

VIRGINIA TECH magazine

SPRING 2018

MAKING STRIDES

Hokies in roller derby

CARRY A COUNTRY

Designing mission-minded backpacks

CHASING STEEPLES

Virginia Tech athlete sets the pace

WASTE NOT

Dishing up sustainable changes at mealtime



HOKIEBUILT

FOR A BETTER TOMORROW

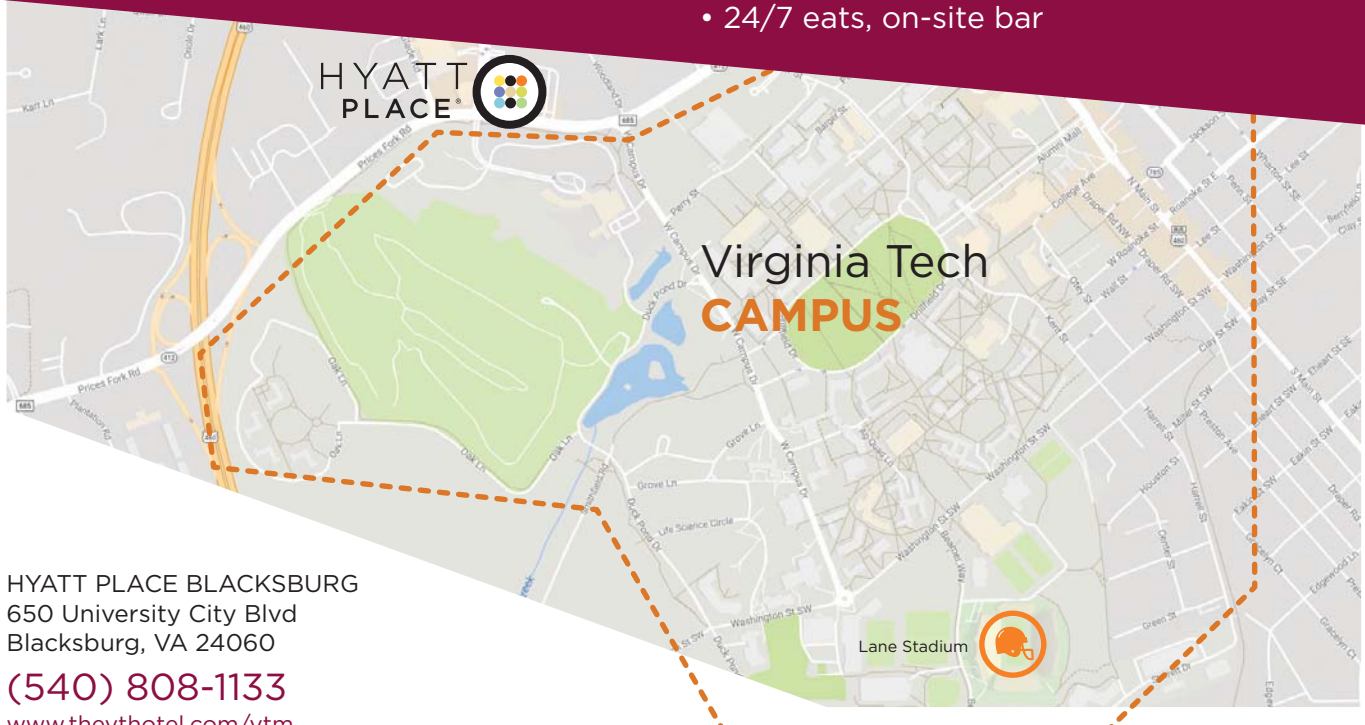


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HOKIE-BUILT

Virginia Tech is redefining the role of the 21st-century comprehensive land-grant by bringing together forward-thinking leaders, world-class faculty, and enterprising students who share the spirit of grit and determination that exemplifies our lunch-pail mentality. Although their individual roles differ greatly, the impact of their combined strengths creates a tremendous force for good.

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30 HOKIE-BUILT

People are the driving force that is advancing the vision for Virginia Tech. From research and learning to community outreach and entrepreneurship, university leaders, faculty, alumni, and students are building a better tomorrow—story by story.

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ON THE COVER: Armed with the traditional lunch-pail mentality, Hokies are building Virginia Tech's future as a leading 21st-century land-grant university. (At right) Jasmine Edison of Anchorage, Alaska, a graduate assistant, works with technology in the Cube during a special winter semester course. Read more about the Cube on page 20.





LOGAN WALLACE

PRESIDENT'S MESSAGE

LISTEN AND LEARN: Prior to graduation in May 2017, Virginia Tech President Tim Sands met with Abby Smith, 2017 Undergraduate Student of the Year, and Bobby Hollingsworth, Outstanding Senior for the College of Engineering, to learn more about their future plans and their experiences at Virginia Tech.

ADVANCING THE VISION

by Tim Sands

Nearly four years ago, I was honored to become the 16th president of this dynamic and enduring institution. I've engaged in hundreds of conversations with students, faculty, staff, alumni, and partners about Virginia Tech's future. Together, we have identified a set of aspirational themes that will help guide us as we chart the university's future direction.

First, and perhaps most importantly, we must remain true to our heritage as a land-grant institution and our tradition of service to our community, commonwealth, and country. It is the "secret sauce" that sets Virginia Tech apart. We must integrate experiential learning into every student's education, providing them with the diverse skills and global context that will enable them to compete and succeed in a rapidly changing environment. We need to grow strategically to achieve the benefits of scale and meet the growing demands for the Virginia Tech experience. We need to set our sights on becoming a top-100 global university so we can attract the best talent and partners and generate additional economic activity.

Although some of our goals can be accomplished quickly, others will take many years, but everything we envision has one need

in common—your support. Your generosity brought us this far, and now we need you to take us to the next level. The giving rate for our alumni is currently about 12 percent. Other comparable universities have a giving rate of 20 percent. If we can increase our philanthropic giving to match our peers, we can achieve our goals for the university and much more. But we need your help.

On Tuesday, March 20, we will celebrate the first day of spring with the first annual Virginia Tech Giving Day. I want to encourage all of our alumni and friends to take advantage of this opportunity to support our mission and vision. Find out how you can participate by visiting vt.edu/givingday and help us match (and exceed) the giving rate of our peers and competitors.

With your support, we are creating a shared vision for the university's future that is both inspirational and achievable. As we move forward, I will keep you informed and share our milestones and progress toward our goals.

Thank you for everything you do for Virginia Tech. ■

Tim Sands is Virginia Tech's 16th president.

EDITOR

Erica Stacy

ASSISTANT EDITOR

Mason Adams

ART DIRECTOR

Shanin Glenn

CONTRIBUTORS

Mason Adams, Lindsay Key, Richard Lovegrove, Kelly Shannon, Steven White, Travis Williams, Matthew Winston Jr.

STUDENT CONTRIBUTORS

Ellen Duvall, Allysah Fox, Amanda Robinson

COPY EDITOR

Richard Lovegrove

PHOTOGRAPHERS

Zeke Barlow, Shay Barnhart, Steve Beard Photography, Rebecca Bourquin, Ashley Clarke, Olivia Coleman, Erica Corder, Jessie Foley (Brief Media), Christina Franusich, Andrea P. Greene, Danforth Johnson, David Hungate, Heidi Ketler, Michael Kiernan, Dave Knachel, Christopher Lewkovich (University of Maryland Medical Systems), Amy Loeffler, Shelby Lum, Jessica McAndrew, Peter Means, Ray Meese, Keith Pierce, Valerie F. Orth, Kelly Riffell, Jimmy Robertson, Ben Seese, Jim Stroup, Logan Wallace, Gabriella Wolff

WEBMASTER, DIGITAL EDITOR

Bruce Harper

DIRECTOR OF CONTENT STRATEGY

Jesse Tuel

DIRECTOR OF DESIGN & DIGITAL STRATEGY

Brad Soucy

**SENIOR ASSOCIATE VICE PRESIDENT
FOR ALUMNI RELATIONS**

Matthew M. Winston Jr.

PUBLISHER

Tracy Vosburgh

CONTACTS

STORY IDEAS AND LETTERS TO THE EDITOR:

EMAIL: VT.MAG@VT.EDU. **MAIL:** VIRGINIA TECH MAGAZINE; 902 PRICES FORK ROAD; UNIVERSITY GATEWAY CENTER, SUITE 2100; BLACKSBURG, VA 24061. **ADDRESS CHANGES:** **EMAIL:** ALUMNIDATA@VT.EDU. **PHONE:** 540-231-6285 BETWEEN 8 A.M. AND 5 P.M., MONDAY THROUGH FRIDAY. **CLASS NOTES:** **EMAIL:** FLEETS@VT.EDU. **MAIL:** CLASS NOTES, ALUMNI ASSOCIATION; HOLTZMAN ALUMNI CENTER, VIRGINIA TECH; 901 PRICES FORK RD.; BLACKSBURG, VA 24061. **ADVERTISING:** IMG COLLEGE, BRANDON.FORBIS@IMG.COM, 540-641-0754.

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LETTERS

FROM THE EDITOR

A BRAND NEW LOOK

Welcome to the newly redesigned Virginia Tech Magazine.

As you read the spring edition, you'll notice a few changes, beginning with our cover. For the first time ever, Virginia Tech Magazine is perfect bound, featuring a spine like a book. Your future collection of magazines will line up neatly on a bookshelf, as a ready-reference and an eye-catching display.

This edition also incorporates updated visual elements—from a new logo to more modern fonts and graphic elements—all of which are connected to the new Virginia Tech brand platform.

As you turn the pages, you will find familiar sections, including “Around the Drillfield” favorites like How Tech Ticks (page 16) and Ology (page 22). On page 42, you'll find “Around the Hokie Nation,” our newly renamed location for Class Notes, stories, and information especially for and about our alumni.

For 40 years, Virginia Tech Magazine has been your resource for stories about campus and alumni. Our look has changed a little over the years, but our commitment to sharing compelling stories has remained the same.

We hope you continue to enjoy our coverage.

Erica Stacy
Editor

TO THE EDITOR

AN HONORABLE NAME

I met Jim Doss when I was a freshman at Virginia Tech back in 1966. Some of my classmates had told me that there was another Jim Doss on campus that fall. The surname Doss isn't that common, so I thought I'd contact Jim Doss to see if we might be related. After meeting him, exchanging handshakes, and enjoying some discussion, it appeared that, as far as we could determine at the time, we weren't related, at least through a couple of generations back.

I lost contact with Jim Doss after that, and I knew nothing of his leaving school, getting drafted, and subsequent untimely death, until I read an article in the local Bristol newspaper highlighting the November 2017 ceremony at Virginia Tech that honored him.

It's reassuring to know that the “other Jim Doss” was a true war hero, and he certainly deserved to be memorialized on the Pylons of the War Memorial.

James E. “Jim” Doss '70
Blountville, Tennessee

EDITOR'S NOTE: To learn more about Jim Doss, whose name was added to the Honor pylon in November 2017, see page 24.



SOMETHING TO SAY?

Send us a message at vtmag@vt.edu.



ON THE ROAD: A ribbon-cutting ceremony was held in December to celebrate the opening of the Southgate Drive and U.S. 460 interchange. (At left) Civil engineering students, Wade Orman, Tripp Agnor, and Ann Joseph, who served as interns for Branch Highways, were on the worksite as the final beam was installed overnight at the interchange.

AROUND THE DRILLFIELD

- 16 How Tech Ticks
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NEWS

NEW 460 SOUTHGATE INTERCHANGE OPEN

VIRGINIA DEPARTMENT OF TRANSPORTATION'S \$46.7 million interchange project creates a new grade-separated, diverging diamond interchange at the intersection of U.S. 460 and Southgate Drive, which leads vehicles to a roundabout. Beyond the roundabout, the road heads directly to the university's athletics facilities, including Lane Stadium and English Field at Union Park, the baseball stadium.

Southgate Drive from the new traffic circle to U.S. 460 is closed permanently. ■



RAY MEESE



LOGAN WALLACE



KEITH PIERCE

POISON CONTROL: Wondi Mersie (right), a Virginia Tech alumnus, is working with a Virginia Tech-led project to control the poisonous weed parthenium in Ethiopia. Also pictured (from left): Brhane Gebrekidan, Virginia Tech Board of Visitors Rector Dennis Treacy '78, Samora Macrice, Demeku Zewdie, and (seated) Lidya Alemayehu.

KILLER WEED IN EAST AFRICA NO MATCH FOR VIRGINIA'S LAND-GRANT INSTITUTIONS

WITH HELP FROM THE VIRGINIA Tech-led Feed the Future Innovation Lab for Integrated Pest Management, researchers from Virginia Tech and Virginia State University are working to eradicate *parthenium hysterophorus*, an aggressively invasive plant native to Central America now found on Australian, Asian, and African continents.

Parthenium invaded Ethiopia four decades ago, said Muni Muniappan, director of the lab at Virginia Tech. The weed—sometimes called farmassia or “sign away your land”—crowds out crops and pasture grasses and, if eaten by cows, sours their milk. In humans, its poisonous leaves and pollen aggravate respiratory illnesses and cause severe skin irritations that can be fatal, especially to children and women.

With no natural predators in Africa to curb the plant's aggressive spread, Muniappan turned to Wondi Mersie '85 to identify an insect that could control it.

Mersie, director of research and associate dean at Virginia State University, identified two bugs that fit the bill—a leaf-feeding beetle, *zygogramma bicolorata*, and a stem-boring weevil, *listronotus setosipennis*.

Mersie and the Virginia Tech team worked to bring other scientists and technicians from Ethiopia to South Africa to learn to employ the beetle and weevil as biological controls, then returned to Ethiopia to establish a quarantine facility at the Ambo Research Station, where they tested the plant's natural enemies imported from Central America under local conditions.

Following the initial results, the team spent much of 2017 working on multiplying these natural enemies and releasing them throughout Ethiopia's fields. The two imported insect species devoured parthenium in every site they were released. The team's next step is to expand its activities into neighboring Kenya and Uganda. ■

STUDY CONTRADICTS COMMON PRACTICE OF TAILGATING AT TRAFFIC LIGHTS

WHEN PULLING UP TO A TRAFFIC

light, most drivers get pretty close to the car in front of them, leaving just several feet of space between their bumper and the next. Traditional thinking says the closer a car is to a traffic light, the more likely that car will be to pass through the intersection before the light turns red again.

A study by Virginia Tech engineering professors and students in the Department of Biomedical Engineering and Mechanics, published in the New Journal of Physics, used video cameras attached to drone helicopters to capture footage of cars accelerating through a traffic light on the Virginia Tech Transportation Institute Smart Road. By systematically controlling the packing density of the cars, the researchers discovered that any decrease in distance to the light was completely offset by the time it took for cars to regain a comfortable spacing before drivers could accelerate.

Drivers who pack tightly at intersections do not increase their chances of making it through the light, and tailgating at traffic lights can also lead to more rear-end collisions. ■



MICHAEL KERNAN

LAB INSTRUCTOR CRAIG TOLLIN FULFILLS LIFELONG DREAM WITH APPEARANCE ON "JEOPARDY!"



COURTESY OF JEOPARDY

CRAIG TOLLIN, A LAB INSTRUCTOR with the Virginia Tech College of Science's Academy of Integrated Sciences, always knew that he wanted to compete on the gameshow "Jeopardy!," and he finally got his chance in 2017, appearing on two episodes televised in mid-December.

In the first, Tollin trailed heading into Final Jeopardy, but correctly answered a clue about the Goodyear Blimp and won with a total of \$22,001. In the next night's broadcast, Tollin finished second, ending his run on the show.

Tollin's love of knowledge directly applies to his work with students. He is a lab director and coordinator for the College of Science's Integrated Science Curriculum (ISC) nanoscience program, system biology program, and School of Neuroscience. His duties put him in contact with hundreds of students each week. In addition to students, Tollin also works with teaching assistants to train them for work in laboratories. ■

NEW INVENTORY OF 9,000 CAMPUS TREES

VIRGINIA TECH WILL SOON HAVE an inventory of nearly 9,000 trees on campus, thanks to a collaborative effort between the College of Natural Resources and Environment and the facilities department. The campus tree inventory will be used to monitor tree health and growth and help university planners make decisions about development.

Eric Wiseman, associate professor of urban forestry and arboriculture, Jack Rosenberger, the Office of University Planning's landscape architect, and Peter Stewart (pictured below), a graduate student in urban forestry from Chattanooga, Tennessee, are managing the project.

According to Rosenberger, the data collected will not only expand the inventory of trees on campus, but will tie directly into the facilities department's work order system to allow for greater functionality.

"Each tree will have a unique identification number, so whenever a tree needs work done, the grounds staff will be able to see exactly which one needs work and can keep track of it in that system," he said.

The inventory will also be used by the university to aid in decision-making about construction and landscaping on campus. It will be especially valuable for implementing Virginia Tech's 2017 Master Plan, which includes the development of new facilities. ■



EXTRA, EXTRA! READ ALL ABOUT IT.

For additional details, images, and videos related to the stories featured in Drillfield, go to vtmag.vt.edu.



HEIDI KETTLER



LOGAN WALLACE

FIVE-STAR HOCKEY HELMET CHANGES THE GAME FOR CONSUMERS

WHEN THE VIRGINIA TECH HELMET Lab released its first set of ratings for hockey helmets in 2015, the top of the chart was empty. No helmet had earned the highest score of five stars. That vacancy has now been filled, and the first-ever five-star rating awarded to the CCM FitLite 500.

The Virginia Tech Helmet Ratings use star ratings between zero and five to indicate how well a given helmet reduces head acceleration during an impact, a measurement correlated with a lower risk of head injuries.

Each helmet's STAR rating is the result of 48 impact tests designed specifically for hockey, a game that is packed with opportunities for players to hit their heads on rigid surfaces: the ice, the glass, or another player's helmet. Hockey helmets tend to be light and thin, which limits their ability to cushion the force of those impacts.

Data from thousands of real impacts recorded during hockey games helped

the Virginia Tech team design a laboratory setup to simulate hits accurately.

The new CCM helmet contains optimized padding systems that reduce head acceleration for a range of possible impact scenarios.

The Helmet Lab is extending its reach to an even broader pool of athletes, developing test methods and tools for a range of other sports equipment, including bicycle helmets and soccer headgear. Current ratings for football and hockey helmets are available online and are updated on a rolling basis as new helmets are released. ■



LOGAN WALLACE

DUMA NAMED INSTITUTE DIRECTOR



STEFAN DUMA, THE HARRY WYATT

Professor of Engineering, has been named director of the Virginia Tech Institute for Critical Technology and Applied Science (ICTAS). Duma has served as interim director of the institute for two years.

ICTAS, which recently celebrated its 10th anniversary, now boasts three buildings on the Blacksburg campus, space in the National Capital Region, and growing collaborations in Roanoke.

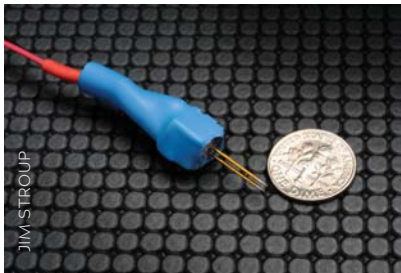
The institute helps drive research at the university by supporting interdisciplinary teams tackling potentially high-impact research and providing funding, shared workspaces, and other resources.

While ICTAS-funded projects cover a wide swath of subject areas, some of the institute's most prominent initiatives include the Nanoscale Characterization and Fabrication Laboratory, which is a resource for faculty all over campus and now a node in the National Science Foundation's national nanotechnology network, and the Virginia Tech Mid-Atlantic Aviation Partnership, which runs one of just seven Federal Aviation Administration-designated test sites for unmanned aircraft systems and the new drone park overlooking Oak Lane. ■

VIRGINIA TECH RESEARCHERS ATTACK CANCERS, PARKINSON'S WITH ELECTRICAL FIELDS

FORMER VIRGINIA GOV. TERRY McAuliffe announced \$1 million in funding for Virginia Tech to research electrotherapy, a process that attacks brain cancer and tumors associated with Parkinson's disease and epilepsy.

Virginia Tech researchers are enabling doctors to treat brain tumors once considered inoperable using irreversible electroporation. The technique, developed by Virginia Tech Professor of Biomedical Engineering and Mechanics Rafael Davalos and his team, opens a cancer cell's pores using low-level electrical pulses, which allows for medicine to be better received by the cell.



