Message from the President

America’s global economic stature at risk

BY CHARLES W. STEGER ’69

China has replaced the United States as the world’s No. 1 high-technology exporter. U.S. consumers spend more on potato chips than the government spends on energy research and development. In the United States, twice as much money is spent on litigation as on research—far more than is spent by any nation on the planet. Among students in industrialized nations, U.S. students rank 20th in high school completion and 16th in college completion. Chinese researchers have moved from 14th to 2nd place in the number of published research articles (behind U.S. researchers).

In 2005, a distinguished panel of national leaders warned in a report prepared for the National Academies, “Rising Above the Gathering Storm,” that the United States risked losing its leadership position as the world’s strongest economy. In the wake of the fanfare generated by the report, Congress quickly passed legislation to address the report’s recommendations. Unfortunately, little funding was provided, and not much progress was made. Now, five years later, the National Academies have issued a revised report, “Rising Above the Gathering Storm, Revisited,” which concludes that our nation is facing a “Category 5 storm.”

The new report reiterated its earlier recommendations—which bear repeating—but warns that the hill that must be climbed is which concludes that our nation is facing a “Category 5 storm.”

For Virginia Tech, items II and III touch especially close to home. Moreover, the updated report finds that the two highest-priority actions today are to a) ensure that teachers in every classroom are qualified to teach the subject they teach, and b) double the federal investment in research.

For years, we have known that our nation cannot compete based on low-cost labor or easy access to capital. As Professor Jeremy Siegel of the University of Pennsylvania’s Wharton School asserts, “Economic growth is based on advances in productivity, and productivity is based on discovery and innovation.” In turn, discovery and innovation are the very products of American research universities.

As a result, we believe that governments have important roles the federal government in sponsoring basic research, and state governments in bolstering education in science, technology, engineering, and mathematics (STEM) disciplines. In my last column, we addressed Gov. Bob McDonnell’s efforts to reforms in the nation’s tax, patent, immigration, and litigation policies.

The federal government must be the primary and leading sponsor of the nation’s basic research. With immense pressure to jobs—jobs whose names don’t even exist today.

For years, we have known that our nation cannot compete

The federal government must be the primary and leading sponsor of the nation’s basic research. With immense pressure to jobs—jobs whose names don’t even exist today. Some will say, “We can’t spend now. Our nation is broke.” But I say we cannot avoid these investments in America’s future. Our nation has immense wealth. We should be willing to make the assessments and investments when they clearly will improve the nation’s economic competitiveness.

IV. Rebuilding the competitive ecosystem by introducing reforms in the nation’s tax, patent, immigration, and litigation policies.

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14 | How Tech Ticks: Hear ye, the bells of Burruss
There’s a twist behind the chiming of the Burruss Hall carillon, Follow Virginia Tech Magazine to the source of the sound.

16 | Mike Ellerbrock: Natural Renaissance Man
From environmentalism and capitalism to religion and science, Professor of Agricultural and Applied Economics Mike Ellerbrock, an award-winning instructor and researcher, expertly guides students on a search for common ground between incongruous topics.

18 | Equipped for excellence: Corporate Research Center thrives at Virginia Tech
Named the Outstanding Research Park by the Association of University Research Parks in 2010, Virginia Tech’s Corporate Research Center is more than just office space. The service-oriented center, currently comprised of 27 buildings on 120 acres, offers tenants a tight-knit community and numerous resources, creating a model for success.

22 | Ear to the ground, eye on the sky
Navigating a landscape that encompasses projects as widely varied as nanotechnology and the preservation of military lands, the College of Natural Resources and Environment confronts the challenges of protecting our world in surprising ways.

24 | Preparing for the golden years
Piozied at the forefront of a life issue of growing concern, staff at Virginia Tech’s Center for Gerontology examine and provide insight into the challenges and decisions faced by caregivers and care-receivers alike.

28 | No frills to five-star: The best campus dining in the country
Circa 1900, campus food was a mess, literally and figuratively. In the 1960s, pecan pie à la cockroach sparked protests. Now featuring such dishes as whole Maine lobster and London broil, dining at Virginia Tech is indisputably first-class.

40 | Biotech pioneer
Well before “translational research” became essential to economies worldwide, Charles Hammer (animal husbandry ‘56) was helping to translate university research into consumer products. His work bridging industry, academia, and economics in North Carolina has made the alumnae nothing short of a biotechnology pioneer.

47 | Alumni Association News
page 47: Commentary
page 48: Reunions and homecomings
page 50: Hobies praise alumni tours
page 52: Driftless Series
page 54: 135th-anniversary celebration
page 54: Alumni Distinguished Professors named

On the cover: Students know it, and even the flatware knows it. Virginia Tech has the best campus dining in the country. The photo—and the heating, bending, and removal of asserted fork prongs—is by Jim Stroup.
Letters to the Editor

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James I. Robertson Jr.: Mr. Civil War

I read the whole article on [James I.] Robertson Jr. with a tear in my eye. I took his Civil War course in the winter quarter of 1969. At that time there was a tradition that graduating seniors could be excused from final exams in the spring quarter. Since I was finishing in the winter, I asked Robertson if I could be excused from the final exam. He was gracious as always and posted my grade as a “B.” This is one of the most cherished of my grades at Tech.

Years later, I asked a common acquaintance who was close to Robertson to verify my grandfather’s war record. He was not a Confederate vet—disappointed, and for many records, Robertson advised of his vast computerized records. He was gracious as always and posted my grade as a “B.”

Address changes and circulation inquiries should be mailed to the Virginia Tech Alumni Association, Headquarters Alumni Center (GIS2), Blacksburg, VA 24061, or sent via e-mail to alumni@vt.edu. Alumni notes should be mailed to Alumni Notes, Virginia Tech Alumni Association, Headquarters Alumni Center (GIS2), Blacksburg, VA 24061, or sent via e-mail to alumni@vt.edu. Alumni Virginia Tech Magazine is produced by the Office of University Relations, with support from Alumni Relations. Virginia Tech Foundation underwrote most production costs.

