier Travis Burns bring their unique skills to the Veterinary Teaching Hospital's equine podiatry service

# Around the college

- In focus: Class of 2020 to be first with new DVM curriculum
  - **Success Story** Jasper the miniature donkey on the road to recovery
- 16 Class Acts Get to know four faculty members outside of their labs and clinics
- 18 Student Profile Valedictorian Danielle Brown achieves childhood dream of becoming a veterinarian
- 18 Alumni Corner Where are they now?
- 19 Awards & Accolades

## Cover

Kathy Samley of Charlottesville, Virginia, who graduated from the veterinary college in May, leads a horse from a trailer into the Equine Medical Center during her rotation in Leesburg this spring. **Photo by:** Logan Wallace

# TRACKS Spring/Summer 2016

### Produced by:

The Office of Public Relations and Communications Dean: Dr. Cyril R. Clarke

Editor: Michael Sutphin

Assistant Editors: Alison Elward, Kelsey Foster

**Contributing Writers:** Alison Elward, Kelsey Foster, Michael Sutphin

Design: Megan Quesenberry

**Photography:** Alison Elward, Kelsey Foster, Doug Margulies, Megan Quesenberry, Michael Sutphin, Logan Wallace

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

Subscribe to Vital Signs at: www.vetmed.vt.edu/news/vs/

Connect with us: Facebook, Instagram & Twitter: /VaMdVetMed LinkedIn Group: VA-MD Vet Med Flickr: /photos/VA-MD-VetMed/

#### Contact us:

Please send your feedback, comments, and story ideas to: vamdvetmed@vt.edu

Virginia Tech does not discriminate against employees, students, or applicants on the basis of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. For inquiries regarding non-discrimination policies, contact the executive director for Equity and Access at 540-231-8771 or Virginia Tech, North End Center, Suite 2300 (0318), 300 Turner St. NW, Blacksburg, VA 24061.

Copyright © Virginia-Maryland College of Veterinary Medicine. All rights reserved. No part of this publication may be utilized or reproduced without prior written consent of the Virginia-Maryland College of Veterinary Medicine.



VA-MD College of Veterinary Medicine 205 Duck Pond Drive • Blacksburg, VA 24061 540-231-7666 / www.vetmed.vt.edu



Dean Clarke and his golden retriever, Dudley

## Message from the Dean

Colleges and universities around the country have incorporated experiential learning into their curricula for years, but recently, these academic institutions have also begun identifying these opportunities for students in the community at large. Since its establishment, the veterinary college has presented students with "real world" challenges that they will face in their professional careers.

In this fourth edition of TRACKS magazine, we present examples of the college's experiential training opportunities in equine medicine. While all veterinary students learn about this field and participate in an equine rotation, some of them choose to place special emphasis on this area by enrolling in our equine track. In support of their interests, we offer an in-house equine service for patients at the Veterinary Teaching Hospital, an expanding podiatry and farrier service, and an Equine Field Service that provides primary and emergency veterinary care for horses within a 35-mile radius of Blacksburg.

Veterinary students also benefit from the Marion duPont Scott Equine Medical Center in Leesburg, Virginia. This premier, high-end equine hospital in the heart of Virginia's horse country provides first-rate service to horse owners in the region. Whether in Blacksburg or Leesburg, our successes in equine medicine would not be possible without our excellent faculty and staff and their commitment to the horse community.



# In focus: Class of 2020 to be first with new DVM curriculum

When veterinary students in the Class of 2020 arrive in August, they will be the first in a new Doctor of Veterinary Medicine curriculum with major changes.

"The college has been undergoing a curriculum revision process for the past four years," said Jennifer Hodgson, associate dean for professional programs. "We formed a curriculum review working committee, reviewed other educational models in both veterinary and human medical education and looked for emerging trends, and developed a proposed curriculum model that is significantly different than our current curriculum."

In particular, the new curriculum integrates the basic and clinical sciences in courses focused on function; incorporates

collaborative, team-based learning in all first- and second-year courses; and allows for early entry into the clinics after the second year.

"When we were developing the curriculum proposal, we sought input from a wide range of stakeholders, including students, faculty, alumni, practitioners, and our regional veterinary medical associations," Hodgson said.

New courses interweave scientific theory and clinical practice and enable students not only to contextualize the information they are taught in the classroom, but also gain a better understanding of its relevance and connections with other disciplines. Instead of ending with 12 months on rotation, students will have a first round of clinical experiences in the summer after their second year and another round after a free summer between their third and fourth year. The amount of time in the classroom and clinics remains the same.

#### **Proposed Curriculum Model:**

	YEAR	FALL SEMESTER		WINTER	SPRING SEMESTER		SUMMER
	1	The Normal Animal	Dealing with Threats	FREE	Moving & Sensing		FREE
		Becoming a Professional I			Becoming a Professional II		
	2	Breathing & Circulating	Eating & Eliminating	FREE	The Next Generation	Healthy Populations	Clerkships (5 blocks)
					Becoming a Professional III		
	3	Advanced Courses (Core/Track/Elective)		FREE	Advanced Courses (Core/Track/Elective)		FREE
	4	Clerkships (12 blocks)					

"These are the most significant changes to our curriculum since the introduction of the tracking curriculum in the 1990s," said Hodgson, who added that students will still choose a track in small animal, equine, food animal, mixed species, or public and corporate veterinary medicine.







Situated in the heart of Virginia's horse country, the Marion duPont Scott Equine Medical Center in Leesburg offers a renewed focus on clinical service



Our strategic plan focuses on clinical services to a greater degree while still fulfilling the teaching, research, and scholarship activities that are consistent with a university and college facility.

- Mike Erskine, EMC Director



NO DOGS ALLOWED



hen Susan Dunham of The Plains, Virginia, brought a mare and foal into the Marion duPont Scott Equine Medical Center (EMC) last March, she knew to expect first-rate service.

"Where I have found that the EMC excels is that it can give a nonbiased evaluation of a medical situation," said Dunham, who brought a 4-week-old foal with enlarged veins around its umbilical stump for an ultrasound. "We interface with three or four veterinarians on our farm, and they work hand-in-hand with the clinicians at the EMC."

Dunham manages Smitten Farm, a thoroughbred breeding farm owned by William Backer which can house as many as 70 horses.

"This is very much a team effort and allows the veterinarians in the field to excel without having the expensive equipment available at the EMC," Dunham said. "We have horses that race at Belmont and Saratoga and are very pleased with the services here. We bring our performance horses here and have the confidence that we are receiving good, quality care."

