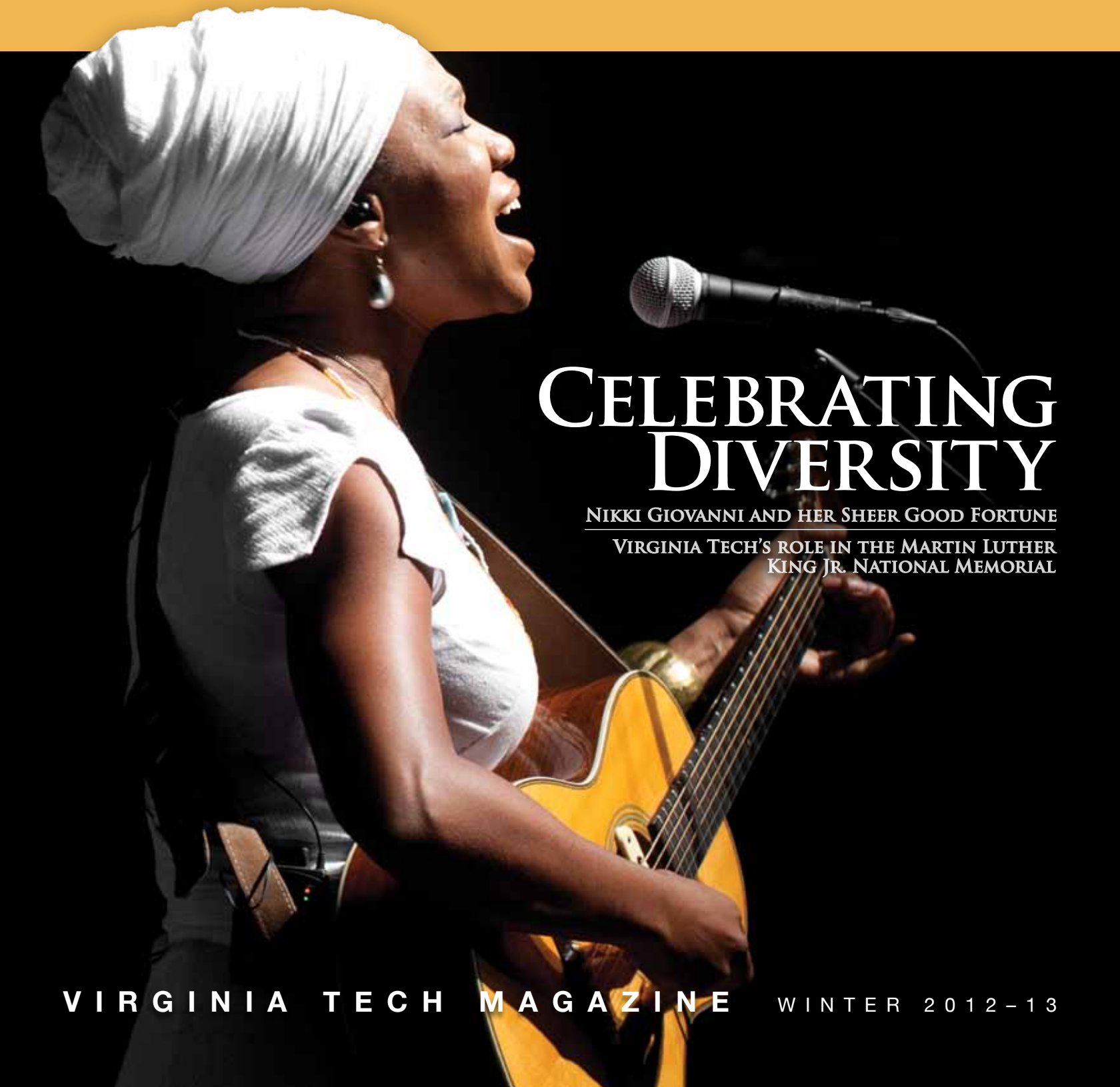
vt mag

Horse Calls
On the road with the Equine Field Service

Welcome to Racksburg
Why open-cloud company Rackspace digs Blacksburg

21st-Century Land-Grant
Virginia Tech and the Morrill Land-Grant Act's evolution



Celebrating Diversity

Nikki Giovanni and her Sheer Good Fortune

Virginia Tech's role in the Martin Luther King Jr. National Memorial

VIRGINIA TECH MAGAZINE WINTER 2012–13

Say hello to the future.

Geo Balderas remembers the tremendous boost in confidence he received from having his smile corrected as a teenager. A junior majoring in human nutrition, foods, and exercise, he plans to become an orthodontist and help others have a winning smile as well.

Like many Virginia Tech students, Geo is able to pursue his ambition thanks, in large part, to the generosity of donors. In his case, the Robert L. Leach '36 and Benton R. Leach '52 Scholarship helps keep college affordable. To learn more about the impact of philanthropy on Virginia Tech and its students, or to make your gift, please visit www.givingto.vt.edu today.

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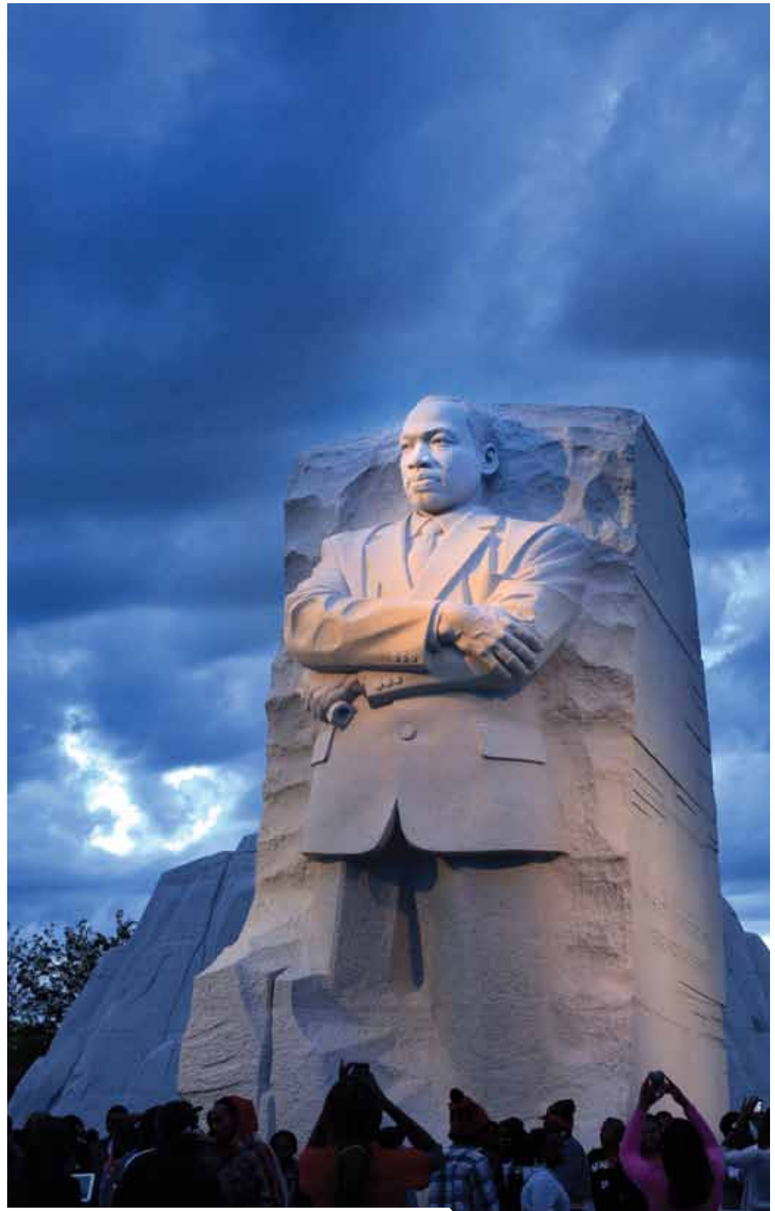

Above: On an October 2012 evening on the National Mall in Washington, D.C., the striking aura of the Martin Luther King Jr. National Memorial drew a crowd. To learn about Virginia Tech's role in the memorial's creation, read the story on page 22. Photo by Jim Stroup.

On the cover: At the Oct. 16 Sheer Good Fortune: Celebrating Toni Morrison event, Grammy Award-winning musician India.Arie sang to Morrison a song entitled "Not Afraid of the Dark," inspired by reading Morrison's "The Bluest Eye." Said Arie, "I believe [being here tonight] happened because I've been asking God since I was 19 to be able to sing this song in front of Toni Morrison." See event coverage on page 30. Photo by Logan Wallace.

contents

features

Welcome to Racksburg
In the latest installment in our economic development series, we take readers behind the scenes at the Blacksburg offices of cloud-computing company Rackspace, offering an insider's perspective on what makes Blacksburg such a great place to live, work, and play. Find out why "Rackers" are so enthusiastic about their company and the New River Valley.
PAGE 14

The 21st-Century Land-Grant
It's been 150 years since the Morrill Act established the nation's land-grant universities, enriching society by opening up access to higher education and promoting economic development. Three experts give their perspective on how that mission remains vital and vibrant—nowhere more so than at Virginia Tech.
PAGE 18

Dream Design: Celebrating diversity at Virginia Tech
Thanks to faculty and students at Virginia Tech's Washington-Alexandria Architecture Center, a design competition paved the way for the Martin Luther King Jr. National Memorial in Washington, D.C. On campus and elsewhere, university community members are designing a vision of inclusive excellence.
PAGE 22

Sheer Good Fortune: Literary stars shine brightly
For fans of literature, it was an evening to remember. Literary giants, from Virginia Tech's own Nikki Giovanni to legendary poet Maya Angelou, gathered on the stage in Burruss Auditorium to honor award-winning author Toni Morrison. Giovanni's vision for the event led to an evening of dramatic readings and musical performances—a star-studded, spellbinding, and unforgettable event.
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The life-saving infant respirator

The article was very special for me, and I am so proud to share it with friends and family. Thank you for all that you and the university have done—especially the chance to spend time with Dr. Arp and his family. He is an exceptional man.

Carrie Darkes, Mountain Home, Idaho

I often tell a story from my biomedical instrumentation class with Professor Arp. He volunteered me to demonstrate the operation of an electrocardiogram. As I lay shirtless with probes attached, in front of the class, everyone was crowded around the screen, observing and hearing my cardiovascular activity. A very attractive female classmate approached and proceeded to place her hands on my bare chest. Arp had obviously put her up to it, as he was laughing as hard as the rest of the class at my accelerated cardio activity.

Mike Dobie (mechanical engineering '76), Dallas, Texas

I took [Professor Arp's] Introduction to Biomedical Engineering class because I thought it sounded interesting. As it turned out, I ended up working for Baxter Healthcare Corp. for most of my career, retiring at the end of 2011. Arp's class was instrumental in my interest in working in the medical manufacturing industry.

J. Stephen Forney (mechanical engineering '76), New Bern, N.C.

The swordfish recipe

I was shocked that Virginia Tech Magazine printed a swordfish recipe without any consideration of the ethics and environmental impact of the purchase of swordfish. An Internet search would have turned up reliable reports of the advisability of the purchase of swordfish. The advisability of consumption depends on the location and the method of the catch. The magazine takes care to use environmentally preferable inks and paper. It needs to also model responsible consumption behavior.

Sandra B. Conners (M.B.A. '81), Lexington, Ky.

Editor's note: In response, we consulted with Eric Hallerman, fish and wildlife conservation department head, who recommended that consumers check the Monterey Bay Aquarium's Seafood Watch at www.montereybayaquarium.org/cr/seafoodwatch.aspx. (We found that the site, based on where and how swordfish and other species are caught, outlines best choices, good alternatives, and fish to avoid.) Hallerman said that consumers should look for swordfish that is certified as sustainable according to the Marine Stewardship Council, and/or swordfish that is harpoon- and handline-caught in U.S. and Canadian waters in the North Atlantic and eastern Pacific Oceans.

The HokieBird at 50

Nice article on the HokieBird in the fall edition. It is interesting to note that the original HokieBird first appeared in the fall of 1962, named "The Fighting Gobbler." I wore the costume in its debut, in the final game of my senior year. It was a really big hit. Our bowl game in Orlando will be my 14th bowl game in a row, and every time I see that HokieBird, I feel good.

Mercer MacPherson (civil engineering '63), San Juan Capistrano, Calif.

Editor's note: For more on MacPherson and the HokieBird, visit www.vtmagazine.vt.edu/fall02/feature4.html.

Correction: Andrew T. Kinney's (communication '08) city of residence and honors were misstated in the spring 2012 edition. The Yorktown, Va., resident received the Bronze Star Medal and the Combat Action Badge from the U.S. Army.

ANNE WERNIKOFF

'Lost Communities of Virginia' book earns honors

"Lost Communities of Virginia," co-authored by Terri Fisher, outreach coordinator for the Community Design Assistance Center in the College of Architecture and Urban Studies, and Kirsten Sparenborg, a former intern with the center, recently received two distinguished honors. The first, a Library of Virginia's People's Choice Award for Nonfiction, allows readers to vote on their favorite works written by Virginia authors or featuring Virginia subjects. The second honor is Preservation Virginia's 2012 Outstanding Historic Preservation Research Effort Award, given annually for contributions to historic preservation or archaeology in Virginia through research or education.

Thomas R. Fox named Soil Science Society of America Fellow

Thomas R. Fox, professor of forest soils and silviculture in the College of Natural Resources and Environment (CNRE), has been named a Fellow by the Soil Science Society of America. Being chosen as a Fellow is the highest recognition bestowed by the organization; the honor is limited to 0.3 percent of the society's more than 6,000 members. Fox is the lead principal investigator for the CNRE Department of Forest Resources and Environmental Conservation's $3.4 million portion of a $20 million grant from the National Institute of Food and Agriculture to study the effects of climate change on southern pine forests. He was recognized during the society's 2012 annual meeting.

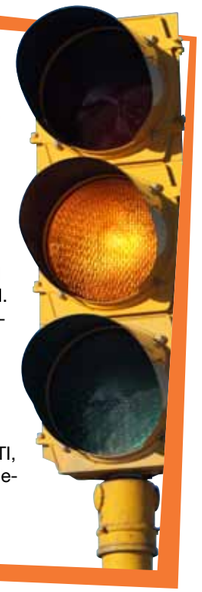
Stop or go? Yellow-light dilemmas

Researchers at the Virginia Tech Transportation Institute (VTTI) are attempting to improve intersection safety by researching driver reaction and the timing of yellow lights.

Although observation-based research shows that only 1.4 percent of drivers cross the stop line after the light turns red, more than 20 percent of traffic fatalities in the U.S. occur at intersections.

"If the yellow time is not set correctly, a dilemma zone is eminent," said Hesham Rakha, director of the Center for Sustainable Mobility at VTTI. "The dilemma zone occurs when the driver has no feasible choice. In other words, the driver can neither stop nor proceed through the intersection before the light turns red. This can also occur if the approaching vehicle is traveling faster than the posted speed limit and/or if the driver's perception and reaction time is longer than one second."

Rakha and his team are using the Virginia Smart Road, managed by VTTI, to test drivers' behavior as they approach yellow lights. Their aim is to determine signal times that are safer yet still efficient.



Landscape architecture programs ranked second in North America

Virginia Tech's School of Architecture + Design, part of the College of Architecture and Urban Studies, has once again earned high marks in national rankings. DesignIntelligence awarded both the undergraduate and graduate landscape architecture programs top marks, with each ranking second in the nation in the America's Best Architecture & Design Schools 2013 report. Other programs within the school were also highly ranked, and Professor Robert Dunay was listed among the 30 Most Admired Educators for 2013.

Engineering team wins space-vehicle design contest

A student team from the Department of Aerospace and Ocean Engineering in the College of Engineering won first place in the American Institute of Aeronautics and Astronautics Foundation's 2011-12 Undergraduate Team Space Transportation Design Competition in September in Pasadena, Calif. The contest required entrants to design and produce a business plan for a commercial Earth-to-orbit passenger vehicle. Members of the winning team, all aerospace engineering undergraduates when the project began in 2011, were Nicole Heersema, Tommy Hertz, Tom Kasmer, Maria Rye, Matt Shepherd, Matt Smith, Bryan Undercoffer, and Greg Wheeler. Kevin Shinpaugh, an adjunct faculty member of aerospace and ocean engineering and the director of information technology at the Virginia Bioinformatics Institute, served as the team's faculty advisor.

New majors, minors added to liberal arts and human sciences offerings

Beginning in the spring semester, two innovative majors, a pair of minors, and a new program option will be available in the College of Liberal Arts and Human Sciences. The State Council of Higher Education for Virginia has approved a bachelor of arts degree in religion and culture and a master's degree in material culture and public humanities. In addition, the college boasts a new minor in Middle East studies, a minor in 21st-century studies, and a new research methods option in sociology.

Researcher determined to find better treatment for 'sleeping sickness'

In sub-Saharan Africa, a disease known as sleeping sickness—spread by the tsetse fly—infects hundreds of thousands of people each year. Because domesticated animals also die from the parasite, the disease delivers a tremendous blow to the agricultural economies of these countries. Zac Mackey, an assistant professor of biochemistry in the College of Agriculture and Life Sciences and an affiliated faculty member with the Fralin Life Science Institute, is investigating new ways to develop drugs to combat the parasite. He examines the parasite, *Trypanosoma brucei*, by studying a protein kinase that may be responsible for controlling DNA replication and repair.

JIM STROUP

Veterinary college celebrates opening of new addition, research facilities

The Virginia-Maryland Regional College of Veterinary Medicine's latest cohort of students began their training in new instructional and laboratory spaces that give the college a sleek, modern look. The $14.1 million, 30,000-square-foot Veterinary Medicine Instruction Addition broke ground in summer 2011 and was completed by mid-August 2012. The addition includes a clinical-techniques laboratory for second- and third-year veterinary students as well as new faculty offices, student seminar space, and small conference areas. The college held a grand opening for the addition in October. The event also marked the completion of the $10.5 million, 16,000-square-foot Infectious Disease Research Facility, which opened in November 2011, and the renovation of the Multi-Disciplinary Lab, which took place in summer 2012.

Roving Mars

When you look at a thick stack of layers, it's like a book and you start at the bottom with the earliest chapters and work your way up. The cool thing is that whatever was going on on Mars at the time of the story we're about to read, is at the time life was starting to evolve on Earth. We get to read that story here and see what controlled the early environmental evolution. I hope that will be the legacy of this mission."

—John Grotzinger (Ph.D. geology '85), chief scientist for NASA's Mars Science Laboratory mission.

Visit **www.vtmag.vt.edu** to learn more about Grotzinger's role in the Mars mission.

Seeing red? Study examines color's influence on consumer behavior

Researchers found that at auctions and similar situations where consumers compete with one another to buy a scarce or a limited edition product, willingness to pay was strengthened through exposure to red rather than blue backgrounds. In contrast, in situations that allowed negotiations—when a product is readily available—willingness to pay was weakened by red backgrounds compared to blue. Published in the Journal of Consumer Research, the study was authored by Pamplin College of Business Associate Professor of Marketing Rajesh Bagchi and the University of Virginia's Amar Cheema.

Blacksburg tops lists for best place to raise kids, find a job

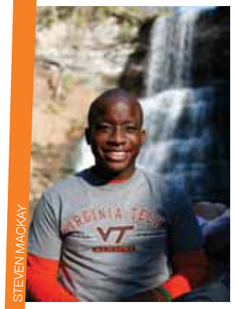
In September 2012, real estate site www.homes.com ranked Blacksburg No. 1 on its "Top 10 Cities to Raise a Family" listing, citing the presence of Virginia Tech and numerous economic opportunities as reasons for the top designation. Last year, Bloomberg Businessweek ranked Blacksburg as the "Best Place in the U.S. to Raise Kids." Educational and economic information, crime rates, amenities, air quality, and diversity were factors considered in the nationwide ranking.

It's not just the region's family-friendly atmosphere that's catching attention. In May, the Blacksburg-Christiansburg-Radford area was listed at No. 5 on Forbes' list of the best small cities for jobs. The list was developed using statistical data from the Bureau of Labor Statistics.

First-of-its-kind degree in real estate approved

Beginning in fall 2013, Virginia Tech will offer a bachelor of science program in real estate, the nation's first interdisciplinary undergraduate program of its kind. Incorporating Tech's academic strengths in architecture, building construction, business, applied economics, engineering, property management, and natural resources management, the degree program was unanimously approved by the Virginia Tech Board of Visitors at its quarterly meeting in November. The program, pending approval from the State Council of Higher Education for Virginia, will prepare students to become leaders in today's complex real estate industry.