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Sofitude

Oldest building on campus undergoes careful restoration

Sofitude, the oldest structure still standing on campus, underwent restoration from July 2010 to January 2011. The building houses the Appalachian Studies Program. The renovation was largely funded by a gift from the Mary Morton Foundation of Richmond, Va. Visit www.vtmagazine.vt.edu to find a photo gallery of the newly renovated space and to read about Sofitude’s unique history.

Mary Morton Foundation

University asks account holders to change passwords

Virginia Tech is asking some 120,000 alumni, faculty, staff, and current students to change passwords for university e-mail addresses and accounts following July 1. Provisions of the directive from the Virginia Tech Board of Visitors aim to help protect users, encourage good computing habits, and add another way users can protect against hackers’ attacks.

Meanwhile, beware of phishing attempts. Do not respond to e-mails asking for usernames and passwords. Virginia Tech will never ask for this information.

John Tyson

Civil War sesquicentennial to draw history enthusiasts to campus

On May 21, Cassell Coliseum will be alive with fans—fans of the Civil War, that is. The one-day event, Military Strategy in the American Civil War, features noted historians, such as Tech’s James I. Robertson Jr. and William C. Davis, in a signature conference sponsored by the Virginia Sesquicentennial of the American Civil War Commission. Highlights will include discussions of Virginia and the Eastern and Western theaters, elements of the war that affected strategy and tactics, and a luncheon performance by the Stonewall Brigade Band. Robertson, one of the nation’s foremost experts on the war, has his own history with the war’s commemoration. In 1961, he was tapped by then-President John F. Kennedy to serve as the executive director of the U.S. Civil War Centennial Commission. For more information about the May 21 conference, visit www.virginiacivilwar.org.

Alternative transportation programs earn gold award

For the second year in a row, Virginia Tech’s alternative transportation programs received a gold award in the Best Workplaces for Commuters Race to Excellence. The Race to Excellence is designed to encourage sustainable transportation innovation and recognize organizations that have taken exemplary steps to offer transportation alternatives for their employees, thereby reducing air pollution, traffic congestion, and fuel consumption.

Veterinary medicine college creates new space for research and instruction

Two major improvements to the Virginia-Maryland Regional College of Veterinary Medicine’s main building—a new research facility and an instructional space—will add
more than 46,000 square feet to the college. Ground was broken on the Infectious Disease Research Facility last September; the $10.5 million, 16,000-square-foot research facility will include laboratories and support space to accelerate translational medicine research. Last fall, the board of visitors approved designs for the Veterinary Medicine Instruction Addition, which will also serve as a new main entrance to the college.

Tech earns high rankings for value among top universities
Virginia Tech ranked among the top 50 “best value” public universities for 2011, according to The Princeton Review, which teamed with USA Today to compile “The Princeton Review Best Value Colleges for 2011.” The list, which features 100 schools, includes 50 public and 50 private colleges and universities. Of the 50 schools chosen in each category, the top 10 are ranked one to 10, and the remaining 40 are listed in alphabetical order and unranked. The selection criteria covered more than 30 factors in three areas: academics, cost of attendance, and financial aid.

Meanwhile, according to Kiplinger’s Personal Finance magazine’s “100 Best Values in Public Colleges” list, Tech was ranked 24th among 100 institutions that combine outstanding economic value with a first-class education.” Since 2006, the annual survey has ranked Virginia Tech in the top 25 among public universities.

Researcher receives award to study depression and substance abuse
Pearl Chen, assistant professor with the Virginia Tech Carilion Research Institute, has received a $1.13 million National Institute of Mental Health BRAINS (Bisbehavorial Research Award for Innovative New Scientists) award for study to depression and substance abuse. She will use functional magnetic resonance imaging to study why depression and substance abuse occur together so often and to quantify the conditions as disorders on a continuum of motivational difficulties. The award seeks to assist researchers in launching a clinical, translational, or basic research program with the potential to transform the understanding, diagnosis, treatment, or prevention of mental disorders.

Gary Downey
Professor receives commonwealth’s highest faculty honor
Gary Downey, Alumni Distinguished Professor of Science and Technology in Society in the College of Liberal Arts and Human Sciences, was honored with the Virginia Outstanding Faculty Award, the commonwealth’s highest recognition for faculty members. Known internationally as a founding leader of the interdisciplinary field of engineering studies, Downey was honored for excellence in teaching, research, and public service. Also an affiliated professor in engineering education, women and gender studies, and sociology, Downey emerged as the highest-ranked nominee out of 106 faculty members from a dozen higher education institutions across Virginia. The award program is administered by the State Council of Higher Education for Virginia (SCH EV) and funded by a grant from the Dominion Foundation, the philanthropic arm of Dominion energy company.

Architecture, design programs outpace peers
Virginia Tech undergraduate programs in architecture and landscape architecture, both in the College of Architecture and Urban Studies’ School of Architecture and Design, ranked fourth and third, respectively, in the America’s Best Architecture & Design Schools study conducted by the journal DesignIntelligence. The school’s programs in interior design and industrial design also ranked in the study’s top 10 in their respective fields. Virginia Tech’s graduate landscape architecture program, offered both in Blacksburg and in the National Capital Region, was ranked No. 6 in North America.

Tech and science museum join forces
Virginia Tech and the Science Museum of Western Virginia have entered a partnership to expand and enhance community-based science education. The partnership formally establishes the university and the museum as educational outreach partners to promote and increase science literacy throughout the region. Tech faculty and students will collaborate with staff from the downtown Roanoke museum to reinvent the facility as a living laboratory for informal science education. The collaboration will include the development of programs and events that stimulate curiosity and encourage exploration.

Veterinary medicine college announces formation of regenerative medicine center
The Virginia-Maryland Regional College of Veterinary Medicine has entered into a research agreement with the Wake Forest Institute for Regenerative Medicine at Wake Forest University Baptist Medical Center in Winston-Salem, N.C., by signing a memorandum of understanding to form the Virginia Tech/Wake Forest Center for Veterinary Regenerative Medicine. Through the new center, the veterinary college and the institute for regenerative medicine, both leaders in their fields, will engage in ongoing collaborations in translational research in regenerative medicine. The agreement facilitates the application of regenerative treatments to both human and animal patients. As part of the collaboration, clients at the Veterinary Teaching Hospital may have the option to enter their pets into clinical trials, allowing them access to technology unavailable elsewhere.