Located in Leesburg, Virginia, the EMC is a premier, full-service equine hospital that offers advanced specialty care, 24-hour emergency treatment, and diagnostic services for all ages and breeds of horses. Over the past year, the EMC has developed a strategic plan that emphasizes service for clients like Dunham. "Our strategic plan focuses on clinical services to a greater degree while still fulfilling the teaching, research, and scholarship activities that are consistent with a university and college facility," said Mike Erskine, who was named EMC director in 2015. "While we are looking to expand our clinical services and promote excellence in numerous areas, one area of strategic importance revolves around soundness, lameness, and podiatry."

While a minor lameness might not affect a backyard hobby horse's quality of life, it could be career-ending for an equine athlete. Every year, the EMC sees approximately 2,300 equine cases, many of them performance horses.

"There's a preponderance of sport horses in the region," said Jennifer Barrett, the Theodora Ayer Randolph Professor of Surgery. "These can be sport horses, dressage, eventing, hunters, show jumpers, and race horses, and we also have many well-loved companions. It runs the gamut."

James Brown, clinical assistant professor of equine surgery in the Department of Large Animal Clinical Sciences, added that the commitment to horse owners creates a special environment to practice equine medicine. "We are very blessed here at the EMC with a wonderful caseload and we have very committed, caring owners," he said. "It allows us to explore diagnoses and treatments that most people do not get the opportunity to do."



Veterinary students also benefit from the caseload at a busy equine hospital. Every year, the EMC hosts about 20 fourth-year students in the equine or mixed species track. It also hosts residents, interns, and other visiting students.

"I am definitely impressed with the caseload," said Kathy Samley of Charlottesville, Virginia, who graduated in May in the college's equine track and completed two rotations at the EMC. "It is much larger than what we see on rotation at the Veterinary Teaching Hospital in Blacksburg, so it is great to gain additional experience with surgery and medicine cases."

The EMC's diagnostic imaging services are popular with horse owners. According to Erskine, the center plans to expand its imaging capabilities to help clinicians diagnose and treat lameness.

"We currently have radiology and ultrasonography, including a standing MRI unit, that is quite advanced," he said, noting that clinicians are installing a new CT unit this summer. "The MRI does a wonderful job on soft tissue, and the CT does an excellent job on bone. With the new CT unit, we will be able to do three-dimensional reconstruction of bones."

### A strategic vision

The EMC has been part of the veterinary college's teaching, research, and clinical missions for more than three decades. The center — which was created in 1984 through a gift from the late Marion duPont Scott, the donation of 200 acres of land at Morven Park from the Westmoreland Davis Memorial Foundation, and private contributions — recently went through a strategic planning process.

In 2014, the college commissioned an equine management consulting group to study the center and develop recommendations to ensure a sustainable future. After reviewing the detailed report, the college established a visioning committee and formed several working groups. It also sought input from the EMC Advisory Council, as well as its faculty and staff, to develop the "Plan for a New Horizon."

"We see lameness as a very important area where we can provide leadership and differentiate ourselves," Erskine said. "With improvements in diagnostics, imaging, and treatments, there's more and more to offer under the auspices of our new equine soundness initiative."

This coincided with the launch of a three-year, \$2 million fundraising initiative dubbed the "New Horizons Challenge" with the EMC Advisory Council's active participation.

Recently, the EMC also partnered with farrier Paul Goodness and his son Luke to provide full-time, on-site services at the center. "We work very closely with the clinicians," Goodness said. "On a new case, we collaborate and refer to each other for the best possible outcome."

Erskine added that the EMC is building on a strong foundation. "Moving forward, we are bringing in a faculty member with an interest in lameness diagnosis, treatment, and imaging," he said. "This will be paired with an expanded farrier service and podiatry center, as well as the possibility of a new indoor arena where we can observe horses exercising on various surfaces to look for subtle gait differences for improved lameness diagnoses. It really does flow nicely from what we have now to what we want to be."

Page 6: Top left: Payton Lawrence, veterinary technician, prepares a horse for nuclear scintigraphy, a type of imaging available at the EMC. Top center: A mare and foal from Smitten Farm in The Plains, Virginia, receive care from the team at the EMC. Top right: Farrier Luke Goodness examines a horse's foot with veterinary students Melissa Bryant and Kathy Samley and faculty member Jennifer Barrett. Bottom: M. Norris Adams, clinical assistant professor in equine lameness and surgery, performs hind fetlock surgery. Page 7: Laboratory technicians Xiaojing Guan, Ibtesam (Sam) Rajpar, and Andrew Hogan examine a sample in regenerative medicine researcher Jennifer Barrett's laboratory.



### **Regenerative medicine**

Every six months, Alexandria Lohr of Warrenton, Virginia, brings her 12-year-old show horse, Costar, for regenerative medicine treatments. "When we first brought him to the Equine Medical Center two years ago, he was diagnosed with arthritis," she said.

Through a treatment called Interleukin-1 Receptor Antagonist Protein, or IRAP, technicians at the EMC remove a blood sample from Costar and then process the serum for beneficial growth factors. Costar then receives his own custom treatments for his arthritic joints. This has allowed Costar to continue a full competition schedule.

"We are so lucky to have a facility of this caliber with this staff and equipment here," Lohr added.

The EMC has become a hub of regenerative medicine research. "I'm a clinician as well as a scientist, and the clinical cases that I see inspire the research that we conduct," said Jennifer Barrett, the Theodora Ayer Randolph Professor of Surgery. "We are also able to apply the research to the clinical realm rather quickly."

These treatments may involve extracting stem cells from bone marrow to regrow tissue, injecting concentrated levels of platelets from blood to jump-start the healing process, or performing surgery to stimulate the body's own ability to regenerate.

"We just published a study that compares stem cells isolated from adipose, bone marrow, and tendon in our bioreactor and found that tendon and bone marrow derived stem cells both seem to be able to differentiate into tendon cells whereas the adipose cells didn't seem as effective," Barrett said. "In the clinic, we also use bone marrow stem cells to treat tendon

injuries."



# The HORSE Ambulance Fourth-year veterinary students gain practical experience

with the college's Equine Field Service

hough not all students continue on to work in equine medicine after graduating, veterinary students all value the hands-on experiences and close relationships they form with faculty while on the Equine Field Service, or EFS, rotation during their fourth year.