STEVEN MACKAY



STEVEN MACKAY

"Ultimate Hokie" finally sees the Cascades

Although he was dubbed "The Ultimate Hokie" for his passion for Virginia Tech, Justin Graves (sociology '12) was missing out on a quintessential Hokies tradition—hiking to the famed Cascades Falls in nearby Giles County, Va.

Graves is a paraplegic and has been reliant on a wheelchair since age 3. "I figured it's just something that would be on my bucket list, never to really ever come off of it. I've seen pictures, and that was good enough for me," said Graves, now a master's student in the Department of Educational Leadership and Policy Studies.

But it wasn't good enough for Graves' fellow Hokies. In the spirit of the Virginia Tech motto, *Ut Prosim* (That I May Serve), Graves' longtime friend, Scinju Gadamsetty, a senior in the Department of Engineering Science and Mechanics, offered to help carry Graves to the falls—two miles, one way, up trails that are decidedly not wheelchair-friendly. More than a dozen Hokies joined in the December quest, carrying Graves on a makeshift stretcher or on their backs.

web extras

To find a photo gallery of the trek, along with links to a video of the hike and more, visit www.vtmag.vt.edu.

LISE VISSER

Understudy: The university's year-long celebration of the Morrill Land-Grant Act's 150th anniversary wouldn't be complete without Abraham Lincoln. Chris Elledge (finance '92) played the part at several events including the National Capital Region Fall Family Day on Nov. 3 at the Northern Virginia Center in Falls Church, Va. Later that day, Elledge visited the Lincoln Memorial, where he was surrounded by passers-by for photographs. The Newport, Va., resident is a systems administrator at the Montgomery-Floyd Regional Library.

In obesity, economics, not genetics, may be to blame

In a first-of-its-kind study that shows environmental conditions can be more influential than genetics, Virginia Tech researchers have found that the cost of food—not someone's genetic makeup—is a major factor in selecting fattening food. The study, published in The Open Neuroendocrinology Journal, suggests that economic environments could be altered to help counteract the obesity epidemic plaguing more than one-third of Americans. In the U.S. over the past 30 years, the price of fattening food has declined compared to healthy food, while obesity rates increased. This research suggests that if fattening foods cost more or were taxed, people would be less likely to eat them.

Virginia Tech hosts its first LGBT history month

Throughout the month of October, Virginia Tech celebrated the history of lesbian, gay, bisexual, and transgender heritage and related civil-rights movements, marking the first time that a cultural awareness month dedicated to LGBT issues was observed at the university. Events included film screenings, guest speakers, and discussions, as well as the Dining Out for Equality Restaurant Week, in which participating restaurants offered discounts on selected menu items in support of the LGBT community.

Enzyme problems

My goal is to teach the next generation of scientists and engineers. We need people with skills and passion to address key challenges in the sustainability revolution."

—Percival Zhang, associate professor of biological systems engineering in Virginia Tech's College of Agriculture and Life Sciences, who has introduced a graduate course on enzyme engineering to teach students how to use enzyme sciences and technologies to solve biotechnology and biochemical engineering problems

Virginia Tech, WSLS-TV co-host senatorial debate

Virginia Tech and WSLS-TV co-hosted the last of three U.S. Senate debates between Democratic candidate and former Virginia Gov. Timothy Kaine and Republican candidate and former U.S. Sen. George Allen on Oct. 18 on campus. WSLS senior political reporter and anchor Jay Warren and WSLS political analyst Robert Denton, the W. Thomas Rice Chair and professor of communication at Virginia Tech, moderated the one-hour televised debate.

Lack of sleep affects your workplace ethics, study finds

Many studies have looked at the impact of sleep deprivation on workers' health, safety, and morale, said Pamplin College of Business Assistant Professor of Management Christopher Barnes, but few have considered its implications for unethical behavior. Barnes and three other scholars conducted four studies in different settings and situations to examine the influence of low levels of sleep in decision-making situations involving ethical considerations. "We consistently found that people were more likely to behave unethically when they were short on sleep," he said.

PHOTO ILLUSTRATION BY JIM STROUP

National Tire Research Center to open

The National Tire Research Center, located in Halifax County adjacent to the Virginia International Raceway, had a ribbon-cutting ceremony on Oct. 24 for its renovated facility. The center features custom-built equipment that economic development leaders and Virginia Tech officials hope will make Southside Virginia a one-stop destination for global tire testing and development.

One test machine, the "Flat-Trac LTRe," is unique in its use of electric motor technology and can run a tire up to 200 mph. It provides data on handling, ride, torque, and braking capabilities on various surfaces, including wet road conditions. The facility also houses the Southern Virginia Vehicle Motion (SoVa Motion) Laboratory, which has an eight-post test rig, wheel force transducers, and a simulator lab.

The $14 million center was created in 2010 through a collaborative effort led by the Virginia Tech Transportation Institute in alliance with the Virginia Tech Department of Mechanical Engineering, the Institute for Advanced Learning and Research, General Motors, and the Virginia Tobacco Indemnification and Community Revitalization Commission. See a photograph of the center on page 18.

People not hooked on fish could get omega-3 through dairy

Not everyone has a taste for fish, even though it is a natural source of heart-healthy omega-3 fatty acids. And while a growing number of omega-3 enriched foods may net health benefits for people who resist the lure of salmon or sashimi, milk remains the product that has gotten away in what has become a billion-dollar health industry.

But now, food science researchers at Virginia Tech may have reeled milk into the omega-3 delivery system, showing it is possible to incorporate fish oil into milk and dairy-based beverages in amounts sufficient to promote heart health without destroying the product's taste or limiting its lifespan. The study was featured in the November issue of the Journal of Dairy Science.

"We were concerned the fish oil would undergo a chemical process called oxidation, which would shorten the milk's shelf life, or the milk would acquire a cardboard or paint flavor by reacting with the fish oil," said Susan E. Duncan, a professor of food science and technology in the College of Agriculture and Life Sciences. "It appears we have a product that is stable, with no chemical taste or smell issues."

Steering driverless cars through intersections

How do driverless vehicles navigate through intersections? Faster and safer than if humans were in charge, according to researchers from the Virginia Tech Transportation Institute.

Autonomous vehicles will turn themselves over to an automated intersection controller, which will allow the vehicles to move at the speed limit,

Untold stories of incarceration

I realized I had entered into a 'hidden pocket' of experience due to my insider status as a visitor and that these stories of families impacted by incarceration needed to be told. I have never witnessed so much pain, vulnerability, and also strength, as I had amongst these families who were also 'doing time' with the incarcerated person."

— Joyce Arditti, professor of human development in the College of Liberal Arts and Human Sciences, whose research deals with the effects of parental incarceration on families.

Read more about Arditti's work at **www.vtnews.vt.edu/articles/2012/09/092812-clahs-arditti.html**.

with the controller tweaking their trajectory to prevent crashes, explained Ismail Zohdy, a Ph.D. student in civil engineering at Virginia Tech, and Hesham Rakha, director of the Center for Sustainable Mobility at the transportation institute and professor of civil engineering at the university.

Their research on "Optimizing Driverless Vehicles at Intersections," presented at the Intelligent Transportation Society World Congress in Vienna, won the Best Scientific Paper Award for North America.

web extras

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LARRY HINCKER

Center for European Studies and Architecture begins expansion, renovation

Situated in a Swiss village between the foot of Monte San Giorgio and the shore of Lake Lugano, the Center for European Studies and Architecture in Riva San Vitale has served as Virginia Tech's European campus for 20 years. Now, the center is scheduled for expansion and renovation. Plans include the construction of 6,200 square feet of new space and the renovation of 5,200 square feet of existing space in the 19,259-square-foot main building. The expansion will include a new dining area, a large classroom, and renovations and enlargement of the existing library, among other improvements.

"(Un)lucky numbers

Statistics indicate that American businesses lose between $800-900 million when the 13th of a month falls on a Friday. … In China, where eight is a lucky number, people like to start auspicious events when eight is part of the date (The Beijing Summer Olympics opened on Aug. 8, 2008, i.e., 8/8/08.). … There is also literature on fluency … numbers such as 10-11-12 or 12-12-12 may feel more fluent. They may feel right, give you a sense of pleasure (not discomfort), and this may make you more optimistic. This sense of optimism may lead you to make investments, buy an expensive gift, make more risky choices, or even get married."

—Rajesh Bagchi, associate professor of marketing in the Pamplin College of Business, on the influence of numerical superstition on human behavior

Targeting malaria

Malaria causes as many as 907,000 deaths each year, mostly among children in sub-Saharan Africa. Closely related African mosquito species originated the ability to transmit human malaria multiple times during their recent evolution, according to a study published in PLoS Pathogens by Igor Sharakhov (right), an associate professor of entomology in the College of Agriculture and Life Sciences, and Maryam Kamali, a Ph.D. student in the Department of Entomology. The discovery could have implications for malaria control by enabling researchers to detect and target specific genetic changes associated with the capacity to transmit a parasite.

MICHAEL KIERNAN

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Horse Calls

On the Road with the Equine Field Service

by DENISE YOUNG
photos by LOGAN WALLACE

On a chilly morning in October, a group of clinicians and veterinary students set out in two trucks, taking equine medicine on the road in the New River Valley. The program, known as Equine Field Service (EFS), provides on-the-ground, on-the-farm veterinary care to horses within a 35-mile-radius of campus.

Clinicians, interns, and students from the Virginia-Maryland Regional College of Veterinary Medicine piled into the trucks and rode out to the Campbell Arena on campus, which houses horses for Virginia Tech's riding program. Dr. Becky Funk guided students through a routine chiropractic visit, finding and detecting sore spots for treatment.

"Essentially, what I'm trying to do is restore ... motion. You take a joint through its range of motion and sort of push it," explained Funk as she worked on a series of neck stretches with a horse named Nimue. The students looked on, following Funk's careful coaching and trying to detect a sore or stiff joint.

"It's nice to get out in the field and learn from clinicians how to work with horses and talk to clients," said Theresa Economos, a fourth-year veterinary student. For Economos, who plans to go into equine practice, the three-week stint with EFS confirmed her choice.

"The problems [one encounters] in field services are different than in the clinic," said EFS intern Dr. Annie Martin, who noted that issues arising in clinic visits in equine medicine are often more complex. In the field, visits range from routine to emergency situations. Teams are often on the road all day, especially if a call comes in during another visit.

EFS offers students a chance to experience in-the-field medical care for horses, including vaccinations and deworming; treatment for common conditions, such as colic, lameness, or lacerations; reproductive care and foal checkups; and dental care.

Cool fall air whisked through the barn as the team huddled around one of the stalls, watching Funk work and taking their own turns examining the horse. The team also took time to check up on other horses that had previously been treated for other conditions—one for sinusitis, another for a fractured mandible. Such experiences prepare students for real-world veterinary scenarios. "More of our equine students will be doing field service, so [EFS] gives them a more realistic experience of what they can expect in the future," said Martin.

Though EFS offers services similar to those provided by private practices, Dr. Dana Cook, a clinical assistant professor with EFS, noted that the program is primarily a learning tool meant to provide hands-on experience for students. "The students get to go out and talk to clients and see things that they'd see in the world every day," she said, adding that "in the face of larger class sizes, we have the ability to do some one-on-one teaching." ▢

Ambulatory care: Danielle Strohacker (right), a fourth-year veterinary student, and others provide in-field care to horses.

web extras

For a photographic tour of the field service, visit www.vetmed.vt.edu/vth/tour/efs/index.asp.

ultrasound machine

radiograph machine

In stock: Each of the Equine Field Service trucks is a veterinary hospital on wheels, stocked with medical and dental supplies and equipped with running water, electricity, a refrigerator, and ultrasound and radiograph machines. An equivalent service is offered for food animals, such as cattle.

Mitzi Vernon
Metaphorically teaching

by KATIE GEHRT
photo by ANNE WERNIKOFF

Mitzi Vernon, winner of Virginia Tech's 2012 William E. Wine Award, has a gift for building connections and using metaphors that allow her students to see the world in a new way. As a professor of industrial design in the School of Architecture + Design, she takes a multifaceted approach to her teaching and research. As she explains it, "I speak three languages: design, engineering, and science."

In the studio, Vernon is not the star of the show; she is a guide and a moderator, but not a lecturer. On a recent critique day, students presented two form projects designed to strengthen their understanding of such concepts as planes, intersections, volume, flow, acceleration, and fair curves, all of which will provide a solid foundation for the students' future work. The results of their efforts are elegant creations of wood, metal, acrylic, and illustration board.

The entire group actively contributes to the critique, offering feedback and suggestions. The atmosphere is supportive, but Vernon is not one to encourage platitudes. She said that while it can be challenging to get the students to be critical of one another, they need that rigor to improve.

Students describe Vernon's style as both nurturing and demanding. Jonathan Kim, a sophomore industrial design student in Vernon's second-year studio, said, "I love the way she gives feedback. It's very constructive; if you need to change something, she'll tell you, and I love that about her."

"[Vernon's teaching] has a real emphasis on craftsmanship and not settling for what comes out first or what comes out easy, but what's truly right visually," said Martha Sullivan (M.S. architecture '06), an instructor for a computer-aided design class that relates to the work Vernon's students are doing in the studio. "What she teaches them in studio is to never settle for 'almost.'"

Vernon is not interested in having her students memorize answers from textbooks; she facilitates critical-thinking skills. Elizabeth Stokley (industrial design '12) said of Vernon's teaching style, "She doesn't give all the right answers, but rather all the right questions—probing, uncompromising, and practical—encouraging students to search rather than follow."

Said Vernon, "I delight when students complete work that presents an understanding of the tenets I have tried to convey, but delight is short-lived. What I hope is there has been

— *continued on page 36*

Hear, hear: Mitzi Vernon and her team, which includes School of Architecture + Design Associate Professor Michael Ermann and Ph.D. student Ana Jaramillo, created a sound field experiment to visually demonstrate that the speed of sound—approximately 1,125 feet per second—is an observable speed over a certain distance. The team created "flowers," or sound stems holding spun aluminum canopies that reflect light from clusters of LEDs that are triggered by microphones. When sound is generated at one end of the field, it travels through the stems, lighting each one up at the speed of sound. The sound-field rendering (above) is courtesy of Ben Tew (mechanical engineering '04, M.Arch. '08).

Mitzi Vernon

- 2012 William E. Wine Award, Virginia Tech
- 2012 TEDxVirginiaTech presentation, "Mapping the Invisible," accessible at www.tedxvirginiatech.com
- 2009 Edward Singleton Diggs Teaching Scholar Award, Virginia Tech
- 2008 Dell Design Educator Award, Dell Computer
- Advisor to more than 15 students who have won top prizes in international competitions, placed as finalists, or been awarded U.S. patents—all based on studio projects
- Primary inventor on three U.S. patents
- Two National Science Foundation grants (2005 and 2000) for the design of nontraditional books and exhibits for teaching science and math to middle school students
- Co-principal on a National Science Foundation grant (2007-11) to examine the design studio as an educational model for the design of software-intensive systems
- Past president of the Faculty Senate at Virginia Tech and member of the Virginia Tech STEM Outreach Board of Advisors
- Master of science in engineering, product design from Stanford University; master of architecture from Virginia Tech; and bachelor of science from the University of North Carolina at Greensboro

ANNE WERNIKOFF

Outer Rackspace: There's a thriving cloud-computing company right here in Blacksburg, led by the likes of Doug Juanarena '75 (seated) and (from left) Brooke Jackson '02, '04; Brian Hartsock '06; and Iccha Sethi '12.

Welcome to Racksburg

by JESSE STEELE

One conference room is better known as the "Kindergarten Cop" room, named after the 1990 Arnold Schwarzenegger film. There's a "Usual Suspects" room downstairs, complete with one-way glass on the door. Others depict scenes from the Star Wars and Transformers franchises.

Welcome to the world of Rackspace. Employing about 120 people who call themselves "Rackers," the Blacksburg branch of the San Antonio-based public cloud company serves as a center for cloud-computing software and application development, manages the company's hosted email business, and more. Housed in the University City Mall development adjacent to campus, the sprawling office has a cozy atmosphere. In fact, "Racker Kids," employees' children, covered the walls of the Kindergarten Cop room with their crayon drawings.

Clearly, Rackers want to be here. And Rackspace clearly wants to be in Blacksburg. Employees even call it Racksburg.

"It's a core value to treat your fellow Rackers like friends and family," said Rackspace software developer Iccha Sethi (computer science '12).

At the helm of this collaborative environment is Doug Juanarena (electrical engineering '75), Rackspace's vice president of Blacksburg operations. The entrepreneur was among the first to invest in the company when it was Webmail.us, the fledgling startup of three other Virginia Tech alumni, Pat Matthews (finance '02), Bill Boebel (computer engineering '01), and Kevin Minnick (computer science '00).

In late 2004, Juanarena sat across the table from the trio. "Pat was very upfront with me," he said. "[Pat] said, 'This is our third business. The first two failed.' To me, that was a strength, because you learn 10 times more from failure than you do from success." Juanarena had made a number of angel investments over the years, but noticed something special about Webmail.us, so he gathered a group of investors to help the company grow. "These guys needed money to scale up. You think of email and it seems simple," he said of their business, "but when you look under the hood, it's like a jet fighter under there."

In 1977, Juanarena left his job at the NASA Langley Research Center, where he was developing instrumentation, to found Pressure Systems Inc., in Tidewater, Va., and further develop a pressure-sensing technology. He sold the company in 1996 and soon became involved in such tech ventures as Nematron Inc., Luna Innovations, and GenTek Ventures. He returned to Blacksburg in 2000 and invested in Webmail.us in 2004. The company grew in size, and by 2007, it was acquired by Rackspace.

Brian Hartsock (computer science, computer engineering '06), the product manager for the control panel that customers use to access Rackspace's cloud products, has been with the company since 2006. "At first we had a lot of college students in here and we all became friends," he said of the camaraderie. "Our demographics have changed a little, but that 'work hard, play hard' mentality is still around."

About the series

In this fourth installment on the tech sector in the Roanoke and New River valleys, we continue to explore the vibrant drivers of the area's economic growth.

The mentality largely stems from the personnel Rackspace hires; they're passionate, but willing to take themselves a little less seriously than the stereotypically driven tech employee. As Juanarena puts it, "We don't hire brilliant jerks. … We don't just hire people [who] are smart, but people who will fit into this environment."

This attitude has put Southwest Virginia on the map in the tech world. Perhaps the most notable Rackspace project is OpenStack, the world's largest and only open-source cloud-computing platform. OpenStack was originally a team effort between Rackspace and NASA, but NASA eventually passed full control of the project to Rackspace, which then took the project

open-source. Now such household names as Cisco, Hewlett-Packard, and Dell contribute to OpenStack.

Why Blacksburg?

Perhaps the greatest benefit of Rackspace's location is the labor pool. "We're [located] at the outlet and spigot of one of the largest engineering universities in the United States, and one of the best," Juanarena said.

Said Brian Hamilton, director of Montgomery County's Department of Economic Development (MCDED), "Virginia Tech [produces] 1,900 engineering and computer science graduates per year, and many of them choose to stay in the area due to the high quality of life." MCDED estimated that in 10 to 20 years, the Montgomery County area population will be approaching 130,000 people, and Hamilton said that with hundreds of millions of dollars in new construction already under way in the Blacksburg area, "the community will offer the technology workforce more opportunities to grow in their careers in Blacksburg and in the surrounding New River Valley."

The area has another well-known perk: natural beauty. It's a part of the work-life balance that Rackspace email product manager Brooke Jackson (marketing '02, M.B.A. '04) appreciates. "You get a really tight-knit community [and] amazing outdoor activities, and then you can come to work and be on the cutting edge of technology," Jackson said.

If the valley has the great outdoors covered, Rackspace takes care of the indoors. In the 2012 "100 Best Companies to Work For" list, compiled by Fortune and Money magazines and CNN, Rackspace ranked 74th.

Rackspace also is highly connected to other area tech businesses and to Virginia Tech. "The power in Silicon Valley is [its] entrepreneurial ecosystem," said Juanarena. "We want to build our brand, but we also want to grow that [type of] ecosystem here in Blacksburg."

web extras

Like the other entrepreneurs interviewed for this series, Doug Juanarena tells us what makes him tick in a podcast interview accessible at www.vtmag.vt.edu.

Juanarena said that Rackspace employees often provide free consulting at area companies, while he personally mentors professionals and Tech students and faculty, helping them "commercialize their dreams and ideas." Meanwhile, he said, "Virginia Tech creates a tremendous amount of research and intellectual property, which spills over into the community to create businesses that hire people."

The notion of new ideas and risk-taking is deeply embedded in the Rackspace culture. Look at it this way: The Kindergarten Cop room, covered wall to wall with crayon drawings, is more than a funny place to meet. It's a reminder that challenges and invention should also be a whole lot of fun.

Jesse Steele, a graduate assistant with the marketing and publications unit, is pursuing master's degrees in public administration and urban and regional planning.