University sustainability efforts achieve “A” ratings in 6 of 9 categories
Virginia Tech received an overall rating of B+ in the Sustainable Endowments Institute’s College Sustainability Report Card 2011. A participant since 2008, the university has seen its overall grade improve each year. Tech received an “A” rating in six of nine categories (administration, climate change and energy, green building, student involvement, transportation, and investment priorities); in addition, three categories (climate change and energy, green building, and endowment transparency) improved one full letter grade from the 2010 report. Six categories (administration, food and recycling, student involvement, transportation, investment priorities, and shareholder engagement) received the same grade as in last year’s survey.

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Studying brain, eye injuries in military personnel
Granola software named to Time’s Top 20 Green Tech list
Research partnership forged with University of Nottingham
Rehabilitated golden eagle released into the wild
Oldest fossils tell story of ancient oceans
Technology pinpoints differences between cancer, noncancer patients

Warren K. Bickel
Center director contributes to drug-dependence research
Warren K. Bickel, director of the Center for Substance Abuse at the Virginia Tech Carilion Research Institute, is the 2011 recipient of the American Psychological Association Don Hake Translational Research Award. The award honors individuals whose work spans basic and applied research. Bickel was recognized for his contributions to understanding drug dependence and treatment, impulsivity, and behavioral economics and for disseminating that work to a wide audience.
The shootings at Virginia Tech on April 16, 2007, prompted many extraordinary gestures of support. Then-President George W. Bush flew in for a convocation at Cassell Coliseum. The New York Yankees donated $1 million and played the Fokies in an exhibition game at English Field. Hundreds of volunteers traveled many miles to help on campus when classes resumed. But one of the most intensive and demanding efforts to help those affected by the tragedy occurred out of public sight. In July 2007, the university created the Office of Recovery and Support to address the needs of students who were injured, their families, and the 32 families who lost loved ones.

“We often said it was the best-worst job any of us had ever had,” said Scott Johnson (Ph.D. Family and child development '91), a licensed marriage and family therapist and director of the university’s marriage and family therapy Ph.D. program. Johnson served as the office's associate director for much of its existence and was a primary Virginia Tech contact for many families of those who were killed. “There was no question what we were trying to do was important. It just was very difficult work.”

Now that all of the students served by the office have completed their degrees, the office has closed, and its responsibilities have been assumed by Alumni Relations. In addition, a federal grant that supported recovery and support efforts expired in February.

“I think we have moved from victim care and victim support to family relations,” said Associate Vice President for Alumni Relations Delores Day (communication '84, M.S.E.D. adult and continuing education '91), who accepted the additional duty of directing the Office of Recovery and Support in July 2008. “We plan to keep in touch with all those students and families who want to [hear from us], and we will continue to coordinate April 16 commemoration events for the families.”

“These are people who were asked to provide an extraordinary service to Virginia Tech and who stepped up to do an excellent job under incredibly difficult circumstances,” said university President Charles W. Steger. “I cannot stress enough how important their sensitive, dedicated, and largely unpublicized work has been to our institution.”

Seeking an appropriate tone

At the core of the Office of Recovery and Support's mission was giving personalized attention to the injured students and 32 families, but its work soon grew to include other projects, including helping to handle thousands of items that well-wishing people from around the world sent to campus and coordinating Day of Remembrance events.

“We knew we wouldn’t be able to help these families in any way unless we could create the right sense of acknowledging their loved ones and the enormous loss they felt,” said Jay Poole (agriculture education '78), a former vice president of corporate communications for Atria, who volunteered to help the university manage the enormous media response immediately following the shootings and was later asked by Steger to head the Office of Recovery and Support.

Poole already possessed significant experience handling sensitive communications projects. He also brought an ability to empathize with the victims’ families in a way many others might not have, due to the death of his own son, Tom, following a bicycle accident in 1999. Because of his personal history, his connection to Virginia Tech, and the difficult nature of his job at the university, Poole said his year in the office was “the hardest thing I have ever done.”

Megan Armbruster, the office’s recovery coordinator and injured student liaison, said she kept this sense of empathy in mind as she led meetings in preparation for the Day of Remembrance events in 2008, 2009, and 2010.

“We tried to propose a plan for events that focused on our families and would also feel appropriate to everybody else,” said Franklin, who now works for the Office of Academic Assessment. “So we were being very sensitive in how we planned things to make sure we were being comforting and providing support.”

As they reached out to families, Johnson and his colleagues were careful to respect boundaries, and carefully worked to try and build relationships, said Marilyn Hutchins, a licensed professional counselor who worked with both students and families for the office.

A 100 percent graduation rate

Twenty-six students suffered nonfatal physical injuries in connection with the tragedy. These ranged from multiple gunshot wounds to a Sprained ankle one student suffered while fleeing Norris Hall. Seven of those students graduated in May 2007, before the office was formed.

Caring for the 19 who returned in August that year was a major priority, handled largely by Franklin.

“One of the things that I was watching, monitoring, was if they got back into their involvement with the community,” Franklin said. “Whether it was through service projects or through clubs, orchestra, or research, I wanted to see them reengaged.”

One promising early sign for her, Franklin said, was that all of the students chose to return to Blacksburg for the fall 2007 term. “To me they were reengaging just by coming back,” she said. “I think that says a lot about what the climate was like here prior to the tragedy.”

One regular gathering for the students was a monthly dinner at Poole’s home, which continued even after he had left the office. “The fact that all of the injured students not only returned, but also completed their degrees, is a point of pride for Poole and others who worked with him.”

They were collectively bright enough to realize some in ways they symbolized the recovery [of the university],” Poole said of the students. “That was a burden. Nobody openly discussed this, but they were under enormous pressure to come back to school and succeed. Most of it was internal and self-imposed, but that’s how they felt about it.”

Providing chances to come together

When asked to describe some of the office’s efforts that seemed particularly successful, Day cited two programs that made it possible for people who were especially affected by the tragedy to get together.