Rebecca Funk, a clinical assistant professor in the Department of Large Animal Clinical Sciences, works with students on their EFS rotation. She explained that she often hears from students who appreciate the experiential learning opportunities in the field. "They've really enjoyed... the hands-on experiences and the diagnostics, doing physical exams, and actually working with the animals themselves," she said.

The EFS is an ambulatory service that provides on-the-farm primary and emergency patient care and preventive health care programs to horses within a 35-mile radius of Blacksburg. According to Funk, EFS offers routine health care services like physical exams, vaccinations, and nutrition consultations, as well as core services like lameness exams and reproduction services. It also provides age-specific equine care, imaging, and diagnostics.

### **Complementary medicine**

Jaclyn Warner, of Bridgeport, West Virginia, who graduated in May, was one such student who gained additional experience during her three-week rotation in early March. "[Since] I was the only student on the rotation... I was seeing upwards of 15 to 20 cases a day," Warner explained. "The majority of the calls we went on involved vaccinations, checking and floating teeth, and drawing blood for Coggins testing. On multiple occasions, farms we visited had horses affected with a neurologic disorder referred to as equine protozoal myelopathy, or EPM. Most of these horses had been treated for the disease, but still had lasting side effects. By the end of the rotation, I was very confident in performing neuro exams in horses and was much more familiar with the clinical presentation of EPM," she said.

Warner was also fortunate to perform a foal exam on the first foal of the season at Virginia Tech's Smithfield Horse Center. "Luckily, he and his mother [were] both very healthy," said Warner. While at Smithfield, Warner also assisted Funk with chiropractic and acupuncture care on Pumba, a horse that "had a history of being stiff and hesitant to turn in tight circles," said Warner. "Dr. Funk performed chiropractic adjustments on him. She also assessed areas in which he appeared painful or sensitive by applying pressure to known acupuncture sites with a blunt object. In the areas he reacted to the pressure, we placed acupuncture needles."

Sharon Witonsky, associate professor in the Equine Field Service, explained, "We have some people that are certified in complementary medicine [such as acupuncture] and that adds an extra dimension that both is really attractive to the clients and obviously benefits the horses, and the students get that additional experience."

### **Close relationships**

Because she was on the equine track, Katie McHenry from Perryville, Maryland spent two three-week rotations with EFS. One of her favorite activities was completing pre-purchase exams with the clinicians. A pre-purchase exam, McHenry explained, means "you're trying to provide just an overall picture on if that horse might fit the lifestyle of the buyer," by thoroughly examining all aspects of the horse.

During one visit, McHenry assisted during the pre-purchase exam for a horse being



purchased for a young girl. "He was being sold to the little girl who rode him at the farm. So she used him as her lesson pony, and then she was interested in purchasing him," explained McHenry. "That was just a really pleasant experience because she absolutely loved him and she was riding him all the time." Since the girl was so invested in the process, McHenry and the clinicians were able to include her in the pre-purchase exam process. "She had tons of questions and she wanted to know everything about him," added McHenry.

McHenry also recalled a more harrowing experience with a stallion that displayed coliclike symptoms during a routine examination. "We worked him up in the field but he was on the verge of probably taking a downward spiral," she said. "So we decided to turn to our medicine team here and we referred him in."

Because veterinarians at EFS and the Veterinary Teaching Hospital in Blacksburg work closely together, "it's a very easy transition if we have a case that's complicated enough that it needs to come into the hospital," explained Funk. The students also continue to work with the horse once it transfers to the hospital.

Top left: With assistance from clinical assistant professor Rebecca Funk, recent graduate Jaclyn Warner performs the first foal exam of the season at Smithfield Horse Center. Middle: The EFS team adjusts electrical currents, used to help increase the horse's response when performing acupuncture. Right: Funk performs chiropractic adjustments. Bottom: The EFS trucks are fully stocked with all of the supplies the faculty and students might need while visiting local farms. McHenry continued, "We did an ultrasound — we were convinced that it was a [gastrointestinal infection]. It ended up being acute renal failure when the whole time we were looking out for colic." Despite the unlikely find, McHenry valued the experience as a teachable moment. "We get taught in the first three years to keep your eyes open and don't just get tunnel vision. And that was a perfect case, which was sad because acute renal failure is a poor prognosis, especially in horses, but it was a good learning opportunity," said McHenry.

# An impactful rotation for students

Other students, who completed their fourth year in May, also experienced the challenges of the Equine Field Service rotation. Because of wet weather, "we [saw] a lot of foot abscesses," said Ashley Hoss of Chilhowie, Virginia. "Every time you go out, you're just re-bandaging them and soaking their feet, and then each time we go back out, we're just checking them to make sure that [the abscess] is draining or that it's hardening up."

Despite the weather, Hoss and her fellow students on rotation found the experience extremely valuable. "I think the Equine Field Service is a great rotation and is a great resource because it more closely resembles what you would do as an equine practitioner once you go out in the field," explained Tim Scott of Dansville, New York.

Witonsky also emphasized Equine Field Service's importance for equine tracking students looking for internships later that year. "They usually try to get the equine trackers or ones who they know are going to do equine practice to get through early in their block just to get the basic experience, plus it helps [the students] before they select their potential internships for the following year," she said.

This proved true for McHenry, who will be moving to New York for an internship



with an ambulatory equine service similar to EFS after graduation. For students pursuing non-equine related fields, the experiences and knowledge gained while on the Equine Field Service rotation are still invaluable. After graduating, Warner will be moving to Tampa, Florida to pursue a position as a small animal associate veterinarian. She credits the EFS rotation for helping her "to become more knowledgeable and confident in equine herd health. I've been asked by my family and experienced small animal veterinarians about appropriate vaccination and deworming protocols for their horses," she said. "It's been amazing having my family and mentors consulting me for advice, and being able to have high-quality conversations regarding equine wellness."





Veterinarian Scott Pleasant and farrier Travis Burns bring their unique skills to the Veterinary Teaching Hospital's equine podiatry service

9

IF THE



1



**H** orse owner Joe Calicchio of Lexington, Virginia made his first visit to the Veterinary Teaching Hospital in Blacksburg after a local veterinarian referred one of his horses with a complicated lower limb issue. Scott Pleasant, director of the equine podiatry service, not only successfully treated Calicchio's horse but also introduced him to college farrier Travis Burns.

"Dr. Pleasant is the one who got us started," Calicchio said. "When we first came, we worked with him to deal with medical issues, but right now we're on our own with Travis unless there's a problem."