ANNE WERNIKOFF

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With a research portfolio totaling $450 million, Virginia Tech is more than just Virginia's leading research university. Providing research power, intellectual capital, job creation, and a dedication to service, the university is an economic engine that is fueling growth throughout the commonwealth and working with communities around the world. Marking the sesquicentennial of the Morrill Act, which established the nation's tradition of land-grant universities, Virginia Tech affirms its commitment to and understanding of what it means to be a great land-grant university in the 21st century.

www.vt.edu/landgrant

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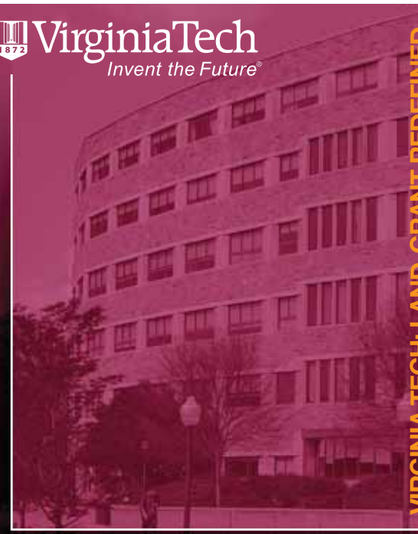

VIRGINIA TECH: LAND-GRANT REDEFINED

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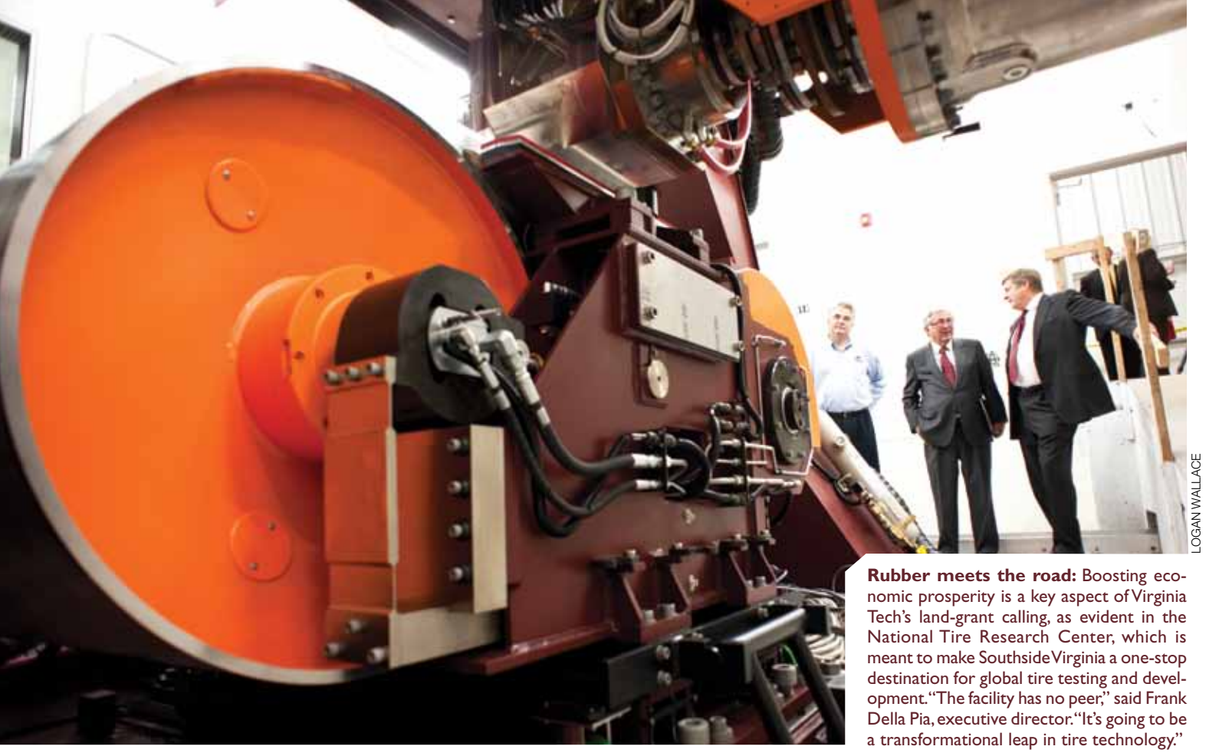

LOGAN WALLACE

Rubber meets the road: Boosting economic prosperity is a key aspect of Virginia Tech's land-grant calling, as evident in the National Tire Research Center, which is meant to make Southside Virginia a one-stop destination for global tire testing and development. "The facility has no peer," said Frank Della Pia, executive director. "It's going to be a transformational leap in tire technology."

Virginia Tech and the 21st-Century Land-Grant Model

How the land-grant has evolved

by JOHN DOOLEY
CEO, Virginia Tech Foundation

This year, as we celebrate the 150th year of the enactment of the landmark legislation that established the land-grant university system, Virginia Tech embraces its land-grant covenant to be "the university of and for the people." The university also recognizes a preordained responsibility to enhance and enrich the economic vitality and quality of life enjoyed by all Virginians and citizens around the world.

At Virginia Tech, "land-grant university" is much more than a historic descriptor. The university's proud legacy, distinguished by significant contributions to American agriculture, innovation, and military and civilian leadership, is also characterized by an active commitment to provide practical education that makes differences in the fundamental ways people work and live. Virginia Tech submits to a conviction that the greatest instrument of democracy is education and that quality education produces an engaged, enlightened, and productive citizenry.

Throughout its 140-year history as Virginia's senior land-grant university, Virginia Tech has subscribed to two primary tenets:

- Knowledge generated by faculty and researchers will be made accessible through various delivery systems for the benefit of society.
- The research and discovery agenda will reflect the priorities and needs of society with an emphasis on strong programs in applied sciences and engineering.

These tenets remain the mantra of the 21st-century land-grant university, and Virginia Tech continues to provide the intellectual leadership to confront big issues facing society, including energy, water resources, food security, education, and more. Considering the complexity of such issues, the value and relevance of the land-grant university is arguably even greater today than when President Abraham Lincoln signed the Morrill Act 150 years ago in the midst of the Civil War.

The land-grant today

by JOHN PROVO
Director, Office of Economic Development, Virginia Tech

The roots of the land-grant system are in economic competitiveness—created by placing knowledge in the hands of people who can apply it in the world. Since Virginia Tech's founding in 1872, this aspect of our mission has helped fuel job growth across the commonwealth.

Today's economic challenges and technological changes have led to the creation of "living laboratories" across Virginia—places where collaborations among faculty, students, and industry drive discovery and learning, and give the commonwealth an edge in a global economy.

In Blacksburg, the Virginia Tech Corporate Research Center is a seed bed for faculty entrepreneurship, a locus for partnerships between firms and faculty, and a training ground for students. The Virginia Tech Carilion School of Medicine and Research Institute is a unique public-private partnership linking Roanoke to global networks in medicine and life sciences. In central Virginia, we've partnered with Region 2000's Center for Advanced Engineering and Research, a regionally owned and operated center that connects our faculty to wireless technology and nuclear engineering firms. Southern Virginia's Institute for Advanced Learning and Research is developing horticulture crops and biopolymers in collaboration with industry players. Nearby, the National Tire Research Center and SOVA Motion Labs work with General Motors and other firms in the auto, tire, and racing industries.

In Hampton Roads, the National Institute for Aeronautics is a multi-university consortium adjacent to NASA Langley. In the Richmond-Petersburg area, the Commonwealth Center for Advanced Manufacturing is an independent, nonprofit research-and-development partnership bringing together firms like Rolls-Royce Aerospace and Canon with talent from several state universities. At the newly opened Virginia Tech Research Center – Arlington, faculty examine issues in energy, informatics, and cybersecurity.

All represent a sustained investment in the fundamental vision of the land-grant mission. As we put knowledge to work across Virginia, we are transferring valuable intellectual capital and investing in the future competitiveness of the commonwealth.

The land-grant's challenges

by PETER MCPHERSON
President, Association of Public and Land-grant Universities

As we celebrate the 150th anniversary of the Morrill Act, it is timely to remember the three ideals that drove its creation: strengthening democracy by expanding access to higher education to ordinary people, defining the federal government's role in economic development, and improving agriculture production by increasing technical and scientific education.

The Morrill Act embodied all of the compelling ideas that shaped Abraham Lincoln's non-war agenda. Land-grant colleges adopted a model that reinforced cutting-edge teaching, discovery, and community engagement. That model was codified when the Morrill Act was expanded to include research with the passage of the Hatch Act and cooperative extension with the Smith-Lever Act.

Today, land-grant and the other public universities enroll 7 million students and have increased enrollment by 23 percent over the past decade. At the same time, public universities perform more than 60 percent of federally funded academic research.

The nation now faces a new set of challenges: We need to expand economic and social opportunity. Universities must respond with high-quality and affordable education for our diverse population. By the year 2018, more than 60 percent of the nation's jobs are expected to require at least some college education.

To help drive economic growth, federal and state governments need to invest in research and innovation. Federally funded research must be a national priority as Congress and the administration make critical decisions about federal spending. Moreover, governments must keep higher education accessible. A generation ago, states paid two-thirds of the tuition cost while students and families paid one-third. Today, the situation has flipped and students and families pay two-thirds of the cost.

Public universities are being challenged to provide both a quality education and cutting-edge research while also educating more students with fewer financial resources. As leaders work to meet these challenges over the next decade, public universities will become very different institutions.

LOGAN WALLACE

Brotherly Love
Helps Corps Grow

by CARRIE COX

Cadet John Turbyfill (above right) always wanted to be a Hokie. His mom's side of the family hails from Blacksburg, and he grew up visiting campus and cheering on Virginia Tech.

He also was active in JROTC in high school and had another Virginia Tech connection that helped him make his college choice. His JROTC instructor, U.S. Air Force Lt. Col. Tracey Carter (chemistry '88), a corps alumnus, brought Turbyfill and his fellow students to campus for a tour. After that, the decision was easy: Turbyfill would be a Hokie and a cadet so that he could pursue his dream of being an Air Force officer.

As the Turbyfill brothers explain it, James (above left) was another story—long hair and all. James, two years younger, did not participate in JROTC and although he was set on following his brother to Virginia Tech, he had no interest in being a cadet or serving in the military. That all changed when he participated in the Corps of Cadets Spend the Night program last October.

"I love [the corps]. I wasn't in JROTC in high school and didn't think about the military until later, but I did Spend the Night last year and was sold on the corps. I wanted the structured lifestyle and the focus on academics. I saw my brother mature and transform into a man after joining the corps and that influenced me to [pursue] the same leadership skills," explained James.

James, a finance major, joined Army ROTC hoping to be in the airborne infantry. John is a chemistry and biochemistry double major and is in Air Force ROTC, pursuing his dream to serve his country as a B-1 pilot. James was one of more than 420 new cadets to enter in August, while John served as a cadre sergeant training the corps' newest members. The addition of the Class of 2016 in August pushed corps enrollment to more than 1,000 cadets for the first time in decades.

> "I saw my brother mature and transform into a man after joining the corps and that influenced me to [pursue] the same leadership skills."
>
> — James Turbyfill

John explained that when he joined the corps he was looking for a family atmosphere and found it at Virginia Tech. "Like the military, the corps is one big family you can depend on."

James echoed these thoughts. "Even if you don't have a family outside of the corps, once you join the corps, you do have a family." Now the Turbyfill brothers are helping their new family continue to grow and succeed.

Maj. Carrie Cox is the executive officer with the Corps of Cadets.

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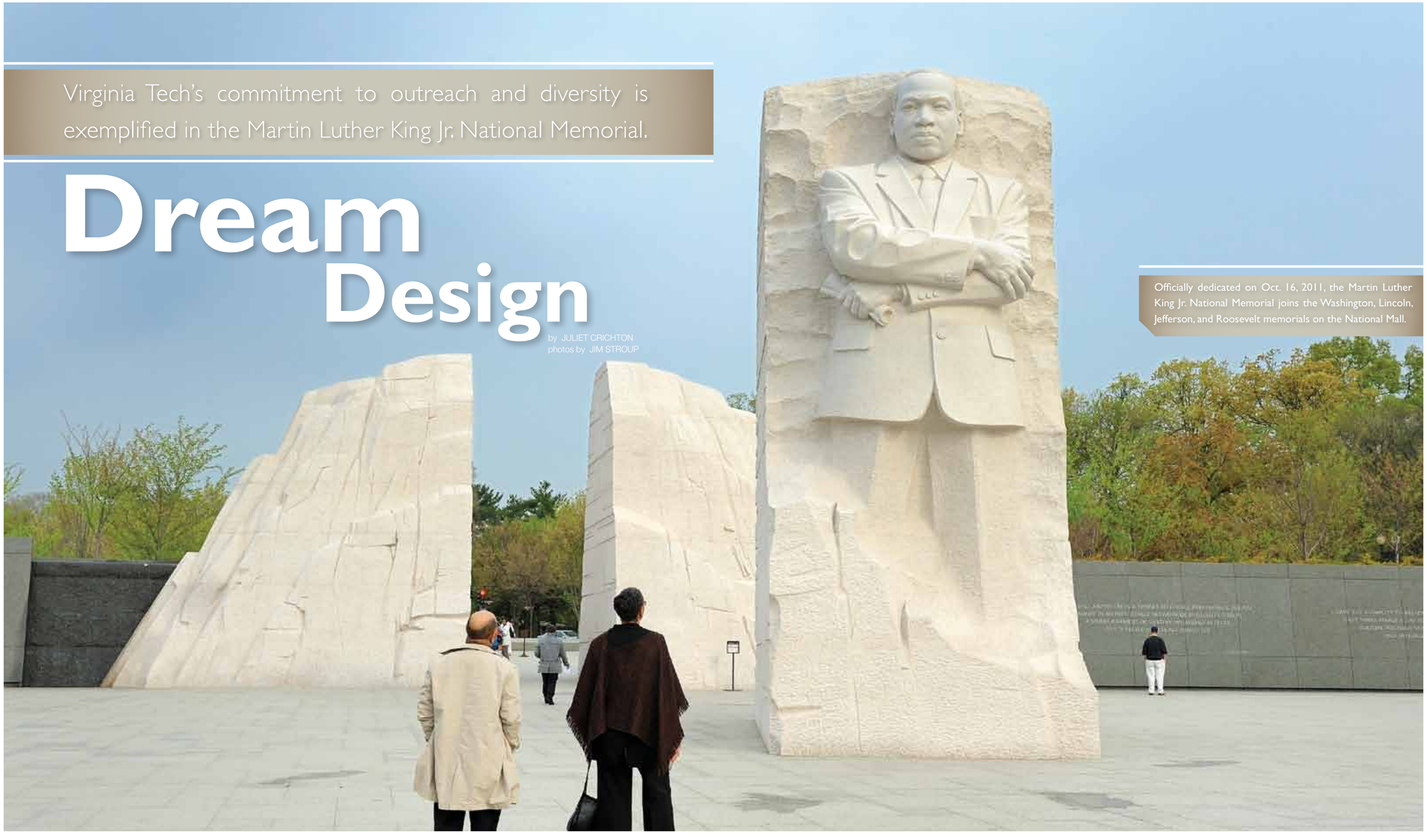
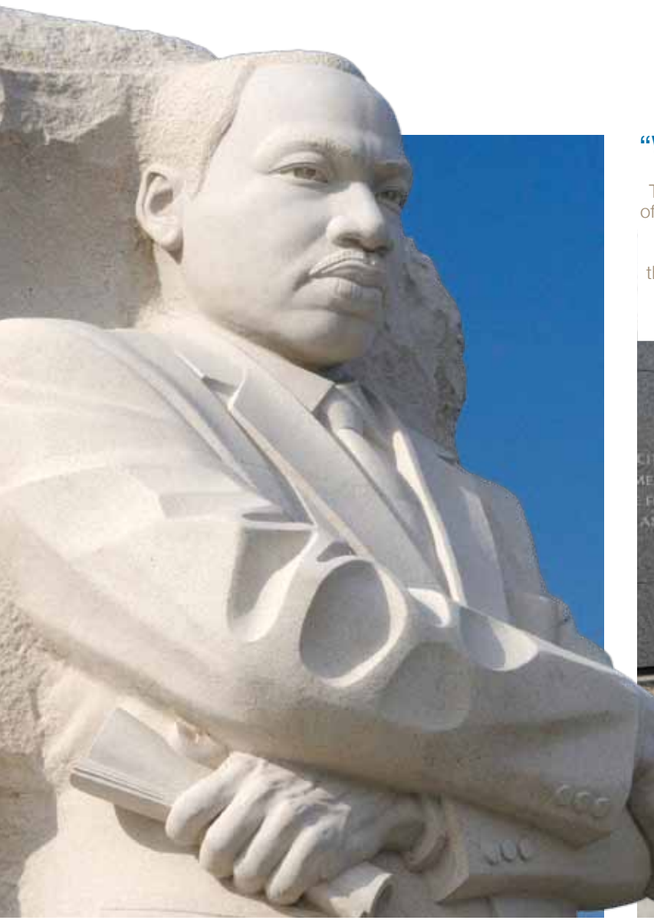
Virginia Tech's commitment to outreach and diversity is exemplified in the Martin Luther King Jr. National Memorial.

Dream Design

by JULIET CRICHTON
photos by JIM STROUP



Officially dedicated on Oct. 16, 2011, the Martin Luther King Jr. National Memorial joins the Washington, Lincoln, Jefferson, and Roosevelt memorials on the National Mall.



"What happens to a dream deferred?"

Thus reads the first line of Langston Hughes' "Harlem," one of the most recognizable poems of the Harlem Renaissance. When Virginia Tech's Washington-Alexandria Architecture Center assumed responsibility for a design competition for the Martin Luther King Jr. National Memorial, the longstanding dream of Alpha Phi Alpha Fraternity Inc.—to erect a memorial to King—was deferred no longer.

In early 1999, before widespread use of email and the Web, an elegant poster was mailed worldwide to the professional design community. Bearing photographer Bob Fitch's 1966 image of a pensive Martin Luther King Jr. superimposed over a familiar black-and-white image of King's "I Have a Dream" speech at the Lincoln Memorial—its steps and lawn and both sides of the Reflecting Pool awash in humanity—the poster announced an international design competition for the first memorial on the National Mall dedicated to an African American.

The announcement, which originated from Virginia Tech's Washington-Alexandria Architecture Center (WAAC), was an emotional milestone for the nation's oldest historically black fraternity. Some 15 years earlier, five leaders in Alpha Phi Alpha Fraternity Inc. had voiced a dream to memorialize one of their most cherished brothers. To guide the project's development, the fraternity established a nonprofit fundraising entity, the Martin Luther King Jr. National Memorial Project Foundation Inc., and set out to raise $120 million for the memorial's construction.

At WAAC, managing architectural competitions is one of the urban center's many outreach functions—and a serious undertaking that requires careful planning and considerable manpower. "The process is complicated," said WAAC founder Jaan Holt (architecture '64), the Patrick and Nancy Lathrop Professor of Architecture and longtime School of Architecture + Design faculty member and administrator. Holt has directed more than $1 million in sponsored projects and outreach-related activities at the center, which has its roots in a few design studios above a retail pharmacy in the Old Town neighborhood of Alexandria, Va., a core city in Tech's National Capital Region presence.

Deeply honored when approached by Alpha Phi Alpha in 1997, Holt was also well aware of the challenges ahead. "Initial stages of a competition are hardest [to fund]," he explained. "We had no money. Alpha Phi Alpha did not have great funding."

In light of the less-than-ideal fiscal landscape, Virginia Tech's involvement in those early stages was crucial, Holt said, adding, "I don't know if [the competition] would have taken off otherwise."

Consortium connections + kismet

Since 1985, WAAC has hosted the only architectural consortium of its kind in the United States, the Consortium of Architecture Studies. Each year, the center's degree programs are opened to students and faculty from schools across the country and around the world.

Foundational: Jaan Holt (above left), founder of Virginia Tech's Washington-Alexandria Architecture Center, and Benjamin Dixon (above right), vice president emeritus of multicultural affairs, played critical roles in the design competition that led to the Martin Luther King Jr. National Memorial, a project featured in a January 2012 presentation on campus attended by Vice President for Diversity and Inclusion William T. Lewis Sr. (seated) and others.

"My first trip to WAAC on behalf of Virginia Tech was related to [the King Memorial design] project with Jaan Holt," said Vice President Emeritus of Multicultural Affairs Benjamin Dixon. Appointed in 1998 by then-President Paul E. Torgersen, Dixon, who led a new office charged with pulling together diversity efforts at the university, was a relative newcomer to Tech when talk of the design competition began to surface.