The first was a series of “friends of” meetings held in Squires Student Center during 2008. Each meeting was an opportunity for people who had known one of the victims to come forward, share memories, and console each other. The second was the April 16 Victims Support Program, a three-day conference held in October 2009 in Landshower, Va. More than 80 people, including siblings and grandparents of some victims, attended. The
weekend-long event included presentations from several people who had lost children to violence.

“I just felt like we could give them a weekend that wasn’t centered on the anniversary [of the shootings] or a football game … and could provide them an opportunity to hear from some people who had kind of walked in their shoes, that it would be a good thing,” said Anna Beth Benningfield, a licensed psychologist and marriage and family therapist who organized the event. “And I think it was a good thing.”

Benningfield was a visiting faculty member at Virginia Tech from 2001-04 and had consulted for the university afterward while maintaining a private practice in Dallas. Provost Mark McNamee recruited her to serve as a liaison to the families of the faculty members who were killed, and she was technically one of his employees, though she worked out of the Office of Recovery and Support from 2007-10.

When interviewed, Benningfield was about to retire from private practice after 30 years as a therapist. She described her experiences in the Office of Recovery and Support as “a capstone” to her career.

“Toward that end, we were able to get some much-needed support and help to the injured students and their families and then to those who had lost loved ones. I think they felt like we weren’t just doing a job—we really did care about them. And we did. We did.”

Benningfield, Franklin, Hutchins, Johnson, and Poole all say they will never forget their experiences in the office. They take comfort in knowing the responsibilities they shouldered are now being handled by Day and an assistant director, Kelly Griffin (biological sciences ’07), who, like Day, has been involved in the university’s recovery and support efforts since 2008.

To read an expanded version of the story and learn more about all the office’s personnel, go to www.vtmagazine.vt.edu.

The College of Engineering rises in Best Graduate Schools survey

The College of Engineering continues to climb higher among the nation’s 25 best engineering schools for graduate studies, according to U.S. News and World Report’s America’s Best Graduate Schools 2012 survey, released in March. The latest annual survey ranks the College of Engineering in 24th place, one place ahead of its 2011 rankings and its highest since 2002, when the college was ranked 23rd. Six individual engineering graduate programs at Virginia Tech rank among the top 15 in their fields, according to the survey.

Tech receives third Tree Campus USA recognition

For the third consecutive year, Virginia Tech has earned Tree Campus USA recognition from the Arbor Day Foundation for the university’s dedication to campus forestry management and environmental stewardship. Virginia Tech is the only institution of higher education in the commonwealth to be recognized. An Arbor Day Foundation program supported by a grant from Toyota, Tree Campus USA honors colleges and universities and their leaders for promoting healthy management of their campus forests and for engaging the community in environmental stewardship.

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Tech to lead training program in Southern Sudan

Virginia Tech received $1.47 million from the U.S. Agency for International Development to establish university-level programs to train the next generation of agriculturalists in post-conflict Southern Sudan. The university’s Office of International Research, Education, and Development is working with the University of Juba, the Catholic University of Sudan, and Virginia State University to execute the five-year program, which began in March. Southern Sudan is headed toward becoming the world’s newest nation after a referendum earlier this year produced a vote to secede that passed overwhelmingly.

Higher education conference continues growth

Hosted by Virginia Tech’s Center for Instructional Development and Educational Research, the third annual Conference on Higher Education Pedagogy on Feb. 3-4 explored excellence in scholarly teaching and the best pedagogical practices in higher education. More than 600 faculty, students, and administrators from 122 institutions worldwide attended the conference, the quality and reputation of which continues to grow. As one faculty attendee noted, “[Virginia Tech] is a model for other institutions interested in expanding their reach in the area of teaching and learning.” For more information, visit www.cider.vt.edu/conference.

Romesh C. Batra

Engineer earns Virginia Outstanding Scientist Award

Romesh C. Batra, professor of engineering science and mechanics, received the 2011 Virginia Outstanding Scientist Award. Batra has led teams of students in the improved design of different types of armor, such as bulletproof vests, tank walls, and shields to protect vehicles against improvised explosive device blasts. He has also characterized carbon nanotubes for designing lighter and more-efficient fuel planes and studied micro-electromechanical systems that open up air bags in a car crash upon impact, as well as smart materials that monitor their own vibrations for safer car rides. The award program is administered by the Science Museum of Virginia.

The madness of March

For the ups and downs of pure drama, look no further than a sports season. Their curiosity piqued when the Hokies were left out of the NCAA men’s basketball tournament in 2010, two statisticians in the College of Science quantified biases that play a role in selecting at-large teams for the tournament. Analyzing data as far back as the 1993-94 season, assistant professors Leanna House and Scotland Leman found that in addition to the standard Ratings Percentage Index used by the 10-member selection committee, biases such as a team’s marquee name and the strength of its schedule are also factors.

Meanwhile, postseason prospects were looking up when fans stormed the Cassell Coliseum court on Feb. 26. The Hokies had just stunned then-No. 1 Duke University, 64-60, chalking up one of the biggest wins in program history in front of a national audience and ESPN’s “College GameDay” crew. But the good vibes didn’t last. The Hokies dropped their last two regular-season games and, despite winning two games in the ACC tournament, missed out on a bid to the NCAA tournament.

To read more about the study, and to see a video of the ESPN crew in Blacksburg, go to www.vtmagazine.vt.edu.
A team of graduate and undergraduate students from the Virginia Tech College of Engineering helped make history Jan. 29 at Daytona International Speedway.

As part of the ongoing Blind Driver Challenge, a blind man drove a 2010 Ford Escape Hybrid SUV on the famed course during the three-day Rolex 24 race extravaganza. At a top speed of 27 mph, he steered through obstacles that included stationary barrels and cardboard boxes thrown randomly from the back of a van. He then passed the moving van. Assisting the driver was high-tech hardware developed by Hokies.

The driver—Mark Riccobono, an executive with the National Federation of the Blind (NFB)—navigated the course perfectly, capping years of research by teams of College of Engineering students led by Dennis Hong, director of Virginia Tech’s Robotics and Mechanisms Laboratory (RoMeLa) and associate professor of mechanical engineering.