This new process is also suited to destroy brain tumors and can potentially prevent patients from suffering through chemotherapy. Irreversible electroporation has been successful in treating more than 6,000 patients suffering from liver, kidney, pancreatic, and prostate cancer.

Revisit the summer 2015 issue of Virginia Tech Magazine at vtmag.vt.edu to read more about Davalos and the university's efforts to fight cancer. ■

STUDY HIGHLIGHTS CONSERVATION NEEDS OF FISH SPECIES RECENTLY DISCOVERED IN SOUTHWEST VIRGINIA

IN 1999, A ROUTINE STUDY FOR A pipeline in Tazewell County, Virginia, led to a surprising discovery. Researchers spotted tiny minnows with a black stripe and yellow fins similar in size and skeletal structure to the Laurel dace, a species native to Tennessee. Further sampling, however, revealed that these minnows were actually a separate species.

Named for the upper Clinch River basin where it was discovered, the Clinch dace has been extensively studied since 2005. The most recent study, conducted by researchers in Virginia Tech's College of Natural Resources and Environment, offers suggestions for further methods of study and conservation efforts.

The study, published in the *Journal of Fish and Wildlife Management*, compiled data collected on the Clinch dace from 70 stream segments in Tazewell and Russell

counties. The fish, which grow to roughly 2 inches in length, are typically found in forested streams. They prefer to nest in gravel depressions built by larger fish like creek chubs and stonerollers, which provide well-oxygenated nests for their eggs to develop.

Currently, the Clinch dace is in the highest tier of the Virginia Department of Game and Inland Fisheries' Tiers of Imperilment for all wildlife species found in the state. ■





HOW 3-D PRINTING IS HELPING A LOCAL 12-YEAR-OLD GIRL, YOUR GOLF GAME, AND THE EXPLORATION OF SPACE

What do fist bumps, customized golf grips, and Kapton have in common? The short answer: additive manufacturing.

Commonly known as 3-D printing, additive manufacturing is used to fabricate complex forms by printing them layer by layer. At Virginia Tech, researchers are using the technology in innovative and compelling ways.

FIST BUMPS

Josie Fraticelli (pictured above with Blake Johnson) is an active 12-year-old who doesn't let anything hold her back—not even the amniotic band syndrome that affected the development of her right hand, causing a lack of formation beyond the knuckles.

Josie's parents, Barbara and Tom Fraticelli, have focused on learning about the defect. Their investigation revealed that some individuals had benefited from prosthetic limbs created using 3-D printers.

Enter Blake Johnson, assistant professor in the Grado Department of

Industrial and Systems Engineering (ISE) and a colleague of Josie's mother.

"When Barb told me about Josie, I knew we could help," Johnson said.

Johnson created an undergraduate research project for ISE students to help them apply their knowledge toward design and fabrication of a 3-D printed prosthetic hand for Josie.

GOLF GRIPS

A Virginia Tech student engineering team that included Eric Gilmer, Andy Cohen, Jacob Fallon (pictured below), and Camden Chatham created a customized 3-D printed golf grip that uniquely conforms to an individual golfer's hands to guide correct placement each time he or she picks up a club.

To create this game-changing golf grip, the team made a clay mold of hands in the correct grip position, scanned the mold, and converted the image to a 3-D computer-aided design model.

The result is a grip that can be slipped onto golf clubs and used as a non-tournament aid for players to help build muscle memory and achieve a consistent, correct grip without the need for a professional trainer.

The Virginia Tech students garnered recognition with their design earning first place in the 2017 Society of Manufacturing Engineers' Digital Manufacturing Challenge.



KAPTON



ERICA CORDER

Virginia Tech researchers created a novel way to 3-D print the type of high-temperature polymeric materials commonly used to insulate spacecraft and satellites from extreme heat and cold.

The material, formally known as Kapton, is difficult to produce in any format other than thin sheets.

Researchers from the College of Engineering and College of Science were able to synthesize the macromolecules, allowing them to remain stable and maintain their thermal properties for processing in 3-D printing. Theoretically, the high-performance polymer now can be used in any shape, size, or structure. Possible future uses are not limited to the aerospace industry.

Read more about 3-D printing at Virginia Tech in the winter 2017 issue of Virginia Tech Engineer at eng.vt.edu/magazine. ■

THINKABIT LAB INSPIRES LEARNING OPPORTUNITIES FOR STUDENTS AND TEACHERS

"THIS WAS BETTER THAN DISNEY

World! Do we get to come back?" a Cedar Point Elementary School student exclaimed after visiting the Qualcomm Thinkabit Lab at Virginia Tech's Northern Virginia Center in Falls Church, Virginia, in April 2017.

Cedar Point Principal Mark Marinoble, a Virginia Tech Class of 1995 graduate, felt the same excitement. Marinoble, who's now enrolled as a Tech doctoral student, was inspired to plan the field trip following his first visit to the lab.

Motivated by the reactions of their students, Marinoble and fourth-grade teacher Adair Solomon met with Thinkabit Lab Director Jim Egenrieder and representatives from Qualcomm Inc. to discuss creating a Thinkabit Lab for their school in Prince William County, Virginia.

"[Qualcomm] gave us a design framework to build the lab—the ideas, the paint colors, everything they do," said Solomon. The ideas were implemented over the summer break.



OLIVIA COLEMAN

The lab was ready when the students returned to school in the fall. Since then, students from every grade level have spent time in the lab.

Egenrieder says Virginia Tech and Qualcomm are opening more and more labs like Cedar Point's all over the state and the Mid-Atlantic.

The Thinkabit Lab in Falls Church is part of a multiyear collaboration between Virginia Tech and Qualcomm led by the Department of Engineering Education and the School of Education. ■



OLIVIA COLEMAN



VIRGINIA TECH RECEIVES \$15.2 MILLION GIFT TO CONSTRUCT STUDENT-ATHLETE PERFORMANCE CENTER

VIRGINIA TECH HAS RECEIVED ITS largest-ever gift to athletics and the single-largest outright gift ever given to the university.

In December 2017, President Tim Sands announced a \$15.2 million donation to the university to help create a state-of-the-art Student-Athlete Performance Center on the Blacksburg campus.

The gift will benefit student-athletes in all 22 intercollegiate sports. It was made by an alumni couple who are Virginia natives.

This visionary and transformational gift will allow for significant expansion and renovation, encompassing the entire fourth floor of the Jamerson Athletic Center. ■

These stories contain images of conceptual renderings.



TECH FOOTBALL STRENGTH AND CONDITIONING AREA TO UNDERGO RENOVATION, EXPANSION

THANKS TO THE GENEROSITY OF a Roanoke, Virginia, couple who are long-term benefactors to many areas of Virginia Tech, plans are now under way to transform the Virginia Tech football strength and conditioning center into a dynamic training area to meet the current and future needs of the program.

This renovation and expansion will nearly double the functional workout space of the facility located in the Merryman Center, increasing the total square footage from approximately 6,900 square feet to more than 12,300 square feet. A completion date of early 2019 is anticipated.

The couple's \$1 million gift commitment continues the strong fundraising momentum of Tech athletics. ■



HOKIESPORTS.COM

For the latest news and information about athletics at Virginia Tech, visit hokiesports.com.

VIRGINIA TECH magazine



Visit us online to read even more stories about your fellow Hokies, find links to events and campus activities, and stay up-to-date on university news.

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ARE YOU READY?

UPDATE YOUR WARDROBE
Your favorite retailers of Hokie apparel have the goods.



HOW TECH TICKS

WASTE NOT

by Travis Williams

VIRGINIA TECH DINING SERVICES IS NO STRANGER TO THE SPOTLIGHT. THE TRADITION OF THE AWARD-WINNING PROGRAM GROWS EACH YEAR AS IT ROUTINELY EARNS TOP-TIER NATIONAL RANKINGS AND HONORS FOR ITS FOOD QUALITY AND SERVICE TO THE UNIVERSITY COMMUNITY.

LESS ILLUMINATED, BUT NO LESS SIGNIFICANT, IS THE DEPARTMENT'S COMMITMENT TO SERVING THE PLANET THROUGH SUSTAINABLE PRACTICES THAT MAKE A DIFFERENCE IN THE KITCHEN, AT THE TABLE, AND LONG AFTER THE MEAL HAS BEEN CONSUMED.

HOME-GROWN HELP

Sustainability efforts at the university begin long before a stovetop is warmed. Currently, just over 13 percent of Dining Services' food is locally and sustainably sourced—grown or produced within 250 miles of Blacksburg, or having attributes such as fair trade or organic certification—with a portion being cultivated just a few miles from campus by Virginia Tech students.

Fifty-four types of crops, featuring multiple varieties of produce, are cultivated at the Dining Services Farm at Kentland Farms. This growing season, the farm produced about 37,000 pounds of food for Virginia Tech Dining Services and harvested around 1,000 pounds of high-value herbs, including 500 pounds of basil.

BETTER CONTAINERS FOR A BETTER EARTH

Once its award-winning food is prepared, Dining Services focuses on a variety of waste minimization initiatives, including recycling and composting.

Since 2012, Dining Services has made strides to shrink its carbon footprint by shifting from plastic foam to-go products to those made of compostable or recyclable material. In 2013, this effort was bolstered with the introduction of the 9x9 Reusable To-Go containers (R2G), each of which is durable enough to be used more than 300 times.

Originally, students had to have a special key tag to use the R2G boxes. That evolved to a special coin and eventually to a user interface that accepts Hokie Passports. Today, students can use their Hokie Passports like library cards to check out up to three containers at a time. They receive email notifications upon checking out containers, as well as returning them to one of the OZZI collection machines located at West End Market, Owens Food Court, or Turner Place.

The new system enables Dining Services to track usage. About 10,000 containers were checked out between late August and early October of 2017.



OLIVIA COLEMAN



PHOTOS BY RAY MEESE



NEVER WASTE AN OPPORTUNITY TO SERVE

Since 2009, Dining Services has promoted composting waste, such as carrot tops, vegetable peels, or fruit scraps. The effort has diverted around 5 million pounds of food waste from landfills.

In 2015, a grant initiated a start-up chapter of the Campus Kitchens Project, a national organization that promotes students' efforts to combat food waste and fight hunger.

From its inception through mid-October 2017, the campus kitchen at Virginia Tech, a VT Engage program, diverted a total of 53,395 pounds of food to those in need. A total of 380 student, staff, and faculty volunteers committed more than 8,900 hours of service.

This year for the first time the group also teamed up with the New River Valley Glean Team, retrieving about 800 pounds of apples for those in need. ■

DELIVERIES

2015-2017



53,395
pounds of food



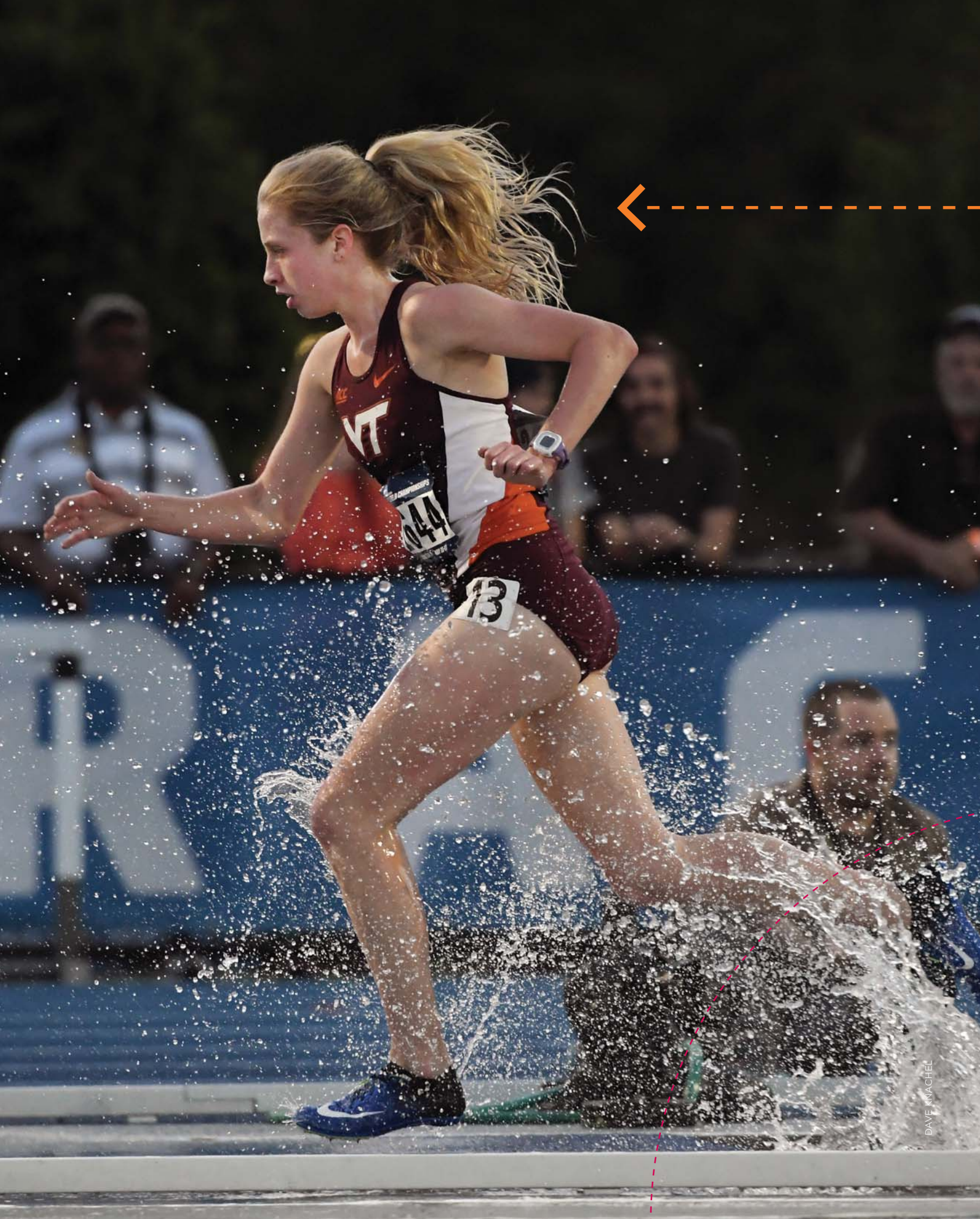
8,900
hours of service



380
volunteers



800
pounds of apples



CHASING STEEPLES

by Allysah Fox

SEVEN-AND-A-HALF LAPS, 28 HURDLES, seven water jumps, and one all-out sprint to the finish. This is the steeplechase—a 3,000-meter track event meant for those bred with true grit.

Collegiate competitors are first-timers to the event, which is not available to most younger athletes. Such was the case for Virginia Tech sophomore Sarah Edwards, a Massachusetts native majoring in interior design. “My coaches talked to me about [the steeplechase] on my first official visit before I even committed to Virginia Tech,” she said.

As a freshman, Edwards began training for the event in earnest. In her steeplechase debut, after just two months of practice, she finished second.

Seven races later, Edwards wasn’t just winning; she was breaking records. In 2017, she posted the third-fastest time ever by an American 20 years old or younger. Edwards also raised the bar at Virginia Tech with a time of 9:52.89 minutes. At the ACC Championships, USA Junior Outdoor Championships, and the Junior Pan American Games in Peru, she took gold.

As she begins the 2018 season, Edwards’ goals include a repeat win at the ACC Championships and a return to the national stage. “I really want to put up a fight to win the title,” Edwards said.

When it comes to beating the odds, Edwards is already a proven champion. At the age of 14, she was diagnosed with pilocytic astrocytoma, a rare, but treatable, brain tumor. The diagnosis forced her to mature earlier than her friends. “It helped me because it made

me care about things that mean so much more,” said Edwards.

Driven to prioritize what really mattered to her, Edwards turned her focus to college and running. “Most successful people in the world have those coming-about stories,” Edwards said. “Maybe this will be mine.”

Today, Edwards confesses her biggest challenge is neither cancer nor winning. It’s being prepared before she approaches the starting line. “I can’t find my water bottle, or my hair tie broke, or I’ve lost a spike,” said Edwards. “I guess that’s my pre-race tradition, and it freaks me out, but it also gives me this huge adrenaline rush.”

For Edwards, these are small obstacles to hurdle in the big arena. Luckily, she’s on the right track. ■

Allysah Fox, a Virginia Tech senior, is an intern with Virginia Tech Magazine.



SETTING THE PACE

Visit vtmag.vt.edu to view video highlights from Sarah Edwards’ 2017 steeplechase season.



WHAT'S IN IT?



THE CUBE:

by Richard Lovegrove

A SPACE WHERE SCIENCE AND SENSES COLLIDE

RAY MEESE

VIRTUAL AND AUGMENTED REALITY technologies are changing the research landscape. Scientists can now be transported to any place in the universe, physically explore massive sets of data, visualize and interact with spatial structures of molecules, and walk through a building before it has been constructed.

The Cube, a multidisciplinary, collaborative research environment located in the Moss Arts Center, accomplishes this and more with the Cyclorama, a massive 360-degree cylindrical projection screen suspended from the ceiling. Measuring roughly 32 feet in diameter and 16 feet tall, the unique screen, installed by the Institute for Creativity, Arts, and Technology (ICAT) in 2016, provides an immersive stereoscopic experience for up to 60 people.

Cyclorama capabilities have been showcased during the Virginia Tech Science

Festival and were featured during an intensive two-week winter session course for students.

Before the Cyclorama, immersive-environment 3-D experiences in the Cube required individual virtual reality headsets and backpack laptops. Now, inexpensive 3-D glasses, which alternate shuttering the left and right eyes 60 times per second, enable numerous viewers to watch the stereoscopic video at the same time.

"This is immersive environment on a large scale," said Tanner Upthegrove, media engineer for ICAT.

Because the Cyclorama can also use the Cube's existing 3-D spatial audio and ultrasonic systems, a 149-speaker array that can place sounds at specific spots in the room, its custom screen needed to be acoustically transparent.

To project, the Cyclorama relies on four

edge-blended OmniFocus 30260 lensed Digital Projection LaserLITE projectors (fisheye), each with 1920×1200 resolution at 11,000 lumens. By comparison, a quality home theater projector runs at around 1,000 lumens.

ICAT staff can drive content from their own data visualization platforms to the system. The shape of the Cyclorama's screens allows for delivery of warped and blended, 120Hz stereo movies at 4K resolution per screen from a single Windows-based machine, which is unique in the industry.

A custom rack-mount computer, including camera calibration for automated alignment and blending, helps match the video to the curved screens. The computer transports eight HD video signals to the four projectors over the Cube's Cat6 Ethernet infrastructure, two displays per projector.



LOGAN WALLACE

THE SOUND OF SCIENCE

A music professor and an engineering professor at Virginia Tech are working together to create a new way to look at data by turning it into sound.

Using a motion capture system and the immersive sound system in the Moss Art Center's Cube, participants will be able to navigate sonified data using a gesture-driven interface similar to the one that was depicted in the science fiction film "Minority Report."

The National Science Foundation (NSF) is funding this first-ever collaboration between the university's School of Performing Arts and College of Engineering, combining elements of music, geospatial science, computer science, and human-computer interaction. The research project will focus on the earth's upper atmospheric system, which features physical variables that are spatially and temporally rich.