"I was at one of the first meetings of the consortium in preparation for the design competition," Dixon said. "Florida A&M University (FAMU) was part of the center's stable of professionals and schools, and there was Professor LaVerne Wells Bowie," of FAMU's School of Architecture. "I was looking at her, and she was looking at me. I was representing Virginia Tech as the first African American in central administration at the vice president level."

Life at WAAC

Since its formal launch in 1981, the Washington-Alexandria Architecture Center (WAAC) has offered more than 1,800 Virginia Tech students both real-world opportunities and course work toward advanced architecture degrees. Ushered into existence with strong support from then-dean of the College of Architecture and Urban Studies Charles W. Steger '69, (Virginia Tech's current president), WAAC continues to thrive in its urban location, retaining highly regarded faculty and outstanding architecture students as the college approaches its 50th anniversary in 2014.

Enacting the university's commitment to service as an integral part of education at a land-grant school, WAAC students have undertaken hundreds of thousands of hours of outreach and public service projects in the region, such as visiting sites that need attention and contributing ideas to refurbish worn spaces, according to center director Jaan Holt (architecture '64). Other projects have included documenting historic construction data for a variety of the region's structures and managing a number of prominent design competitions.

Additionally, the über-successful Solar Decathlon, a national competition to encourage the construction of sustainable and affordable dwellings, was organized by WAAC faculty member and outreach coordinator Henry Hollander (architecture '89, M.Arch. '91), who also owns an award-winning design firm in Alexandria.

web extras

Washington-Alexandria Architecture Center: www.waac.vt.edu

JIM STROUP

Benjamin Dixon (left), vice president emeritus of multicultural affairs, and William T. Lewis Sr., vice president for diversity and inclusion

Strong Together at Virginia Tech

Virginia Tech's Office for Diversity and Inclusion (ODI), led by Vice President William T. Lewis Sr., oversees the university's enactment of its commitment to a respectful, equitable, and inclusive community of leaders, faculty, staff, and students.

Established in 1998 as the Office of Multicultural Affairs and led by founding Vice President of Multicultural Affairs Benjamin Dixon, now retired, the office shepherded in a variety of diversity initiatives and programs, helping to guide university policy and serving as an advocate for diverse groups within the campus community. Under Dixon's leadership, the office grew in both size and scope.

Today, ODI builds on the groundwork established by Dixon and continues to introduce new initiatives that seek to shape Virginia Tech into an inclusive kinship of Hokies.

Traditionally, some of the most popular programs sponsored by ODI have revolved around the university's Martin Luther King Jr. celebration week, the office's most significant outreach initiative. "What we try to do as an institution is to look at the life and legacy of Dr. King and engage our campus and larger community in the positive aspects of his contributions to society, as well as his messages of equity, social justice, and nonviolent resolution of conflict," said Lewis.

One of ODI's most significant activities is the student essay and poster contest, which reaches out into the surrounding communities. Over the past few years, some 26 schools in Montgomery and Roanoke counties have participated in the contests. Last year, 633 posters and/or essays were received, a figure that doubled the previous year's.

Attended last year by about 300 people, the community brunch, in Lewis' view, is the anchor of the university's King celebration. During the event, all winning posters and essays are displayed, and student winners are announced. Another mainstay of the annual celebration is the daycare-facelift project sponsored by the Center for Student Engagement and Community Partners.

For the 2013 Martin Luther King Jr. celebration, ODI has partnered with the Center for the Arts at Virginia Tech to sponsor a special performance that reflects on King's legacy: "What Is This Thing Called Freedom? Transforming and Timeless Songs of Protests." Featuring violinist Diane Monroe and her jazz quartet, with vocalist Paul Jost, the show at The Lyric Theatre will present music of the civil rights movement by such artists as Bob Dylan, Gil Scott Heron, Joni Mitchell, and Pete Seeger.

"One of the things I had envisioned was to really capture the spirit of the '60s through music," said Lewis, "and for that to touch across multiple generations. Music cuts across generations, perspectives, and racial boundaries."

Besides its events to celebrate King's legacy, ODI offers two signature programs that have garnered much attention university-wide.

Promoting excellence through inclusion, the Diversity Development Institute (DDI) is a set of professional development programs designed to help faculty and staff increase awareness, knowledge, and skills around issues of diversity and inclusion. Now in its sophomore year, DDI offers a diversity-ally certificate for participants. More than 300 faculty and staff members participated in the institute's first year of classes.

Another brand-new, campus-wide effort coordinated by ODI is the Strong Together Initiative, which promotes the values set forth in the Virginia Tech Principles of Community, a series of affirmations that underscores the university's commitment to increasing access and inclusion for all.

In a nutshell, Strong Together is "a way to take the good words of the Principles of Community and turn them into great works," Lewis said. "We're looking at the history and traditions at Tech—athletics, the Corps of Cadets—to illustrate that, at Virginia Tech, we prevail. We have a tradition of steadfastness. We are strong when we work together."

To keep diversity and inclusion in the consciousness of the campus community and to allow students to express how the Tech community truly is strong together, two T-shirt designs have been created. One shirt bears the word "strong," and the other shirt bears the word "together." When people wearing the different shirts congregate, the concept is illustrated, moving from an abstract idea to a concrete demonstration.

"I have a lot of experts around me who help us take our vision into practice," Lewis said. "We work together to help the university reach its commitment to inclusivity and to make a welcoming place for all faculty and staff."

web extras
Virtual tour of the King Memorial design:
http://youtu.be/CaYN1TLJCG0

Because Bowie, who later served on the jury that selected the competition's winning design, was familiar with WAAC's management of the design competition for the Women in Military Service for America Memorial, she approached Alpha Phi Alpha on behalf of the center.

In Dixon's mind, the university's involvement in the design competition solidified in the right place at the right moment with the right people. Holt, for his part, feels that Dixon is one of those people. "Dr. Dixon gave us his whole discretionary budget, seed money to get things under way to research the project, get a team, get the site," Holt said. "That seed money got us going."

"I was new at the university," Dixon said. "I had not yet become fully enmeshed and had no outstanding obligations for the office to manage during that early phase of my tenure. Even if I had, I would have still seen [the project] as a significant opportunity to make a contribution. It really wasn't a tough decision."

With that seed money, along with grants from the U.S. Commission of Fine Arts and the National Endowment for the Arts, WAAC assembled a team. Work to secure an appropriate site for the memorial commenced in earnest.

"For us to have responded so quickly to do this pro bono work impressed a lot of people outside the university," said Dixon. "That wasn't our aim, but it was a nice residual. We had the tools, the talents, and the purpose. It was a happy coming together of circumstances."

Years in the dreaming

"When Alpha Phi Alpha first came to WAAC," Holt said, "they had no site. They had been offered a number of sites by the National Park Service and weren't happy with those selected by the Commission of Fine Arts, so our first challenge was to find an appropriate location."

Henry Hollander (architecture '89, M.Arch. '91), a faculty member and coordinator of outreach and alumni relations at the center, remembered that "there was controversy about the site selection. A whole group of folks wanted the King Memorial to the right of the Lincoln Memorial, where King had delivered his 'I Have a Dream' speech."

While the location of King's speech is commemorated with a plaque, the planning group envisioned a much grander, more expansive site. After looking at the sites proposed by the park service, the WAAC team deemed most appropriate a 4-acre site next to the Franklin Delano Roosevelt Memorial on the Tidal Basin. "We felt it was the best site, a triangle of acreage that sits between the Jefferson and Lincoln memorials, positioned in a continuation of the same polemics, the same political intentions, culminating in King's success in the civil rights movement," Holt said. "Alpha Phi Alpha liked that idea—a path of leadership around the basin, and King would be one of those leaders."

The site approved, plans were made for its official dedication. "We were asked if

A place of honor: Virginia Tech's Jaan Holt and Henry Hollander and others helped the memorial's planners secure a location.

> We felt it was the best site, a triangle of acreage that sits between the Jefferson and Lincoln memorials, positioned in a continuation of the same polemics, the same political intentions, culminating in King's success in the civil rights movement."
> —Jaan Holt

HENRY HOLLANDER

An overwhelming response: More than 900 entries for the memorial's design filled the Verizon Center, then named the MCI Center, in Washington, D.C.

Alpha Phi Alpha's Hokies

Chartered in 1973 as the first black Greek organization at Virginia Tech, the Theta Iota chapter of Alpha Phi Alpha Fraternity Inc. has long been dedicated to uplifting the community, said chapter president Everette Taylor Jr., a senior majoring in business information technology.

Specifically, the brothers of the Theta Iota chapter made significant contributions during the years of fundraising and work leading up to the construction of the Martin Luther King Jr. National Memorial on the National Mall.

"The chapter was very active in raising money for the memorial by selling blue 'Keep The Dream Alive' wristbands when I was chapter advisor," said Kwaku Kankam Jr. (biology '03). Among undergraduate Virginia chapters of Alpha Phi Alpha, Kankam noted, Theta Iota was at one point recognized for raising the most money.

Virginia Tech's annual Martin Luther King Jr. celebration, during which the university showcases King's impact and legacy, is coordinated by the Office for Diversity and Inclusion in partnership with Alpha Phi Alpha.

we could produce a bronze plaque for the dedication—in two weeks," Hollander said. While under construction, the site would need a marker indicating the vision for the area. "We scoured the Internet and found a foundry in Texas that was able to work with us in that short amount of time."

"Then we needed a base to hold the plaque at the site," continued Holt. "So we found a local headstone shop in Arlington, Va., that worked through the night to cut the base." Hollander said that he and Holt showed up at the National Mall and were "literally digging in the ground the night before the event. "

In the ensuing months, Holt and Bowie oversaw the surveying of the site and the coordination of aerial photography and climatology information. Meanwhile, with significant contributions from former graduate student Daryl Wells, WAAC designed promotional posters and programs for the competition.

Realizing the dream

In Holt's estimation, executing the King Memorial design competition in 2000 required between $150,000 and $200,000. Besides professional oversight, design competitions necessitate a robust workforce, in this case ably filled by architecture students both at the center and in Blacksburg. Without these students' dedication to the project, costs would have been exponentially higher.

Indeed, when the time had come to send information and design specifications to those who had registered to enter the competition, students on the Blacksburg campus assembled the packets and mailed them. Later, more than 50 students and faculty members participated in the setup of the design entries at the Verizon Center, then named the MCI Center, in Washington, D.C.

Response to the call for submissions was tremendous. Only the design competition for the Vietnam Veterans Memorial generated more entries than the King Memorial, which received more than 900 physically delivered entries.

Every entry was comprised of three 30-inch by 40-inch boards: one each for design, site layout, and information about the entrant(s). The Verizon Center "was consumed with submission boards from all over the world," said Holt.

The jury, an international mix of prominent architects and civic leaders, examined the boards for three days, identified approximately two-dozen finalists, and proceeded into a month-long evaluation period. On Sept. 10, 2000, the ROMA Design Group of San Francisco was announced as the winner of the competition, and WAAC's work was completed.

"Whatever we tried to do, people responded to the intent and nature of the project," Holt said. "Almost everyone was willing to work and contribute almost immediately. People were positive and would go out of their way to get things done. They never said, 'This is impossible.' They figured out a way to do things, and we figured out a way to do things."

Coda

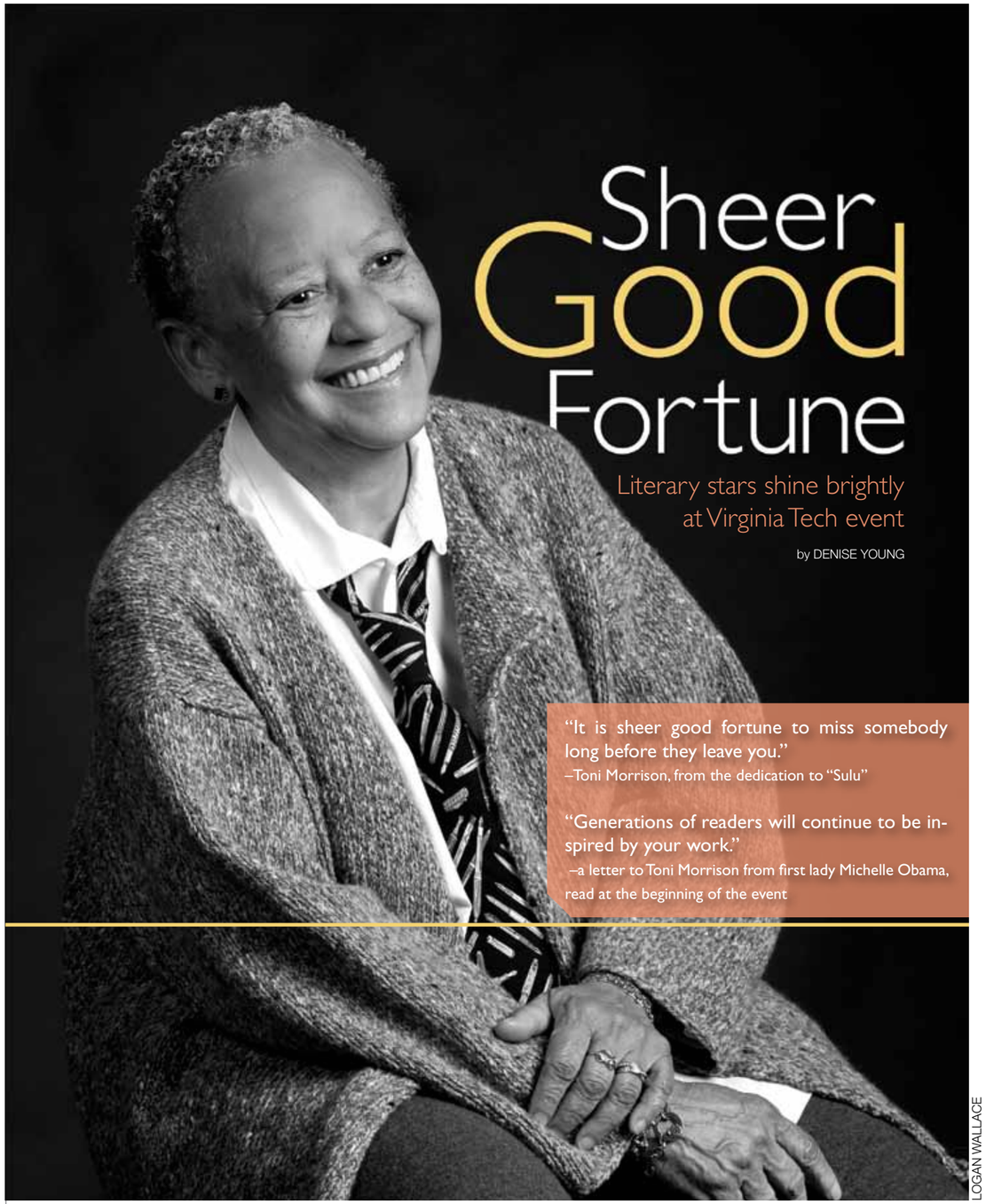
In 2006, following a span during which fundraising efforts wavered in the wake of the 9/11 terrorist attacks and then Hurricane Katrina, a formal groundbreaking for the King Memorial was held at the northwest edge of the Tidal Basin.

As part of the team assembled by the King Memorial Foundation to build the memorial, Ken Terry (civil engineering '94) of Tompkins Builders Inc. served as project executive, a role he also held in the construction of the World War II Memorial on the National Mall.

"I was extremely honored to have played a role in the completion of the design and construction of the Martin Luther King Jr. National Memorial," said Terry, now a project executive with Grunley Construction Co. Inc. in Maryland. "The lengthy process was challenging and stressful at times, but the people involved, all working tirelessly with a common and worthy purpose, made it one of the most rewarding experiences of my life."

Officially dedicated on Oct. 16, 2011, the King Memorial joins the Washington, Lincoln, Jefferson, and Roosevelt memorials along the west portion of the National Mall. Visit the National Park Service online at www.nps.gov/mlkm/index.htm to learn more.

Juliet Crichton is an editor with University Relations' marketing and publications unit. Emily Goodrich, an intern with Virginia Tech Magazine, contributed to this story.



Sheer Good Fortune

Literary stars shine brightly at Virginia Tech event

by DENISE YOUNG

"It is sheer good fortune to miss somebody long before they leave you."
–Toni Morrison, from the dedication to "Sulu"

"Generations of readers will continue to be inspired by your work."
–a letter to Toni Morrison from first lady Michelle Obama, read at the beginning of the event

LOGAN WALLACE

University Distinguished Professor of English Nikki Giovanni

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MICHAEL KIERNAN

For many who gathered in Burruss Auditorium on Oct. 16, it was the evening of a lifetime. Giants of literature, from Maya Angelou to Rita Dove, gathered on the stage to honor one of their own, Nobel and Pulitzer Prize-winning author Toni Morrison. The author of acclaimed works, including "Beloved" and "The Bluest Eye," Morrison also received the Presidential Medal of Freedom from President Barack Obama in May 2012.

The evening, dubbed "Sheer Good Fortune: Celebrating Toni Morrison," was orchestrated by renowned poet and University Distinguished Professor of English Nikki Giovanni. As the author of more than 30 books and recipient of an unprecedented eight NAACP Image Awards for literature, Giovanni is a literary star in her own right.

Planning such events is no new endeavor for Giovanni, who in 2010, along with James Madison University English Professor Joanne Gabbin, planned a tribute to poet Lucille Clifton, who passed away in February of that year. This time, Giovanni and others decided to honor Morrison in person, offering her an evening of dramatic performance, music, and readings of her work that the writer, now 81, could enjoy. Giovanni joined forces with Angelou and Gabbin, also the executive director of Furious Flowers Poetry Center.

"When Toni's son Slade passed (in 2010) I could only imagine how sad and, well, alone she must be feeling," Giovanni said. "Though she has another son and grandchildren, I think it must be just

Free tickets to the event, sponsored by the university's Center for the Arts, were claimed in **28 hours**.

Star power: (Above, from left) Joanne Gabbin of James Madison University, Robert Vaughan of the Virginia Foundation for the Humanities, and Virginia Tech's Nikki Giovanni and Virginia Fowler welcomed Toni Morrison and Maya Angelou to campus.

MICHAEL KIERNAN

LOGAN WALLACE

Still dreaming of what's next:

To read more on Nikki Giovanni's achievements—and to find out what's to come for the poet and professor—visit www.vt.edu/spotlight/achievement/2012-10-22-giovanni/giovanni.html.

awful to bury a child. I wanted to find a way to throw as much love as we could around her. Nothing will replace that hole in your heart but love can at least kiss the edges. So I called Maya."

Word of the event, sponsored by the university's Center for the Arts, spread quickly; the free tickets were claimed in just 28 hours.

At the end of a series of readings featuring well-respected names that included Yusef Komunyakaa, Sonia Sanchez, and Jericho Brown, Giovanni led a choral reading of Morrison's work. The musical and dramatic performances and emotional readings garnered a number of standing ovations and kept audience members captivated from start to finish. Grammy-winning musician India.Arie graced the stage, performing a song entitled "Not Afraid of the Dark," inspired by Morrison's "The Bluest Eye."

More than a tribute to Morrison, the event also spoke to Virginia Tech's ongoing support of the arts. Ruth Waalkes, director of the Center for the Arts at Virginia Tech, called the event a unique opportunity to celebrate the literary arts in a group setting, noting that literature is usually more of an individual experience. "And it really was [Morrison's] words we were hearing that night," she said, "not a lecture."

With the Center for the Arts' official opening in fall 2013, such events could be but a taste of things to come. "I think it shows how art has this deeper connection and meaning in our lives, and I think everyone there [at the event] felt that," said Waalkes.

By the end of the evening, Morrison's eyes shone with gratitude. "I think this is—yes, I think it is—the first time I have been rendered speechless," said Morrison of the readings and performances. "Let me tell you, if nothing ever happens again in a crowd for me, it doesn't matter. This is as good as it gets."

Susan Bland, communications manager for the Center for the Arts, and Jean Elliott, communications manager for the College of Liberal Arts and Human Sciences, contributed to this story.

LOGAN WALLACE

MICHAEL KIERNAN

Celebration: (Clockwise from right) Nikki Giovanni and student Tom Bryant; violinist Akemi Takayama and Virginia Tech's Chamber Singers; and Giovanni and singer India.Arie.

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Maurizio Porfiri

The Force of Water

by JENN BATES

The teacher: Maurizio Porfiri '00, '06 demonstrates how the design of a fish's tail can affect its swimming.

Like the largely uncharted depths of the Earth's oceans, the brilliance of one alumnus is proving to be similarly as deep.

Dubbed the "Water Wizard" when Popular Science magazine named him to its "Brilliant 10" list in late 2010, Maurizio Porfiri (M.S. engineering mechanics '00, Ph.D. '06) is pursuing a fascination with robot-animal interactions, combining his personal interest in animal behavior with his technical training in mechanics to create a robotic fish designed to steer animals away from potential dangers.