Calicchio and his wife own several horses that have benefited in one way or another from Pleasant and Burns. "We feel very confident in their services," he said. "I take the time out of my day — it's an hour and a half trip — when needed because I feel good about the service here."

Every year, the Veterinary Teaching Hospital sees approximately 1,200 cases through the equine podiatry service, one in five of which involves therapeutic podiatry. The service treats patients within a 35-mile practice radius or on referral. Recently, the college completed construction of a new equine podiatry barn.

"When I interviewed at the college nine years ago, it was obvious that Dr. Pleasant's passion for therapeutic podiatry was something the hospital could provide for local clients, referring veterinarians, and farriers at a level not usually available," said David Hodgson, head of the Department of Large Animal Clinical Sciences. "After a modest beginning with just a truck and the recruitment of Travis, the program has recently expanded into its own building."

Hodgson added that this expansion would not have been possible without committed donors who provided the financial support for the new podiatry center. Pleasant and Burns have already begun seeing patients in the new building.

### A team approach

By working together on individual cases, Pleasant and Burns can combine their knowledge and skills to provide quality service for both horse and owner. "There are very few places that have a veterinarian and farrier working together on site," Pleasant said.

This team approach has worked well. Pleasant, who was recently inducted into the International Equine Veterinarian Hall of Fame, provides a science-based understanding of equine anatomy and decades of experience as an equine surgeon and clinician. Burns recently became a Fellow of the Worshipful Company of Farriers and is one of a small number of Certified Journeyman farriers to receive by

continue on page 12





#### continued from page 11

examination the "therapeutic" endorsement from the American Farrier's Association. He combines the centuries-old tools of a blacksmith — including a forge, hot metal, and hammers — with a 21st century knowledge of equine anatomy to trim and balance horses' hooves, and make and fit their shoes by hand.

"A successful farrier not only knows how to appropriately fit and shoe a horse, but also has an understanding of equine anatomy and physiology," Burns said.

The podiatry service provides routine care and treats patients with both primary foot problems and other issues where farriery could aid in the treatment plan. It sees clients ranging from horse hobbyists in the region to a competitor in the 2012 Summer Olympics in London.

#### A commitment to education

While much of the college's equine podiatry work focuses on clinical service, Pleasant and Burns also support the college's educational mission. They co-teach a three-credit elective course on equine podiatry for third-year veterinary students.

"Our students review pertinent anatomy, physiology, and biomechanics of lameness associated with the equine digit," Pleasant said. "They also learn the principles of farriery. We are not teaching them to be farriers, but they are learning the basics and thought processes required to work with farriers in the management of foot and lameness problems."

Melissa Bryant of Pasedina, Maryland, who graduated in May in the college's equine track, found the course to be helpful for aspiring equine veterinarians like herself. "I feel more comfortable dealing with common foot issues now," she said.

Page 10: Top: College farrier Travis Burns makes a horseshoe at a farm in Floyd, Virginia. Bottom: Veterinary students in the equine podiatry course learn valuable skills at the college's new equine podiatry center. Page 11: Burns applies a shoe to a horse in Floyd, Virginia. Page 12: Top left: Equine veterinarian Scott Pleasant examines an X-ray of a horse foot. Top right: Burns works with students in the equine podiatry course. Bottom left: Pleasant examines a horse at the new equine podiatry center. Bottom right: Veterinary students and faculty prepare a horse for an X-ray. A successful farrier not only knows how to appropriately fit and shoe a horse, but also has an understanding of equine anatomy and physiology.

The course aims to create what Pleasant and Burns describe as "the culture of the veterinarian-farrier team." Veterinary students "can take the equine podiatry class during their third year and then, when they come on clinics, they can work with us on their rotations," Pleasant added. "That reinforces what they have already learned."

These education efforts extend not just to students, but also to horse owners, farriers, and other veterinarians, including residents and interns at the college. The equine farrier internship program exposes early career farriers to the team approach.

"We are trying to get our farrier interns to a high level of knowledge and competence so that they can work with veterinarians on the most difficult cases," Burns said. "Their exposure to cases at the teaching hospital should make that come naturally."

While other veterinary schools and some large private practices are investigating similar programs, what matters the most for clients like Calicchio is quality service.

"They take really good care of our horses," Calicchio said.



2 TRACKS — Virginia-Maryland College of Veterinary Medici



# Jasper the miniature donkey on the road to recovery

Tammy Little of Newville, Pennsylvania, had only owned her miniature donkey, Jasper, for three months when she found him one afternoon in late August on the ground with multiple abrasions and lacerations. Jasper had been attacked by a dog.

"We stabilized Jasper as best we could but decided that Jasper's injuries needed further immediate attention," said Little, who was referred by her local veterinarian to the Marion duPont Scott Equine Medical Center (EMC) in Leesburg, Virginia. "Elizabeth helped me lift Jasper into the back of her truck and we traveled as quickly as possible to Leesburg."

Little spent the 100-mile journey to the EMC — a full-service equine hospital operated by the veterinary college — leaning out the rear window of her truck to ensure that Jasper, who was only 6 months old, remained safely tucked into his blanket.

Upon arrival, James Brown, clinical assistant professor of equine surgery, and the EMC support staff lifted Jasper from his blanket and carried him into the building. In addition to multiple abrasions and lacerations, Brown discovered a left mandibular fracture and a suspected olecranon



Left: Jasper the miniature donkey was treated successfully at the Equine Medical Center in Leesburg, Virginia. **Right:** James Brown, clinical assistant professor of equine surgery, operated on Jasper at the EMC.

fracture on Jasper's left front leg. Jasper was in critical condition, but because he was hypothermic and unstable, he was not immediately able to go into surgery.

"The following day after being stabilized, Jasper underwent surgery for a mandibular fracture repair. His left front leg, although badly lacerated, was thankfully not fractured," Little said. "We were all relieved that Jasper did really well after surgery and was successfully reintroduced to his feed."

Three days later, Jasper was well enough to return home. His recovery would not have been possible without an anonymous contribution to the EMC's Good Samaritan Fund, one of several compassionate care funds at the veterinary college which provide financial support when an animal's owners are either unknown or cannot meet the financial needs of treatment. Numerous patients in Leesburg and Blacksburg have benefited from the college's compassionate care funds, including Jasper.

"Jasper is working on his recovery and is happy to be back on his feet visiting his many friends on the farm," Little said.