“As Mark arrived safely at the finish line, hugging his wife with tears in his eyes, I couldn’t help but also cry,” Hong said. “I asked Mark if he could give me a ride back to my hotel. He is blind, but I knew he could see the big smile on my face.”

In 2004, the NFB, a nonprofit advocacy group based in Baltimore, put forth the Blind Driver Challenge: Create non-visual interface technology that one day could allow a blind person to drive an automobile. Virginia Tech was the only university and research institution to answer the call. Work began in 2006, and within three years, undergraduate engineering students had built a prototype buggy, which debuted at the NFB’s Youth Slam summer camp in July 2009. The debut made international news, but this success was merely the beginning.

From there, work began on second-generation Blind Driver vehicles, highway-ready cars that could conceivably be used on the open road. To meet the goal, Virginia Tech enlisted the help of TORC Technologies, a company founded by College of Engineering alumni and based at the university’s Corporate Research Center. TORC had an essential ingredient: ByWire XGV technology, which provides reliable and safe electronic control of the vehicle and remote braking, among other modifications.

Engineering students designed the non-visual interface devices used to operate the vehicle. The hardware includes wire-enhanced vibrating gloves called DriveGrips and a vibrating seat cushion called SpeedStrip. Both interfaces vibrate cues that indicate directions to accelerate, halt, or turn. “The vehicles can ‘see’ obstacles and the road ahead using strategically placed laser-range finders and cameras.”

On the eve of Rolex 24, Riccobono test-drove the SUV with his wife—who is also blind—in the passenger seat, and his two children in the back. “This really hit home for me as my goal is to use engineering to help people overcome life’s toughest challenges,” said Paul D’Angio (Ph.D. mechanical engineering ’12).

The next day, Jan. 29, Riccobono drove the track. “People asked me what I was going to say, and I had some things in mind,” Riccobono said afterward. “But for me the moment spoke for itself. There were no words that would fit.”

Advocates at NFB acknowledge that the technology likely will be ready before insurers, highway regulators, and everyday motorists are open to the concept. Even so, the devices used in the SUVs—as well as other technologies developed by students during the Blind Driver Challenge—likely have other applications for the blind outside of driving, such as in home appliances, computers, and other everyday objects. In addition, the laser-range finders and technologies on the SUVs could be adapted to all vehicles. Consider the benefits of a laser-based collision warning alarm on a fog-covered mountain road.

“Humans do not adapt easily to what they think is impossible unless, of course, you are brought up to embrace technology, as some of us in the blind community have been,” said Chelsea Cook (physics ’14), who is blind and has driven one of the Blind Driver vehicles. “The ability to control a vehicle independently is amazing, but I’m just as curious to see the spin-offs and applications in other fields until society is ready for us to hit the road.”

Steven Mackay is the communications coordinator for the College of Engineering.

For a video on the Blind Driver Challenge, go to www.vtmagazine.vt.edu.

Leaving the famed starting line behind, Mark Riccobono traversed the Daytona International Speedway. His trek totaled 1.5 miles, and took less than 10 minutes to complete. Riccobono is executive director of the National Federation of the Blind’s Jernigan Institute.
Malawi is not your typical study-abroad location, and the experience is sure to leave deep impressions. Led on an annual summer trip by Professor Patricia Kelly in the School of Education, Virginia Tech students teach in the Malawi schools for one month. Despite advance preparation with readings and discussions on hunger and poverty, nothing compares to meeting the children of this southern African nation on their own turf.

Chants of “azungu, azungu” (white people) filled the ear as streams of children raced out to greet the bus of summer 2010 visitors. Most children wore worn-out versions of a school uniform. They do not find their happiness in possessions, but rather in people, relationships, and family.

Tech students encountered faces of poverty and hunger, yet they also discovered a culture with a genuine zest for music, dancing, and community. “We quickly learned that the younger children focused by engaging in song,” said Becca FitzGerald. “In Africa, they do not waste time getting all the kids to focus.” They sing a song to bring the kids in. Singing is contagious, and once the teacher and a few kids from the front start singing, the kids in the back start singing, and pretty soon the whole class is engaged. “They sing a song to bring the kids in. Singing is contagious, and once the teacher and a few kids from the front start singing, the kids in the back start singing, and pretty soon the whole class is engaged.”

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Youthful language of Chichewa must be able to pass national tests in English by standard [grade] eight or they cannot continue with school. The Virginia Tech students, who were majoring in human development, psychology, or education, concentrated on language skills, but also taught classes in health, math, social studies, and science.


“My own experience has taught me more than this trip,” said Lauren Scheid (human development ’13). “It now makes me think about how each of us is born into culture and how these cultures form our everyday lives. This experience has molded me into a better person, not because of what I did for them, but what their culture, the relationships I formed, and their genuine happiness did for me.”

On the weekends, the group traveled to various destinations, learning about sustainable gardening, local history, and culture. The group also visited Liwonde National Park for a wildlife safari and climbed Mount Mulanje, a majestic and fabled peak in the Old Rift.

“Although I’ve been to Malawi more than two dozen times, each summer when I see the country and its people through the eyes of my students, everything becomes new and fresh for me,” said Kelly. “No matter how much we give, we receive so much more through a heightened worldview and an increased appreciation of what we have.”

Jean Elliott is the communications manager for the College of Liberal Arts and Human Sciences.

To see Elliott’s blog and more stories and pictures from Malawi, go to www.vtmagazine.vt.edu.

By Hillary May ‘12

The second night of Hannukah 2010 proved to be the coldest. Jewish students huddled outside Squires Student Center, trying to keep menorahs lit through Blacksburg wind and falling snow. For more than an hour, they sang holiday songs through chattering teeth, spun dreidels on the ice with shivering hands, and managed to keep their candles lit.

Why brave the weather? Candles aren’t allowed indoors on campus, so no other option was available.

That will change soon. Virginia Tech’s Jewish students—estimated to be about 4 percent of the student population—are awaiting the completion of the Malcolm Rosenberg Hillel Center for Jewish Life.