Porfiri, an associate professor of mechanical engineering at the Polytechnic Institute of New York University (NYU-Poly), said that while he is still only beginning to understand the complex communication system of fish, his ultimate goal is for robots to coexist with and help animals in the wild. "In the future, what we would like to do is put robots in the wild and have them interact with animals and change [their] behavior," he said. "Some possible applications could be guiding fish away to a safe area, whether because of an oil spill or a pollutant, or changing migration patterns to bypass manmade structures."

Porfiri is well on his way to reaching that goal. At 35 years old, he holds a doctorate from Tech and dual doctorates in theoretical and applied mechanics from the University of Rome and the University of Toulon. The coauthor of more than 70 journal articles and conference papers, Porfiri won the prestigious National Science Foundation's Faculty Early Career Development (CAREER) Award in 2008.

Operating at the intersection of biology and engineering, Porfiri and his team chose to focus on the zebrafish, a social animal that communicates primarily through visual cues. After a series of experiments, they designed a robot that mimicked the shape and color pattern of the zebrafish—bright yellow with white stripes—though the robot would be four times larger in order to hold all of the necessary equipment.

After successfully replicating the visual cues of the zebrafish, the team redirected their focus to determine if the robot could swim in a way that produced a wake the fish would follow. They placed the robot and the fish in a tank of water, controlling the tail speed of the robot, and observed when the live fish would ride the wake of the robot.

"We discovered that for each flow speed, there are certain tail-beat frequencies of the robot for which live fish prefer to be in the robot wake," said Porfiri. "In these conditions, live fish can reduce their tail-beat frequency by following the robot, that is, reducing their energy expenditure. In other words, the robot can be a leader for live fish by offering them a hydrodynamic advantage."

PHOTOS COURTESY OF NYU-POLY

Live zebrafish were visually attracted to a similarly striped and shaped robot in a tank, but they were attracted even more to a live member of their species, NYU-Poly researchers found. The team is trying to develop robotic fish that may some day lead real ones from dangerous waters.

Romesh Batra, the Clifton C. Garvin Professor of Engineering Science and Mechanics at Virginia Tech, was Porfiri's mentor for more than four years. Porfiri is arguably the most accomplished of Batra's protégés.

"He's brilliant—super," Batra said, adding that Porfiri's IQ and his desire to achieve make the scientist stand out.

Porfiri said the transition from student to professor was difficult because of the increased responsibility.

"It was extremely challenging to get [the transition] right. But [being a professor] is very rewarding. You see [students] grow and you can make a big impact on their career, but it's something you're not trained in. You're trained in writing papers, in research, not in motivating people and getting them excited about what they do. When you first start, you see that it is a big obstacle; you see that you need to learn a lot there," he said.

Nicole Abaid, an assistant professor of engineering science and mechanics at Virginia Tech, studied for her doctorate under Porfiri at NYU-Poly and was a member of the team that discovered how to duplicate communication factors of certain fish, such as visual cues, pressure-sensing cues, and synchronization.

Abaid, whose dissertation was on the mathematical modeling of fish schools, said that Porfiri's profound curiosity sets him apart. "He's super-creative and just thinks in a really original way. He's incredibly smart; he has two Ph.D.'s and he's 35 years old. He's the hardest-working person I've ever met in my entire life," she said.

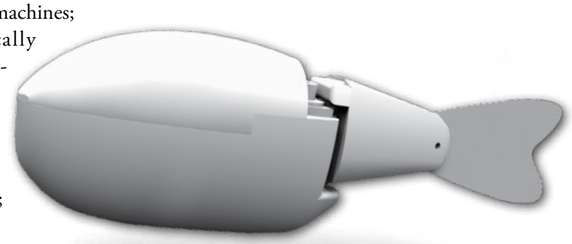
In addition to robotic fish, Porfiri is also involved in many other water-related projects. He is currently researching how humans interact with machines; how to mathematically model the collective behavior of fish, humans, and frogs; how to harvest energy from water to power environmental monitoring sensors; and how materials in U.S. Navy marine vessels respond to their surroundings.

One element of Porfiri's work that makes his research unique is the interdisciplinary nature of combining the clean variations of engineering with the live experiments of biological sciences, forcing scientists from both disciplines to examine the problem at hand from a different perspective. Porfiri said the varying interpretations allow him to combine experimental tactics from both fields and arrive at richer hypotheses.

Abaid worked with biology students to generate experimental campaigns comparing the mathematical model to the actual behavior of fish. "Most math departments don't have labs or let you touch anything; you have pencil and paper," Abaid said. "In engineering, especially working with Maurizio, I had fish. You get to touch stuff; you get to see how your research lives in the world."

While Porfiri said he is pleased with the recognition his work has earned, he is also excited that honors like the "Brilliant 10" list, which carry a great deal of weight in terms of public perception and visible impacts on younger students, allow him to interact with the next generation of scientists.

Porfiri is currently part of three programs operating at the intersection of marine biology and robotics that help teach students about science—two at the New York Aquarium and a third at a middle school in



Brooklyn. "My research has allowed me the opportunity of impacting K-12 students and the general public through science fairs, invited lectures at conferences, community meetings on environmental science, presentations in local high schools, and symposia for the general public on science, music, and creativity," he said.

Batra said that Porfiri's desire to explore all aspects of a problem and to make full use of his knowledge propels him toward greatness. "One of these days, he will come up with something that will be groundbreaking and probably revolutionize underwater robotics," Batra predicted.

Jenn Bates, a junior communication major, is an intern with Virginia Tech Magazine.

NYU-POLY/SWAPNIL THAKUR

Maurizio Porfiri '00, '06 (left) and his team

professor profile, continued from page 13

a transformation, that the students' thinking has shifted, unveiling more questions than when they began. I hope that they are not satisfied, but eager to press forward, recognizing along the way that they may have to keep asking the questions."

Vernon incorporates learning methods that help students approach design challenges in new ways. When introducing ergonomics, for example, she invites Carol Burch-Brown, a professor in the School of Visual Arts, to conduct a life-drawing exercise so that the students understand the anatomy and mechanics of the hand in order to create improved form and utility in product design. Vernon's approach to teaching design covers all facets, from suiting the needs of end users to planning for the manufacturing process.

While studying physics at Stanford in pursuit of her master's degree in engineering, Vernon discovered something about her own learning that influenced her teaching and research. As she explained, "I could grasp scientific phenomena through drawing, modeling, and metaphors."

That ability to understand scientific phenomena as metaphors has not only strengthened her pedagogy in the studio, but also influenced her research on using design to teach scientific concepts that are abstract and invisible. Case in point: She leads Fields Everywhere, a continuing research project to develop interactive exhibits that began as a way to teach children about physics principles including gravitational, acoustic, and electromagnetic fields. (For more on the project, see the image and description on page 13.)

Likewise, Vernon's teaching approach in and outside of the classroom is lighting up young minds, one at a time. From inspiring students in her classroom to energizing future scientists, Vernon recognizes that the world has many complex design problems, and that to solve them, it's important to imagine what might be possible rather than relying on what has been done in the past.

Katie Gehrt is the communications manager for the College of Architecture and Urban Studies. Emily Goodrich, a sophomore English major and an intern with Virginia Tech Magazine, contributed to this story.

Remember the time what's-his-face was guarding that guy on that other team? And that one guy took that shot — was it a two- or three-pointer? And boom! He drained it and the crowd went wild. I'll never forget that!

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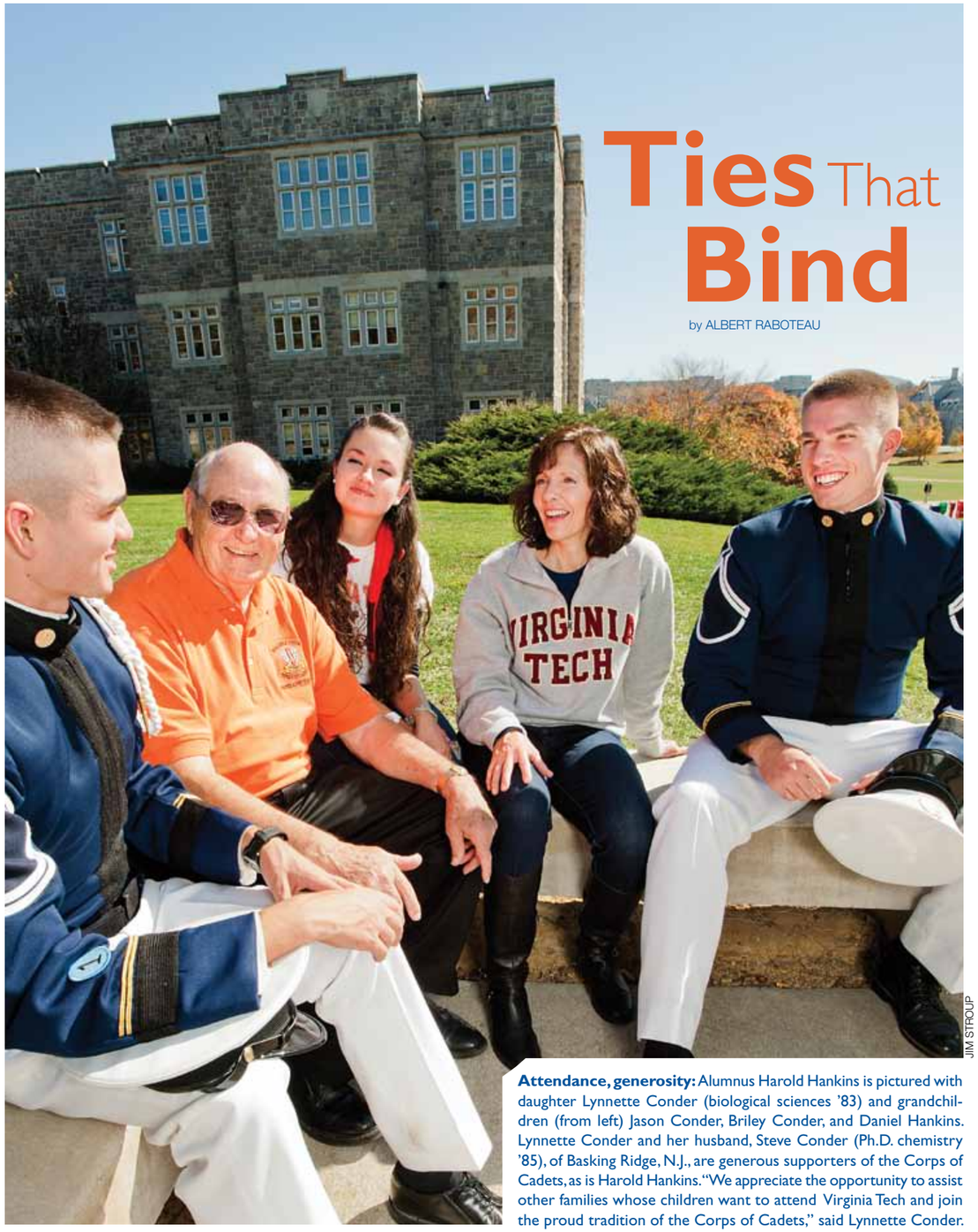


JIM STROUP

Attendance, generosity: Alumnus Harold Hankins is pictured with daughter Lynnette Conder (biological sciences '83) and grandchildren (from left) Jason Conder, Briley Conder, and Daniel Hankins. Lynnette Conder and her husband, Steve Conder (Ph.D. chemistry '85), of Basking Ridge, N.J., are generous supporters of the Corps of Cadets, as is Harold Hankins. "We appreciate the opportunity to assist other families whose children want to attend Virginia Tech and join the proud tradition of the Corps of Cadets," said Lynnette Conder.

Ties That Bind

by ALBERT RABOTEAU

As a young man in 1946, Harold Hankins started working toward a college degree through a Virginia Polytechnic Institute Extension program in Danville, Va.

He juggled his studies with a job in a cotton mill, and recalls it as "the most miserable year I ever spent."

Hankins (secondary education, industrial arts '57) completed his first-year classes, but his grades were poor. He did not return for a second year. Surprisingly, that unpleasant beginning led to a remarkably long-lasting connection between Hankins, his extended family, and Virginia Tech.

Though it took longer than he first expected, Hankins did complete that degree, which he credits with preparing him to succeed as an executive and entrepreneur in the electronics industry.

He sent two daughters to Virginia Tech and has helped fund the education of several grandchildren who have enrolled. Hankins has also been an extremely generous supporter of scholarships and other programs at his alma mater.

"We just felt like we needed to give something back," said Hankins, who along with his wife, June, has endowed scholarships within the College of Liberal Arts and Human Sciences and the Corps of Cadets, as well as a leadership education fund within the corps. "If it hadn't been for Virginia Tech, I wouldn't have been as successful as I have been."

Hankins said that during the eight years between when he first enrolled and when he resumed his studies, "I always had the knowledge in the back of my mind that I did not complete what I had started, and that was hanging over me all those years, so I thought 'I've got to get back and at least try it.'"

During the gap in his college career, Hankins worked several jobs, including one in a jewelry store, where he learned to repair watches. While serving in the U.S. Navy during the Korean War, he was responsible for servicing ships' clocks.

While working toward his degree on the university's main campus the second time around, Hankins was urged to apply to a newly formed Blacksburg company, Poly-Scientific, by a professor who was aware both of Hankins' need to pay his way through school and his skill working with miniature machine parts.

After graduating, Hankins was hired full time by Poly-Scientific, which manufactured slip rings—devices that allow transmission of electrical signals from stationary to rotating devices—in a facility on Blacksburg's Main Street. Hankins progressed within that company and others in the industry over the course of 35 years. He ultimately owned several firms, including Martin Electronics, a world leader in the manufacture of ammunition and pyrotechnics.

Though he was never a member of the Corps of Cadets, Hankins said, "I would see the cadets everywhere and had a lot of respect for them and that program. It was neat."

Several years ago, Hankins said, he was inspired to get more involved with the corps by the story of a cadet named Adnan Barqawi. A descendant of Palestinian refugees who was born in Kuwait, Barqawi enrolled at Virginia Tech, became regimental commander of the corps, and was voted Undergraduate Student Leader of the Year in 2009.

COURTESY OF HAROLD HANKINS

Harold Hankins and his wife, June, on campus in 1954

"We called Adnan and developed a relationship with him, and he became part of the family," said Hankins, who still lives in Blacksburg just a few miles from campus.

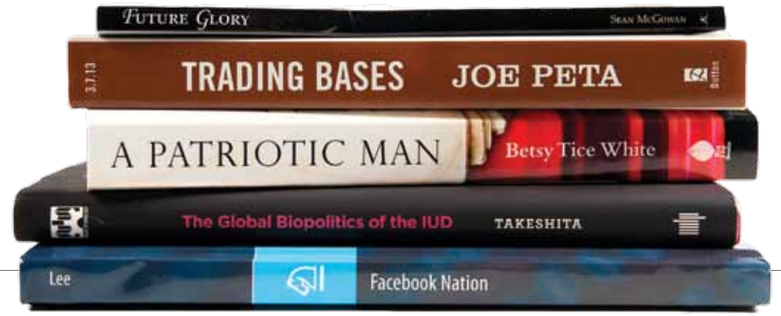
Today, Hankins has two grandsons in the corps, David Hankins, a junior management major, and Jason Conder, a junior mechanical engineering major.

In August, Conder's sister, Briley, became the 10th of Harold Hankins' relatives to enroll at Virginia Tech. She is double majoring in hospitality and tourism management and theatre arts and cinema.

Briley and Jason Conder were both early-decision applicants and did not submit applications to any other colleges, which illustrates just how strong the bond remains between their family and Virginia Tech—despite its rather inauspicious beginning.

Albert Raboteau is the director of development communications.

Submission guidelines are available online at www.vtmag.vt.edu/bookreview.html. To submit a book, mail it to Book Notes, Virginia Tech Magazine, 205 Media Building, Blacksburg, VA 24061. You can also email your name, the name of the publisher, the genre, and a brief description of the book to vtmag@vt.edu. We must receive the book within one year of its publication date. Photos by Anne Wernikoff.



Book Notes

BOOKS BY ALUMNI

nonfiction

Rob Dietz (M.S. environmental science and engineering '00), et al, "Enough is Enough: Building a Sustainable Economy in a World of Finite Resources," sustainability, economics, Berrett-Koehler.

Newton Lee (computer science '83, M.S. '85), "Facebook Nation: Total Information Awareness," social media privacy and ethical issues, Springer.

Sean McGowan (political science '98, M.Ed. curriculum and instruction '99), "Future Glory: Walking in the Power of Your God-Given Destiny," Christianity, West Bow Press.

Joe Peta (accounting '88), "Trading Bases: A Story About Wall Street, Gambling and Baseball (Not Necessarily in That Order)," risk analysis and baseball, Dutton.

Andrew Smiler (psychology '90, mathematics '93), "Challenging Casanova: Beyond the Stereotype of the Promiscuous Young Male," human sexuality and adolescent psychology, Jossey-Bass.

Chikako Takeshita (science and technology studies M.S. '00, Ph.D. '04), "The Global Biopolitics of the IUD: How Science Constructs Contraceptive Users and Women's Bodies," women's reproductive rights, The MIT Press.

fiction

Shuvom Ghose (aerospace engineering '00), "Infinity Squad," science fiction, Libboo.

Charles T. "Tom" Tate II (marketing management '75), "Rift Weavers, A Novel in Parts, Part One: Finn Stockton," science fiction/fantasy/adventure, CreateSpace.

BOOKS BY FACULTY/STAFF

Rosemary Blieszner, Alumni Distinguished Professor in the Department of Human Development, et al, editor, "Handbook of Families and Aging (second edition)," aging, elder care, Praeger.

Rosemary Blieszner, Alumni Distinguished Professor in the Department of Human Development, et al, "Spiritual Resiliency and Aging: Hope, Relationality, and the Creative Self," aging, Baywood Publishing Company.

George J. Flick Jr., University Distinguished Professor Emeritus, Department of Food Science and Technology, et al, edited by **Linda Ankenman Granata**, research associate, Department of Food Science and Technology, "The Seafood Industry: Species, Products, Processing, and Safety," second edition, critical, Wiley-Blackwell.

BOOKS OF INTEREST

fiction

Betsy Tice White, "A Patriotic Man," novel, historic fiction, WWI, Virginia Tech history, Big Elm Books.

LINDEN TREE PHOTOGRAPHY

Featured author: Christal Presley

Christal Presley (English '99, M.A. English education '00), has published a memoir, "Thirty Days with My Father: Finding Peace from Wartime PTSD," in which she recounts 30 days of interviews with her father, a Vietnam War veteran.

Presley founded United Children of Veterans, a website that provides resources about PTSD to children of war veterans. The native of Honaker, Va., now lives in Atlanta, Ga., where she is an instructional mentor teacher for Atlanta Public Schools. She received her Ph.D. in education from Capella University in 2009. She is a former intern at Algonquin Books of Chapel Hill and spent seven years teaching middle and high school English in Chatham and Danville, Va.

In her memoir, Presley attempts to understand her father, his PTSD, and her own lifetime of vicarious traumas. What emerges is a harrowing portrait of the past's ability to haunt the present. Below is an excerpt, reprinted with the author's permission:

I was 6 when my father went to the [Veterans Affairs] hospital for the first time because he was so emotionally disturbed and his hands shook so badly that he knew he shouldn't go on working and that he needed to qualify for disability insurance. That's when he was finally diagnosed with PTSD, but it would take six years before he was approved for full disability. Meanwhile, he just kept on working.

To me, "posttraumatic stress disorder" was just a bunch of words. All I knew was that it had something to do with my dad's brain and he seemed to be going crazy. And I knew it was bad because my mom told me that if anyone found out how sick he was, they'd come and take him away forever, and they'd take me away too, and she couldn't live like that. If he had to be that sick, I wanted him to have something everybody could understand. So I picked brain cancer.

I envisioned a map of the human brain like I had seen on television.