"It makes sense that we would want to go beyond two-dimensional graphical models of information and make new discoveries using senses other than our eyes," said Ivica Ico Bukvic, associate professor of composition and multimedia, who is working with Greg Earle, professor of electrical and computer engineering on the special project. ■



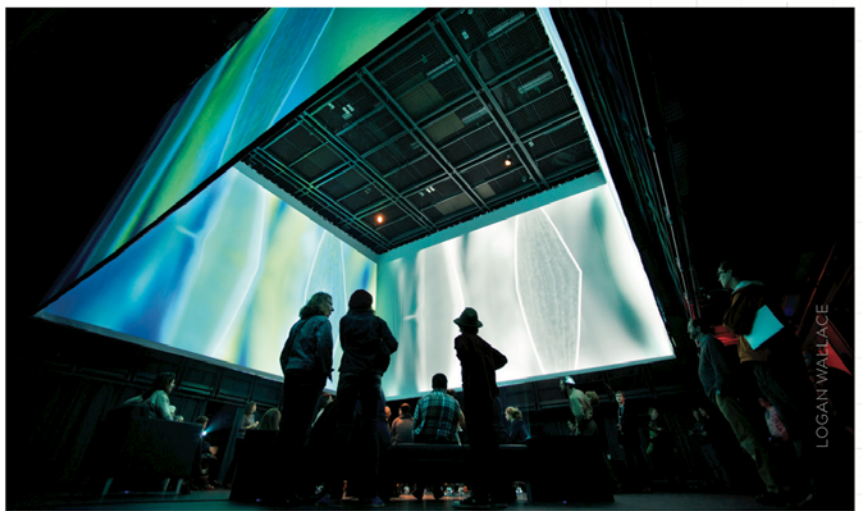
RAYNEESE

TECHNOLOGICALLY ENHANCED: (Opposite page) Students from the Honors College demonstrated their winter semester projects inside the Cyclo-rama in the Cube. (Above) Ami Behzad, a graduate student studying creative technologies, works on a project in the Cube. (At left) Kaelum Hasler, a freshman industrial design student, prepares a presentation.



TUNE IN

To learn more about the research studies and other projects taking place in the Cube, go to vtmag.vt.edu.



LOGAN WALLACE

LOGY

a subject
of study

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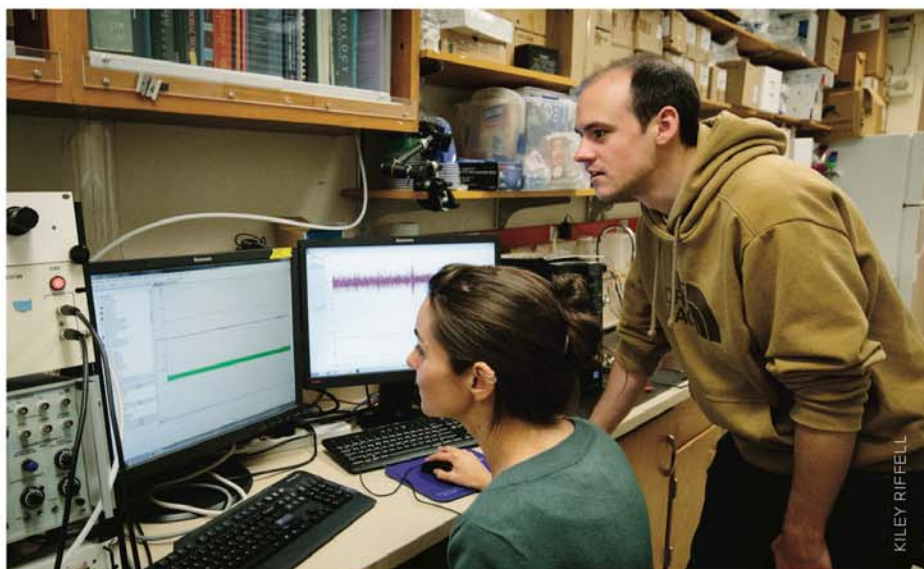
MOSQUITOES

by Lindsay Key

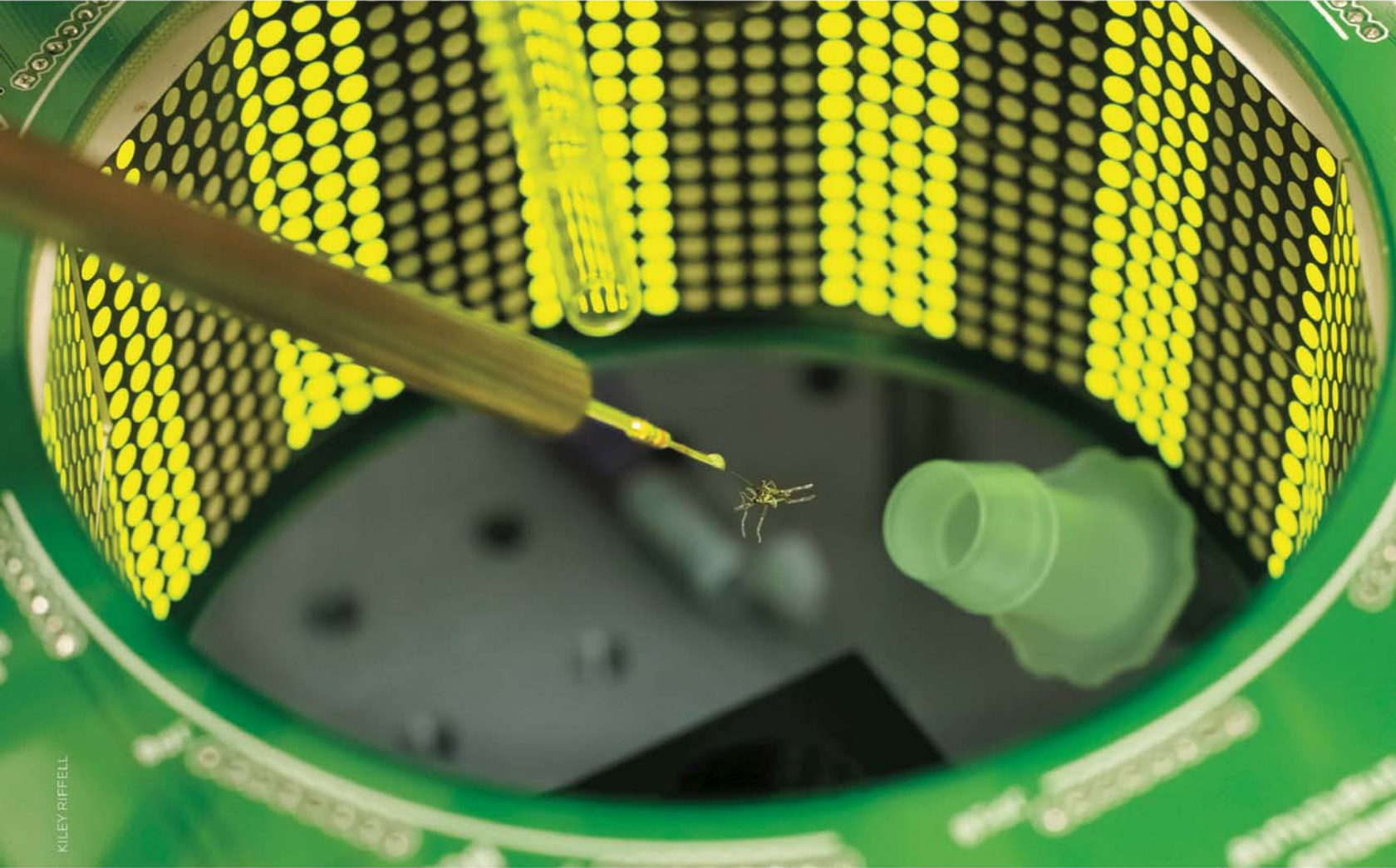
YOUR GRANDMOTHER'S INSISTENCE THAT YOU GET MORE BUG BITES BECAUSE you're "sweeter" may not be that far-fetched, according to pioneering research from Virginia Tech scientists.

The study, published Jan. 25 in *Current Biology*, demonstrates that mosquitoes can learn and remember the smells of hosts, and points to dopamine as a key mediator of this process. The project also proved that a mosquito's preference can shift if an odor once deemed delicious-smelling becomes associated with something unpleasant. Hosts who swat the insects or perform other defensive behaviors may be abandoned, no matter how sweet.

Clément Vinauger, an assistant professor of biochemistry in the College of Agriculture and Life Sciences, and Chloé Lahondère, a research assistant professor in the Department of Biochemistry, found that mosquitoes exhibit a trait known as aversive learning by training female *Aedes aegypti* mosquitoes to associate specific odors with unpleasant shocks and vibrations.



A NOSE FOR DETAILS: Chloé Lahondère and Clément Vinauger are new researchers in the Department of Biochemistry. Their labs are located in Engel and Fralin halls, and they are affiliated with the Fralin Life Science Institute.



KILEY RIFFELL

TAKING FLIGHT: Researchers used an insect flight simulator along with CRISPR gene editing and RNAi techniques to determine that dopamine is a key mediator of aversive learning in mosquitoes.

Twenty-four hours after the initial training, the same mosquitoes were assessed in a Y-maze olfactometer. The insects had to fly upwind and choose between the once-preferred human body odor and a control scent. The mosquitoes avoided the human body odor, suggesting that they had been successfully trained.

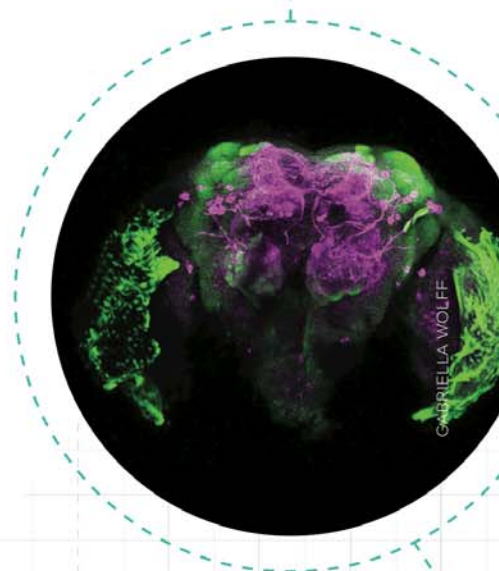
The scientists were also able to identify that dopamine is a key mediator of aversive learning in mosquitoes. To target the specific parts of the brain involved in olfactory integration, researchers fit mosquitoes with helmets that allowed for brain activity recordings and observations. Then, the scientists were able to analyze how the insects reacted when exposed to various smells. The findings demonstrated that the neural activity in the brain region where olfactory information is processed was

modulated by dopamine in such a way that odors were easier to discriminate, and potentially learn, by the mosquitoes.

“Understanding these mechanisms of mosquito learning and preferences may provide new tools for mosquito control,” said Vinauger.

Aedes aegypti mosquitoes are vectors for Zika fever, dengue fever, chikungunya, and yellow fever viruses, and can be found in tropical and subtropical regions throughout the world. Vinauger and Lahondère are both affiliated with the university’s Fralin Life Science Institute, which supports vector-borne disease research as a major focus area. ■

Lindsay Key is the communications director for the Fralin Life Science Institute.



GABRIELLA WOLFF

BRAINIAC: An image of a mosquito brain highlights the presence of dopamine in regions involved with the sense of smell.



by Travis Williams

HONOR, ETCHED IN STONE

THE VIRGINIA TECH COMMUNITY gathered at the Pylons on Nov. 10, 2017, for a series of events in recognition of Veterans Day. The day included a special ceremony organized by the Corps of Cadets in cooperation with the Alumni Association to add a name to the Honor pylon.

"It is at moments like these that we also take time to reflect on the origins and meanings of this university," said Maj. Gen. Randal D. Fullhart, commandant of the corps. "While we are a modern-day, world-class research institute, Virginia Tech is, at its heart, a land-grant university whose roots in the military tradition form the basis of its motto, *Ut Prosim*, (That I May Serve). Service is what we honor today."



SERVICE AND SACRIFICE: The name of Jim Doss was engraved on the Honor pylon. (Top) the Virginia Tech Corps of Cadets honored veterans during two special ceremonies on Veterans Day.



Moments later, the name of the late Luther James “Jim” Doss Jr. of the Class of 1970 was unveiled on the Honor pylon.

Doss was killed in action on April 30, 1970, in the province of Binh Dinh, South Vietnam while trying to rescue eight soldiers who were surrounded by attacking forces. Last spring, the digitization of a fraternity scrapbook revealed that his name had never been added to the Pylons. His was the 431st name inscribed.

Prior to the unveiling, Doss’ son, David Doss, spoke to the university community on behalf of his family. “You haven’t only carved in these stones the name of my father,” David Doss said, holding back tears, “but you’ve etched in our hearts gratitude that could not be described with words.”

The Honor pylon is inscribed with the names of Virginia Tech students and graduates who have died defending the nation’s freedoms since World War I. At the War Memorial’s center, the cenotaph, an empty monument erected to honor a group of people whose remains are consecrated elsewhere, displays the names of Virginia Tech’s seven Medal of Honor recipients. ■

FAMILY AND FRIENDS: (Top left) Doss’s family members who attended the Pylon ceremony included widow Barbara Doss Rookstool, son David Doss and his wife April, and their children, Summer and James. (At left) The Virginia Tech community gathered at the War Memorial Pylons on Nov. 10 for Veterans Day. ┐



SERVICE AND SACRIFICE

Read more about Jim Doss, view a gallery of images from the 2017 Veterans Day event, and learn more about the Pylons at vtmag.vt.edu.



LOGAN WALLACE

DRESSING FOR SUCCESS

by Kelly Shannon

PRIOR TO COMING TO VIRGINIA TECH, BLYTHE BOYD scheduled as many job interviews as she could just to get experience and learn more about being professional. She did not always get an offer, but she walked away from each interview with new piece of knowledge.

A sophomore from Virginia Beach, Virginia, Boyd noticed that many interviewees did not seem to understand the importance of professional dress and behavior. So when she learned that Career and Professional Development was looking for an intern to take the lead on the Virginia Tech Career Outfitters program, which helps provide students with new or gently used professional clothing and accessories, she applied immediately.

"I love event planning, organizing, and coordinating things, but being involved with a program that provides professional wear to students who don't have access to it really spoke to me," said Boyd.

Boyd, a fashion merchandising and design major in the College of Liberal Arts and Human Sciences, knows that dressing professionally boosts confidence. "I am helping students feel confident because of what they are wearing," said Boyd. "And I hope their confidence shines through in their actions and behavior, too."



Career Outfitters, an annual service project that began in 2013, provides free-of-charge shopping for students to obtain new and gently used professional attire. The career closet is replenished throughout the year with donations from alumni, faculty, staff, and local business professionals. There are hundreds of items in the closet: suits, blazers, sport coats, dress pants, dress shirts, blouses, skirts, dresses, and accessories such as jewelry, ties, and belts.

Boyd helps sort and organize items according to type and size.

“It is really exciting to look at all the stuff we have in the closet and be able to put together a good outfit that doesn’t make someone feel like they are just blending in with everyone else with the black suit and white shirt,” said Boyd. “Knowing how to present yourself in a professional manner includes being aware of what is appropriate to wear to a job interview and how to behave.”

Donations of new and gently used professional wear are accepted 8 a.m. to 5 p.m. Monday through Friday at the Smith Career Center. For large donations, call 540-231-6241. All donations are tax deductible. ■

Kelly Shannon is the marketing manager for Career and Professional Development.

“

I AM HELPING STUDENTS FEEL CONFIDENT BECAUSE OF WHAT THEY ARE WEARING, **AND I HOPE THEIR CONFIDENCE SHINES THROUGH IN THEIR ACTIONS AND BEHAVIOR, TOO.”**

sophomore Blythe Boyd (pictured at left)





WHAT IS DIGITAL HYGEINE, AND HOW DOES IT AFFECT INFORMATION AND DEVICES?

by Mason Adams

1 CALIBRATE THE LEVEL OF SECURITY YOU NEED.

"What you use for banking will be different from submitting an academic article to an online journal," said Jardine. "The potential exposure, potential problems, are different."

2 UPDATE SOFTWARE FREQUENTLY.

Updates often contain security patches for newly discovered vulnerabilities. Run updates as soon as they become available, Jardine said.

3 IF YOU'RE NOT USING A PROGRAM OR APP, DON'T LEAVE IT JUST SITTING THERE.

"A lot of people install a whole host of programs they use just once," Jardine said. Those unused programs are a source of potential attacks; deleting them decreases vulnerability.

4 BE SMART ABOUT ANTI- VIRUS SOFTWARE.

Antivirus software is useful and effective, but make sure that the product lines up with your hardware, operating system, and browser. Incompatibilities can create holes. Also, Jardine said, don't assume that because you have antivirus protection you can be flippant in your online behavior.

Just the mention of germs makes most of us a little squeamish. We take personal hygiene and cleanliness seriously. It's a fundamental part of our daily routines.

But what about those annoying digital bugs that could lead to hacking malware and ID theft?

Virginia Tech cybersecurity expert Eric Jardine suggests that we should develop digital habits that protect our devices and our information, in the same way that handwashing helps prevent the flu.

Jardine, an assistant professor of political science at Virginia Tech and a fellow at the Centre for International Governance Innovation, said that "digital hygiene" consists of habits that can be incorporated into a regular routine to secure computers, smartphones, and other devices.

"A healthy person isn't someone who never gets sick; it's someone who can get sick and bounce back," Jardine said. "That's the way you want to be thinking about security. It's not, 'Does the system ever get compromised?' It's, 'When it does get compromised, is it catastrophic?'"



5 TAKE CARE WITH PASSWORDS.

Don't use the same password across multiple accounts. A password manager can help, or even a system of handwritten notes spread across multiple post-its. Just don't stash them all in one place, either online or physically.

6 DON'T CLICK ON EMAILED LINKS OR ATTACHMENTS UNLESS YOU CAN CONFIRM THE SOURCE.

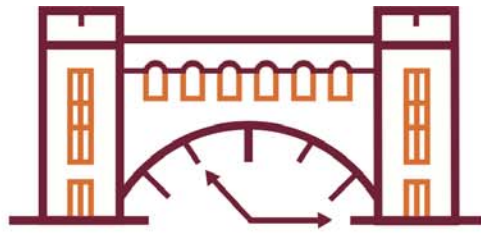
Err on the side of caution. If an email purports to be from a bank or other website where you have an account, sign in through your browser, not through an email link.

7 DON'T OPEN RANDOM FLASH DRIVES.

Plugging in an unknown flash drive is as dangerous as clicking links in an unknown email.

8 BACK UP YOUR DATA FREQUENTLY.

If you're doing regular back-ups, ransomware is more of an inconvenience than a disaster. "You may lose a couple of days of work, but you won't have lost everything," Jardine said. "You can wipe the system and reinstall applications and files. How often you back everything up, and whether you use a cloud service or hard drive, is one of those choices that people make based on how much security, how much usability they want." ■



GIVING DAY VIRGINIA TECH

CALLING ALL HOKIES!

Spring forward twice in 2018.

On March 12, turn clocks ahead.

ON MARCH 20, GIVE BACK.

WHAT IS A **GIVING DAY?**

Giving days are 24-HOUR online fundraising challenges that bring communities together to raise money and awareness of the impact of philanthropy. Our Giving Day theme is **SPRING FORWARD.**

HOW DOES IT WORK?

Hokies from all over make online gifts between noon on March 20 and noon on March 21, Blacksburg time. Participation challenges, matching opportunities, and other surprises will add to the excitement as the Virginia Tech community comes together in support of our university.

HOW DOES MY GIFT HELP?

Your gift of any amount directly helps the college or program you choose. The fact that you gave will inspire other Hokies to join you in making this first Giving Day a success. Your participation shows that you love Virginia Tech and have taken to heart our motto: *Ut Prosim* (That I May Serve).