# Equine technician Jenny Jones focuses on patient — and owner — comfort

Jenny Jones received her first horse at age 13 and "from then on, it was horses everywhere," she said. Jones, who is from Rocky Mount, Virginia, has served as a large animal outpatient support technician since joining the Veterinary Teaching Hospital in April 2013. She worked previously at the college's Equine Medical Center in Leesburg, Virginia.

Typically, her job at the hospital involves checking the schedule, consulting with the veterinarians, and preparing for appointments the following day. "I'll get all the equipment set up, make sure the rooms are clean, communicate with the other departments like radiology if we think we might need them, [and] talk with the students," she explained.

Jones also values ensuring both the horses and their owners feel more comfortable during their stay at the hospital. "I'm sure those clients are unsure, they don't know what's going on, and they may be a little scared. So I like being that person who they can count on to be there and maybe relax them a little bit and ensure them that we'll do whatever we can to help their horse," Jones said.

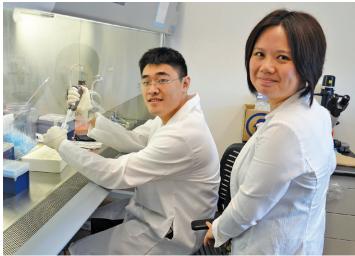
Her colleagues also appreciate her willingness to help out in various roles. "Working closely with clients through her position, Jenny is diligent at making sure they, as well as their animals, have a positive experience while visiting the Veterinary Teaching Hospital," said large animal supervisor Becky Wade. "Jenny fosters a positive learning and working environment for students through her willingness to instruct and assist." Jones continued, "I work with a great support staff. I love all the doctors I work with and I think they're very knowledgeable. I love the staff and I try to work with them as much as I can."

Jones also stays busy taking care of her two horses, one donkey, five cats, one dog, and nine chickens on her farm in Radford.

Below: Jenny Jones (left), outpatient support technician, and Jaclyn Warner (right), who graduated with her DVM in May, work with Pete, a 10-year-old Andalusian cross.



## AROUND THE COLLEGE



## Xin Luo's laboratory unearths clues about lupus, "bubble boy" disorder

Researchers now have a better understanding of autoimmune diseases thanks to recent discoveries at the college.

Xin Luo, assistant professor of immunology in the Department of Biomedical Sciences and Pathobiology, and her colleagues recently found that immune cells long suspected for causing disease in lupus patients do not, in fact, worsen symptoms in patients who already have the disease. Lupus can cause chronic fatigue, joint pain, rash, fever, renal failure, and even death, and affects an estimated 3 million people in the United States.

Earlier research showed that lupus patients have been exposed to interferon alpha, a type of protein released by plasmacytoid dendritic cells, known as pDCs.

"We found that mice with late-stage lupus didn't produce interferon alpha at all," Luo said. "We believe that these cells are only involved in the initiation of lupus, not the later exacerbation or progression of the disease. This is very clinically relevant because many researchers are still thinking about targeting pDCs as a treatment for lupus patients, which may not work."

In a separate project, Luo and her colleagues discovered an earlydetection biomarker for severe combined immunodeficiency, or SCID — an autoimmune disease which forces patients to breathe filtered air and avoid human contact because of their bodies' weak natural defenses. Popularly known as the "bubble boy" disorder, the disease affects fewer than 2,000 new births worldwide.

"If SCID is not detected, children cannot live past their first year," Luo said. "Now we may have a noninvasive way to screen for this disease."

**Top:** Xiaofeng Liao (left), a Ph.D. student, and Xin Luo (right), assistant professor of immunology, are co-authors on a paper about late-stage lupus in mice.

# New study raises questions about common household chemicals

Researchers at the Edward Via College of Osteopathic Medicine (VCOM) and Virginia Tech have discovered that two active ingredients common in household cleaning products and disinfectants used in medical and food preparation settings cause reproduction problems in male and female mice.

Terry Hrubec, associate professor of anatomy at VCOM and research assistant professor in the Department of Biomedical Sciences and Pathobiology, and Vanessa Melin, postdoctoral associate, are building on their earlier research on the toxicity of quaternary ammonium compounds, or QACs. In particular, the researchers looked at mice exposed to two active ingredients valued for their antimicrobial and antistatic properties, as well as their ability to lower surface tension.

"The first study identified that there was a problem, but it didn't show if the problem was on the male side or the female side," said Hrubec, who published the findings in the journal *Reproductive Toxicology.* "We just knew that exposure to the disinfectant decreased reproduction."

The most recent study went into more detail about the male and female reproductive issues in mice. "We found that the compounds decreased sperm counts in experimentally dosed mice, as well as those that were just exposed to disinfectant use in the mouse room. They also caused female mice to progress through fewer estrus cycles, meaning they were in heat fewer times," Melin said. "This is a direct indication of hormone disruption in the mice."

Their research raises the possibility of QACs contributing to human infertility, which has been on the rise in recent decades.

"We are asked all of the time, 'You see your results in mice. How do you know that it's toxic in humans?" "Hrubec said, "Our research on mice shows that it is toxic to the reproductive system, and we think that you can extrapolate that to humans because all biomedical science is based on rodent research."

The researchers noted that an epidemiological study could determine whether people who have a high rate of exposure have a more difficult time becoming pregnant. The two active ingredients in the disinfectant — alkyl dimethyl benzalkonium chloride and didecyl dimethylammonium chloride — are typically listed by their abbreviations, ADBAC and DDAC.

Bottom: Researchers Vanessa Melin (left) and Terry Hrubec (right) conduct their research at the Center for Molecular Medicine and Infectious Diseases.

## Regenerative medicine research offers hope for injured horses

When an equine athlete has a joint, tendon, or ligament injury, the results can be career-ending. Veterinary researchers are investigating how to use regenerative medicine to stimulate the natural repair mechanisms in horses with joint injuries or inflammation. One area of focus is on the use of adult stem cells for the treatment of soft tissue injuries in horses.

"Stem cells can be used for any type of tissue repair, but my work specifically deals with tendons and ligaments because these are a common source of tissue damage in horses," said Linda Dahlgren, associate professor of large animal surgery in the Department of Large Animal Clinical Sciences.

Stem cells — unspecialized cells that are part of the body's repair system — are capable of reforming damaged tissues. Regenerative medicine researchers like Dahlgren can harvest stem cells from a horse's healthy fat tissue or bone marrow and inject them directly into damaged tissue. Recently, Dahlgren and her colleagues have turned their attention to how these stem cells interact with neighboring cells once injected back into a horse.