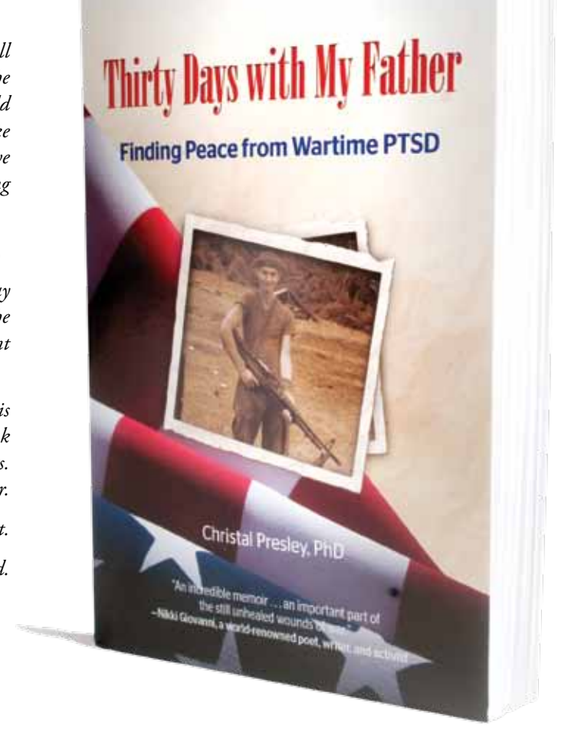
"Here is a normal brain," a doctor in a white lab coat would say solemnly. He would use a pointer to show his audience the parts of the brain displayed on a screen. Each one would light up in a different color as he talked about it.

"Now, here is your father's brain," the same doctor would say, shaking his head, as my father's brain appeared on the screen. This one didn't look like the other brain. The doctor could not point out the individual parts. Everything was a jumble of mush and sharp wires all clumped together.

"Nothing we can do about this one," he'd say, and move on to the next.

Did my brain look like everyone else's—or was I a freak too? I wondered.

I was not normal. That was for sure.



The **power** of mentoring

In a recent Alumni Factor survey that included 104 national universities, Virginia Tech ranked fourth in overall assessment and first among alumni who said the university is one they "would personally choose again." Quite a feather in our cap, I'd say. One reason for the strong affinity may be something I have long paid particular attention to: the mentoring relationships between faculty and students. Such established bonds inspire students later, as alumni, to remain connected to endeared professors. I'll share two examples that illustrate the commitment of faculty to go beyond their job expectations and invest significantly in students.

In October, Nikki Giovanni, University Distinguished Professor of English and a nationally acclaimed poet, hosted a magnificent tribute to her dear friend and novelist Toni Morrison, recipient of a Nobel Prize and the Presidential Medal of Freedom. That event, which also included poet Maya Angelou, is described earlier in this issue. One not-yet-famous poet who attended the event was one of Giovanni's former students, Jonathan Pfaehler (English '10). He traveled to campus for the mid-week commemoration of Morrison, whom he knew to be a mentor of his mentor. Pfaehler was once a finalist for the Steger Poetry Prize that Giovanni created—the nation's largest cash prize for a student poetry contest. Now a consultant with the World Bank in Washington, D.C., he remains in touch with Giovanni and describes her as "my most inspiring professor and friend." Said Pfaehler, "I learned to express myself in poetry through Giovanni's inspiration."

Scott Geller, Alumni Distinguished Professor in Psychology, has been a teacher and researcher at the university for 43 years. Like Giovanni, he has touched students' lives and inspired them to hone their career paths. Shane McCarty (marketing '11) became Geller's student in 2008. McCarty had visited the campus the weekend prior to the April 16 tragedy in 2007 and said he accepted the university's offer of admission the very next week "because of the amazing resilience shown by the entire Hokie Nation."

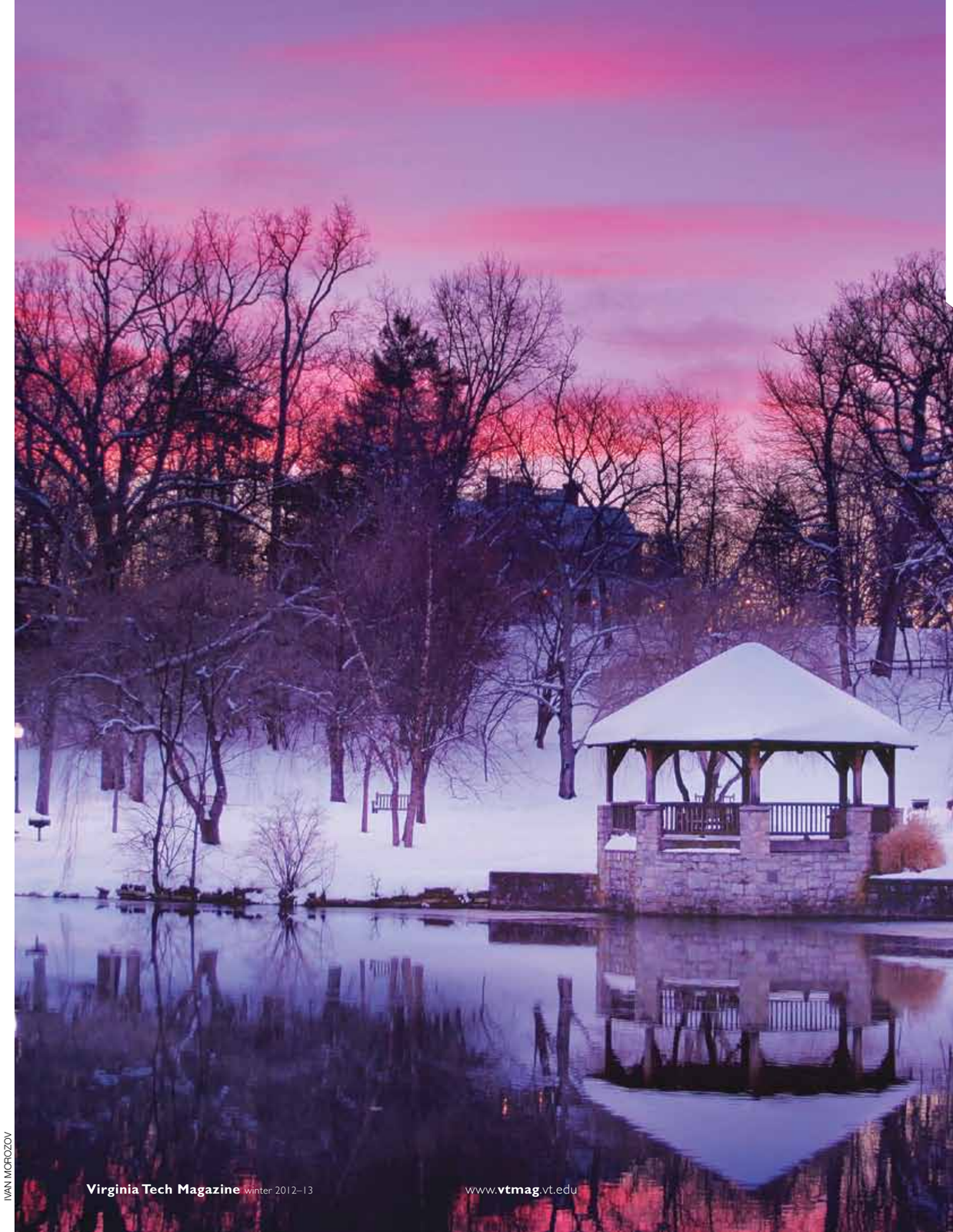
Inspired by Geller's classes and the opportunity to conduct research, McCarty, a marketing major, later added psychology as a minor. He designed a research study investigating bullying behaviors among elementary students and used the "Actively Caring for People" wrist bands that Geller had created 20 years earlier. The wrist bands served as positive incentives for students to reduce bullying. Today, McCarty is a Ph.D. student of Geller's and is continuing his research on bullying. McCarty joined Geller and others to author a book, "Actively Caring for People: Cultivating a Culture of Compassion." Said McCarty, "Professor Geller brought clarity to my career goals and inspiration that only a true mentor could bring."

Pfaehler and McCarty agree they have benefited from mentoring by faculty who represent a commitment to teach, advise, challenge, and inspire students. Mentoring is one of the attributes that help make Virginia Tech a special place—a place alumni would personally choose again.

JOHN MCCORMICK

Tom Tillar '69

Vice President for Alumni Relations



IVAN MOROZOV

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Shirley Fleet	Class Notes Editor

alumni association

2013 Drillfield Series

The Drillfield Series continues in 2013 with weekends devoted to photography, fine dining, student legacies, and special programs for corps and women alumni. Make plans now to attend these events designed for alumni and their families, and take advantage of the specially discounted accommodations available at The Inn at Virginia Tech.

Feb. 15-17

Food for Thought: An Indulgence of Wine and Fine Cuisine
Looking for an elegant getaway over Valentine's Day weekend? Return home to your alma mater and enjoy a stay at The Inn at Virginia Tech for a palate-pleasing weekend. Program highlights include a dessert and sparkling wine reception, chef demonstrations, a Mediterranean food and wine pairing, and an aperitif reception and five-course dinner with wine pairing. $300 per couple/$165 individual.

May 10-11

Focus on Photography 2013
Whether you're a point-and-shoot photographer or a seasoned one with the latest DSLR camera, year three of this popular program can take your photography to the next level. Instructors will cover processing and editing, shooting and editing video, and topics geared toward individual interests and skills. A reception and most meals are included. $175 per person.

June 21-23

Corps of Cadets Alumni Weekend
Calling all cadet alumni! Come enjoy Tech's campus in summer and reunite with former cadets. Program highlights include a barbecue at the alumni center, a shooting-range contest and paintball, a Civil War presentation, reflections from veterans, and a briefing from the commandant. Meet student cadets, and possibly learn how to help the corps in your hometowns. $150 per person.

July 12-13

Virginia Tech Admissions Weekend
Our annual "Day in the Life of College Admissions" is designed especially to assist 2014 and 2015 high school graduates and their parents in navigating the college application process. Program highlights include pointers for conducting a college search, a behind-the-scenes look at college admissions, application preparation tips, and information on scholarships and financial aid. $120 per adult/$95 per student.

July 19-21

Women's Getaway Weekend for Alumnae
Bring friends or former classmates for a fun-filled weekend in Blacksburg! Relax, revive, and reminisce. Take some time for yourself and indulge in a weekend especially designed for women. Program highlights include a tapas and wine reception, massages, recreational activities, a champagne brunch, insightful sessions for today's woman, and a dinner with special guests. $150 per person.

*Lodging for all these events at The Inn at Virginia Tech is $105 per room, per night. For more details on events and registration, go to www.alumni.vt.edu/drillfieldseries.

Virginia Tech Columbarium

Many campuses have a columbarium where alumni and others from an extended university family may choose to be interred. Virginia Tech's columbarium is located on the grounds adjacent to the Holtzman Alumni Center, on a grassy knoll in view of the Duck Pond.

The Hokie Stone structure contains 60 niches that may be purchased and reserved for individual or dual interments. Each niche is covered with a maroon granite face, on which names will be engraved and gold-filled. Behind the columbarium, there is a terrace and recently added benches, and a walkway leads to the alumni center's Alumni Terrace. The area is designed to accommodate expansion of additional niche walls bordering the terrace.

Niches are being reserved now, and many are still available. Internments began in 2010. For more information on the Virginia Tech columbarium, contact Josh Burnheimer at 540-231-6285 or ffburnie@vt.edu.

MICHAEL KIERNAN

In this economy, why should I spend money on insurance right now?

Oh, that's why.

Hokies and their families can save money with exclusive discounts on select insurance plans available through The Alumni Insurance Program.

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AlumniTerm 10/20℠*
Group 10- and 20- year level term life insurance policies are available up to $1,000,000 for alumni under age 65.

AlumniTerm℠**
Simplified issue group term life insurance available up to $100,000 to alumni under age 60, and renewable to age 75.

AlumniTerm 50+SM**
Basic group term life protection from age 50 to 74, renewable to age 95.

AlumniDent℠***
Comprehensive group dental insurance for alumni and their families that will cover any U.S. dentist you choose with guaranteed acceptance up to age 60.

AlumniLTC®
Individual long-term care insurance available to age 84 for both alumni and their parents.

GradMed®
Short-term major medical protection, ideal for new graduates, job seekers, and early retirees.

Underwritten by Assurant Health, HCC Life Insurance Company and Insurance Company of Pennsylvania
*American General Life Insurance Company and **The United States Life Insurance Company in the City of New York

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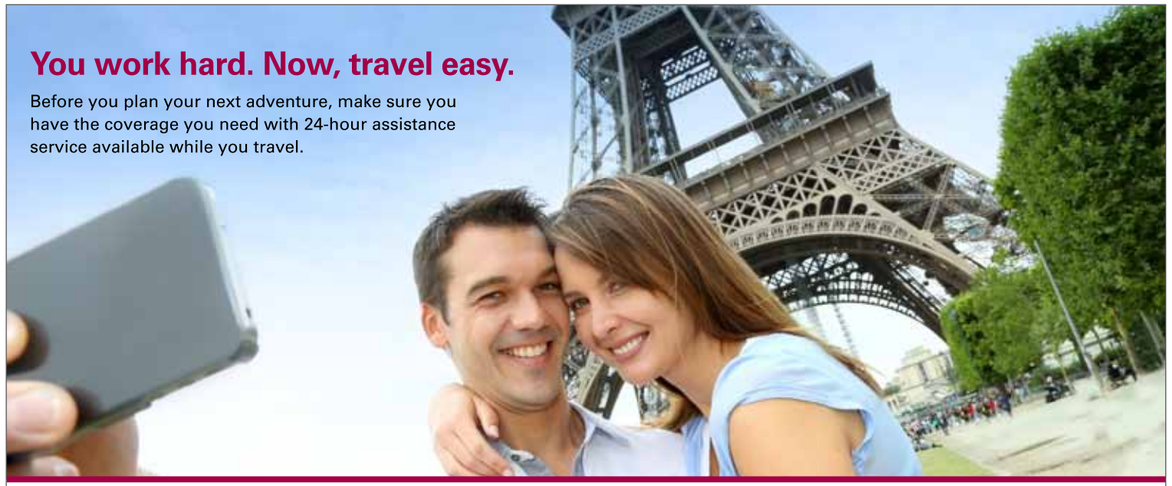

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Call 1-800-937-1387 today or visit **www.travelinsure.com/vt** to learn more about these affordable benefits and services.

Alumni Association Board of Directors ballot

The Alumni Board of Directors nominating committee has proposed the following nominees for election to three-year terms from 2013 through 2016. Please vote for up to 12 nominees and return the ballot by April 1. Results will be announced at the board meeting in late April.

___Lisa C. Ellison (finance '86), Inverness, Ill.
___A. Jerome Fowlkes (finance '88), South Riding, Va.
___Kathleen K. Frazier (agricultural and applied economics, political science '04), Midlothian, Va.
___William M. Furrer (English '91), Georgetown, Texas
___Travis E. Hardy (geography '01), Leesburg, Va.
___Mark S. Lawrence (management '80), Roanoke, Va.
___W. Park Lemmond (business administration '54), Petersburg, Va.
___Brian C. Montgomery (industrial systems engineering '03), Djursholm, Sweden
___Melissa B. Nelson (finance '92), Richmond, Va.
___James P. O'Connell (biochemistry '97), Downington, Pa.
___Judy M. Springer (international studies '95), Woolwich Township, N.J.
___Kai M. Zuehlke (engineering science and mechanics '05), Atlanta, Ga.

Write-in Nomination_____

Signature_____

Return to:
Virginia Tech Alumni Association
Holtzman Alumni Center (0102)
901 Prices Fork Road
Blacksburg, VA 24061

Marvels of China

Oct. 12-23
$3,995 (including airfare)

Join Virginia Tech and the Chinese Language Institute (CLI) for an unforgettable 10-day experience in one of the world's most fascinating and influential countries. Explore Chinese history within the walls of the Forbidden City in Beijing, discover the lure of China's natural beauty among the limestone mountains of Guilin, and gaze upon the ultra-modern city of Shanghai while high atop China's tallest skyscraper. Founded and directed by a Virginia Tech alumnus, CLI provides one-of-a-kind travel experiences to students, alumni, and professionals worldwide, including more than 100 Hokies to date.

- 24-hour assistance from CLI's team
- Full-time bilingual American and Chinese guides
- At least two meals per day
- All group transportation (including airport transfers)
- All tips for drivers, guides, restaurant attendants, etc.
- High-quality four-star hotel accommodations

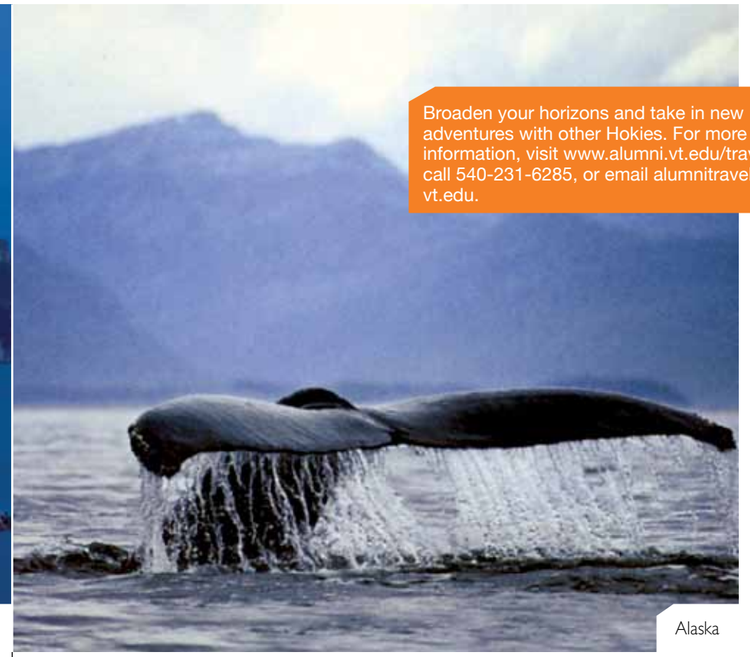
Days 1-5	Days 6-8	Days 9-12
Beijing	**Guilin**	**Shanghai**
Tiananmen Square	Li River Boat Cruise	Yu Garden
Forbidden City	Countryside Bicycle Tour	Old Town Shanghai
Summer Palace	Company Visits	Propaganda Poster Art Center
Peking University	Buddhist Monastery	Jade Buddha Temple
Tsinghua University		Silk Factory
The Great Wall of China		

2013 Travel Tours

travel

Spain

Italy



Alaska

Broaden your horizons and take in new adventures with other Hokies. For more information, visit www.alumni.vt.edu/travel, call 540-231-6285, or email alumnitravel@vt.edu.

Marvels of the Panama Canal
Vacations To Go—Celebrity Cruises' Infinity
April 16-May 1 | from $1,594*

Italian Inspiration
Go Next—Oceania Cruises' Riviera
April 27-May 5 | from $1,799* (air included)

Antebellum South
Go Next—Great American Steamboat Company's American Queen
May 10-19 | from $2,295*

Italy ~ Sorrento
AHI—Alumni Campus Abroad (ACA) program
May 22-May 30 | $2,795*

Virginia Tech Grad and Young Alumni Trip
Europe itinerary
May 28-June 15 | $3,543

European Mosaic
Go Next—Oceania Cruises' Nautica
June 5-13 | from $2,199* (air included)

Baltic Cruises
Go Next—Oceania Cruises' Marina
July 4-15 | from $3,999* (air included)

Alaskan Adventures
Go Next—Oceania Cruises' Regatta
Aug. 5-12 | from $1,999* (air included)
Hosts: Jack and Linda Davis (page 49)

British Isles and Norwegian Fjords
Go Next—Oceania Cruises' Nautica
Aug. 14-27 | from $4,999* (air included)

Discover Switzerland
AHI
Aug. 28-Sept. 12 | $3,995*

Grand Danube Passage
AHI—MS Amadeus Brilliant
Aug. 29-Sept.13 | from $4,395*

Black Sea Serenade
Go Next—Oceania Cruises' Nautica
Sept. 15-28 | from $4,999* (air included)

Pearls of the Mediterranean
Go Next—Oceania Cruises' Riviera
Oct. 10-18 | from $2,199* (air included)

JUST ADDED! **Marvels of China**
Chinese Language Institute
Oct. 12-23 | $3,995 *(see page 47)*

Villages and Vineyards of the Mosel, Rhine, and Main Rivers
AHI—MS Amadeus Diamond
Oct. 14-22 | from $2,895*

Greek Isles Odyssey
Go Next—Ocean Cruises' Nautica
Oct. 17-25 | from $2,199* (air included)

Island Escape
Vacations To Go—Royal Caribbean's Navigator of the Seas
Dec. 8-15 | $594*

*Dates and prices are subject to change. Pricing is based per person on double occupancy. Pricing is without air, except as noted.

Travel insurance

The Alumni Association encourages all alumni to consider purchasing travel insurance. Learn more at www.alumni.vt.edu/travel/insurance.