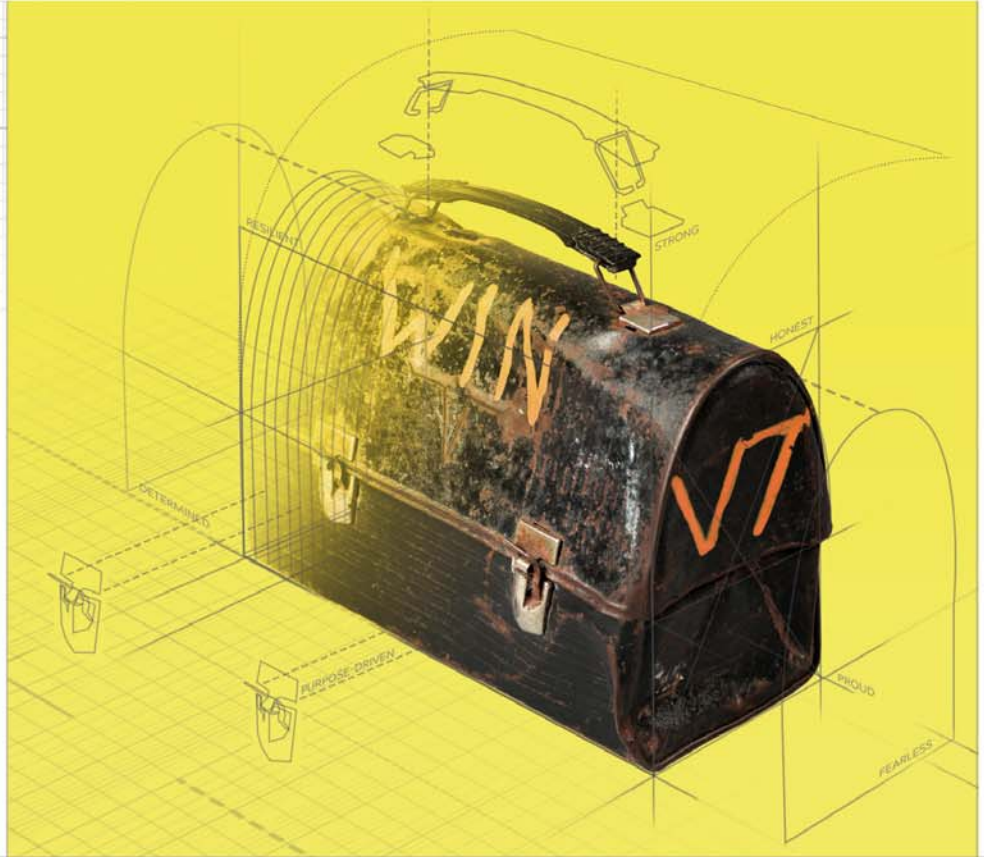
**MARCH
20**

HOW CAN I SPREAD THE WORD?

Please tell your friends about Giving Day so that they can participate, too. Share news of your plans, and your gift, on social media with the hashtag #VTGivingDay.

**24
HOURS**

VISIT **VT.EDU/GIVINGDAY** TO GIVE.



HOKIE

BUILT

FOR A BETTER TOMORROW

by Travis Williams

「 BUILDERS BREATHE LIFE INTO A BLUEPRINT.

THEY ARE DIVERSELY SKILLED INDIVIDUALS,
UNIFIED IN PURPOSE, WHO MOVE A VISION
FROM IDEA TO PLAN, THEN CONSTRUCT
ITS REALITY.

」

Virginia Tech's bold plan to be a force for positive change throughout the world builds on the university's time-honored tradition of service and its living motto, *Ut Prosim*, (That I May Serve). It's a blueprint contingent on people—builders committed to bringing their unique expertise to the table, expanding their focus to all fields, and jointly answering the call to serve.

Virginia Tech is renowned for its roll-up-your-sleeves brand of hard work, resilient commitment, and can-do attitude. True to the blue-collar heritage of Southwest Virginia, these distinguishing characteristics set Hokies apart. For Virginia Tech football players, this distinctive brand of moxie is uniquely symbolized by the famed lunch pail, reminding all Hokies—from the research lab or the boardroom to the athletic field—to focus on the WIN (what's important now.)

More than 13,000 employees, more than 34,000 enrolled students, and nearly 250,000 living alumni comprise the Hokie Nation. And that doesn't include the numerous friends, former faculty and staff, or family members who are Hokies at heart. Regardless of their affiliation, most are eager to continue the Tech legacy of hard work and service, transforming the role of higher education and making a positive difference in the world.

WELL CONNECTED: Technology linked audiences in Blacksburg, Roanoke, and the National Capital Region for President Sands' 2017 State of the University Address.



President Tim Sands has urged campus thought-leaders, faculty, staff, and friends to reimagine the role of a land-grant university. In 2015, he introduced the visioning process now known as Beyond Boundaries. The concept, which you can read more about at president.vt.edu, tears down the past constraints associated with higher education to establish a new standard for how universities impact the world.

Cyril Clarke, interim executive vice president and provost, is helping to guide the efforts. "There are a number of very exciting and important initiatives being advanced at Virginia Tech, and we have an opportunity to develop them into significant areas of distinction," said Clarke.

Three pillars anchor Virginia Tech's vision—research, culture, and learning. Across the Blacksburg campus and beyond, the people who exemplify these pillars are shaping the future. Here's a glimpse at how a few of them are helping build the 21st-century land-grant by reaching across disciplines and around the world.

A FOUNDATION FOR TACKLING REAL PROBLEMS

At Virginia Tech, research has the power to turn a dedicated scientist into an extraordinary superhero.

Such was the case for **John Jelesko**, associate professor of plant pathology, physiology, and weed science, whose work studying poison ivy served as the inspiration for an evil weed-fighting character in the online comic, *Partners 5*. Although Jelesko never dons a literal cape and can't leap tall buildings, he does work to make the world a little safer and a lot less itchy.

In the only research facility in the world dedicated entirely to the study of poison ivy, Jelesko is getting to know the plant on an intensely personal level—investigating where it lives and what environmental factors allow it to thrive.

Teaming up with fellow researchers whose expertise was vastly different from his own greatly accelerated his work combatting the evil weed. "When you work with others who are trained in another discipline, together you can work in a way that is much larger than you alone," Jelesko said.

Today, a smartphone app known as Investigating Toxicodendron Change and Habitat for Years (ITCHY), which was created from these collaborations, allows for crowdsourcing of hundreds of locations of poison ivy, replacing the need for duplicated field research. Analyzing this data is also expedited thanks to partnerships with university statisticians.

Such collaboration strengthens the project, but, according to Jelesko, it also benefits the researcher.

"It allows you to perhaps think of new ideas that you wouldn't have if you just stayed stuck in your discipline," he said. "For example, when I work with ecologists, I actually start thinking and learning about ecology more than I would from my traditional discipline. So, it greatly expands both my intellectual understanding and my curiosity."

The opportunity to create such partnerships first lured **Albert Pan** to Virginia Tech last summer. A series of open doors convinced him that he made the right move.

"I was really impressed to hear about the many collaborations across departments and disciplines," said Pan, who is now an associate professor and Commonwealth Center for Innovative Technology Eminent Research Scholar in the Development and Translational Neurobiology Center at the Virginia Tech Carilion Research Institute in Roanoke, Virginia.

Pan's first encounters with Hokies made it evident this university was the type of friendly, open culture in which he would thrive. "Apparently, opening the door for others at Tech is a big thing," Pan said.

It's in this environment Pan intends to make a big splash by studying a tiny subject—zebrafish brains.

Smaller than most pinky fingers, the translucent zebrafish offers researchers a perfect view of the developing brain, producing insights that can be used to learn more about the development of psychiatric disorders in humans.

While these discoveries help us understand more about how things work and may enable us to develop solutions for problems, Pan believes the value of research extends far beyond results in a lab.

"Research is a great way to communicate with the local and global community and be a part of a worldwide network in science or technology," Pan said. In fact, his zebrafish found a role as scientific ambassadors when the lab took part in a science, technology, engineering, art, and mathematics event for about 800 elementary school children.

Pan suggested that research is also the perfect training ground for our brains. "How do we adapt to a world where information and technology are advancing exponentially? Rigorous research experience helps us become active learners, problem-solvers, and more adept at adopting technology."

That passion for recognizing the untapped potential of the research process is echoed by **Ralph Buehler**, associate professor of urban affairs and planning in the National Capital Region.

"In many ways, research is the main engine that powers the university, because knowledge gained through research contributes to teaching and educating graduates with cutting-edge abilities, motivation, and knowledge," Buehler said.

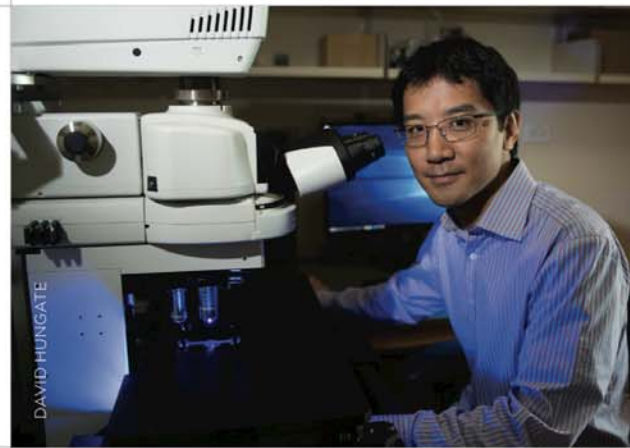
For Buehler, research also literally fuels the ease with which people get around town. His work encompasses government transportation policy as well as the impact of transportation access on a person's health.

"Movement for daily travel is key to public health. As one health researcher recently said at a conference, 'Sitting is the new smoking,'" Buehler said.



AMY LOEFFLER

DIALED UP: A smartphone app allows John Jelesko to crowdsource data from numerous locations to aid his poison ivy research. (Below) Albert Pan, associate professor, studies tiny zebrafish.



DAVID HUNGATE

“RESEARCH IS A GREAT WAY TO COMMUNICATE WITH THE LOCAL AND GLOBAL COMMUNITY AND BE A PART OF A WORLDWIDE NETWORK IN SCIENCE OR TECHNOLOGY.”

ALBERT PAN
ASSOCIATE PROFESSOR



STAGING RESEARCH: (Above) Ralph Buehler's transportation research includes a partnership with Washington, D.C.-based Capital Bikeshare. (Below) Virginia Tech's Center for Communicating Science encourages creative strategies for sharing information so that it can be understood across broad audiences.



Buehler routinely provides his students the opportunity to explore these topics via studio classes designed to solve real-world problems for actual clients. Four such classes have targeted bicycling—three working in tandem with the Washington, D.C.-based Capital Bikeshare.

Buehler suggests that to effectively answer the really big questions, it is essential to consider issues from varying perspectives.

"Transport is mostly just a means to an end—participating in an activity that cannot be reached online or is not at the place where the individual is. However, transport demand is also shaped by other trends in society and at the same time, is closely linked to quality of life, traffic safety, local and global pollution, residential segregation, et cetera," Buehler said. "Thus, it is crucial to look beyond the narrow disciplinary silo of transport planning."

SHORING CONNECTIONS

Finding a connection between tree-killing beetles from Asia and the 1979 film "Alien" earned one Virginia Tech graduate student \$500 during the university's first Nutshell Games.

During the event, participants were charged with condensing descriptions of their research into captivating 90-second talks. Held to celebrate the opening of the Center for Communicating Science, the Nutshell Games illustrated the power of moving beyond a translation of jargon toward more effective communication.

For **Patty Raun**, who stepped away from her role leading the School of Performing Arts to serve as the center's founding director, scientific communication is a stage where researchers can overcome the barriers that limit understanding and stymie potential.

"I have taken my fire for the transformational power of theater into new and unexpected places," Raun said. "I am teaching people of all backgrounds and all interests a capacity for learning through experience—applying theory to real-life circumstances—and building skills of empathy, connection, and communication."

The center offers events and workshops aimed at building those skills within areas of academia where they have not traditionally been emphasized or cultivated. "We want to help specialists discover the excitement and adventure of transcending disciplinary boundaries and the satisfaction of climbing over those walls," Raun said.

With so much of Virginia Tech's research focused on solving the world's most pressing issues, communication is especially important. A solution is good only if it can be understood.

But, what happens when scientific advances collide with societal mores? What does it mean to be human in the age of smart houses, smart cars, and intelligent machines?

Sylvester Johnson, who will direct Virginia Tech's developing Center for the Humanities, said such discussions, as well as current debates addressing social equity and disparity on a global scale, are at the heart of much of the new center's work.

"Right now, technology is far outpacing guidelines and policy. This is an urgent opportunity for the humanities to take leadership," Johnson said. "I envision a new humanities center at Virginia Tech that draws on the university's unique strengths in technology by organizing an artificial intelligence ethics group that can lead the state and this region in creating inclusive, shared governance of the technology that will soon produce technologically enhanced humans and more powerful intelligent machine applications."

Johnson believes that a university-wide collaborative effort will yield the best and most expedited results and plans to create an advisory group made up of faculty from within every college and department at Virginia Tech.

"I want the humanities center to foster a culture of humanities leadership through transdisciplinary boldness," Johnson said. "We can build the teams we need to create a better world for experiencing our humanity without being limited or constrained by the field in which we earned a degree or by our departmental affiliation."

A well-rounded approach to problem-solving requires a table big enough to include a population of thinkers as diverse as our world. But an invitation to sit is not enough; those invited must also feel ownership.

Yolanda Avent knows what it takes for a student to feel genuinely connected to the university. A 1998 graduate, Avent felt alienated as a black woman during her freshman year and considered transferring—until she discovered the Black Cultural Center.

"It was a big part of my ability to survive and thrive here," Avent said.

In October, Avent was named the senior director of the Culture and Community Centers.

“RIGHT NOW, TECHNOLOGY IS FAR OUTPACING GUIDELINES AND POLICY. THIS IS AN URGENT OPPORTUNITY FOR THE HUMANITIES TO TAKE LEADERSHIP.”

SYLVESTER JOHNSON
PROFESSOR



THE HUMAN CONNECTION: Sylvester Johnson will direct the Center for Humanities. (Below) Students enjoy the sense of community in the Black Cultural Center.





CHRISTINA FRANUSICH

PAST, PRESENT, AND FUTURE: (Above) Yolanda Avent '98 is the first director of the Cultural and Community Centers at Virginia Tech. (Below) Maj. Gen. Randal D. Fullhart leads the Virginia Tech Corps of Cadets.



LOGAN WALLACE

In recent years, under the guidance of Student Affairs, the number of centers has expanded to six, including the Black Cultural Center, Asian Cultural Engagement Center, American Indian and Indigenous Community Center, El Centro (a Hispanic and Latino center), the LGBTQ+ Resource Center, and the Intercultural Engagement Center.

Each center consists of a room or several rooms equipped with televisions, sofas, chairs, tables, and bookshelves. But they are more than locations to study or hang out, they are hubs that reflect cultural affirmation, educational connections and community building.

"We are preparing students to become more socially conscious and to critically think about how education and technology can assist in alleviating some of the social ills that currently exist for marginalized populations," Avent said. "Oftentimes, that starts with helping students simply see themselves as community members who belong here and not as imposters."

While the centers represent recent advancements at Virginia Tech, the spirit of community behind them is not new. Nowhere is the link between the past, present, and future more evident than in the university's Corps of Cadets.

"Today's corps is far more than just a quaint reminder of the past, but actually lives and personifies the goals of Beyond Boundaries, the spirit of service that is embodied in the university's motto, *Ut Prosim* (That I May Serve), and the mission of a land-grant institution," said corps commandant Maj. Gen. Randal D. Fullhart.

The spirit of service that leads cadets to give up some of the creature comforts their fellow students enjoy, such as sleeping late or living off campus, affords them a uniquely intense and diversified learning experience.

Annually, some cadets travel all over the world, including to places like Central America where they work with indigenous people, assist with service projects, and meet with ambassadors and embassy staff. Support from donors also allows for a select number who complete a semester-long special studies course to travel to France. They continue their classes about the leadership lessons of D-Day on the Normandy Beach before visiting Paris, where they meet with embassy officials.

The rigors and experiences of the corps are welcomed by cadets, the majority of whom intend to pursue a life of military service. Those who choose the Citizen-Leader Track and not commission, value the discipline and leadership skills they gain. As a result, they are highly sought after by public and private organizations.

"When it comes to Beyond Boundaries, that's where our cadets already are and will be leading. They will do so as long as there is a well-supported corps that continues to live out the precepts and be a symbol of what *Ut Prosim* is all about," Fullhart said.

A TRANSFORMATIVE RENOVATION

Richard Blythe traveled to Blacksburg from the Land Down Under with the aim of turning student learning at Virginia Tech upside down.

Since the award-winning architect and educator took over as dean of the College of Architecture and Urban Studies in October 2017, he's been working to advance the college by infusing student learning with big projects that solve real-world problems.

"We want to use the college as a change agent for societal, economic, and environmental good," he said. "That starts with project-based partnerships to tackle the most pressing issues of our time: climate change, overpopulation, economic and social inequality, and political instability, for example."

Freshmen would sign up for a project, rather than adhering to a traditional discipline or curriculum, and stick with it through graduation. Along the way, they would rotate through roles and responsibilities, work alongside leading international industry partners and experts, and cultivate the experience needed to move directly into the workforce.

"Instead of going through different subjects, you'll perform different roles on the project," he said. He believes this structure would allow students to understand the types of workplace relationships necessary to cultivate achievements.

Blythe is also developing a new practice-based stream in the Ph.D. program that is unlike others in the nation. It will be rooted in the Washington-Alexandria Architecture Center. "It situates knowledge and knowledge production outside of the university," he said. "The real question now isn't so much 'What is the fact,' it's 'What are you going to do with the fact.'"

Shifting away from the norm is the norm for **Julia M. Ross**, who joined the university in July 2017. The first female dean of the College of Engineering, Ross feels that challenging some of the restrictive traditions in higher education is the key to growing the best 21st-century problem-solvers.

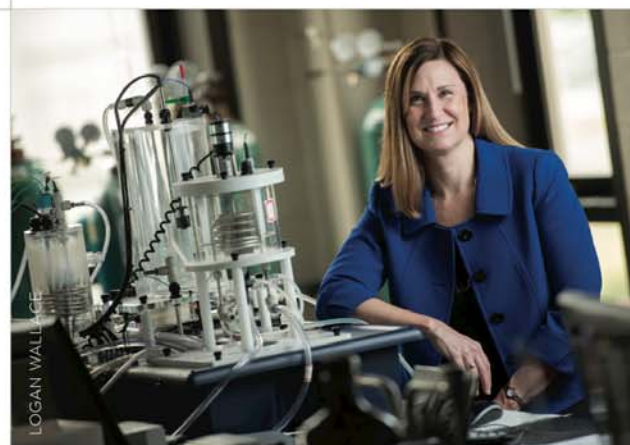
"We need every bright, smart person out there, all with different life experiences, bringing all those different perspectives to the problem," Ross said.

Ross was drawn to Virginia Tech by initiatives, such as the Clarke Scholars, that are aimed at increasing student diversity, and she believes that a diverse faculty is key to recruiting underrepresented students. She is also committed to ensuring that once those students arrive, the learning experience is one that empowers them to grow toward success rather than simply survive the program.

"I believe in excellence and high quality and rigor, but I do not believe in reaching excellence through exclusivity," Ross said. "When you have that kind of attitude, sometimes you weed out and exclude people who are very capable."



LEADING THE WAY: (Above) Richard Blythe, dean of the College of Architecture and Urban Studies, is committed to opportunities that teach through experience. (Below) Julia Ross, the first female dean of the College of Engineering, understands the importance of different perspectives.



**“ I BELIEVE IN
EXCELLENCE AND HIGH
QUALITY AND RIGOR,
BUT I DO NOT BELIEVE IN
REACHING EXCELLENCE
THROUGH EXCLUSIVITY.”**

JULIA M. ROSS
DEAN OF THE COLLEGE OF ENGINEERING



WORLD-CLASS: (Above) Professor Ozzie Abaye encourages students to pursue educational experiences that expand cultural understanding by visiting places like Ecuador. (Below) Ella Rak '17 is a Peace Corps volunteer serving in Cameroon, Africa.



COURTESY ELLA RAK

Some students find their passions during a classroom lecture or in a lab in Blacksburg. But that discovery could even happen under a giant kapok tree in the Ecuadorian rainforest.

"It was there, as a Quechuan guide spoke of how deforestation has changed the way his family survives in the jungle, that [one of my students] fully appreciated why she flew south of the equator this summer to study food security," said Ozzie Abaye, recalling one student's "aha" moment.

Such empowering experiences drive Abaye, a professor of crop and soil environmental sciences, to organize international programs for students. "I strongly believe that students must be exposed to an environment that is different from their own," Abaye said. "Faculty must provide occasions that open opportunities for students to cast their nets wide."

In places like Ecuador, Senegal, and South Africa, students encounter the problems associated with food insecurity firsthand, becoming acutely aware of the magnitude of the challenge. In areas where roadside stands serve as magnets for harmful bacteria and most homes lack refrigeration, the problem extends far beyond food production, and solutions must involve addressing social norms, infrastructure, and access to education.

"Most importantly, it helps students see that the issues involving food security, social and cultural issues, as well as economic relationships are not isolated by national boundaries or in particular disciplines," Abaye said.