Hillel, an international Jewish campus organization, is the students’ home away from home. More than just a campus synagogue, Hillel helps students to be a part of a cultural community on campus through recreational, educational, and service opportunities. Hillel has everything from outdoor programs and sporting events to weekly Shabbat services and a free trip to Israel. “Hillel helps Jewish students find each other and be a community,” said Jake Abelman (electrical engineering ’14).

In memory of her late husband, Diane Rosenberg recently donated a challenge gift of $1 million to Hillel for the new building. Though neither of the Rosenbergs attended the university, they wanted to do something about the needs of the Jewish community at Tech, encouraging the students to “dream large.” The center will be located on Toms Creek Road, right across from campus, and will offer a much-needed space.

Stephanie Mahoney (interior design ’14), a transfer student from a school where the Jewish community was not as engaged as Tech’s, said Hillel helped her get involved and feel welcome in Blacksburg.

Abelman, a freshman, agreed: “Especially for me, coming to a school where you only knew one or two people, Hillel is a great way to make friends and [attend services] and know you have something in common.”

Mahoney thinks that the new building will draw more Jewish students to Tech. “Having a building shows that the Jewish community is taken seriously,” she said. “It also will give Jewish students a permanent place to go.”

Hillel’s new center is exciting news for Sigma Alpha Epilson Pi sorority and Alpha Epilson Pi fraternity, Jewish-interest organizations on campus. Both groups have members on Hillel’s executive board and make a strong showing at events. Andy Greisinger (finance ’12), the president of Alpha Epilson Pi, stressed the connection between Hillel and Jewish-interest Greek organizations.

“We helped at the ground-breaking for the new Hillel building, ‘We always show a great appreciation of what we have.’

“But the main thing is that we want to do something about the needs of the Jewish community at Tech, encouraging the students to dream large.” The center will be located on Toms Creek Road, right across from campus, and will offer a much-needed space.

Aberman manages all the Hillel events,” he said. “We quickly learned that the younger children focused by engaging in song,” said Becca FitzGerald. “In Africa, they do not waste time getting all the kids to focus.” They sing a song to bring the kids in. Singing is contagious, and once the teacher and a few kids from the front start singing, the kids in the back start singing, and pretty soon the whole class is engaged.”

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To download music from the Burruss Hall carillon, install a QR code reader on your smartphone and capture the image in the viewfinder.

Hear ye, the bells of Burruss

BY DENISE YOUNG

PHOTOS BY KELSEY KRADEL

Seven times a day on weekdays and five times on Saturdays and Sundays, the Burruss Hall carillon covers the Drillfield with the chiming of bells.

Source of the sound

If you’re picturing a bell tower straight out of The Hunchback of Notre Dame, you’re in for a surprise. In a small closet adjacent to the light box for the building’s 3,003-seat auditorium, you won’t find physical bells at all. The ringing comes from an electronic carillon, donated by the Class of 1958 in 1997 at a cost of $39,911.

Two boxes house the electronic system, which connects to eight speakers on the roof, each with a 2-foot diameter. At 120 decibels, the volume is roughly equivalent to a loud rock concert. In order to house enough bells to produce the same amount and quality of sound, the entire third floor would be needed to house them, said Kim Briele, associate director of operations engineering at Virginia Tech.

Then and now

Although Burruss Hall was built in 1936, the original carillon wasn’t added until 1957, using money leftover from the construction of the War Memorial Chapel. In fact, the original “bell” wasn’t a bell at all; it used paper rolls, akin to those used by a player piano.

Most of the time, Briele doesn’t have to touch the system. It’s entirely automatic, playing random selections from a pool of more than 200 songs by a diverse medley of artists, ranging from Bach to the Beatles.

A personal touch

On occasions such as Founder’s Day or memorial events, Blacksburg native and piano teacher Sharon Knight will play the keyboard. She even has some Tech-specific sheet music, such as “Moonlight and VPI,” a song composed in 1942 for the Ring Dance.

Upon request, the bells can be played at a specific time, such as for the recessional of a wedding at the chapel. “Some people take a horse-drawn carriage ride around the Drillfield and have the bells played,” said Briele.

Visit www.vtmagazine.vt.edu for an audio slide-show of the carillon.

“[Growing up I] could hear the bells from my house and was always fascinated by them.”

— Sharon Knight
Mike Ellerbrock
Natural Renaissance Man

BY MICHAEL SUTPHIN '06

The professor sketched a football-shaped diagram on the overhead projector. The upper curve, he explained to almost 200 first-year students, represented the benefits of an education, and the lower half stood for its costs.

“The benefits of your education are not exclusive to you,” he said, drawing more curves for the marginal costs and marginal benefits. “There are benefits to other people as well.”

Although the class on macroeconomics of food and fiber systems was only three weeks into the semester, Professor of Agricultural and Applied Economics Mike Ellerbrock already knew many of his students by name. Early in his teaching career, he had formed a habit of asking the names of students who posed questions. This sort of individual attention and concern helped Ellerbrock earn Virginia Tech’s 2010 William E. Wine Award for exceptional teaching and the ability to inspire students.

In addition to introductory courses on micro- and macroeconomics, Ellerbrock teaches Environment and Sustainable Development Economics, and Religion and Science. To an outsider, this range of courses might seem like a hodgepodge of teaching interests—but not to Ellerbrock, whose academic pursuits and service to the university and community have made him a sort of Renaissance Man at Virginia Tech.

“The Greeks had a concept of ‘oikos,’ or ‘care for the household.’ From this, we get our notions of economics, ecology, and ecumenism,” said Ellerbrock, who, drawing from the ancient Greek idea of the planet as a three-legged stool, recognizes a parallel to modern dialogue on economic, environmental, and social sustainability. “For our planet to be managed in a sustainable manner, somehow we have to make a living, somehow we have to take out the trash, and somehow we have to all get along. If one of these three is not in place, then the whole system does not work.”

Mike Ellerbrock has a knack for asking questions, finding consensus, and turning a topic upside down.

“Every student has the capacity for wisdom, and we as teachers are not here to instill [wisdom], but to draw it out.”