Alaskan Adventures

Aug. 5-12 | from $1,999* (air included)
Hosted by Jack Davis, dean of the College of Architecture and Urban Studies, and his wife, Linda Davis, an instructor at the university

Travel to a place of stunning landscapes and unspoiled wilderness, a place where nature reigns supreme: amazing Alaska. Discover America's last frontier from the elegant decks of Oceania Cruises' Regatta, an intimate vessel with outstanding amenities, cuisine, and service. Depart from Seattle and travel north along Canada's coast to Wrangell, one of Alaska's oldest towns and the only one in the state to be governed by four nations: Tlingit, Russia, Great Britain, and the U.S. Continue cruising through Tracy Arm, a breathtaking fjord with pristine waters that reflect icy-blue tidewater glaciers and soaring granite cliffs. Follow the Alaskan coast to Sitka, the former Russian capital of North America and an astoundingly picturesque city known for its many historic attractions, and visit the small wilderness outpost of Ketchikan, known as the "Salmon Capital of the World." Sail on through the scenic Inside Passage heading south to the cosmopolitan city of Vancouver, where your voyage concludes. This Alaskan cruise is truly an unforgettable adventure.

Alumni, we want to hear what you've been doing. We can post online photographs of weddings, babies, and spirited alumni, with some images appearing in print. Mail photos to Virginia Tech Magazine, 205 Media Building, Blacksburg, VA 24061, or email them to vtmag@vt.edu.

Please mail career, wedding, birth, and death news to Alumni Notes, Virginia Tech Alumni Association, Holtzman Alumni Center, Blacksburg, VA 24061; email them to fleets@vt.edu; or submit them online at www.vtmag.vt.edu/submit-classnote.php.

Alumni mailing addresses may be viewed online at www.alumni.vt.edu/directory by logging in with your Virginia Tech PID and password. For assistance, call 540-231-6285.

weddings
births and adoptions
deceased

ALLISON KUHN '02

Colleen Quattlebaum (COMM '01) and Steve Quattlebaum (CE '01), Glen Allen, Va., a daughter, Kendall, born 6/10/12.

'34 **R.C. "Bob" Heterick Sr.** (CE), Blacksburg, Va., 8/4/12.

'35 **H. Boyd C. Campbell** (HORT), Hendersonville, N.C., 9/2/12.

'36 **George A. Costan** (IE), Lynchburg, Va., 9/23/12.

'38 **Oscar W. Ward Jr.** (BIOL), Hampton, Va., 7/25/12.

'40 **L.C. Angle Jr.** (AGE), Radford, Va., 7/21/12.
John M. Rhoads (BIOL), Durham, N.C., 1/29/12.
Noel A. Wright (ME), Tallahassee, Fla., 8/9/12.

'41 **C. Edward Hedgepeth** (HORT), Castlewood, Va., 4/14/12.
William V. Steele (ME), Merced, Calif., 7/17/12.

'42 **John E. Ginter** (IE), Wheeling, W.Va, 8/16/12.
Thomas R. White (IE), Salt Lake City, Utah, 8/15/12.
George A. Zirkle Jr. (BIOL), Knoxville, Tenn., 3/20/12.

'43 **Richard Ferguson** (ME), Charlotte, N.C., 8/14/12.
I. Stokes Hoffman (ME), Newport News, Va., 9/21/12.
John J. Lilley Jr. (AGED), Waverly, Va., 7/15/12.
Edwin T. Robertson (AGED), Rocky Mount, Va., 9/5/12.
Irene Price Seib (HEED), Kingwood, Texas, 7/6/12.
John C. Wysor (EE), Harrisonburg, Va., 4/23/12.

'44 **R. Baird Cabell** (BAD), Franklin, Va., 7/21/12.
William B. Hoover (MNE), Salem, Va., 8/20/12.
Arthur "Pat" Meakin (BIOL), Greenville, S.C., 10/9/12.
Edward S. Szczepanski (BAD), Monessen, Pa., 1/18/12.
J. Douglas Tauscher (FW), Gastonia, N.C., 5/8/12.
Lee W. Walker Jr. (EE), Portsmouth, Va., 3/17/12.

'45 **J.A. "Pete" Kolbe** (CHEM '44), Richmond, Va., 7/2/12.
John B. Lee (ME '48), Houston, Texas, 9/19/12.

'46 **William R. Elder Jr.** (BAD), Brookneal, Va., 7/17/12.
Ernest M. Holdaway (BAD '48), Richmond, Va., 7/13/12.
Norman C. Ratliffe (BIOL '49), Clintwood, Va., 8/5/12.
James W. Rush Jr. (EE '48), Owensboro, Ky., 8/10/12.

'47 **Thomas E. McDonald** (EE), Port Richey, Fla., 7/20/12.
B. Shepherd Trant (BC '48), Portsmouth, Va., 8/5/12.

'48 **John P. Duda** (CE), St. Albans, W.Va., 7/14/12.
C.M. "Claude" Hollyfield (METE), Accokeek, Md., 9/14/12.

'49 **Winston "Jerry" Jackson Jr.** (CHEM), Kingsport, Tenn., 8/1/12.
James C. Lee (IE '50), LaGrange, Ga., 2/5/12.
B.B. "Bill" Powell (ASE), Washington, N.C., 5/7/12.

'50 **David B. Ballard** (METE), Vienna, Va., 1/28/12.
Joseph J. Basgier (CE '55, CE '55), Virginia Beach, Va., 9/14/12.
Wickham B. Coleman Sr. (AGED '67, AGED '67), Ruther Glen, Va., 4/13/12.
Robert A. Cramer (BAD), Franklin, Va., 2/8/12.
Joseph "Ted" Domazet Jr. (CE), Falls Church, Va., 7/19/12.
T.C. "Ted" Harrison Jr. (AGE), Jacksonville, Fla., 3/30/12.
Gordon W. Hicks (DASC), Evington, Va., 7/1/12.
Auzville Jackson Jr. (METE), Henrico, Va., 7/27/12.
Harold "Skeebo" Lucas (BAD), Richmond, Va., 8/15/12.
Thomas Sarver (CE), Louisville, Ky., 4/27/12.
Donald L. Whiteman (BAD), Charlotte, N.C., 1/14/12.
David K. Whittington (CHE), Pittsburgh, Pa., 8/6/12.
Raymond C. Woodard (ASE), Jacksonville, Fla., 6/29/12.
H. Winston Woodford Sr. (AGEC), Huddleston, Va., 8/26/12.

'51 **Delbert L. Boggs Jr.** (MINE), Wise, Va., 7/24/12.
Gerald E. Bolen (BAD), Pulaski, Va., 7/21/12.
Leonard H. Childers Jr. (ME, IEOR '52), Sterling, Va., 4/16/12.
Robert G. Covel Jr. (ME '52), Cocoa, Fla., 3/31/12.
Gordon D. Lewis (FW), Asheville, N.C., 4/25/12.
Albert J. Ramey (CE), Henrico, Va., 7/14/12.
Sterling L. Wingo (BAD), Richmond, Va., 7/7/12.

'52 **Frank C. Holton Jr.** (ARCH '58), Chesapeake, Va., 7/11/12.
Grayson B. Morris Jr. (EE), Newport News, Va., 7/16/12.
William B. Poff (ACCT), Roanoke, Va., 9/5/12.

'53 **Nancy Darnell Moncol** (GHEC '52), Raleigh, N.C., 8/27/12.

'54 **David R. Miller** (EE '56), Surprise, Ariz., 8/29/12.
C. William Smith Jr. (GBUS '56), Willis, Va., 8/30/12.

'55 **William S. Shelton** (CE), Lexington, Va., 5/6/12.

Michael G. Cahill (DE), Louisville, Ky., 8/6/12.
Robert C. Wagner Sr. (BAD), McKeesport, Pa., 8/21/12.

'66 **David E. Williams** (CE), Hampton, Va., 7/30/12.

'67 **Earving L. Blythe** (ENGL '68, URBA '83), Blacksburg, Va., retired as vice president for information technology and chief information officer at Virginia Tech. He was conferred the title of vice president emeritus by the Virginia Tech Board of Visitors. Additionally, the Mid-Atlantic Research Infrastructure Alliance named Blythe an honorary board member and presented him with a certificate of appreciation for his service to Tech and the commonwealth and his leadership at the national level in information technology and advanced networking programs.
John C. Hrapchak (ARE), Columbia, Md., was elected to the board of directors of the Orthodox Christian Mission Center in St. Augustine, Fla.
David W. Ratcliff Jr. (BAD), Pulaski, Va., 4/16/12.

'68 **Virgil "Brownie" Cauley Jr.** (FW, FW '73), Newport, Va., 8/2/12.
James M. Weddle (EDBS), Salem, Va., 8/16/12.

'69 **Jack W. Bowling** (BAD '70), Dublin, Va., 5/13/12.
R. James Foster Jr. (MGT), Lynchburg, Va., 10/8/12.
Carl E. Lawson (BAD '70), Richlands, Va., 8/27/12.

'70 **Daniel M. Dick** (IE), Keswick, Va., is serving on the board of directors of Cardno TEC and is the Government Security Committee chairman.
Gary P. Miller (BIOL), Danville, Va., is vice mayor for the City of Danville, Va.

'71 **James W. Baker Jr.** (EDVT, GSC), Roanoke, Va., 8/5/12.

'56 **P.C. "Pete" Georgallis** (EE '58), Leesburg, Va., 7/6/12.
Merrel E. Spence (BAD '57), Ilion, N.Y., 5/7/12.
Maywood F. Wallace Sr. (EE), Glen Allen, Va., 8/20/12.

'57 **Alfred Patrick** (BAD, EDBS '60), Richmond, Ky., published a murder-mystery novel entitled "Clinch River Justice."

Sue Plunkett Hill (EDBS), Bent Mountain, Va., 5/10/12.
William "Jack" Mayo (BAD), Naples, Fla., 2/8/12.

'59 **Hugh M. Eaton Jr.** (BAD), Palmer Lake, Colo., 8/5/12.
Horace "Bud" Keever Jr. (BAD), Broadway, Va., 8/15/12.

'60 **Robert B. Kerby** (GBUS '65), Waynesboro, Va., 4/24/12.
K.A. "Ken" McPherson (BAD '61), Fort Mill, S.C., 8/30/12.
Benjamin L. Taylor Jr. (EDBS), Roanoke, Va., 7/16/12.
Leo "Buck" Wright Jr. (VOED), Salem, Va., 9/4/12.

'61 **Charles C. Thigpen** (STAT), Knoxville, Tenn., 8/21/12.
L. Wayne Wiles (CE), Richmond, Va., 4/19/12.

'62 **John J. Bartko** (STAT '61, STAT '62), Newville, Pa., has been accepted into the American Statistical Association's newly initiated Accredited Professional Statistician program.

Harvey W. Herring (METE, MESC '72), Gloucester, Va., 7/1/12.

'63 **David Finkleman** (ASE), Colorado Springs, Colo., was elected to the International Academy of Astronautics.

Michael J. McGinnis (ME), Gallipolis, Ohio, 8/24/12.
J. Roy Murphy (GSC '64, GEOL '74), Broken Arrow, Okla., 4/14/12.
Roger P. Pence (CE), McGaheysville, Va., 8/29/12.

'64 **William E. Thomas** (DASC, EDAC '81), Culpeper, Va., was appointed to the Germanna Community College Advisory Board.

'65 **G. William Marshall Jr.** (METE), Larkspur, Calif., was named distinguished professor emeritus at the University of California, San Francisco. He also received an honorary doctorate from Malmo University in Sweden.

Alumna brings event-planning pizzazz and vintage flair to street market

by EMILY GOODRICH

In the Chicago event-planning arena, Sally Schwartz (marketing management '81) has found a niche for herself: the Randolph Street Market, an indoor-outdoor antiques market.

COURTESY PHOTO

Sally Schwartz '81

The market is an interesting transition from Schwartz's earlier work. She founded Paint Me A Party Productions, a party-planning company, in 1985; she then restructured the company in 2000. It became Image Pilots in 2002, a company that reflects the flexibility Schwartz wanted to offer clients.

"I wanted to pull things together, pull teams together, rather than sit on a staff," said Schwartz. "I wanted to pull in experts for events, whether [they were in] the auto industry or health care."

While on a trip to buy party props in 2003, Schwartz began planning the Randolph Street Market as an antiques event. "There was nothing in Chicago like [the antique markets] I visited," Schwartz said. "There was a niche to fill; it was the right timing and [the market] filled a big gap in the Chicago community."

A European-style bazaar, the Randolph Street Market is the largest indoor/outdoor market in the country. It attracts more than 250 vendors from around the country and customers from around the world, and has been recognized as one of the "top three national urban antique markets" by Travel & Leisure magazine.

Image Pilots now runs three markets on select weekends. The Randolph Street Market is a "market of markets," including the main antique market as well as vinyl and fine food markets. Modern Vintage Chicago, a fashion event, is hosted indoors in the spring and after the Randolph Holiday Market in the winter.

"It's a real institution," said Schwartz. "People fly in from around the world to shop here. There have been smaller things that have popped up since I started this, but they haven't lasted long, and have disappeared. The Randolph Street Market is much longer lived, and will continue."

Schwartz developed her skill and love for event planning during her time at Virginia Tech. "I was in advertising, and we had to plan an event for a client," said Schwartz. Even then, she knew she'd found her calling. "I liked marketing through special events; it was more fun than [traditional] advertising."

Emily Goodrich, a sophomore majoring in English, is an intern with Virginia Tech Magazine.

Attention 2002 grads

After June 30, the Schiffert Health Center will destroy the medical records of all 2002 graduates. If you would like a copy of your records, please contact Paula Robertson at 540-231-9430 or medrec@vt.edu before June 1.

weddings
births and adoptions
deceased

Susan J. Masterson (CTRA), New York, N.Y., 7/13/12.

'73 **Susie J. Blankenship** (HNF), Johnson City, Tenn., 2/8/12.
Jacqueline P. Martin (SOC), Litchfield, Conn., 2/9/12.
Bruce A. Oyler (PSYC), Knoxville, Tenn., 4/14/12.

'74 **Roland H. Macher** (HRIM, HNF '95), Roanoke, Va., built a soccer field in Tanzania for children with the O'Brien School for the Maasai.

Margaret H. Baumgardner (EDVT), Wytheville, Va., 7/28/12.
R.B. "Dick" Brewer (SOC), Santa Cruz, Calif., 8/15/12.
Grace Reynolds Karnes (CTRA '75), Christiansburg, Va., 9/15/12.
David W. Morey (BAD), Lynchburg, Va., 7/20/12.
Edward J. Vengenock Jr. (MAED), Salem, N.J., 7/19/12.

'75 **Nancy E. Graham Monson** (MHFD), Gum Spring, Va., 3/5/12.

'76 **William D. Fairchild III** (BC), Gainesville, Va., was appointed by Gov. Bob McDonnell to serve on the Virginia Tech Board of Visitors until June 2016.

'77 **Thomas R. Anable** (BAD '78), Benbrook, Texas, 8/18/12.
Mary Mears Barber (EDVT, EDVT '80), Virginia Beach, Va., 3/16/12.
John L. Monroe (FW, EDSC '84), Henrico, Va., 7/30/12.
Randal H. Ringstaff (AGRN), Radford, Va., 7/27/12.
Teressa D. Vickers (ELED '78), Kingsport, Tenn., 3/1/12.

'78 **Duncan D. Aukland** (PSCI), Worthington, Ohio, was promoted from National Guard AGR judge advocate to colonel.
Walter L. Daniels (FW, AGRN '81, AGRN '85), Blacksburg, Va., received the William T. Plass Award for his work in the reclamation and rehabilitation of lands impacted by mining, waste disposal, road building, and other disturbances.
Richard L. Ford III (GEOL), Salt Lake City, Utah, is chairman of the Department of Geosciences at Weber State University.
Robert D. Grisso Jr. (AGE '79, AGE '81), Blacksburg, Va., is associate director of agriculture and natural resources for Virginia Cooperative Extension.
Dennis H. Treacy (FW), Hanover, Va., was appointed by Gov. Bob McDonnell to serve on the Virginia Tech Board of Visitors until June 2016.

'79 **Gordon E. Groover** (ANSC, AGEC '88, AAEC '01), Blacksburg, Va., received the 2012 Andy Swiger Land-Grant Award, an honor that recognizes recipients' creative accomplishments in research, teaching, or extension.
Thomas G. Tingle (ARCH '80), Williamsburg, Va., received the 2013 Small Business Person of the Year award from the Greater Williamsburg Chamber and Tourism Alliance.

Phillip C. Harris (CE), Spout Spring, Va., 4/8/12.
Walter F. Pearce (BAD),Waynesboro, Pa., 3/24/12.
Margaret B. McQuade Surbaugh (BED), Dover, Del., 12/30/11.
Chris E. Wilt (SYSE), Fairmont, W.Va., 8/14/12.

'80 **William O. Turner III** (CE), Roswell, Ga., is a national engineering manager with Parsons Corp.

Allison Caskie Kingston (MKTG), Cincinnati, Ohio, 8/30/12.

Robert "Bob" Lambert (electrical engineering technology '80), Glendale, Calif., an entertainment industry executive regarded as a major player in the shift toward digital animation, died Sept. 7, 2012. Lambert worked in various roles with Walt Disney Co. for 25 years, helping to usher in the company's digital era, including working with Pixar. Among other roles, he was also founder and chairman of Digital Cinema Initiatives, a consortium of studios that helped movie theaters transition to digital exhibition.

'81 **Frederick P. Heller** (ESM), Richmond, Va., received the Commanders Award for Civilian Service as the Sharana regional support activity site lead for the Joint Program Office Mine Resistance Ambush Protected Vehicles program.
Thomas C. Maness (FOR), Corvallis, Ore., is dean of the College of Forestry at Oregon State University.

John C. Sadler (MKTG), Dumfries, Va., 4/21/12.

'82 **Theresa L. Defore** (CE '83), Arlington, Va., 5/31/12.
Ralph G. Lampert Jr. (COMM), Chesapeake, Va., 9/6/12.
Robert A. Wharton Jr. (BOT), Rapid City, S.D., 9/19/12.

'83 **Julia O. Beamish** (HIDM), Blacksburg, Va., showcased a universally designed kitchen—a space meant to be aesthetically appealing and usable by everyone, regardless of their age, ability, or status in life—at the university's Disability Employment Awareness Month event.
Burton J. Burch Jr. (ME), Lynchburg, Va., is general manager of Babcock & Wilson Nuclear Operations Group Inc.

K. Mark Gill (MKTG), Richmond, Va., 8/17/12.

'84 **Michael E. Mease** (AGRN), Gaithersburg, Md., 3/28/12.

'85 **Francis J. Huber** (EE), Manakin Sabot, Va., was selected as the Hokie Hero for the University of North Carolina game.
R. Bruce Perry (ME), Leicester, N.Y., received Delphi Powertrain's 2012 Boss Kettering Award for the development of Delphi's gasoline direct injector, Multec 12.
Larado M. Robinson (CE), Blacksburg, Va., received the American Water Works Association's Vernon Lucy Award.

'86 **Philip S. Burkholder** (ME), Pittsboro, Ind., received the College of Engineering's 2012 Distinguished Service Award for his personal service to his profession and to the college.
Roderick A. Hall (FIN, BAD '89, ELPS '09), Christiansburg, Va., is associate director for operations and finance for the Virginia Tech Transportation Institute.
Robert L. Holloman Jr.(IEOR '87), Glen Allen, Va., is the founder of an engineering consulting firm, The Holloman Group LLC, and Kollege Kicks, a company that supplies sneakers featuring university logos.
Bradford A. King (COMM), Ashland, Va., was selected for inclusion in the Best Lawyers in America 2013 publication.
Janice M. Mueller (CHE), Lexington, Ky., has authored her second book, "Mueller on Patent Law: Patentability and Validity."

'87 **James E. Foster** (EE, BAD '97), Roanoke, Va., and his firm, SoftSolutions Inc., entered an enterprise-wide agreement with Cenveo Inc. to incorporate the Flex integration platform to automate shop-floor data collection.

'88 **Steve F. Ewankowich Jr.** (ME), Raleigh, N.C., is a business development manager for HMS Industrial Networks in Halmstad, Sweden.
A. Jerome Fowlkes (FIN), McLean, Va., is the associate director and team leader of the credit and mission team for Farm Credit Administration.
Nigel A. Greene (PSCI), Elkins Park, Pa., was appointed vice chair of the American Bar Association Tort Trial and Insurance Practice Section's Commercial Transportation Litigation General Committee for the 2012-13 fiscal year.
Steven L. Sims (CE), Dumfries, Va., is an inspector general for the U.S. Navy's Naval Facilities Engineering Command.

Jizeng Chen (URPL), Haymarket, Va., 1/31/12.
Douglas P. Frye (EDPE), Radford, Va., 3/10/12.
Timothy O. Slaterbeck (ENGL, ENGL '91), Starkville, Miss., 4/24/12.