That realization is central to the fruition of Virginia Tech's efforts to positively impact the world.

"The key is to provide purpose-driven engagement: Engage students in behaviors that promote global thinking, sharing, serving communities, multicultural sensitivity, and the understanding of interdependent systems that operate in today's world," Abaye said.

PAVING THE WAY

Ella Rak thought she was headed straight for the Virginia-Maryland College of Veterinary Medicine, but a call to service led her down an different path.

"It wasn't until I talked to some of my professors that I realized how important it is to learn outside of the classroom," Rak said.

After earning bachelor's degrees in dairy science and animal and poultry science in 2017, Rak joined the Agriculture Peace Corps. Today, she is an international volunteer, helping farmers in the villages of Grand North in Cameroon, Africa. Rak evaluates farming practices, hosts agricultural trainings and vaccination campaigns, and teaches in local schools.

"To me, *Ut Prosim* is an ideology," Rak said. "I don't necessarily need to be in another country or speaking a new language because to me, *Ut Prosim* is just being blessed with the opportunity to do meaningful work."

For more than a century, alumni like Rak have moved into careers and professions that bolster the university's tradition of service. Equipped with a strong educational background, a commitment to hard work, and a can-do, lunch-pail attitude, their work positively impacts communities, the country, and the world. They are Virginia Tech's ambassadors, reaching out and bringing back to provide the inspiration and insight that advances the direction of the university and inspires its future students.

For Darryl Settles '84, a Boston-area restaurateur, property developer, and civic leader, Tech offered the experiences that helped shape him into not only a successful entrepreneur, but a leader dedicated to improving the quality of life in his community.

"I have always been involved with organizations that do quality work to improve the lives of others," Settles said. "I take to heart that we should make positive differences in the world while we are here." That spirit drove his decision to transfer to Virginia Tech as a sophomore, and it would later influence his move from engineering to entrepreneurship.

Professionally, Settles, who majored in industrial and systems engineering, operates a real estate development firm and investment company, Catalyst Ventures Development, as well as two restaurants, Darryl's Corner Bar and Kitchen and Slade's Bar and Grill. The restaurants are known as places where good food, good music, and good friends come together. When Settles first landed in Bean Town, he missed such hangouts, so he chose to fill the niche himself.

But it's his work in the Boston community that he lists atop his accomplishments. During the past three years, Settles' efforts have focused on issues of inequality within minority communities. He co-founded the Black Economic Council of Massachusetts, which is helping to influence public policy at both the city and state levels to encourage an equal playing field for minority-owned businesses.

Joyal Mulheron of Dumfries, Virginia, found her role working with another marginalized population—parents coping with the deaths of children—in an unexpected place.

For the 1999 English and biochemistry graduate, visiting Virginia Tech always seemed like a good idea, but a game in Lane Stadium shortly after her daughter's death in 2010 had particularly profound impact.

"I suppose you never know what someone else is going through, but feeling Hokie pride that night gave us a glimmer of hope that we could feel happiness again," Mulheron said. Although Mulheron didn't realize it right away, that moment would take her life in a new direction.

“ I TAKE TO HEART THAT WE SHOULD MAKE POSITIVE DIFFERENCES IN THE WORLD WHILE WE ARE HERE.”

DARRYL SETTLES '84



HELPFUL HOKIES: (Above) Darryl's Corner Bar and Kitchen in Boston is owned by Darryl Settles '84. (Below) Joyal Mulheron '99, pictured with her daughters, Addie Legresse and Charlotte Grace, channeled her personal grief into an opportunity to serve.



LUNCH PAIL LORE

The famed Virginia Tech lunch pail has come to symbolize the blue-collar approach of the Hokies' football defense under assistant head coach and defensive coordinator Bud Foster.

In 1995, Foster served as co-defensive coordinator with Rod Sharpless, whose mother-in-law found the original lunch pail in Mercerville, New Jersey. The pail once belonged to a coal miner, and after the record-setting defensive season, the lunch pail became an iconic element of the Hokies' lore.

The pail travels wherever the Hokies go, and its care is entrusted to a defensive leader.

For senior linebacker Andrew Motuapuaka of Virginia Beach, Virginia, the pail serves as a visual reminder of what it means to be a Hokie. "I will use the lunch-pail mentality in every aspect of my life in the future," he said.

"The lunch pail is Virginia Tech. It represents hard-working people," Motuapuaka said. "It represents generation-changers, and it represents the people who will one day change the world."

A few years later, in 2015, she left her job as chief strategy officer for the Partnership for a Healthier America, the private offshoot of former First Lady Michelle Obama's "Let's Move" campaign, to launch the nonprofit Evermore. The organization helps people grappling with the death of a child and advocates for policies, like paid leave, that recognize the grief in such situations.

As a student, Mulheron had learned about answering the call to serve, investing hundreds of hours with the Special Olympics and the Chi Delta Alpha sorority in Blacksburg, earning the university's Volunteer of the Year award just prior to graduation. Today, she finds her call to fill the unmet needs of others amplified even more.

"From families whose children have been murdered, or who have died by accident, or suicide, or cancer, or war, I have had the opportunity to serve them in hopes of changing our nation's policies for bereaved families of all walks of life," Mulheron said.

Years after being a student and years before launching her nonprofit, she realizes the day in Lane Stadium was a small moment, but one that served as a microcosm for the university's role in her entire life.

"I would not be where I am today without the experiences and life changes that began at Virginia Tech," Mulheron said. "Once a Hokie, always a Hokie. There's nothing more to say."

CONTINUING TO BUILD THE FUTURE: ONE STORY AFTER ANOTHER

During the spring of 2016, Michael Webb (pictured top right), then a senior studying forestry, discovered several infestations of the invasive emerald ash borer on campus. Although 35 campus trees were beyond assistance, the remaining 30 trees were treated and closely monitored to ensure their long-term survival.

Just over a year ago, Joe Scalea '02 (pictured middle right), a liver, kidney, and pancreas transplant surgeon, was tasked with expanding the University of Maryland Medical Center's pancreas transplant program in Baltimore as its new director. Under his leadership, patient evaluations for potential pancreas transplants have grown seven-fold, and the pancreas transplant rate is up 116 percent.

Scalea traced his accomplishments with the hospital's transplant program back to his Virginia Tech education, "All of this progress is a direct result of the skills I gained while a business information technology major at the Pamplin College of Business," said Scalea.

Saving human lives isn't always in a veterinarian's job description, but **Lauren Dodd**, of Sugar Land, Texas, resident of clinical nutrition in the Department of Large Animal Clinical Sciences and master's candidate in the Biomedical and Veterinary Sciences and Public Health Program, has been doing just that through her work with Mission Rabies in Blantyre, Malawi. Dodd participated in the second block of a month-long rabies vaccination drive (pictured bottom right). Combined, the two blocks successfully vaccinated 34,078 dogs, educated 137,635 children in 53 schools about rabies prevention, and facilitated lessons on rabies for 3,086 teachers. Rabies is responsible for killing an estimated 61,000 people annually, with 99 percent of all human cases caused by dog bites.

THIS IS OUR MOMENT

The vision for Virginia Tech connects research scientists to theater experts to inspiring alumni and eager students. It is an idea whose time is now, a strategy with opportunities for the entire Hokie Nation.

How can you help? Contact your college or go to alumni.vt.edu to learn more about being a mentor or speaking on campus. Talk with a prospective student. Visit givingto.vt.edu to make a donation.

"What a great moment to be at Virginia Tech. It's going to be exciting, but it will take all of us working together," said President Tim Sands. ■

**ANSWER SANDS' CHALLENGE, AND
"PICK UP THE LUNCH PAIL."**



WHAT'S YOUR STORY?

Write to Virginia Tech Magazine to let us know how you are answering the challenge. Send us a message at vtmag@vt.edu.





AROUND THE HOKIE NATION

- 45 Class Notes
- 50 Travel Tours
- 58 Retro
- 62 Family
- 65 Alumni Commentary

WHEN MAJA LEHNUS ARRIVED AT VIRGINIA TECH IN 1979, she was one of a small number of women pursuing an engineering degree—she remembers six in a class of about 300.

Lehnus has blazed a path ever since.

As an undergraduate, she participated in a cooperative program that placed her in a scientific and weapons research job within the CIA the summer after her first year at Tech. She alternated between attending classes in Blacksburg and working with the CIA in Washington, D.C. Lehnus obtained her security clearance during her first co-op tour with the CIA, which led to a full-time position with the agency immediately following graduation.

At the CIA Lehnus has made a practice of breaking so-called glass ceilings—not once, not twice, but six different times. Now, in her newest job as associate director for talent, she's assisting a new generation in climbing the ranks.

“Maja is committed to building expertise,” said Jane Fletcher ’82, who worked with Lehnus in three different divisions within the agency. “She [Lehnus] worked with weapons of mass destruction for several years, and as she got new jobs less familiar to her, she took it upon herself to go to conferences, to learn about other groups inside government as well as outside.”

Lehnus attributes her success to supportive mentors who helped her navigate what was a heavily male environment.

“Every boss that I had took an interest in my development,” Lehnus said. “They gave me great opportunities. As one of the only female analysts, I was highly visible. When I performed well, everyone noticed.”

DEFINING MOMENTS: Maja Lehnus '84 has been the first woman to hold six progressively more responsible positions with the CIA.

COURTESY THE CIA

Although male coworkers often made jokes or comments to fluster and antagonize her, Lehnus focused on the exciting, positive aspects of her job, and she excelled.

As her career advanced, Lehnus encountered even more challenges.

"I was selected for my first management position in 1991. I recall overhearing a male colleague saying that I had only been selected because the division needed some gender diversity in the leadership team. The comment certainly hurt my feelings, but I focused on mastering the new career of managing and leading people and doing my job well."

Lehnus and her husband, David Lehnus '84, whom she met at Virginia Tech, also found time to raise a family. This year marked their 31st anniversary, and they have a son and daughter.

"The key has been that my husband is so there for me," Maja Lehnus said. "When I moved to my first really executive level position and the demands of the hours became significantly more, he said, 'Something's got to give. How about I back off my hours?'"

Maja Lehnus has been able to balance her career and family life through setting and holding boundaries.

"You want to be 100 percent for work and 100 percent for home, but there's only one of you," she said. "Sometimes I've had to say, 'No, I can't do that. Tomorrow I'm going on a field trip with my child.' You have to do some soul searching, figure out where the red lines are, and share those with managers."

Lehnus still lives by the *Ut Prosim* (That I May Serve) ethic at the heart of the Virginia Tech experience.

"I have devoted my career to serving the nation," Lehnus said. "My desire to serve was very much influenced by the fact I grew up overseas as the daughter of a foreign service officer. When you live in countries that don't have the liberties and protections that we have, it really makes you appreciate America. By the time I arrived at Virginia Tech, I was already a fervent patriot and had the desire to serve. The Virginia Tech environment facilitated that." ■



SHATTERED GLASS

Read more about Maja Lehnus' career with the CIA at vtmag.vt.edu.



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CLASS NOTES

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'57

CAREER **Alfred Patrick**, Richmond, Ky., has published his fourth novel, "Hessian Soldier, American Pioneer: A March to Destiny."

'63

CAREER **Sidney C. Smith Jr.**, Chapel Hill, N.C., was appointed to the Dean's Council on Advancement for the Virginia Tech Carilion School of Medicine.

'64

CAREER **Steve O. Dixon**, Dumfries, Va., was elected to a second four-year term on the Democratic Party of Virginia's Central Committee.

CAREER **John M. Pinkerton**, Blacksburg, Va., was conferred the title of SunTrust Professor Emeritus by the Virginia Tech Board of Visitors.

'68

CAREER **Leo A. Vecellio Jr.**, Palm Beach, Fla., was inducted into the National Academy of Construction, class of 2017.

'69

CAREER **George A. Levicki**, Penhook, Va., was appointed to the Dean's Council on Advancement for

the Virginia Tech Carilion School of Medicine.

'71

CAREER **Ellen Margaret E. Beville**, Danville, Va., was appointed to the Dean's Council on Advancement for the Virginia Tech Carilion School of Medicine.

'72

CAREER **Hunter C. Bristow**, Williamsburg, Va., retired from Christopher Newport University and has continued a small, private, part-time practice.

'73

CAREER **Steven M. Janosik**, Blacksburg, Va., retired from Virginia Tech after 38 years of service.

'75

CAREER **Kimberlee J. Benart**, Lake Mary, Fla., was awarded gold and silver medals from the Florida Authors and Publishers Association for her epic fantasy collections. Her book was featured in an issue of Booklist Magazine.

'76

CAREER **Gaver M. Nichols**, Baltimore, Md., whose firm was



INVESTING IN EDUCATION

Willis Blackwood '72 and Mary Nolen Blackwood '73, of Richmond, Virginia, and Bonita Springs, Florida, recently donated \$2 million to name and endow the director's position within the rapidly growing Virginia Tech Program in Real Estate. Their gift is the largest ever made to the program.

Willis Blackwood, who earned his Virginia Tech bachelor's degree in business administration and has an MBA from Virginia Commonwealth University, chairs the Virginia Tech Real Estate Industry Advisory Board. Mary Nolen Blackwood earned her Virginia Tech bachelor's degree in psychology and has a master's in health administration from what is now the Virginia Commonwealth University School of Medicine.

Learn more about the Blackwoods and the program in real estate at vtmag.vt.edu.

ALL ABOARD

In January, a Virginia Tech Magazine writer and photographer made tracks to the Big Apple. Like many Hokies, they were surprised to find how easy it is to travel up and down the Eastern Seaboard. Taking the train from Roanoke, they reached New York City's Penn Station in just nine hours.

The service, which arrives daily at Virginia Tech's front door, Squire's Student Center, via bus service to and from the Roanoke, Virginia station, began in October 2017.

Riders can book both train and bus travel to and from Blacksburg directly on the Amtrak website.

Concurrent with Roanoke's Amtrak service, a group in Virginia's New River Valley has been working hard to extend passenger rail service to the region. New River Valley Rail 2020 is a partnership of business, municipal, and legislative leaders as well as Virginia Tech. A group of students from the university volunteered to help the initiative by developing a promotional video.

NRV 2020 has aligned legislative support, and the commonwealth of Virginia has allocated \$350,000 for an operational study. A station site in Christiansburg has already been selected.

A market demand study conducted by NRV 2020 shows strong rider usage from a station in this region. However, Amtrak and the state's decision to support a new service will be based, in part, on actual usage. After three months service from Roanoke, Amtrak said ridership is meeting expectations.



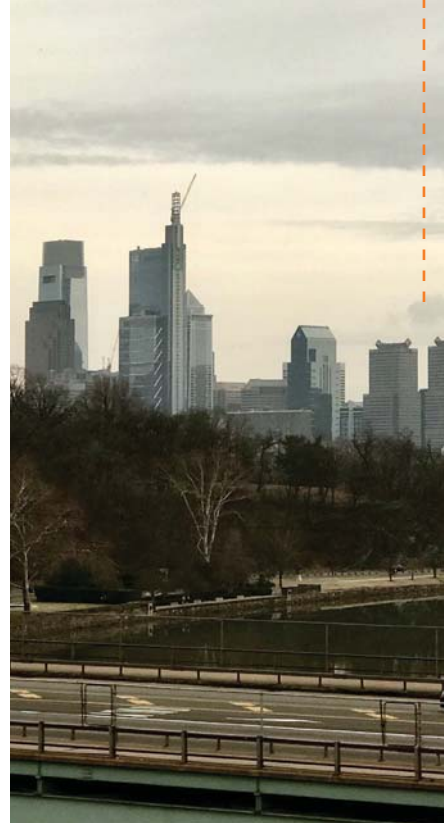
#HOKIETRACKSNYC

NEW YORK CITY IS LOCATED JUST UNDER 500 MILES FROM BLACKSBURG. THE differences between the tree-lined, campus community and Manhattan's towering skyscrapers are obvious, but Virginia Tech and the city share a common connection: Hokies.

Growing numbers of Virginia Tech graduates live and work in the city, and current students are frequent visitors, pursuing opportunities for metropolitan studies and urban internships.

During their recent visit to the city, the Virginia Tech Magazine team visited Tech graduates at work, gathered for a Hokie happy hour, and spent a little time taking in the sights, sounds, and smells of the city.

Their mission: to discover how Manhattan Hokies transfer their Virginia Tech spirit to the city that never sleeps. ■



Q&A

To break the ice, Virginia Tech Magazine posed the following question to each Hokie: "How'd you get from where you were to where you are?"

Their answers were as varied as the Hokies themselves. Read them all online at vtmag.vt.edu, and check us out on Instagram (#HokieTracksNYC) to view even more photos from the trip.

We'd also like to hear from you. Send us a note or an email with your answer and a recent image. You may just find yourself in print or online.

MANHATTAN HOKIES: (left to right) Nick Cullen '91, Steve White '97, Amanda Gurtis Davis '09, Jeremy Davis '09, Lauren Rumerman '06, Patrick Farrell '07, Tara Petrucci '13, and Sean Herlihy '06. (At left) Union Station in Washington, D.C. (Top right) A view of Philadelphia from the train.

named a top designer in the American Residential Design Awards by the American Institute of Building Design, also received multiple awards in the renovation, multifamily, and conceptual design categories.

CAREER Thomas A. Sachs, Alexandria, Va., retired after more than 40 years in public service as associate director of business services with the U.S. Department of Transportation, Office of the Secretary.

— '78 —

CAREER Thomas "Keith" Ferguson, Richmond, Va., is director of business services for the United Network for Organ Sharing.

— '79 —

CAREER Maurice L. "Rick" Fingeret, Wilton, Colo., retired from Ernst & Young on June 30, 2017.

— '82 —

CAREER Joseph A. Blount Jr., Houston, Texas, was named president and CEO of Colonial Pipeline Co.

CAREER John E. Greaud III, Germantown, Tenn., is aviation project manager at Barge, Waggoner, Sumner, and Cannon Inc.

CAREER Melissa H. Weaver, Cary, N.C., was named to "The Best Lawyers in America" 2018 edition.

CAREER Gilbert A. Steppe, West Grove, Pa., retired from E.I. DuPont de Nemours & Co./Chemours Co. after a 34-year career as a global supply chain manager.

— '83 —

CAREER Carol W. Carroll, San Jose, Calif., was appointed deputy center director at NASA's Ames Research Center.

CAREER Edwin G. Tuchler's, Blacksburg, Va., owns a firm, Shelter Alternatives, that received the 2017 Award of Excellence at the EarthCraft Celebration of Excellence.

CAREER George N. Holback, Baldwin, Md., has retired from Cho

Benn Holback & Associates, a Quinn Evans company.

CAREER Jacqueline T. Wieland, Greensboro, N.C., was appointed to the Dean's Council on Advancement for the Virginia Tech Carilion School of Medicine.

— '84 —

CAREER Sean O'Leary, Southern Pines, N.C., transitioned to captain on the B777, flying long-haul international routes around the world for FedEx.

CAREER Vernon R. Tinsley, Summerfield, N.C., was named to "The Best Lawyers in America" 2018 edition.

— '85 —

CAREER Henry L. Welch, Los Gatos, Calif., was promoted to partner with Haynes and Boone LLP.

— '86 —

CAREER Charles G. Lambrecht, Knoxville, Tenn., received the J.E. Moss Achievement Award from the University of Tennessee.

CAREER Denise K. Merinar, Moseley, Va., was awarded the 2017 Executive Women in Business Achievement Award.

CAREER Ward G. Wilson, Louisville, Ky., was selected as the executive director of Kentucky Waterways Alliance.

— '87 —

CAREER James E. Foster, Roanoke, Va., was appointed to the Dean's Council on Advancement for the Virginia Tech Carilion School of Medicine.

CAREER David A. Keith, Virginia Beach, Va., is president/CEO for Hanbury, a leading architectural firm.

CAREER Chandra M. McPherson, Hopewell, Va., was named director of the Heritage Regional Public Library in New Kent and Charles City counties.