Mike Ellerbrock

• Professor of agricultural and applied economics in the College of Agriculture and Life Sciences and 4-H economics education specialist for Virginia Cooperative Extension
• President of the Faculty Senate for the 2010-11 academic year
• Teaches courses on introductory economics, environmental and sustainable development economics, and religion and science
• Provides economics education curricula for Virginia K-12 teachers through the Center for Economics Education
• Serves as the only agricultural economist on the faculty of the Foundation for Teaching Economics, an organization that has offered summer training for high school teachers from Bulgaria, Hungary, Puerto Rico, Romania, and Slovakia for the past five years
• One of 32 faculty members who sailed last spring with the University of Virginia’s Semester at Sea and taught 650 students from around the country, making stops in Mexico, Hawaii, Japan, China, Vietnam, India, Mauritius, South Africa, Ghana, and Brazil
• Ph.D. in applied economics and master’s degree in recreation and parks administration from Clemson University; bachelor’s degree in recreation and parks from Texas A&M University

Recognition
• William E. Wine Award, 2010
• Student Alumni Associates Students’ Choice Award, 2004 and 2008
• U.S. Department of Agriculture National Award for Teaching Excellence, 2002
• Sporn Award for Excellence in Teaching Introductory Subjects, 1998
• Outstanding Teaching Award from the Southern Agricultural Economics Association, 1997
SAIC’s three-year history at the Corporate Research Center has resulted in innovative business opportunities with local small businesses and the university. Having Tech students work and research with us here in the office is a key benefit, resulting in a stream of strong job candidates. The recent opening of the VCOM II research facility at the CRC, which supports education and research in national security issues, also creates a tremendous opportunity for future growth.

Design Nine has benefitted significantly from the CRC. We get Class A office space with amenities like cleaning service, maintenance, and utilities bundled at a predictable and affordable cost. The CRC also has excellent Internet access and a high-quality videoconferencing system. Finally, we have the ability to add office space as needed and take advantage of flexible lease arrangements as our business changes and grows. As a firm with a national reach and a client base in eight states, we need the look and feel that the CRC brings to Design Nine.

By CHAD O’KANE M.A. ’11

On a blustery Tuesday afternoon in January, the Wikiteria Market and Café at the Virginia Tech Corporate Research Center (CRC) was abuzz. A line of people stretched to the door, and nary an open table could be found. At first glance, the café appeared to be just another busy lunch spot located inside an office park. Upon closer inspection, this is no ordinary corporate cafeteria. All around, the relationships that result in business deals were being nurtured. The scene was a microcosm of the research park itself: an enclave where leaders of high-tech companies network and share best practices.

Successful enough to earn the 2010 Outstanding Research Park award from the Association of University Research Parks, the CRC is now embarking on an expansion that will double its square footage. Chances are park administrators will fill that space using the same model of service that has brought the CRC this far.

MORE THAN A RESEARCH PARK

According to Joe Meredith (aerospace engineering ’69, Ph.D. industrial and systems engineering ’97), president of the CRC for the past 18 years, most research parks function merely as real estate entities, encouraging little contact between the park’s leadership and its tenants. The CRC at Virginia Tech, however, is unlike most research parks. “What differentiates our park is our strategy to focus on being a partner of the companies and providing services in hopes that [the companies will] be more successful,” Meredith said.

Such services run the gamut, offering assistance to technology companies in a variety of capacities. The business assistance program, managed by the Pamplin College of Business, utilizes outstanding business students to aid tenants in numerous functions, including market research, business planning, and competitive-market assessments. Several presidents’ councils—monthly meetings of eight to 10 company leaders—help to foster self-discovery and professional growth among the companies in the park.

The financial assistance program takes advantage of the CRC’s relationship with Virginia Tech alumni who manage financial entities to help companies obtain funding, particularly helpful for nascent companies in the early stages of development, when financing can be a big hurdle. “By far the hardest money to get is money early in the process,” Meredith explained. “The first dollar is just hard.”
The CRC also manages an incubation program, VT KnowledgeWorks, designed to accelerate business growth in the pre-launch and enterprise stages. According to director Jim Flowers, at the core of the incubation program is risk-reduction. “We don’t create opportunities for businesses,” said Flowers, who helped to create VT KnowledgeWorks in 2004. “But we’re in a position to provide access to information that will reduce the risk associated with those opportunities.”

Michael Fleming (mechanical engineering ’02, M.S. ’03), president of TORC, a robotics company that recently graduated from VT KnowledgeWorks, credits the program for his company’s early success. “Early counseling and advice on business issues that technologists and engineers tend to neglect were crucial,” Fleming said. “It takes a lot more than good technology to be successful.”

VT KnowledgeWorks, currently serving 65 companies in various stages of development, takes an ad hoc approach to each member, maintaining the flexibility to change and adapt to the needs of its clients. “The world is changing so fast. ... We’re constantly reinventing the program and the service offerings to keep up with the changing environment,” Flowers said.

In essence, VT KnowledgeWorks acts as a testing ground for the larger CRC. Flowers explained, “Research parks need to have stability, whereas we can test things out and revamp.”

SYMBIOSIS

While companies at the CRC clearly benefit from proximity to campus and access to research faculty and students, Tech and the surrounding community also benefit from the park’s presence. A wholly owned subsidiary of the Virginia Tech Foundation, the CRC annually remits $500,000, which helps to fund university priorities. Moreover, the CRC provides employment opportunities to sponsors of Tech faculty and staff, and Ray Smoot (English ’69, M.S. education administration ’71), the foundation’s CEO, “The CRC attracts sharp people to come to the area and be a part of the university,” he said. “This [attraction] in turn expands things like the arts and other cultural endeavors.”

The CRC also boosts the local economy. “The park encourages an entrepreneurial environment around the university, and impacts the regional community and economy by expanding [the availability of] quality jobs, which drives enhanced retail offerings within the region,” said Ray Smoot.

A TRUE SENSE OF COMMUNITY

In 1993, after 22 years in the shipbuilding business, Meredith believes the CRC is more than a place to work; he sees it as a community in and of itself. “This mentality is cultivated through social events, an intramural sports league, an on-site fitness center, a café, and a variety of other programs aimed at bringing people together. “All of these events and programs are, at their heart, designed for people in the park to meet each other, share best practices, and provide services for one another,” he explained. “This place truly is a community.”