The Ph.D. students in Dahlgren's laboratory are both looking at different sides of this issue. Anne Nichols from Abingdon, Virginia, is investigating how to provide cues for stem cells to differentiate into tendon cells. Her research uses tendon fibroblasts — or cells that form the tendon's structural framework — in a collagen gel to simulate mechanical strain on the tendon without having to use live horses.

Meanwhile, Bruno Menarim from Austral University in Chile, focuses on using cells from a horse's own body to address joint disease. He extracts mononuclear cells directly from the bone marrow without the need to culture the cells and tests the ability of this mixture of immature white blood cells and stem cells to modulate inflammation and repair damaged joint tissue.

"The processing in the laboratory takes approximately one hour and can be administered to the horse on the same visit," Dahlgren said.

Dahlgren and Menarim hypothesize that these cells, when exposed to the right environmental cues, can reduce inflammation in the joint and guide the healing process. The researchers are conducting the basic science in the laboratory needed to develop future treatment protocols.

"The goal is to have a biological therapy for joints with long-term positive effects," Dahlgren said.



### Bruno Menarim: Equine surgeon turned regenerative medicine researcher

Bruno Menarim, an equine surgeon at Austral University in Chile, is completing his Ph.D. at the veterinary college as part

of a student honors graduate program developed between the college and the Chilean university in 1996.

Menarim chose Dahlgren's lab because he wanted his research to be associated with clinical work and have translational significance.

"She has been an important name in the equine surgery field between the universities for a while, and I thought that was a perfect match," he said.

As a child, Menarim worked with and competed the horses his

family raised in Brazil and, in 2002, received an externship with the Brazilian equestrian team. "I think that got me in contact with the big international panorama of equine veterinary medicine," Menarim said.

Menarim notes the differences between equine research in South America and in the United States.

"Some things in Brazil are more developed, like reproductive biotechnology, but certainly on the surgical and sports medicine side of the field, the U.S. has more tradition and development, and that's the reason why I decided to pursue graduate studies related to clinical aspects in the U.S.," he said.

Once he graduates with his Ph.D., Menarim plans to return to his faculty position at Austral University in Chile.



## AROUND THE COLLEGE

**Class Acts:** These faculty members represent the departments of Biomedical Sciences and Pathobiology, Small Animal Clinical Sciences, Large Animal Clinical Sciences, and Population Health Sciences.



Phil Sponenberg Professor of Pathology/ Genetics. Biomedical Sciences and Pathobiology Years at the college: 35

Why did you choose to work at Virginia Tech and the college? The people and the location, originally. At my interview Bernie Gross took my wife and me down after dinner (all dressed up) to look at McCov Falls. I thought the geography and the people sounded like a good fit! He excitedly explained the geography and other benefits of this beautiful corner of the world. If you knew Bernie, you knew his enthusiasm, excitement, and how infectious that was. That enthusiasm and the beautiful location clinched it.

## What do you love most about your work at the vet school?

The people, and a chance to have a small positive input in several lives, and a large input into a few.

#### If you could choose one animal to be like, what would that be and why? A vulture! Most of my career the dead things come find

me, and it would be interesting to turn the tables for a while.

What is a fact about you that few people know? I can make tortillas.

Do you have any pets? If so, what and how many? About 126 goats, six dogs (one is a real knot head), and 19 chickens.



Noah Pavlisko Assistant Professor of Veterinary Anesthesiology. Small Animal Clinical Sciences Years at the college: 5

Why did you choose to work at Virginia Tech and the college? The Blue Ridge area is great for outdoor adventures and after completing my residency, I wanted to be in a location that lends itself to a good work-life balance.

What do you love most about your work at the vet school? Each day is different. I look forward to hectic days working through challenging cases. I also enjoy working with students and teaching them anesthesia.

If you could choose one animal to be like, what would that be and why? Although most people say my personality most closely resembles that of a cat, I would prefer to be a horse. Horses are awesome animals!

## What is a fact about you that few people know?

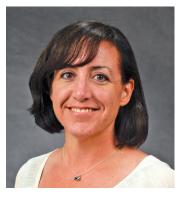
I like to kayak on the New River on the weekends.

### Your favorite place to travel?

I love going back home to Western New York. The first place I always visit when I'm back is Wegmans.

### What would you attempt if you knew you could not fail? I'd take a few months off and

I'd take a few months off and hike the Appalachian Trail.



Katherine Wilson Clinical Assistant Professor of Large Animal Medicine. Large Animal Clinical Sciences Years at the college: 6

## What do you love most about your work at the vet school?

your work at the vet school? I have had the same answer to this question since I was asked it in interviewing for my residency at VMCVM: I love the people I get to work with. There truly is a community atmosphere here that is not usual for veterinary colleges, in my experience. I get to draw from all of my colleagues' experiences and collaborate with faculty in different fields in order to better teach students and provide care for patients.

If you could choose one animal to be like, what would that be and why? Well, I am a little obsessed with sloths, but I am not sure that is something I should aspire towards...

What is a fact about you that few people know? My undergraduate degree is a Bachelor of Philosophy in Interdisciplinary Studies. I have always wanted to be a veterinarian but also had strong interests in literature, writing, and the arts and probably spent more time in those subject areas prior to vet school than in science.

## What would you attempt if you knew you could not fail?

I would love to be a musician. I have no talent though, and so I am content to appreciate the music of others.



Sophie Wenzel Lecturer/Assistant Director for the Center for Public Health Practice and Research. Population Health Sciences Years at the college: 3

## Why did you choose to work at Virginia Tech and the college?

Back in 2012, my family and I were living in Anchorage, Alaska, and we wanted to get closer to family in Virginia, so we moved to Blacksburg. I actually remember looking for public health career options in Blacksburg when we were still living in Alaska and seeing a press release about the newly formed Center for Public Health Practice and Research. Within six months of moving here, I had been hired!

What is a fact about you that few people know? Many people know this, but this fact really defines me. I am half French; my mom was French, my dad is American, and I grew up in France until I was twelve. I still have much of my family living there. It is a big part of who I am. I speak French to my girls and go visit family as often as I can.

#### What is your greatest

accomplishment? In 1999, I set off to Paraguay for "the toughest job I'll ever love." I served as a Peace Corps Volunteer there for three years. That experience has shaped who I am today in so many ways. There were moments of great joy, moments of great sorrow and many ups and downs in between, it was one of the most difficult things I've ever done, and I would not in a million years trade that experience. Plus, I met my husband there!