SAVE THE DATES

March 12, Austin, Texas
Hokies @ SXSW

March 22, McLean, Virginia
Hokies in Finance and Technology

March 28, Richmond, Virginia
Young Alumni Social

April 13-15, Blacksburg, Virginia
Black Alumni Reunion

April 13-15, Blacksburg, Virginia
Spring Family Weekend

April 19, New York, New York
Hokies on Wall Street

May 1, Arlington, Virginia
Graduate Alumni Networking

May 16-18, Blacksburg, Virginia
Old Guard Society of Golden Alumni Reunion

May 19, Doswell, Virginia
Virginia Tech Day at Kings Dominion

➤ June 7-10, Blacksburg, Virginia
Reunion 2018

June 23, Blacksburg, Virginia
Beer Festival at Virginia Tech

June 28-29, Blacksburg, Virginia
Day in the Life of College Admissions

For more information, including details about other future events, visit alumni.vt.edu/events.

'88

CAREER Michael D. Erskine, Woodbine, Md., was named the Jean Ellen Shehan Professor and director of Virginia Tech's Marion duPont Scott Equine Medical Center by the Board of Visitors.

CAREER Stephen C. Kepley, Kentwood, Mich., was elected to another 4-year term as Kentwood's mayor and city manager.

CAREER Paul E. Rossler, Sand Springs, Okla., was named to "The Best Lawyers in America" 2018 edition.

CHILDREN Robert M. Brooke, Fairfax, Va., a daughter, 5/6/17.

'90

CAREER John T. Hasselmann, Washington, D.C., was named managing director of government relations and engineering education at the American Society of Mechanical Engineers.

'91

CAREER Amy L. Clarke, Signal Mountain, Tenn., was named vice president of corporate communications at Morning Pointe Senior Living Corp.

CAREER Charles R. Kaiser, Aurora, Ontario, received the Fletcher Award in recognition of his spirit, dedication, and commitment to the betterment of live theater in Newmarket, Ontario.

CAREER David J. Santoro Jr., Belmont, Sutton, Surrey, joined the London-based EY Financial Assurance Advisory Services practice as a partner.

CHILDREN Sarah T. Welch, Moravia, N.Y., a son, 10/12/17.

'93

CAREER Victor P. Jones, Huntersville, N.C., is a State Farm agent in Washington, D.C.

CAREER Robyn L. Williams, Evans, Ga., was promoted to lead engineer at Southern Nuclear's Vogtle electric generating plant.

'95

CAREER John C. Bunin, Afton, Va., received the National Council for Geographic Education's inaugural Brunn Creativity Award for Outstanding Teaching of Geography Online.

CAREER Gary M. Romano, Lynnfield, Mass., authored a second book, "Lean Recruitment: Finding Better Talent Faster."

CAREER Dan Shoemaker, Coronado, Calif., was appointed chief CEO of PeopleFacts, an employment screening service.

CAREER Erich J. Weissbart, Mechanicsville, Va., received the National Notable Achievement Award for Outstanding Use of Innovative Approaches to Achieve RCRA Corrective Action Program Goals.

'96

CAREER Mark N. Heinrich, Leesburg, Va., was promoted to associate vice president for Dewberry in Fairfax, Va.

CAREER Kaichang Li, Corvallis, Ore., was recognized at the Golden Goose Award Ceremony for his work in developing a soy-based adhesive for plywood.

CAREER Caroline S. Setliffe, Alexandria, Va., joined the tax practice group as counsel for Eversheds Sutherland.

CAREER Brian M. Tanner, Centreville, Va., was promoted to associate vice president for Dewberry.

'97

CAREER Jasen S. Bohlander, San Francisco, Calif., has been promoted to senior associate with Leddy Maytum Stacy Architects.

'98

CAREER Brian J. Colligan, Virginia Beach, Va., received the Burl Osborne Award for Editorial Leadership from the American Society of News Editors and a Sigma Delta Chi Award for Editorial Writing from the Society of Professional Journalists.

CAREER Sasha A. Varone, San Diego, Calif., and her husband, established an architecture firm.

'99

CAREER Kevin Baird, Middletown, Del., was selected a Top Lawyer of Trust and Estates by his peers in Delaware.

CAREER Matthew M. Clabaugh, Kingsport, Tenn., joined Barge, Waggoner, Sumner, and Cannon Inc. as natural resources manager.

CAREER Robert E. Emard, Gaithersburg, Md., was named the commercial permitting manager for the City of Gaithersburg.

CHILDREN Roberta S. Mitchum, Atlanta, Ga., a daughter, 7/7/17.

'00

WEDDING Marvin J. Boyd and Sarah Stoneham Boyd, Ashburn, Va., 3/18/17.

CHILDREN Bonnie Williams DeMay and Christopher B. DeMay '02, Chantilly, Va., a daughter, 7/26/17.

CHILDREN Matthew J. Lanz, Canonsburg, Pa., a son, 4/14/17.





May 30-June 8, 2019

**D-Day 75th Anniversary:
An Iconic Journey of Remembrance –
The National WWII Museum**

Honor the 75th anniversary of D-Day, which was June 6, 1944, with this 10-day trip designed by renowned historians and authors. This trip will retrace the Allies' triumphant return to, and liberation of, Europe, and includes luxury accommodations on the six-star Regent Seven Seas Navigator.

From \$9,999 per person, double occupancy
(airfare not included)

Pictured: Port-of-call Bruges, Belgium.



YANN ARTHUS-BERTRAND

TRAVEL TOURS

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FOR MORE THAN 41 YEARS, THE VIRGINIA TECH ALUMNI ASSOCIATION HAS OFFERED TRAVEL OPPORTUNITIES FOR ALUMNI, THEIR FAMILIES, AND FRIENDS. EACH YEAR THE ASSOCIATION HANDPICKS MORE THAN 20 TOURS TO INSPIRE TRAVELING HOKIES.

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Oct. 1-9
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For more information about this trip and other Alumni Association travel tours, go to alumni.vt.edu/travel.



ON TRACK: Kacey Huntington M.Arch. '10 skated with Baltimore's Charm City Roller Girls under the name I.M. Pain

DANFORTH JOHNSON



by Mason Adams

MAKING STRIDES

HOW HOKIES ARE CHANGING THE FACE OF MODERN ROLLER DERBY

AT VIRGINIA TECH, STUDENTS LEARN that individuals can come together to form a whole that is stronger than its parts. Beyond the classroom, many Hokies put that knowledge to work in their professional lives and through participation in team sports that continue well past graduation.

Four Virginia Tech alumni have seen that team-oriented mindset play out at the highest levels of one of America's most hard-hitting amateur sports: roller derby.

Since roller derby arrived in western Virginia in 2007, Virginia Tech students and alumni have skated with the New River Valley (NRV) Rollergirls of Blacksburg; the Star City Roller Girls of Roanoke, Virginia; or more recently with the combined team known as the Valleys All-Stars.

Some Tech alumni have gone on to compete in the Women's Flat Track Derby Association's (WFTDA) "Big Five" tournaments, which decide the association's champion each year. One has found her place among the pioneering women who now play men's derby. All have overcome obstacles and continuously adapt to a sport that is still evolving, while pursuing careers in fields that range from architecture, mechanical engineering and insurance, to auto manufacturing safety.

Stephanie Beeman M.S. '11, Ph.D. '15, who skates under the name Bettie Lockdown, joined the NRV Rollergirls in 2010, during her first year as a Virginia Tech graduate student.

"I showed up at practice and then got hooked," Beeman said. "Skating came somewhat naturally. I liked the team aspect, working with other people and having that network."

Roller derby functions as a do-it-yourself amateur sport, organized by skaters, for skaters. Beeman took an active role in the workings of the league. As she pursued her degrees, she also learned about how to run an organization and put on sporting events.

In 2017, Beeman moved to Ann Arbor, Michigan, to become a regulatory engineer at the Hyundai Kia America Technical Center Inc., a job that entails overseeing company compliance with state and federal regulations. She also transferred to the Ann Arbor Derby Dimes, which was ranked No. 30 in the world.

"This team is a really good fit for me because they have this overall, team-first approach," Beeman said. "It's not about one person; it's about the collective. We all are able to provide feedback to what we want as a team, and then we can achieve those goals."

“
YOU'RE IN IT WITH
OTHER PEOPLE ...
THAT MAKES IT VERY
COLLABORATIVE
AND FUN.”

Kacey Huntington M.Arch '10



STEVE BEARD PHOTOGRAPHY

“
... IT WAS DEFINITELY
A COMMUNITY OPEN
TO PEOPLE MAKING
SWEEPING LIFE
CHANGES AND LETTING
PEOPLE EXPLORE
THEMSELVES ...”

Tori Elmore '09

┌ HIGH SCORER: Tori Elmore '09 skates with Houston Roller Derby as Arrak-Kiss. ┐

Tori Elmore '09, who skates as Arrak-Kiss—a reference to Frank Herbert’s epic sci-fi series “Dune”—is another former member of the NRV Rollergirls who achieved new success with a transfer to a new league. Last year, she moved to Houston to work as a mechanical equipment reliability engineer for biopharmaceutical manufacturer Syngenta.

The first time Elmore attended a Houston Roller Derby practice, she was amazed by how much bigger it was than an NRV practice, both in terms of venue and the number of skaters. Leveling up forced her to reinvent her game. She studied footage on Youtube, analyzing how successful skaters used their bodies, including how they turned their shoulders and where they focused their vision.

Elmore tried out and quickly rose through the Houston team’s ranks, competing last year in a Division 2 playoff tournament. This year she skated in a qualifying Division 1 tournament in Dallas. Elmore

excelled, scoring an exceptional 22 points in one jam.

Derby has provided a supportive community for Elmore, who transitioned from male to female after first joining NRV in 2009.

“As I started learning more about myself and who I really am, it was definitely a community open to people making sweeping life changes and letting people explore themselves and not just stick to convention,” Elmore said.

The Virginia Tech alumna who probably has skated in more WFTDA tournaments than any other is Kacey Huntington M.Arch. '10, who skates as I.M. Pain, a name that pays tribute to famed architect I.M. Pei. She applied to Virginia Tech as her “reach” school and was excited to get in. A competitive speed skater since age 5, both as an amateur and professional, she was recruited by the NRV Rollergirls in 2009.

When Huntington moved to Maryland

in 2010 to pursue her professional goals—first with architectural engineering firm Nika Architects and Engineers in Rockville, and later with architecture, landscape architecture, planning, and interior design firm Hord Coplan Macht in Baltimore, she tried out with the Charm City Roller Girls, a perennially competitive team. She quickly became a primary jammer. Since joining the team, Huntington has competed in six playoffs and three championship tournaments.

“Architecture is especially known for long hours in the studio and a lot of hard work, but it’s really fun,” Huntington said. “You’re in it with other people in that same situation. You’re working on individual projects, but everyone is so willing to help or work through a problem together. That makes it very collaborative and fun. And that also explains how it is with derby, too.”

With the exception of a February 2017 state team tournament, Huntington retired from competitive play after the

2016 season. She remains involved on Charm City committees.

Jen “Slingin’ Gritz” Stern ’97, meanwhile, is blazing a trail that’s entirely hers.

For Stern, the decision to attend Virginia Tech was a simple one. Her grandfather, E. George Stern, pioneered wood sciences at the university during his four-decade tenure as a professor. In 1997, the Stern Fastener and Pallet Research Laboratory at the Thomas M. Brooks Forest Products Center on campus was named for him.

While at the university, Jen Stern was a member of the Marching Virginians. After graduating, she married and started a family. In 2008, she found the NRV Roller girls.

“I wanted a fun way of exercising to keep off weight and have something for myself—maybe get a little aggression out,” Stern said. “I showed up for practice and fell in love with it. It’s real important for mothers in general, but especially for young mothers staying at home, to have something just for them that’s not centered around being a mom, being a wife. Roller derby kept me sane during those years.”

Stern found a supportive network within roller derby that extended well beyond western Virginia. “Over the years, I’ve met and become instant

friends with people all over the world who play derby,” she said. “This draws a connection with Hokies; there’s a lot of networking and support within the Hokie community. I find that support within the derby community, too.”

From 2010 to 2015, she expanded on her identity as a skater, spending some weekends with independent wrestling alliances in Virginia and North Carolina. Stern wrestled as “Derby Girl Jennifer Blaze” to promote NRV Roller girl events.

Stern moved to Clayton, North Carolina, near Raleigh, where she joined up with the Carolina Roller Girls. In August of 2015, she started playing with a men’s league, Collision Men’s Derby.

“I had joked about wanting to play with men,” Stern said. “I did feel like my size and physical style of play were more fitting for the men’s game.”

The stylistic shift challenged her in a way that enthralled her and forced her to evolve her game.

“Men’s derby tends to be faster and more physical,” Stern said. “I enjoy I’m not the biggest person on the track. I had to

“

I LIKED THE TEAM ASPECT, WORKING WITH OTHER PEOPLE AND HAVING THAT NETWORK.”

Stephanie Beeman M.S. ’11, Ph.D. ’15

change my style to being less the brute and more the brain. In men’s derby, I rely a lot more on my game knowledge, track awareness, and skating skill. I’m not going to muscle a lot of these guys.”

Today, more women have joined men’s leagues thanks to pioneers like Stern. Back in women’s derby, Virginia Tech alumni continue to make a mark as well—competing at the highest levels in the world. ■



JAMMING

Read more about how Hokies are changing the face of modern roller derby at vtmag.vt.edu.

DERBY DAYS: (Bottom, left) Jen “Slingin’ Gritz” Stern ’97, center, began skating with the NRV Roller girls in 2008 and now competes with Collision Men’s Derby in North Carolina. (Bottom, right) Stephanie Beeman M.S. ’11, Ph.D. ’15, right, skates with the Ann Arbor Derby Dimes under the name Bettie Lockdown.



ALUMNI ASSOCIATION BOARD OF DIRECTORS BALLOT



THE VIRGINIA TECH ALUMNI ASSOCIATION BOARD OF DIRECTORS' NOMINATING COMMITTEE HAS PROPOSED NOMINEES FOR ELECTION TO THREE-YEAR TERMS FROM 2018 TO 2021. PLEASE VOTE FOR UP TO TWO NOMINEES AND RETURN THE BALLOT BY APRIL 1. RESULTS WILL BE ANNOUNCED IN MAY.

CAMILLE M. DADAMIO '11, ROYAL OAK, MICHIGAN

DaDamio majored in industrial and systems engineering at Virginia Tech and later earned a master's degree in engineering from the University of Michigan. She is a design release engineer for General Motors Corp. She serves as a member of the Division of Student Affairs Young Alumni Board and is active with the Southeast Michigan alumni chapter.

As a student she was selected as the 2011 Undergraduate Woman of the Year and Greek Woman of the Year, and she participated in Omicron Delta Kappa, Phi Kappa Phi, Tau Beta Pi, Alpha Pi Mu, University Honors Program, Student Alumni Associates, and Zeta Tau Alpha.

RANDY M. LUCAS '91, M.ACC. '92, CHARLOTTE, NORTH CAROLINA

Lucas, who earned his undergraduate and graduate degrees in accounting from Virginia Tech, is the principal consultant for Lucas Tax and Energy Consulting. He has served as a member of the Pamplin Advisory Council, Department of Accounting Advisory Board, Black Cultural Center Advisory Board, and the Pylon Society.

As a student, Lucas was involved in the Black Organizations Council, Accounting Society, Black Student Alliance, and Order of the Gavel.

WRITE-IN NOMINATION

Four incumbent members will serve an additional three-year term: Thomas J. Fast '06, Deborah Barackman Flippo '83, Brian Sullivan '93, and Claudia K. True '81, DVM '86.

SIGNATURE

RETURN TO:

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OR EMAIL A PHOTO OF YOUR BALLOT TO ALUMNI@VT.EDU.

'01

CHILDREN **Jennifer C. DeSantis**, King George, Va., a daughter, 12/15/16.

'02

CAREER **Melissa L. Dornan**, Aldie, Va., was elected to a three-year term on the board of directors for the Society of Financial Service Professionals.

CAREER **Craig D. Swift**, Charlottesville, Va., was promoted to principal of Keast & Hood structural engineers.

CHILDREN **Anna L. James**, Suffolk, Va., a son, 11/3/17.

'03

CAREER **Aaron E. Cheskis**, Columbia, Md., was promoted to associate at Dewberry in Baltimore.

CAREER **Jhaymee S. Heinlein**, Belmont, N.C., was selected as a 2018 ACHE Thomas C. Dolan Executive Diversity Program Scholar.

CAREER **Chi-Ying S. Lu**, San Francisco, Calif., founded a company that was chosen for the Outstanding Diverse Small Business Award by The SCORE Foundation.

CAREER **Jeremy R. Moss**, Norfolk, Va., was named an "Up & Coming Lawyer" for 2017 by Virginia Lawyer's Weekly.

CHILDREN **Sara S. Belleau**, Chester, Va., a daughter, 5/19/17.

CHILDREN **Jonathan R. Mollerup** and **Lauren Cloyed Mollerup** '03, Chantilly, Va., a son, 7/15/17.

CHILDREN **Daniel B. Shelton** and **Shannon Baird Shelton** '04, Chesapeake, Va., a daughter, 4/7/17.

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ACROSS THE POND

by Travis Williams

MORE THAN 3,000 MILES FROM Blacksburg, Virginia Tech's mission is clear.

"Our community is one that spans the globe," said Matt Winston, the university's chief alumni officer, addressing a group of international alumni in London last year. "We are Hokies, and wherever we go, our commitment to service, to each other, and to the global community unites us."

Winston, Virginia Tech President Tim Sands, and other university representatives traveled across the Atlantic Ocean for Hokies in London, a gathering of European alums, university partners, and students that was more than a year in the making.

Bolstering the university's international presence is a critical task, and Hokie alumni play a key role, according to Vice President for Outreach and International Affairs Guru Ghosh. "If we are to be a top-100 global university, we need to develop a multifaceted engagement strategy with our alumni overseas," Ghosh said.

Sunil Vaswani '02, who earned a degree in accounting and information systems, Dan Kendall '94, a graduate of the College of Engineering, and Taylor Rogers M.Arch. '09 have been instrumental in connecting Hokies abroad.

When Vaswani first moved to England in 2007, he struggled to find fellow alumni and sensed a lack of school spirit among those with whom he did connect. He said he felt called to work towards a change.

For Kendall, who lives outside of London, it was a mission fueled by a visit to Blacksburg eight years ago. "It had changed so much. I even got lost on campus. I couldn't quite figure where I was going," he said. "There was just something about that visit back that really drove the message of 'service' home again. Now, with the addition of the medical school and the VTCRI, Virginia Tech has an even bigger opportunity to make a global impact."

A contribution from Paco Garcia helped provide the financial support to organize the event and unite international Hokies. Garcia, a resident of London, had a briefer stint at Tech, but one that was no less impactful. In 2006, Garcia came to Blacksburg from Spain as a part of one-year International Student Exchange Program. He said he wants to help raise Virginia Tech's international presence.

"I feel that I'm in the position I am at the moment, in part, because of the one year I spent at Virginia Tech," he said. "I'd like [the event] to grow," he said, "and become a strong community that drives some of the important technical and business areas internationally." ■

ARE YOU A HOKIE LIVING ABROAD? -----

Connect with other alumni living internationally, host students traveling abroad, and learn more about how you can get involved.

alumni.vt.edu/international

HOKIES IN LONDON

June 16, 2018



FOTOVOYAGER

EVA-KATALIN



GOING UNDERGROUND: A VPI Cave Club member rappels down a wall at Clover Hollow Cave in Giles County in the 1950s. (Right, from top:) The 1947 VPI Cave Club, the 1948 VPI Cave Club, and a member at the entrance to the Catawba Murder Hole near New Castle in May 1949.

DOWN TO EARTH

by Mason Adams

FIVE VIRGINIA TECH STUDENTS formed a club around their shared love of exploring the world underground in September 1942.

Four months later, in January 1943, the VPI Cave Club was recognized by the National Speleological Society as the first student “grotto,” or local chapter. This February, the Cave Club celebrated its 75th anniversary.

Founded on a leader-oriented system, more experienced cavers led the cave trips,

which often stretched over weekends and involved 20 or more members. Although the club invested in equipment, members often explored in street clothes with relatively limited safety gear when compared to modern caving. During the early years, due to the extreme nature of the sport, the club recorded several accidents, including a fatality in 1958, when a rappelling rope broke. As the club matured, members focused heavily on safety, becoming one of the leading cave rescue groups on the East Coast.