'89 **B.K. Fulton** (UA), Glen Allen, Va., was appointed by Gov. Bob McDonnell to serve on the Virginia Tech Board of Visitors until June 2016.
Timothy J. Mersmann (FIW), Snellville, Ga., is district ranger for the Conecuh National Forest in Alabama.
Wayne A. Morrison (FIN), Marietta, Ga., started a law firm named Hedgepeth, Heredia, Crumrine & Morrison LLC.
Cecil C. Snead II (EDMA, ELPS '05), Roanoke, Va., is superintendent of Buckingham County Public Schools.
Marta C. Carter Wilson (PSYC, PSYC '93), Harrisonburg, Va., has authored her second book, entitled "Everybody's Business."

Cynthia A. Bowman (EDCI), Powell, Ohio, 8/4/12.
Curtis M. Mitchell (PSCI), Silver Spring, Md., 8/11/12.
Cynthia Crotts Roos (ELED), Bassett, Va., 9/4/12.
Nestor E. Sanchez (EM), San Antonio, Texas, 8/12/12.

'90 **Eric D. Schardt** (ME), Powhatan, Va., 4/26/12.

'91 **John P. Noonan** (FIN), Virginia Beach, Va., is a wealth management advisor for Merrill Lynch, Pierce, Fenner & Smith Inc.
Latanya R. Walker (FCD), Blacksburg, Va., is director of alumni relations for diversity, inclusion, and community engagement at Virginia Tech.

Richard W. Hastings Jr. (FIN, BAD '93), Baltimore, Md., a daughter, 7/30/12.

'92 **Ronald D. Murphy Jr.** (FIN), San Francisco, Calif., was promoted from senior manager to partner with Ernst & Young LLP.

WILLIAM MAHONE PHOTOGRAPHY

William T. Satterwhite Jr. (MUS '10, EDCI '11) and Julie A. Terrell (STAT '11), Roanoke, Va., married 6/30/12.

COURTESY PHOTO

Adam L. Garland (ARCH '01) and Andrea Bobik Garland (ARCH '01), Mount Laurel, N.J., a daughter, Emily (center), born 6/28/12, and seated with sisters Julia (left) and Madison (right).

COURTESY PHOTO

Mackenzie D'Assis Buice (COMM '08) and William Buice (ME '10), Southbridge, Mass., married 6/17/12.

Lucie A. Pelletier (ANSC '89, VM), Glen Allen, Va., 8/12/12.

'93 **Kelly Williamson Buechner** (COMM), Alexandria, Va., a daughter, 7/3/12.

Wesley R. Hale (CHE), Kingsport, Tenn., 7/16/12.
Matthew E. Hilburn (HIST), Arlington, Va., 7/1/12.
Elizabeth H. Spencer (FCD), Blacksburg, Va., 9/9/12.

'94 **Ashwin E. Amanna** (BIOL, EE '12), Leesburg, Va., is a research program manager for the Institute for Critical Technology and Applied Science at Virginia Tech.
Gregory M. Jarvis (HIDM), Raleigh, N.C., is athletic director for North Carolina School of Science and Mathematics.
Christopher M. Olds (CHE), Pawleys Island, S.C., is corporate counsel for Mercom Corp.
Robert F. Warther (CE), Oak Ridge, Tenn., is the deputy program manager for the American Centrifuge research, development, and demonstration program.

Edward L. Martin (ISE), Camp Hill, Pa., 4/20/12.

'95 **Lester K. Ortley** (ARCH), Dallas, Texas, established a public magnet high school program for underprivileged youth.

'96 **Phillip E. Wiseman** (FW, FOR '01), Christiansburg, Va., received the Early-Career Scientist Award from the International Society of Arboriculture.

'97 **Lara E. Bartl-Wilson** (VM), Blacksburg, Va., is assistant professor in Virginia-Maryland Regional College of Veterinary Medicine's Department of Small Animal Clinical Sciences.

Leila Cosby Longcor (PSCI) and **Jason D. Longcor** (ENGL '98), Harrisonburg, Va., a daughter, 4/8/12.

'98 **Keith E. Knipling** (MSE), Alexandria, Va., received the Presidential Early Career Award for Scientists and Engineers for research related to Department of Defense projects.

'99 **Kristin Burke Greentree** (AE), Virginia Beach, Va., is featured in the book "Military Fly Moms," which depicts women aviators in the U.S. Army, Navy, Air Force, Marine Corps, and Coast Guard.

Noelle Mooney Stanley (MUS), Manassas, Va., a son, 8/15/12.

Benjamin Araman (HIDM), Blacksburg, Va., 7/19/12.
McGregor J. Ferguson (VM), Annapolis, Md., 8/12/12.

'00 **Gardner E. Barrier** (ECON), Winston-Salem, N.C., is director of the Upper School program at Summit School.

Elizabeth Markle Leach (MSCI), Woodstock, Ga., a daughter, 4/6/12.
Beth L. Quartel (COMM), Clinton, N.J., a daughter, 8/30/11.
Brian Slingerland (FIN), San Francisco, Calif., a daughter, 6/12/12.

'01 **Benjamin P. Cripps** (HTM, HIST '09) and **Haley B. File** (FR '07, IS '07), Blacksburg, Va., married 8/18/12.
Mary Lowzinski Marks (MSCI) and Brian E. Marks, Roswell, Ga., married 6/30/12.

Adam L. Garland (ARCH) and **Andrea Bobik Garland** (ARCH), Mount Laurel, N.J., a daughter, 6/28/12.
Paula David Monte (APSC), New Milford, Conn., a daughter, 7/22/12.

Michael S. Moulton (CPE), Chesapeake, Va., 8/8/12.

'02 **John T. Farnum** (PSCI), Arlington, Va., is an attorney with Wiley Rein LLP focusing on bankruptcy, creditors' rights, and commercial litigation.
Lawton E. Grinter (FOR), Wheat Ridge, Colo., has authored a book entitled "I Hike: Mostly True Stories from 10,000 Miles of Hiking."
Joseph D. Grist (FIW), Newport News, Va., is the deputy chief of the Virginia Marine Resources Commission's Fisheries Management Division.
Matthew S. Hull (BIOL, CE '11), Dublin, Va., is a research program manager for the Institute for Critical Technology and Applied Science at Virginia Tech.
Zachary D. Sherman (AE), Arlington, Va., was named one of the 99 most influential foreign policy leaders under the age of 33 by the Diplomatic Courier and Young Professionals in Foreign Policy group.
Dave D. White Jr. (FOR), Tempe, Ariz., is principal investigator and co-director of the Decision Center for a Desert City in the Arizona State University College of Public Programs.

Marsha Wood Canfield (BIOL) and **Matthew A. Canfield** (CPE), Ashburn, Va., a daughter, 10/10/11.
Johnny R. Cross (BIOL, VM '07) and **Pamela Brierley Cross** (VM '07), Carmel, Ind., a daughter, 6/16/12.
Kevin P. Heaslip II (CE, CE '03) and **Ann Hutton Heaslip** (PSCI '03), Logan, Utah, a daughter, 8/12/12.
Joshua D. Kanera (BIT) and **Tamara Williams Kanera** (COMM '04), Charlotte, N.C., a daughter, 3/2/12.
Justin M. Kerns (FIN) and **Jacqueline Smith Kerns** (BIOL '00), Paris, France, a daughter, 6/27/12.
Bettina C. Agnor Soost (ISE), Chesapeake, Va., a son, 8/19/12.

From the D.C. rat race to Alaskan dog races

by JENN BATES

Alaska may not be a preferred vacation destination for most. For Maj. Dr. Christine Christensen (biological sciences '94, forestry and wildlife '94, animal science '96, D.V.M. '00), however, the frozen tundra offers the perfect escape from the hustle and bustle of Washington, D.C., where she works as a veterinary pathologist.

While stationed in Fort Wainwright, Alaska, with the U.S. Army from 2003 to 2006, Christensen discovered the sport of dog sledding. Since then, she has spent her vacation time volunteering as a trail veterinarian and pathologist for major dog sled races, such as the Yukon Quest and the Iditarod. Each race is 1,000 miles long and takes about two weeks for competitors to complete.

"It's exciting to be a part of something that's so different than what I'm usually exposed to. It's great to escape from the rat race in D.C.," said Christensen.

During the Iditarod, Christensen remains at a single checkpoint, while in the Yukon race, she travels along the trail by SUV. The tasks she performs during the races are quite different from her daily routine as chief of comparative pathology at the Armed Forces Radiobiology Research Institute, a U.S. Department of Defense research laboratory. During the races, Christensen helps take care of the sled dogs. She said the most common injuries she treats are orthopedic injuries and sore shoulders and wrists. Over the course of a race, she will perform 700 to 1,200 physical exams on the dogs.

"I work with tissue in the lab, but at the races I'm working with animals. I get to use my clinic skills. I don't touch a stethoscope during the year other than when I work on the races," she said.

Christensen said that last year's weather was warmer than usual, with highs reaching 20 degrees. In past years, she said, temperatures have been as low as 60 degrees below zero. She brings her own survival gear—an arctic sleeping bag, an arctic parka, a fur hat, mukluk boots, and more. "I love the cold and the winter," she said. "[Dog sledding is] a great sport and I enjoy using my professional skills to support it."

Jenn Bates, a junior communication major, is an intern with Virginia Tech Magazine. Photos courtesy of Christine Christensen.

Benny Summerlin Jr. (PAPA), Axton, Va., 8/15/12.

'03 Jennifer Kerr Di Sessa (BIOL), Lebanon, Tenn., earned her degree from the University of Kentucky's College of Nursing Second Degree program, passed the NCLEX, and is now a registered nurse.
Robert B. DiGiacomo (COMM), Greensboro, N.C., is assistant athletic director of marketing and promotions at the University of North Carolina at Greensboro.
Matthew A. Thackray (ARCH), Victor, Idaho, is a licensed architect in the State of Idaho.

Jonathan D. Catania (ISE), Gainesville, Va., a daughter, 12/30/11.
Jennifer Kerr Di Sessa (BIOL) and **Peter R. Di Sessa** (CS '04), Lebanon, Tenn., a son, 2/17/12.
Dustin L. Grissom (AE, AE '05, AE '07) and **Kathy Despain Grissom** (CHE '04, CHEM '04, EDCI '05), Sahuarita, Ariz., a son, 8/17/12.

Edward L. McCarty Jr. (BIT), Arlington, Va., 4/6/12.

'04 Kimberly A. House (PSCI), Winston-Salem, N.C., is an associate for Rawle & Henderson LLP in Philadelphia, Pa.

Leslie Funkhouser Hawkins (AAEC, EDCT '05) and Zachary A. Hawkins, Winchester, Va., married 9/8/12.

Lindsay Hession Grainger (HNFE), Fredericksburg, Va., a son, 3/31/12.
Christine R. Shearer Moser (ITDS), Annandale, Va., a son, 12/7/11.
Jacqueline Koerner Rommell (CHEM) and **Eric C. Rommell** (FIN), Vienna, Va., a daughter, 5/17/12.
Lindsey Heath Stone (ISE), Chesterfield, Va., a daughter, 8/9/12.
Amy Adamchik Tate (ITDS), Baltimore, Md., a daughter, 5/19/12.

'05 Stefanie Hartman Chen (BCHM), Chapel Hill, N.C., earned her doctorate in biochemistry from Duke University.
Laura A. Flessner (ARTF), Wilmington, N.C., began her appointment with the Coastal Management Fellowship Program sponsored by the National Oceanic and Atmospheric Administration's Coastal Services Center.
Amy C. Frady (HNFE), Springfield, Va., is a nutrition program analyst in food distribution in the USDA's Supplemental Nutrition Assistance Program.
Kimberly D. French (IDST), Arlington, Va., was selected as the Hokie Hero for the Virginia Tech vs. Austin Peay game.

John P. Holland (ENSC) and Julie N. Robbins, Jacksonville, Fla., married 7/27/12.
Patrick G. La Vay (MINE) and **Alli Sturges** (SOC '08), Columbia, Md., married 6/23/12.

Brian S. Board (CE), Hampton, Va., a son, 6/12/12.
Aimee Elm Miller (PSYC), New Market, Va., a daughter, 6/30/12.
Erin Robertson Neuman (HNFE), Richmond, Va., a son, 7/12/12.
Lauren Burnette Opett (SOC), Leesburg, Va., a son, 9/10/12.

'06 Matthew C. Avery (BIOL) and **Chelsea M. Butterfield** (MKTG), Chapel Hill, N.C., married 5/18/12.
Owen K. Keenan (CE) and **Lily Tam** (APSC), Littleton, Colo., married 7/21/12.

Ashley Cleveland Antonides (MKTG) and **Evan C. Antonides** (MKTG), Centreville, Va., a daughter, 6/4/12.
Kristin Smith Sweeney (MINE), Mountain Top, Pa., a daughter, 3/20/12.

Andrew D. Fox (AT), Rescue, Va., 10/5/12.

'07 David W. Crotts (ACIS), Christiansburg, Va., received the international Most Promising Novice ACL Impact Award and was awarded the professional designation of Certified Data Analyst.
Joshua J. Davis (CHEM, BCHM), Blacksburg, Va., assumed command of Delta Company, 4th Combat Engineer Battalion, U.S. Marine Corps, in Knoxville, Tenn.
Andrew P. McCoy (BCSM), Blacksburg, Va., is director of Virginia Tech's Center for Housing Research.

Jessica L. Clatterbuck (FIN) and **Andrew D. Summer** (BIT), Virginia Beach, Va., married 8/4/12.
Michael A. Foussekis (PHYS) and **Katherine A. Golkow** (PSYC '08), Burke, Va., married 9/2/12.
Clinton J. Hepner (HORT) and **Paige M. Plunkett** (CHEM '11), Woodstock, Va., married 10/8/11.
Duane A. Kuykendall (HIST) and **Kelly Schnabel** (BIOL), Culpeper, Va., married 10/22/11.
Christina M. Lilick (WSCI) and **Brian Clevenger** (HIST '08, PSCI '08, PIA '11, GSCR '12) Fairfax, Va., married 5/11/12.

Holly Kuntz Pratt (MKTG) and **Michael R. Pratt** (ENGL), Chesterfield Va., a daughter, 3/4/12.

'08 Katherine E. Biniek (SOC), Dublin, Va., is a sergeant for the Virginia Tech Police Department.

weddings
births and adoptions
deceased

Lindsey R. Aitcheson (PSCI, SOC '11) and AK Kanode (HSE '10) Seattle, Wash., married 7/7/12.
Mackenzie D'Assis Buice (COMM) and **William Buice** (ME '10), Southbridge, Mass., married 6/17/12.
Jonathan A. Clifton (COMM) and Meghan E. Gilstrap, Chesterfield, Va., married 11/4/11.
Lauren C. Lee (COMM) and **Hugh F. McCarthy** (ACIS, FIN '09), Arlington, Va., married 4/14/12.

Mallory Casey Banks (NRC), Dover, Del., a daughter, 4/10/12.

'09 Randy J. Coggin Jr. (ECAS), Warrenton, Va., was selected as the Hokie Hero for the Virginia Tech vs. Georgia Tech game.
Kevin H. McLaughlin (HNFE), Roselle Park, N.J., earned his doctor of physical therapy degree from Temple University and is completing his residency at Johns Hopkins University in Baltimore, Md.

Lindsay Cooper West (COMM) and **Charles M. West** (ENGL '10), Woodbridge, Va., married 10/21/11.

'10 Ian A. Hamre (FIN) and **Cass Maloy** (ACIS), Rocky Mount, Va., married 6/16/12.
Samantha Simcik Reddy (MATH, EDCI '11) and **Robert J. Reddy**, Stafford, Va., married 1/21/12.
William T. Satterwhite Jr. (MUS, EDCI '11) and **Julie A. Terrell** (STAT '11), Roanoke, Va., married 6/30/12.

'11 Brent M. Casteele (CE), Pulaski, Va., is a staff engineer with the utilities division of Draper Aden Associates in Blacksburg, Va.
Samuel C. Hardin (CE), Starkville, Miss., earned his professional engineering license and is employed at Clearwater Consultants Inc.

Rachel Kistler Thomas (ENSC) and **Wesley A. Thomas** (CE '12), Burlington, Mass., married 5/26/12.

'12 Jennifer L. Boyd (ITDS), Carmel, Ind., received honorable mention in a student design competition sponsored by the American Society of Interior Designers.
Hannah C. Chessman (ITDS), Charleston, S.C., placed first place in a student design competition sponsored by the American Society of Interior Designers.
Emily M. Jasper (BAD), Weldon Spring, Mo., authored an article, "The Graduation Edition: 13 Entrepreneurial Blogs & Sites You Should Read Before 2013," featured on the BuyerZone website's Best of BuyerZone list.
Tiffany E. Jebson (GEOS), Blacksburg, Va., is a geologist at Draper Aden Associates in Blacksburg, Va.
Titi-Mary Omotade (HIST, BIOL), Brookeville, Md., is leading laboratory instruction and experiments with high school students through the GEMS (Gains in the Education of Mathematics and Science) program with the Walter Reed Army Institute of Research.

obituaries

faculty/staff

Hubert John Gerken Jr., an internationally known beef cattle specialist who held a bachelor's degree and a master's degree from Virginia Tech, died Oct. 27, in Burlington, N.C. As a professor of animal science in the College of Agriculture and Life Sciences and a Virginia Cooperative Extension animal scientist, his programs in beef cattle nutrition and management helped improve beef production. Gerken also coordinated the Powell River Project, which uses reclaimed mined land for livestock production. He and his wife, Shirley, made a generous gift to support the professional development of Extension faculty.

Stanton R. Musser, a retired U.S. Air Force major general and former commandant of the Virginia Tech Corps of Cadets, died Oct. 8. Upon retiring from the Air Force in 1989, Musser took over as corps commandant, retiring in 1999 as the then-longest-serving commandant in the university's history. Under his leadership, the corps experienced positive changes in program quality while also embarking on the first period of sustained growth in several decades. Following Musser's passing, the Corps of Cadets placed a memorial wreath by the flag pole on the Upper Quad and flew the flag at half-staff in his honor.

friends

Mike Varelos, the longtime owner of Mike's Grill in downtown Blacksburg, died Nov. 12. Known for his burgers and his storytelling, the Greek immigrant operated the restaurant for 29 years; it remains open under the ownership of his son, Nick.

To advertise your business in Class Notes, email us at vtmag@vt.edu.

TEDxVirginiaTech

The art of improvisation.
Emotion, the new musical instrument.
How snakes fly.
More passion, less pedagogy.
Why nuns don't have mid-life crises.

Now *those* are ideas worth spreading.

Twenty-one faculty members, alumni, and students spoke on those topics and more at the TEDxVirginiaTech event on Nov. 10 on campus. Centered on the theme of "knowing," all 21 speeches from the independently organized event can be accessed at **www.tedxvirginiatech.com.**

Photos by Robin Dowdy

David G. Schmale III, an associate professor of food and safety and plant biosecurity, engages his students with topics that include the majesty of the humble fungi and ways to measure crop-threatening pathogens with model airplanes.

"It's important to train students to be scientists because we need the next generation of critical thinkers," said Schmale. "Students doing research in my lab are generating their own questions, their own ideas, and their own methods to test these hypotheses or educated guesses that they've come up with themselves."

At Virginia Tech, professors create opportunities for undergraduate students to get hands-on experience in the lab in a real-world environment.

"The students are the No. 1 driving factor for excellence," said Schmale. "[Their] eagerness to learn [and their] ability to acquire new information and demonstrate that knowledge in a critical context [are some] of the greatest rewards for any teacher."

David G. Schmale III
College of Agriculture and Life Sciences
Associate Professor, Food Safety and Plant Biosecurity

VirginiaTech
Invent the Future®

We set up a photo booth on our campus and asked faculty how they are inventing the future. The story featured here represents just one sample of the innovative work that is being done at Virginia Tech.

facebook.com/virginiatechinvents

2013 Drillfield Series

The Drillfield Series continues in 2013 with weekends devoted to photography, fine dining, student legacies, and special programs for corps and women alumni. Make plans now to attend these events designed for alumni and their families, and take advantage of the specially discounted accommodations available at The Inn at Virginia Tech.

Feb. 15-17	Food for Thought: An Indulgence of Wine and Fine Cuisine
May 10-11	Focus on Photography 2013
June 21-23	Corps of Cadets Alumni Weekend
July 12-13	Virginia Tech Admissions Weekend
July 19-21	Women's Getaway Weekend for Alumnae

See pages 44-45 for descriptions and visit **www.alumni.vt.edu/drillfieldseries** for more information.

The Virginia Tech Alumni Association Hokie Classic

June 17

Join fellow alumni for a captain's choice golf tournament at the Pete Dye River Course! Greens fees, cart, door prizes, lunch, drinks, and a post-tournament dinner in the new clubhouse overlooking the New River. It's all included. Registration is limited to the first 120 golfers, so register early. Enjoyable for golfers of every skill level. $150 per person. Visit **www.alumni.vt.edu** for more information.