Last year, the U.S. poultry industry faced an avian influenza outbreak which swept across the Midwest and killed tens of millions of chickens and turkeys.

"These outbreaks of highly pathogenic H5N2 avian influenza decimated the turkey industry in Minnesota, the egg layer industry in Iowa, and poultry farmers in several other states," said Nathaniel Tablante, professor and Extension poultry veterinarian at the University of Maryland's Department of Veterinary Medicine. "The U.S. declared this the greatest animal health emergency in our

# University of Maryland campus builds connections with poultry industry

country's history. When the USDA National Institute of Food and Agriculture announced a request for proposals for a Smith-Lever Special Needs Grant to focus on emergency issues, I said,

"We have an emergency right now."

Tablante partnered with other Extension specialists at the University of Maryland to apply for the grant and, in a career first, was given more than he requested to develop materials educating commercial poultry farmers, technical service personnel, and backyard poultry producers on avian influenza biosecurity.

Although the outbreak has now subsided, the materials — which include professionally produced videos which explain biosecurity measures in simple terms — are designed to better prepare the poultry industry in the event of a future outbreak.

Tablante has two decades of experience supporting the poultry industry. He started his career as a poultry veterinarian in the Philippines and Canada before joining the University of Maryland faculty in 1997. Originally stationed in Salisbury, Maryland on the Delmarva Peninsula, Tablante was relocated to the College Park campus in 2003 to assume teaching and administrative responsibilities.

In his current role, he provides support and resources for Maryland's poultry producers, serves in a leadership capacity in animal health and agro-security working groups, and has been invited to speak to poultry industry stakeholders both in the U.S. and abroad.

## Betsy Schroeder: Aspiring disease detective

Betsy Schroeder of Johnstown, Pennsylvania accidentally applied to the DVM/Ph.D. dual degree program when she checked a box thinking she was simply requesting more information while filling out her application paperwork for the veterinary college. When she unexpectedly received an interview for the dual degree program, however, her bosses at the Centers for Disease Control and Prevention, or CDC, immediately told her that "you need to do the dual degree. It will give you more options career-wise," Schroeder explained.

Schroeder, who already held a bachelor's degree in biological sciences from the University of Notre Dame and a master of public health degree from the University of Minnesota, was accepted into the dual degree program for the fall of 2009 with a particular interest in public and corporate veterinary medicine.

"I came to vet school with the purpose of doing public health better and that makes me different from most of my classmates who knew they wanted to be veterinarians from the time they were like five," said Schroeder, whose research interests include salmonella and herd health. "I loved the fact that I would have the opportunity to take classes on public policy."

Photo: Betsy Schroeder visits Torres del Paine in Chilean Patagonia as part of her CDC externship in Chile. This public health focus has created numerous opportunities for Schroeder. This past year, she was one of 11 students who received the CDC's Hubert Global Health Fellowship, which partners third- and fourth-year veterinary and medical students with a CDC staff mentor on a public health project in a developing country. Through the fellowship, Schroeder spent six weeks in Ethiopia to help set up a rabies control and surveillance programs to protect the Ethiopian wolf, the rarest and most endangered canid in the world. She also recently returned from Chile, where she worked with Minister of Health officials on several projects.

After graduating, Schroeder will once again be working with the CDC, this time as one of 80 veterinarians, epidemiologists, dentists, nurses, and pharmacists chosen for the 2016 Epidemic Intelligence Service Fellowship.

She credits the public and corporate veterinary medicine track and her experiences at the veterinary college for her success in reaching her goals. "The public/corporate track was the primary reason why I came here and one of the things I like most about it is that it highlights all of the different things veterinarians can do," she said. "The degree opens up a lot of doors that you may not even know exist and that you have access to as your career evolves too."

## STUDENT PROFILE



Like many of her classmates, Danielle Brown of Woodbine, Maryland, knew that she wanted to be a veterinarian from an early age. "It was the first job I ever wanted to have," said Brown, who graduated from the veterinary college in May.

Brown has not only turned her childhood dream into a reality, but also did so with top honors as the college's Class of 2016 valedictorian.

Brown, who pursued the college's mixed species track, has a long history of high academic achievement, graduating in the top 5 percent of her high school class. Although Brown has always had a passion for veterinary medicine, her time at her high school newspaper also sparked an interest in journalism.

"I was originally admitted into the journalism program at the University of Maryland at College Park and did that for a semester before realizing that it was not for me," said Brown, who switched her major to animal science. "The first thing that came to the top of my mind when I sat down and envisioned my life in the future was to become a veterinarian."

Brown graduated magna cum laude from the University of Maryland and was accepted into the Virginia-Maryland College of Veterinary Medicine. She attributed her success in veterinary school to "hard work and motivation."

"There were certainly times when I just had to push myself," Brown said. "When there were a million other things I would rather be doing, I continued to push. It's an exhausting program... It's very demanding on our time and our reserves, but I think the continuous drive has helped."

Outside of the classroom and clinics, Brown has volunteered with Omega Tau Sigma, the college's veterinary service fraternity, and has been a member of the Public Veterinary Practice Club, where she gained more exposure to zoo medicine.

"I have an interest in zoological medicine as well, but I don't want to do that primarily," Brown said. "My ultimate goal at this point is to become a board certified specialist in one of the fields of veterinary medicine, such as cardiology or ophthalmology... And then if I can become board certified in one of those specialty fields, I'm hoping that I can get my foot in the door and collaborate with some of the zoos in the area where I work."

Since graduating, Brown plans to complete a small animal medicine internship and residency at a referral clinic in Maryland.

### ALUMNI CORNER: Where Are They Now? A Celebration of Our Alumni and Their Achievements

### Michael Davis - Sled Dog Researcher



While studying ski asthma, an asthma-like disease common in elite winter athletes, Michael Davis (MS '95) approached the Iditarod head veterinarian, hoping the 1,000-mile dog sled race would allow him to study this phenomenon in sled dogs.

"It turned out that while the dogs were not a great model for ski asthma, the gastric ulcer issue was much more prominent," Davis explained. "So, the Iditarod work shifted to finding a solution to the gastric ulcer problem."

Davis solved the gastric ulcer problem and moved on to metabolic work. While he no longer works directly with the Iditarod, he returns each year to provide support and updates about his current research to trail veterinarians.

### Diane D'Orazio - Wildlife Veterinarian



Diane D'Orazio (DVM '85) currently works as the full-time veterinarian of record for the Southwest Virginia Wildlife Center, a non-profit wildlife rehabilitation facility that serves the greater Roanoke

Valley and surrounding areas.