Today, Virginia Tech’s Cave Club membership requires completion of a rigorous training program. Many members work with the Blacksburg Volunteer Rescue Squad’s Cave Rescue Group, and the club is involved in efforts to fight white-nose syndrome, a fungal disease that has devastated bat populations. Alumni of all ages maintain contact with current student members, forming mentorships through an extended network linked by exploration, education, adventure, and camaraderie. ■

'04

CAREER **Keith E. Yates**, Old Hickory, Tenn., joined Hanson Professional Services Inc. and provides engineering design and construction services for aviation projects.

WEDDING **Richard P. Kerrand** and **Cynthia Lee Abbott** '09, Farmers Branch, Texas, 10/14/17.

CHILDREN **Joshua M. Fink** and **Katherine Mason Fink**, Ellicott City, Md., a daughter, 5/18/17.

CHILDREN **Amy C. Hall**, Atlanta, Ga., a daughter, 10/22/17.

CHILDREN **Cory S. Surber**, Falls Church, Va., a son, 7/1/17.

'05

CAREER **Anthony B. Reedy**, Henrico, Va., was promoted to vice president of political operations of the Virginia Realtors Association.

CAREER **Darren W. Smith**, Washington, D.C., expanded his company and developed a mobile app for gamified city exploration.

CHILDREN **Matthew A. Benz**, San Diego, Calif., a son, 9/21/17.

CHILDREN **Lindsey H. Childress** and **Daniel Clay Childress** '06, Bristol, Va., a daughter, 7/1/17.

CHILDREN **Matthew L. Cooper**, Raleigh, N.C., a son, 7/17.

CHILDREN **Jefferson W. Cox II**, New York, N.Y., a son, 11/21/17.

CHILDREN **Alison R. Matthiesen** and **Peter Craig Matthiesen**, Roanoke, Va., son, 4/19/17.

'06

WEDDING **Laura A. Trilles**, and **Charlie F. Trilles**, Honolulu, Hawaii, 8/19/17.

CHILDREN **Doran J. Bosso**, Maitland, Fla., a daughter, 9/11/17.

CHILDREN **Stacy C. Daley** and **John Charles Daley** '09, Fairfax, Va., a daughter, 3/17/17.

CHILDREN **Brandon L. Frye**, Myrtle Beach, S.C., a daughter, 9/5/17.

CHILDREN **Mark C. Helton**, Virginia Beach, Va., a son, 10/11/17.

CHILDREN **David S. Londrey**, Madison, Va., a son, 5/21/17.

'07

CAREER **Christine M. Bacolas**, Philadelphia, Pa., is assistant principal of Glen Rock High School in New Jersey.

CAREER **Dustin D. Flannery**, Philadelphia, Pa., received the Pediatric Hospital Epidemiology and Outcomes Research Program Award from the Children's Hospital of Philadelphia.

CHILDREN **Richard L. Anderson** and **Courtney Cecil Anderson** '07, Charlotte, N.C., a son, 4/7/17.

CHILDREN **Philip A. Johnson**, Alexandria, Va., son, 6/30/17.

'08

CAREER **Ashley N. Duncan**, Etters, Pa., is project engineer at Barton & Loguidice.

CAREER **Reese E. Goldsmith**, Washington, D.C., was admitted to the Virginia State Bar by the Virginia Supreme Court.

CAREER **Manisha P. Patel**, Greensboro, N.C., was appointed vice president of the North Carolina Association of Women Attorneys.

WEDDING **David Lamar Garber** and **Elizabeth C. Garber** '09, Cambridge, Mass., 6/3/17.

CHILDREN **Katie M. Bredenkamp** and **Benjamin Matthew Bredenkamp**, Mount Pleasant, S.C., a son, 7/9/17.

CHILDREN **Khalid A. Ibrahim**, Chantilly, Va., a son, 7/28/17.

CHILDREN **Brian D. Moran**, Chambersburg, Pa., a son, 10/30/17.

CHILDREN **Heather D. Reaske** and **Trevor Gray Reaske**, Reston, Va., a son, 8/5/17.

CHILDREN **Kristin Westover**, Fairfax, Va., a daughter, 5/15/17.

'09

CAREER **Dane S. Yezek**, Waynesboro, Pa., is a chemistry teacher for Chambersburg School District.

WEDDING **Christine M. Hirschberg** and **Brian Hirschberg**, Bernardsville, N.J., 7/8/17.

WEDDING **Katherine J. Hudencial** and **Kyle Hudencial**, Nashville, Tenn., 9/15/17.

CHILDREN **Elizabeth W. Kamstra** and **Matthew Richard Kamstra**, Richmond, Va., a daughter, 10/16/17.

CHILDREN **Arkeif E. Robinson** and **Keriann Elizabeth Robinson** '15, Christiansburg, Va., a son, 9/15/17.

CHILDREN **Parker G. Trasborg**, Arlington, Va., a daughter, 8/23/17.

'10

CAREER **David B. Heisler**, Dallas, Texas, received a Ph.D. in biochemistry from Ohio State University.

WEDDING **Kimberly C. DeSilva** and **David DeSilva**, Alexandria, Va., 9/16/17.

WEDDING **Laura S. McLaughlin** and **Jose Alexis Torres** '16, Baton Rouge, La., 6/3/17.



ALL IN A DAY'S WORK

In Haiti, the workday starts early, at 4 a.m.

The sun won't be fully out for several more hours when Mario Calixte '10, M.A.Ed. '12 heads to his day job in the bustle of motorbikes, pedestrians, and burros jockeying for space in the morning traffic in Port-au-Prince.

Calixte, works at the Ecole Supérieure d'Infotronique d'Haïti (School of Infotonics of Haiti), where he advises students and develops curriculums.

In his "off hours," Calixte travels throughout the country setting up computer labs and teaching elementary and high school instructors basic computer and Linux operating system skills.

"It's encouraging, and I know I am making a difference in the students' ability to succeed intellectually, academically, and professionally," said Calixte.

CHILDREN **Ashley L. Hankin** and **Morgan Lee Hankin**, Baltimore, Md., a daughter, 9/1/17.

CHILDREN **Kerry M. Sjoberg**, Austin, Texas, a son, 10/4/17.

'11

CAREER **Erica L. Critzer**, Quinton, Va., received "20 in their 20s" recognition from the Professional Convention Management Association for 2017-18.

CAREER **Olivera Jankovska**, Houston, Texas, received the 2017 President's Volunteer Service Award and the UNICEF USA Global Citizenship Fellowship.

CAREER **Boris M. Kramer**, Boston, Mass., is a postdoctoral research associate at the Massachusetts Institute of Technology.

CAREER **Valerie J. Weeks**, Seattle, Wash., is chief of operations at the Transit Control Center.

WEDDING **Max Andrew M. Jameson** and **Taylor Lane Nurmi Jameson** '12, New Braunfels, Texas, 9/3/17.

'12

CAREER **John A. Reffit**, Billings, Mont., is monument manager of Pompey's Pillar National Monument.

WEDDING **Matthew Clarke Arnold** and **Janice L. Arnold** '15, Blacksburg, Va., 10/22/16.

WEDDING **Sarah C. Rooney** and **Edward Robert Rooney** '13, Valencia, Calif., 6/10/17.

'14

CAREER **Leslie A. Barksdale**, Wexford, Pa., was awarded the 2017 Professional and Community Engagement Award from the Danville Pittsylvania County Chamber of Commerce.



by Travis Williams

CARRY A COUNTRY

JORDAN ARBUCKLE MIGHT BE RACING across the Drillfield to class, but one glance at her backpack, and she's transported back to the summer she spent in Barcelona, Spain.

"By carrying my bag, I feel like I've connected Spain's lifestyle of relaxation to Virginia Tech," said the junior studying human nutrition, exercise, and fitness. "Where I typically feel stressed out due to exams, with my backpack, I am reminded of a simpler life, and it almost calms me."

That feeling was what Tech alumni Jack and Alley DuFour of Blacksburg, Virginia, had in mind five years ago when they founded Taaluma Totes, the company that crafted Arbuckle's bag from fabric that the student found during her study-abroad trip, last summer.

"Our goal is to connect the world and make it feel a little smaller," Alley DuFour said.

Since 2012, Taaluma Totes has sold thousands of bags crafted from unique international and domestic fabrics. Manufactured by a nonprofit organization in Southwest Virginia that supports jobs for dozens of workers with disabilities, a portion of the profits from the sale of the bags assists people living in the communities where the fabric originated.

In February 2015, the altruistic business model earned the husband and wife team a spot on the reality television show, "Shark Tank." The national exposure created such a surge in demand that the DuFours turned to fellow travelers, like Arbuckle, to expand their access to fabric. For their efforts, each



COURTESY TAALUMA TOTES

supplier earns a free tote created from the fabric and a commission for the additional totes sold.

Michael Harnisch '16 took advantage of the opportunity during a study-abroad trip to Rwanda.

"You throw your bag over your shoulder, and you can remember all of the experiences and people you met," Harnisch said.

The DuFours agree that being Hokies provided the foundation for their success. "The Virginia Tech community was our incubator, giving us everything we needed to start Taaluma," said Jack DuFour.

It was during a Virginia Tech Engineers without Borders trip in Uganda that Jack DuFour, a mechanical engineering major, and Alley Heffern, a civil engineering student, took the first steps on their journey into the backpack industry. The experience in Uganda sparked a desire to bring back a piece of the country. So, when the pair found a local fabric that they felt perfectly captured the culture of the country, they bought several yards. Alley DuFour had a portion of the material made into a skirt; Jack DuFour opted for a backpack.



“
OUR GOAL IS TO
CONNECT THE WORLD
AND MAKE IT FEEL A
LITTLE SMALLER.”

Alley DuFour '13

FANTASTIC FABRICS: (Opposite) Jack DuFour '12 and Alley Heffern DuFour '13 find time for a break during a trip to Ecuador. (Top left) Alley Heffern DuFour searches through a market shop in Bangkok. (Bottom left) Jack DuFour admires the bright colors in Bali.

"And the idea really snowballed from there," Alley DuFour said.

The couple returned to Blacksburg with an inspiration, but without the skillset or expertise to make a bag or launch a business.

From the legal paperwork to the actual crafting of their first marketable tote, an extensive network of mentors in and around the university helped bridge the gaps. "I think without the Virginia Tech community we would have just left it as an idea, but instead there were people there who helped us turn it into a reality," said Alley DuFour.

Through careful planning, the DuFours ensured a quality, marketable, cost-effective product for consumers. They also fulfilled a personal commitment to give back. Twenty percent of the profits from the sale of the totes are returned to the country of the fabric's origin as a microloan for a small business or farm. The no-interest loans are managed through the San Francisco-based nonprofit Kiva Lending Team. When the funding is paid back in full within a year, the DuFours reinvest it, buying additional fabric from the country.

"We're trying to connect the world in a subtle, but significant way. Giving people a nudge to wander off the beaten path in search of fabric often leads them to their most authentic experiences. These authentic and genuine interactions with local people connect us in a way that typical tourist attractions don't," Jack DuFour said. ■



TRAVELING TOTES

For more about Taaluma Totes, including information on how you can help carry a country, visit vtmag.vt.edu.



1 “Now that’s Hokie! We flew the minister from Virginia to perform the ceremony; he’s a Hokie. Yes, there is a Hokie tattoo under that dress. The bride took the groom to Virginia Tech for our first Christmas together.” —Laura Stanley Trilles ’06 who married Charlie Trilles, Honolulu, Hawaii, 8/19/17.

2 “What could be better than two Hokies who met at school, fell in love, and then got married on campus, too. Hokies for life!” —Janice Leigh Ryerse Overton ’15 who married Matthew C. Arnold ’12, Blacksburg, Va., 10/22/16.

3 “Raising her right with some Hokie Spirit! My wife, Susan, and I can’t wait to bring her to Blacksburg!” —Robert M. Brooke ’88, Fairfax, Va., who welcomed a daughter, Addison Grace, 5/6/17.

4 “Nothing beats marrying your best friend in the best place; right where our story began!” —Ashley Nelson Dustin ’15 who married James Dustin, Los Angeles, Calif., 7/29/17.

5 “Danielle, our little Hokie cheerleader, is already an avid Hokie fan.” —Brian Wilkerson ’96, who welcomed a daughter, Danielle Elise, 9/27/16.



SCOTTIE PHOTOGRAPHY



KRISTIE LEA PHOTOGRAPHY



ROBERT BROOKE



TOYA EARLEY



WENDY WILKERSON



6



ROBIN JERSTAD

7



BONNIE WILLIAMS DEWAY

8



9

MEREDITH SHUMAN



JCPENNEY

10

6 “We met in physics lab. Chemistry quickly turned into biology, which blessed us with Charlotte—our newest Hokie.” —Morgan Hankin ’10, who along with Ashley Hankin ’10, Baltimore, Md., welcomed a daughter, Charlotte, 9/1/17.

7 “Our love story started in Blacksburg, traveled across four states, and landed us in our new home of New Braunfels, Texas, where our family, friends, and fellow Hokies joined us to celebrate our marriage.” —Taylor Nurmi Jimeson ’12, who married Max Jimeson ’11, New Braunfels, Texas, 9/3/17.

8 “Brooke has already enjoyed a full season of cheering on the Virginia Tech football team.” —Chris DeMay ’02, who along with Bonnie Williams DeMay ’00, Chantilly, Va., welcomed a daughter, Brooke Florence, 7/26/17.

9 “Clark Shuman loves supporting the Hokies and his daddy, who is associate director for VT football strength and conditioning.” —Meredith Hawkins Shuman ’10, who along with Ryan Shuman ’08, Roanoke, Va., welcomed a son, John Clark, 11/6/17.

10 “George was born early, but he made it home on Feb. 5, 2017—just in time to watch the Super Bowl! Both mom and dad graduated from Virginia Tech, so he’s destined to be a Hokie fan, too. In fact, he’s already a member of the Hokie Kids’ Club.” —Sara Lovejoy Pennington ’01, who along with Neil S. Pennington ’95, MBA ’99, Richmond, Va., welcomed a son, George Alexander Pennington, 1/14/17.

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FROM THE BUCKET LIST

HOKIE HIKES



The Hokie Bucket List was conceived and developed by the Student Alumni Associates. It consists of 72 tasks, which, if completed, would give any Virginia Tech student or community member the experience of a lifetime.

Hike to
McAfee's
Knob

AND GET YOUR PICTURE TAKEN ON THE EDGE.
AVOID THE CROWDS - GO ON A WEEKDAY!



BRING ENOUGH WATER
AND PRACTICE "LEAVE
NO TRACE" ON THE TRAIL.

Hike
Dragon's
Tooth



Hike the
Cascades

EVEN BETTER WHEN THE
CASCADES ARE FROZEN!



HIKE THE TRAILS AND TAKE THE
SELF-GUIDED TOUR OF THE "DIRTY
DANCING" MOVIE'S LOCATIONS.

Visit
Mountain
Lake



There are a handful of hikes included on the list. How many have you trekked? Did you take any photos in your Virginia Tech gear? If so, tweet them to @VT_Mag using the hashtag #HokieHikes, and we'll share them with our followers. For the full bucket list, visit hokiebucketlist.alumni.vt.edu. Photos by (from upper left) Marie De Jesus, Shutterstock Photo, Mac Stone, and Dave Trozzo/Alamy Stock Photo.

“

**THERE IS POWER
WHEN THE HOKIE
NATION GATHERS
AND GIVES BACK
TOGETHER. WE CAN'T
WAIT TO SEE YOU!"**

Matthew M. Winston Jr. '90,
senior associate vice president
for alumni relations



LOGAN WALLACE

WHAT IS NEXT?

by Mathew M. Winston Jr.

SINCE 2014, OUR UNIVERSITY community has been asking: What is next? The Beyond Boundaries visioning process challenged us to think about what it looks like to be a leading institution confronting the most challenging problems of the commonwealth, the nation, and the world.

Our vision for the future is clear. Planning and implementation are under way.

In four years, we will commemorate the 150th anniversary of the founding of Virginia Tech.

Our goals position us to be a stronger university as we march toward our sesquicentennial in 2022. It is an extraordinary time to be a Hokie.

As alumni, you have an important role to play in supporting Virginia Tech and

helping achieve our bold and ambitious objectives.

Spend time on campus. Learn about where we are headed—and why. Become inspired.

There are two opportunities to do just that coming up soon.

In April, we will hold our biennial Black Alumni Reunion. This year's theme is Raising the BAR: Celebrating Black Excellence at Virginia Tech.

This reunion is a chance for alumni to honor past milestones, celebrate current successes, and engage with Virginia Tech as we move forward. More than 500 alumni returned to campus for our last Black Alumni Reunion, and we hope to see even more Hokies on campus this year. Join us April 13-15.

In June, we will launch our first-ever summer reunion weekend. Reunion 2018 welcomes Hokies back for four days of unique on-campus experiences, with new ways to connect with fellow alumni.

Attendees will enjoy dinners on the Drillfield, behind-the-scenes campus tours, seminars with top faculty, and more.

Please return to campus June 7-10. And when you do, we encourage you to give back, too.

Spend time with students to share your expertise. Volunteer on a board or committee. Make a gift.

There is power when the Hokie Nation gathers—and gives back—together. We look forward to welcoming you home! ■

Mathew M. Winston Jr. '90 is senior associate vice president for alumni relations



IN MEMORIAM

*Listing includes notices shared with the university between June 1, 2017, and Sept. 30, 2017.
The next edition will include those received between Oct. 1, 2017, and Dec. 31, 2017.*

'43

Everett F. Eldred Jr., North Chesterfield, Va., 8/26/17.

Newman R. Ogden Jr., Richmond, Va., 7/14/17.

Martha P. Waybright, Blacksburg, Va., 8/7/17.

'44

Thomas O. Dixon Sr., Edgewater, Md., 7/21/17.

John C. Higginbotham III, Greensboro, N.C., 8/14/17.

'45

Joseph C. Hild, La Grange, Texas, 9/21/17.

Thomas G. Martin, Williamsburg, Va., 7/4/17.

Donald H. Scott Jr., Marietta, Ga., 8/6/17.

Douglas D. Shelton Jr., Miami, Fla., 7/29/17.

Helen F. Troland, Mechanicsville, Va., 8/29/17.

Edgar L. Van Nuis, Pittsgrove, N.J., 7/5/17.

'46

Robert I. Wilkerson, Brevard, N.C., 9/23/17.

'47

William L. Phalen Jr., Marietta, Ga., 9/19/17.

John T. Walmsley, Tinley Park, Ill., 8/10/17.

'48

James M. Cole, Abingdon, Va., 9/15/17.

George L. Spanos, Columbia, S.C., 6/30/17.

Robert E. Wickes, Simpsonville, S.C., 9/7/17.

'49

Robert W. Benson, Victor, N.Y., 9/6/17.

Melvin E. Manuel, Norfolk, Va., 8/9/17.

Roy L. Scales, Kingwood, Texas, 7/18/17.

'50

Walker Anderson, Louisville, Colo., 9/28/17.

Wesley L. Anderson, Livingston, N.J., 8/9/17.

Wayne G. Branscome, Wilmington, N.C., 8/27/17.

Claiborne H. Cummins, Springfield, Va., 9/28/17.

William A. Headley Jr., Orlando, Fla., 7/20/17.

Tony W. Hogue, Pittston, Pa., 2/19/17.

Howard E. Jones, Virginia Beach, Va., 9/22/17.

Robert S. Kilbourne, Abingdon, Va., 8/23/17.

Harold H. Mathews Jr., Kernersville, N.C., 7/3/17.

Robert L. May, Abingdon, Va., 6/7/17.

James N. Sheppard, Buffalo Junction, Va., 9/25/17.

Leon K. Smith, Newport News, Va., 8/22/17.

Leon V. Talmage, Garnet Valley, Pa., 8/2/17.

Franklin R. Taylor, Millersville, Md., 8/12/17.

Allen R. Trippeer, Kennesaw, Ga., 6/30/17.

'51

Walter Lambert Jr., Richmond, Va., 8/18/17.

Richard L. Martin, Collierville, Tenn., 6/22/17.

Mildred Price McDuffie, Roanoke, Va., 7/1/17.

John "Dick" R. Plymale Jr., Harrisonburg, Va., 9/19/17.

Gerald M. White, Lexington, Ky., 8/6/17.

James N. Young Sr., Springfield, Va., 7/10/17.

'52

J. Curtis Hall, Richmond, Va., 7/20/2017.

Franklin O. Vecellio, Staunton, Va., 6/28/17.

'53

William B. Atkinson Jr., Roanoke, Va., 7/6/17.

Philip P. Janosik, Woodbridge, Va., 8/25/17.

Everett A. Huffman, Lanham, Md., 8/19/17.

William P. Radtke, Leawood, Kan., 8/16/17.

William R. Stafford Jr., Greensboro, N.C., 8/3/17.

'54

Marilyn E. Ambler, Hampton, Va., 6/13/17.

James Rosati Jr., Largo, Fla., 9/15/17.

Hayden J. Silver Jr., Williamsburg, Va., 9/28/17.

Joseph "Jay" T. Sowell Jr., Palm-dale, Calif., 6/16/17.

Stephen E. Whitney, Ashburn, Va., 8/18/17.

'55

William E. Cox, Raleigh, N.C., 8/10/17.

'56

Dennis E. Brown, Mechanicsville, Va., 8/31/17.

Raymond F. Burmester, Fairfax, Va., 9/15/17.

Sidney B. Harvey, Elk Creek, Va., 7/26/2017.

James H. Holland, Peoria, Ill., 7/1/2017.

Robert M. Stewart, Va Beach, Va., 8/21/17.

'57

Stanley A. Jacobson, Miami, Fla., 8/7/17.

Clyde B. LaRue Jr., Newport News, Va., 7/14/17.

Peggy Brooks Loyd, Chambersburg, Pa., 9/3/17.

'58

Curtis E. Davis Jr., Roanoke, Va., 8/2/17.

Clarence B. Givens, Blacksburg, Va., 8/22/17.

James H. Patterson, Blacksburg, Va., 9/18/17.

Julian C. Roden Jr., Mechanicsville, Va., 5/28/17.

Albert E. Smith, Severna Park, Md., 7/26/17.

'59

James R. Berry, Earlsyville, Va., 7/1/17.

Arthur R. Lafollette, High View, W.Va., 4/12/17.

Richard N. McGuire, Christiansburg, Va., 9/14/17.

C. Harry Stanley, Damascus, Va., 6/29/17.

'60

George W. Bowling, Chesterfield, Mo., 7/3/17.

James M. Brown Jr., Fredericksburg, Va., 8/30/17.

Robert L. Lively, Greensboro, N.C., 7/26/17.

C. L. Roberson, Spartanburg, S.C., 8/8/17.

William J. Story III, Waverly, Va., 7/14/17.

'61

Murray S. Boris, Potomac, Md., 9/19/17.

John H. Crews Jr., Lanexa, Va., 9/1/17.

Patricia Trainum Field, Annapolis, Md., 8/31/17.

Kenneth L. Garner, Norco, Calif., 9/19/17.

Lemuel "Chip" W. Houston Jr., Chesterfield, Va., 7/9/17.

Paul "Davis" Myers Jr., Titusville, Fla., 8/4/17.

'62

James H. Bradley Sr., Danville, Va., 6/3/17.

Lyle G. Hall Jr., Richmond, Va., 8/22/17.

Asghar Hasan, Burlington, N.J., 9/22/17.

Frederick D. Howard, Alum Creek, W.Va., 8/8/17.

Joseph J. McSweeney III, Richmond, Va., 7/2/17.

Bartley Mullin, Columbus, Ohio, 7/2/17.

Douglas H. Petrie, Pittsburgh, Pa., 7/11/17.

Eugene M. Schultz, Baltimore, Md., 8/23/17.

Richard W. Williams Jr., Annapolis, Md., 9/15/17.

'63

Lawrence W. Akers, Raleigh, N.C., 9/15/17.

Keith Douglas K. Baugher, Baton Rouge, La., 9/7/17.

John F. Reppert, Saint Albans, W.Va., 9/30/17.

'64

Samuel R. Carter III, Salem, Va., 8/18/17.

Richard L. Dishman Sr., Troutman, N.C., 8/23/17.

Robert E. Doriot, Coppell, Texas, 7/27/2017.

Thomas E. Falgout Sr., Lafayette, La., 8/21/17.

Marvin W. Parker Jr., Newport News, Va., 9/1/17.

'65

George S. Gillis, Atlanta, Ga., 9/21/17.

Thomas W. Otto Jr., Springfield, Va., 7/22/17.

Terrell A. Wright, Alexandria, Va., 7/31/17.

'66

Robert W. Earley, Sugarloaf, Pa., 9/25/17.

Claude E. Messamore Jr., Saint Petersburg, Fla., 9/18/17.

John J. Monroe Jr., Nokesville, Va., 9/6/17.

Kenneth J. Rhodes, Henrico, Va., 8/25/17.

Aubrey P. Ward Jr., Columbia, Md., 7/15/17.

'67

William T. Dickson, Luray, Va., 9/28/17.

Dean R. Hanson, League City, Texas, 7/21/17.

David E. Sawyer, Chesapeake, Va., 8/20/17.

Howard M. Sisson Jr., Wirtz, Va., 9/12/17.

'68

John E. Apostolides, Richmond, Va., 7/6/17.

Larry R. Coke, Lansdale, Penn., 9/27/17.

William L. Gibson, Canton, N.C., 8/28/17.

William C. Wilson, Columbia, Md., 7/21/17.

'69

Thomas C. Chestnutt, Williamsburg, Va., 8/26/17.

French E. Guthrie Jr., Greensboro, N.C., 8/23/17.

'70

Samuel J. Fariss, Buffalo Junction, Va., 6/27/17.

Steve Pyles, Fort Washington, Md., 7/14/17.

Gary D. Spidell, Home, Pa., 9/21/17.

'71

John F. Dryden, Anderson, S.C., 9/1/17.

William L. Herring Sr., Keswick, Va., 8/9/17.

Harriet H. Miller, Sterling, Va., 9/24/17.

David T. Stafford, Oak Ridge, Tenn., 6/24/17.

Lonnie White, Whitewood, Va., 8/31/17.

'72

Charles E. Fraker Jr., Richmond, Va., 7/27/17.

Joseph H. Gilmer, Lebanon, Va., 7/26/17.

Philip T. Lester, Ridgeway, Va., 8/4/17.

'74

Wayne L. Adkins, Myrtle Beach, S.C., 7/25/17.

William A. Herndon, Cape Coral, Fla., 8/14/17.



Andrewus “Andre” Khuri, Jacksonville, Fla., 8/30/17.

Margery L. Krome, Norfolk, Va., 8/11/17.

James A. Marshall, Hot Springs, N.C., 5/13/17.

Mark A. Munsey Jr., Kingsport, Tenn., 8/13/17.

Herbert R. Smith, Athens, Ga., 8/15/17.

’75

John P. Dixon Jr., El Paso, Texas, 6/27/17.

Julian L. Hicks, Turbeville, S.C., 9/12/17.

’76

Therese T. Minter, Virginia Beach, Va., 11/21/17.

William D. Simpkins, Bristol, Tenn., 8/23/17.

’77

Harold Absher Jr., Knoxville, Tenn., 8/9/17.

Phyllis F. Cannon, Virginia Beach, Va., 8/15/17.

Moses A. Clements, Emporia, Va., 9/23/17.

Charles R. Guarino, Durango, Colo., 7/4/17.

Thomas J. Heckman, Reading, Penn., 8/11/17.

Betty M. Henry, Fairlawn, Va., 9/13/17.

’78

Chester L. Briggs, Roanoke, Va., 8/17/17.

’79

Suzanne M. Flavin, Chicago, Ill., 9/8/17.

Henry S. Hewitt Jr., Studley, Va., 8/27/17.

Thomas E. McCue, Williamsburg, Va., 8/19/17.

Fred C. Shelton Jr., Madison Heights, Va., 7/29/17.

’81

Linda Kruscop Carter, Yanceyville, N.C., 7/18/17.

Ronald R. Clary, Roanoke, Va., 6/24/17.

Lisa H. Peterson, Alexandria, Va., 6/30/17.

’82

David P. Fitzgerald, Alachua, Fla., 6/27/17.

Nancy Sautter, Horton, Mich., 7/17/17.

’83

Kevin J. Buckert, Hilton, N.Y., 6/29/17.

Sabrina L. Tuttle, Globe, Ariz., 7/17/17.

William R. Williamson, Gastonia, N.C., 8/25/17.

’84

Richard W. Eby, Laurence Harbor, N.J., 9/15/17.

Gregory G. Hamm, Fairfax, Va., 7/25/17.

Mark A. Newman, Blacksburg, Va., 10/28/17.

Bobbie J. Primus-Cotton, Daytona Beach, Fla., 9/25/17.

’85

Derek A. Emmerson, Owens Cross Roads, Ala., 7/16/17.

Kelly E. Quillen, Greensboro, N.C., 9/10/17.

’86

Brion H. Ferratt, Fort Worth, Texas, 6/29/17.

Karen M. Latham, Gainesville, Va., 8/16/17.

David B. Wiersma, North Bethesda, Md., 7/15/17.

’87

Stephanie S. Herron, Roanoke, Va., 8/12/17.

Glenn W. Prichard, Crum, W.Va., 9/6/17.

’88

John H. Stadler, Poquoson, Va., 10/18/17.

’89

James R. Criniti, Mount Carbon, W.Va., 8/22/17.

Audrey O. Lee, Bedford, Va., 8/14/17.

’90

Phillip P. Cataldi, Annapolis, Md., 7/10/17.

’92

Ruth E. Rathburn Cox, Blacksburg, Va., 8/7/17.

Marsha Siewert Hoshko, Grayslake, Ill., 8/6/17.

’94

Nancy R. Hymes Houseknecht, Staunton, Va., 9/13/17.

Robert F. Rhinehart, Edmonds, Wash., 7/20/17.

David W. Wallace, Lawrenceville, Va., 7/5/17.

’96

Robert A. Coletti, Jonesborough, Tenn., 7/9/17.

Charles R. Fagg, Richmond, Va., 8/9/17.

Charles K. Fisher, Bassett, Va., 8/7/17.

Ethel R. Porter, Chesapeake, Va., 1/25/17.

’02

Noelle C. Loving, North Chesterfield, Va., 9/13/17.

’04

Patricia S. Morgan, Amelia Court House, Va., 11/4/17.

’09

Ryan F. Hubbard, Christiansburg, Va., 9/9/17.

Christopher L. Shifflett, Shenandoah, Va., 7/4/17.

’11

Aaron P. Bitler, Williamsburg, Va., 8/22/17.

Heather D. Riley, Midlothian, Va., 7/28/17.

’14

Dylan F. Patterson, Baltimore, Md., 9/21/17.

’15

Benjamin M. Wenger, Annandale, Va., 9/16/17.

’16

Catherine E. Poindexter, Severna Park, Md., 9/21/17.

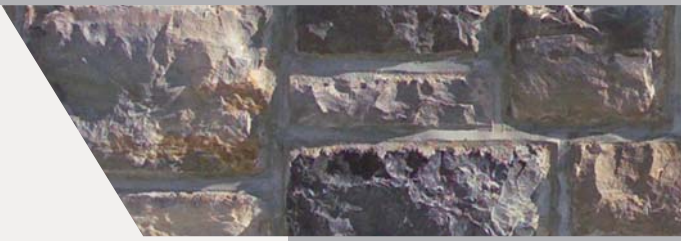
Abigail Ryan, Blacksburg, Va., 9/16/17.

’17

Alyce R. Cheatham, Portland, Ore., 5/21/17.



OBITUARIES



John Cairns Jr., a University Distinguished Professor Emeritus of Environmental Biology, died Nov. 5, 2017. Cairns joined the faculty of Virginia Tech in 1968, teaching more than 20 courses before his retirement in 1995. His research focused primarily on ecotoxicology, ecological restoration, protozoan community dynamics, and the sustainable use of the planet. In 1991, Cairns was named to the National Academy of Sciences and received the Virginia Lifetime Achievement in Science Award.

Col. Wesley L. Fox, a Medal of Honor recipient, U.S. Marine, and former deputy commandant for the Virginia Tech Corps of Cadets, died Nov. 24, 2017. On Feb. 22, 1969, while serving as the commanding officer of Company A, 1st Battalion, 9th Marines, 3rd Marine Division in A Shau Valley, Vietnam, Fox's unit was attacked. Despite injury, Fox led his men as they advanced through heavy fire. They eventually forced the North Vietnamese troops to retreat. Wounded again in a final assault, Fox continued to refuse medical attention and instead ensured that other wounded Marines were tended to and evacuated. Fox was presented the Medal of Honor by former President Richard Nixon. Fox also earned a Purple Heart and a Bronze Star, among other recognitions.

Barry Robert, university veterinarian and director of the Office of Animal Resources, died Nov. 12, 2017. As a veterinarian and professor for 30 years, he worked at universities and medical and research centers throughout the country. In 2014, he arrived at Virginia Tech, where he oversaw the management and clinical care of animals used in teaching and research in Blacksburg and in Roanoke at the Virginia Tech Carilion Research Institute.

James E. Turner Jr., '56 of Suffolk, Virginia, a distinguished and devoted alumnus who served on the university's Board of Visitors from 1994 to 2002 and was rector from 1997 to 2002, died Dec. 27, 2017. A native of Virginia's Isle of Wight County, Turner earned his bachelor's in agricultural engineering. While a student at Virginia Tech, Turner spent two years in the Corps of Cadets, played football, and was a member of the Tau Beta Pi and Phi Kappa Phi honor fraternities. After graduation, he went to work for Newport News Shipbuilding, and over the next 43 years, he held positions of increasing responsibility at that company, Westinghouse, and General Dynamics, from which he retired as president and chief operating officer in 2000.

Along with his wife, Elizabeth, Turner was a charter member of the President's Circle within the Ut Prosim Society of Virginia Tech's most generous donors.

In recognition of his accomplishments, service, and contributions, the university in 1994 presented Turner with the University Distinguished Achievement Award. He received the Alumni Distinguished Service Award in 2003, and the university's highest award, the William H. Ruffner Medal, in 2004.

STILL
LIFE

In November 2017, the Council of International Student Organizations presented "Dance of Nations." The event, held in the Graduate Life Center auditorium, showcased performances from countries and cultures around the globe. The dances were performed by students and community members associated with international groups at Virginia Tech. Odiney Alvarez-Campos (pictured) performed a traditional Greek Romani (Gypsy) dance. Alvarez-Campos, a native of Costa Rica, is a doctoral student in crop and soil environmental sciences. Photo by Christina Fransulich .

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CHRISTIANSBURG**
MONTGOMERY COUNTY, VA



**VIRGINIA
IS FOR
LOVERS**

**MOSS
ARTS
CENTER**





DAVID HUNGATE

by Michael J. Friedlander

END NOTE

POTENTIAL ENERGY TO KINETIC ENERGY IN ROANOKE



JIM STROUP

CONSTRUCTION WAS JUST UNDER way on campus when I came to Roanoke to interview for the position of founding executive director of the Virginia Tech Carilion Research Institute (VTCRI).

At the time, I was chair of the Department of Neuroscience and director of neuroscience initiatives at the Baylor College of Medicine, an academic health science center at the Texas Medical Center in Houston, the largest medical complex in the U.S.

I parked near the construction and walked around. Melting snow was turning into puddles on the ground. Not many people were in sight. One really had to exercise the imagination to get any sense of what it might be like moving forward.

However, my confidence in the plans to create an innovative medical school and research institute grew as I met then-university President Charles W. Steger '70, M.Arch. '71, Ph.D. '78 and then-Carilion Clinic President and CEO Ed Murphy. It wasn't long before I understood that this could really be something spectacular.

My wife Sandra and I also saw the promise of a vibrant, talented, and welcoming community where we could stake our future.

Before Baylor, I founded the University of Alabama at Birmingham's Neurobiology Research Center, the Department of Neurobiology, and the neurobiology graduate program. I was able to watch them grow while sharing in the successes of the outstanding faculty and students who worked to build them.

But never before had I started such a massive undertaking with an almost blank slate. I kept thinking, how often do you get a chance to contribute to building something brand new with the potential to positively impact so many lives? How could I say no?

VTCRI opened Sept. 1, 2010. The medical school had opened a few weeks earlier, so there was some life, thanks to the new students. But on the research institute side of the building, there was literally no one—except me, a couple of hardy Virginia Tech staff, and my labradoodle, Grayton, who visited often in the early days. Those first few days were spent alone, with all the challenges one would expect in a brand-new, nearly empty building and starting a new program.

Then, very quickly, things started to hum. Those first couple of years were a recruiting blitz. We interviewed people from all over the world, hosted visitors, and had seminars—literally something every day.

By the middle of the first year, we were nearly 100 strong—including eminent scientists who recognized the opportunity for innovation and discovery-based entrepreneurship. We quickly progressed

from the days when everyone at VTCRI could fit around one table to today, with our faculty, staff, and students numbering well over 300.

In just seven years, VTCRI has won more than \$100 million in new research grants.

Today, it's hard to remember those "old days," but reminders of that not-so-distant past are becoming more prominent. Once again, this time on a fenced-in area on what had been a parking lot in the center of the Riverside campus off Jefferson Street, earthmovers and construction crews are putting up a new building. The Virginia Tech Carilion Biomedical Research Addition will house another 25-30 research teams to solve 21st-century health challenges and add to the economic vitality of Southwest Virginia.

As before, where once there was nothing, the Virginia Tech Carilion enterprise is creating something amazing. The new leadership—Virginia Tech President Tim Sands and Carilion Clinic President and CEO Nancy Agee—brought new energy to the enterprise, propelling it to the next level.

With our five daughters grown and raising their own families, Sandra and I are headed into the next phase of this partnership, this time with our new dog, Baylor (having lost Grayton to cancer five years after we relocated.) It seems fitting, as Baylor is a rescue pup, found on a highway in Houston near the Baylor College of Medicine, and the dog reminds us that our history is as important as the bright future ahead. ■

Michael J. Friedlander is the vice president for health sciences and technology for Virginia Tech and the founding executive director of the Virginia Tech Carilion Research Institute.

DOGGED CONNECTIONS: (opposite: top) Michael Friedlander and his labradoodle, Grayton, were constant companions during the early days at VTCRI. Grayton died of cancer in 2015, surviving almost five years after his diagnosis thanks to experimental treatments, some administered at the Virginia Maryland College of Veterinary Medicine. (Bottom) VTCRI and the Virginia Tech Carilion School of Medicine occupy a modern facility in Roanoke.

IN OUR NEXT ISSUE

This summer, the Virginia Tech Carilion School of Medicine will become the university's ninth college. Virginia Tech Magazine will commemorate the occasion by exploring how Virginia Tech is leading Roanoke's transformation into a brain-powered outdoor city.

Virginia Tech's partnership with Carilion Clinic to build a medical school and research institute has recharged the Star City, bringing new energy to the land along the Roanoke River and laying the groundwork for a thriving biomedical business district. The school of medicine prepares the medical leaders of tomorrow, while the research institute is creating new tools that will revolutionize health care from the medicine cabinet to the operating room.

Virginia Tech's engagement in Roanoke has revitalized the city's core, attracting young talent while also applying the ethic of *Ut Prosim* (That I May Serve) to benefit the region's most vulnerable residents. Find out more in the summer issue of Virginia Tech Magazine.

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REUNION 2018

JUNE 7-10

**COME START A NEW TRADITION WITH US:
REUNION WEEKEND, JUNE 7-10, 2018**

This June we are establishing a new tradition with our first-ever reunion weekend. Hokies will gather for one weekend during the summer, instead of holding individual reunion weekends in the fall.

You asked for more time on campus to connect with friends and experience the place that will always be home. Our newly expanded reunion weekend is a chance to do just that. There will be guided campus tours, college open houses, class dinners on the Drillfield, presentations from top faculty, children's activities, time to network and mingle, and more.

Register now. Discounted local lodging is available; you can even stay on campus in a residence hall.

To learn more, get involved, and make plans to attend, visit alumni.vt.edu/reunion2018. Plus, share your excitement online, using **#VTReunion18**.



VISIT ALUMNI.VT.EDU/REUNION2018.