While the clinic has a regular rotation of educational programs, D'Orazio explained that "no day is like any other." This past summer, D'Orazio successfully rescued a fledgling eagle that "had gotten blown out of the nest" during inclement weather.

D'Orazio also works with student volunteers from Virginia Tech and the fourth-year students at the veterinary college, who have the option to include the wildlife center in their rotations. "There are a lot of students at the vet school who are interested in wildlife," she said.



# Equine association honors Nathaniel White with Distinguished Life Member Award

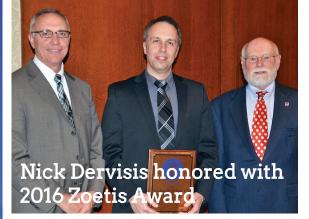
The American Association of Equine Practitioners (AAEP) presented Nathaniel A. White II, professor emeritus of equine surgery at the Marion duPont Scott Equine Medical Center, with the Distinguished Life Member Award for his leadership and substantial volunteerism within the association during his 43 years of membership.

During his tenure at the Equine Medical Center, White was the Theodora Ayer Randolph Professor of Surgery from 1987 to 2004 and the Jean Ellen Shehan Chair as the center director from 2003 to 2012. He also served as AAEP president in 2010.

White, a world-renowned expert on colic, has also authored several books on the topic. He is currently chair of the AAEP's National Equine Health Plan Task Force, which is establishing an Equine Disease Communication Center to serve as a national hub for equine disease reporting and communication.

White was instrumental in the establishment and served as longtime chair of the AAEP Foundation, the charitable arm of the AAEP that has distributed more than \$3.3 million to improve the welfare of the horse. He also received the AAEP's Distinguished Service Award in 2004.

**Above from left to right:** David Foley, executive director of the American Association of Equine Practitioners (AAEP); Nathaniel White, recipient of the 2015 Distinguished Life Member Award; and G. Kent Carter, 2015 AAEP president.



Nick Dervisis, an assistant professor of oncology in the Department of Small Animal Clinical Sciences, received the Zoetis Award for Research Excellence.

Since joining the college in 2012, Dervisis has helped build a successful oncology service at the Veterinary Teaching Hospital that offers state-of-the-art services for cancer patients and opportunities to participate in clinical research.

"In the past 3.5 years, Dr. Dervisis has led the development of a progressive oncology service that sees one of the largest caseloads in the hospital," said Greg Daniel, head of the Department of Small Animal Clinical Sciences. "Having an oncology service linked to a significant research program brings new technologies and treatments to our patient populations."

**Above:** Dean Cyril Clarke (left), and Roger Avery (right), senior associate dean for research and graduate studies, present the Zoetis Award for Research Excellence to Nick Dervisis (center), assistant professor of oncology in the Department of Small Animal Clinical Sciences.

## AWARDS & ACCOLADES

**Michele Borgarelli**, associate professor of cardiology in the Department of Small Animal Clinical Sciences, is now president of the European Society of Veterinary Cardiology.

**Caitlin Cossaboom**, a dual degree DVM/Ph.D. student in the Biomedical and Veterinary Sciences program, won the outstanding science, technology, engineering, and mathematics dissertation award from the Virginia Tech Graduate School. She was also awarded the U.S. Centers for Disease Control and Prevention's Hubert Global Health Fellowship to work on rabies control in Cambodia.

Chip Godine (DVM '97) of Ruckersville, Virginia was honored with the college's 2016 Lifetime Achievement Alumni Award.

Julia Gohlke, assistant professor of environmental health in the Department of Population Health Sciences, and her colleagues won the first prize in the Climate Change and Environmental Exposures Challenge presented by the National Institute of Environmental Health Sciences for the development of a web-based disaster planning app.

David Hodgson, head of the Department of Large Animal Clinical

Sciences, received the Association of Equine Veterinarians of Mexico's Outstanding Service to Equine Veterinary Medicine Award in 2015.

**X.J. Meng**, University Distinguished Professor of Molecular Virology, was elected a member of the National Academy of Sciences. This is one of the highest honors given to a scientist in the United States.

**Mindy Quigley**, the college's clinical trials coordinator, received the 2016 Friend of the Virginia Veterinary Medical Association Award.

**Jason Regalado**, a member of the Class of 2016 from Sacramento, California, was named the 2016 Outstanding Graduating Student from the college.

Megan Shepherd (DVM '06) was honored with the college's 2016 Outstanding Recent Alumna Award.

**Ellen Staples**, the college's equine podiatry intern, passed the Certified Journeyman Farrier exam.

**Michelle Theus**, assistant professor of molecular and cellular neurobiology in the Department of Biomedical Sciences and Pathobiology, received a five-year, \$1.7 million

grant from the National Institutes of Health to study vascular health and traumatic brain injury.



Spring/Summer 2016



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

www.vetmed.vt.edu

## Upcoming Events

June 10-11 — Virginia Tech Alumni Association Special Event: Human and Animal Health, *Blacksburg*, VA
June 26-28 — MVMA Summer Conference, *Ocean City*, MD
July 31- Aug. 5 — VA-MD VetTRAC Summer Program, *Blacksburg*, VA
Aug. 5-9 — AVMA Annual Convention, *San Antonio*, TX
Sept. 17 — VA-MD Homecoming and Football Tailgate, *Blacksburg*, VA

## Make a Difference

It's always a great time to give! By helping us to advance our strategic priorities and fulfill our mission of training veterinarians, your gifts also benefit pet owners, industry, and society at large.

To support the college or learn more about ways to give, contact our Development Office at 540-231-4716 or visit us online at www.vetmed.vt.edu/development

## Join the Conversation!

Facebook, Instagram & Twitter: /VaMdVetMed LinkedIn Group: VA-MD Vet Med Flickr: /photos/VA-MD-VetMed/



Above: Sonali Kadam, a rising second-year veterinary student, holds Winston, a 9-year-old Siamese therapy cat in training, at the college's annual Open House held on Saturday, April 9. The pair are members of VT Helping PAWS (Pet Assisted Wellness Service), a student-run therapy animal program at the college. Through the program, Virginia Tech students, faculty, staff, alumni, and their pets bring the benefit of human-animal interactions to college events, such as Open House and Doctor of Veterinary Medicine program interviews, and local facilities, including schools, assisted living centers, and Virginia Tech's Newman Library, Squires Student Center, Cook Counseling Center, and Women's Center.