This notion of community was clearly evident that afternoon at the café, where the conversations went about the weather. At one table, two engineers from different firms were discussing business practices, while at another table, an information-technology professional was soliciting advice from a web developer at a rival company. Such sharing of knowledge is just another day at the office at the Corporate Research Center.

Despite its rapid growth, the CRC continues to be a tight-knit community and a research park that, for all its changes, still feels like home.
Ear to the ground, eye on the sky

By Lynn Matthews Davis

The breadth of the varied and often unexpected pursuits in the College of Natural Resources and Environment (CNRE) stretches from "molecules to markets," as one college professor is known to say. From nanotechnology and polysaccharides in medicine to numerous military partnerships and international research projects, surprises paint the landscape of CNRE, considered by peer institutions to have some of the top programs of their kind in the country.

Researchers in the Department of Wood Science and Forest Products are working to put sustainable, natural polysaccharides into products that can do much better than almost any other material, petroleum-based or otherwise, explained biomaterials Professor Kevin Edgar, who also directs Virginia Tech's Bio-Based Materials Center in the Institute for Critical Technology and Applied Science. His research group has made recent progress in developing polysaccharide derivatives to attack disease-causing organisms like the tuberculosis bacterium and HIV.

It's difficult to imagine cutting a meter stick into one billion pieces. But that's the size of a nanometer, and CNRE scientists are working at this small scale with some big goals in mind. Edgar and his fellow researchers have figured out how to make tiny particles that can explosively enhance the solubility of tuberculosis medications in water while easily containing multiple drugs. These multi-drug particles can help patients by lowering the dose required and thus reducing cost and side effects. Edgar and his fellow researchers have figured out how to make tiny particles that can explosively enhance the solubility of tuberculosis medications in water while easily containing multiple drugs. These multi-drug particles can help patients by lowering the dose required and thus reducing cost and side effects.

Maren Roman, another biomaterials scientist, is studying the use of wood-derived nanoparticles for cancer drugs. Her lab has developed a chemical strategy to aim cellulose nanocrystals at malignant tumor cells, allowing the selective delivery of antitumor drugs to cancerous tissue while bypassing the healthy cells.

In addition to enhanced drug delivery, dozens of military projects are under way in the college's four departments, its Conservation Management Institute (CMI), and other centers. CMI works to conserve natural resources around the world by providing research and development services to agencies and organizations and has led Department of Defense-funded (DOD) projects at military sites across the country.

For example, DOD is funding a cooperative research effort at the Fort Pickett Maneuver Training Center near Blackstone, Va., to proactively address declining populations of the Atlantic piggie mussel before it is listed as endangered. In another Fort Pickett project, CMI biologists are studying the patterns of training disturbances, such as heavy vehicles and fire, to help natural-resource military personnel manage lands.

Even archaeology is in play at Fort Pickett, where CMI's Beverly Boyko is a curator for the Virginia National Guard's archaeological and historical collections, documenting the guard's history back to its inception in 1607 and preserving other artifacts as old as 10,000 B.C.

Many of the college's projects have a broad scope and a global scale. CNRE has established partnerships and research programs in more than 30 countries. Wildlife Assistant Professor Sarah Karpanty has led projects in Madagascar since her undergraduate days, examining wildlife and endangered species management and forest restoration. More than 80 percent of the island's living things are found nowhere else on Earth, a tapestry of biodiversity threatened by slash-and-burn agriculture, mining, and logging.

While many CNRE scientists look toward the earth for answers, others are now turning an eye toward the sky. Phone calls from interested students have been coming in from across the nation as word spreads that CNRE's geography department will start offering an undergraduate program in meteorology this fall. "The wealth of concern about the changing environment around us is evident to all members of society almost daily," said department head Bill Carstensen, ticking off a host of societal issues affected by changing climate patterns.

To address these issues, CNRE is responding with an academic program that blends meteorology and geospatial science. Meteorology studies the atmosphere while geospatial science largely studies the land and water surfaces. The program will provide students with technical life skills and will develop the science and knowledge needed to resolve the environmental challenges of the future.

There is so much more to the College of Natural Resources and Environment than meets the eye," said CNRE Dean Dean Paul Winistorfer. "Our root is local, but our reach today is global in the important work we must do to steward our natural resources and the environment. We are taking a fresh look at all we do to make sure we are positioned to be of maximum value to society and our resources."
Aging has become an issue of national concern as life expectancies increase, boosting the number of people who tap into resources such as Social Security and Medicare and who require access to health care services. According to www.AgingStats.gov, the baby boomers—born between 1946 and 1964—will start turning 65 in 2011, and the number of older people will increase dramatically in the coming decades. The senior population is projected to be twice as large in 2030 as in 2000, growing from 35 million to 71.5 million and representing nearly 20 percent of the U.S. population.

Virginia Tech’s Center for Gerontology stands at the forefront of aging issues; its research helps improve the quality of care and life for people in middle and old age. Research on family relationships, health aspects of aging, and services for older adults offers community members helpful information about a number of challenging situations. Center staff weighed in and shared their expert advice on an issue of growing concern for many people.
Don’t delay difficult conversations.

“Encourage people to be active participants in the planning process, which means [they should] start making plans for old age earlier in life,” said Karen Roberto, director of the center. “Make your wishes known and think about what’s most feasible for you and your family members.”

Carlene Arthur, administrative assistant at the center, has firsthand experience with decisions about care arrangements. She and her husband, Doug, have helped Doug’s mother, Dorothy Arthur, make plans for her own health care. Last June, Dorothy moved to Warm Hearth Village in Blacksburg so that she could be closer to her son and his wife.

“I think [moving to Blacksburg] was the best thing in the world,” said Dorothy. She previously had resided in an assisted living facility in Littleton, Colo., near one of her other sons. Before that, Dorothy had lived in an apartment in Colorado—until three years ago, when arthritis began to affect her knees. “I knew at the time that being in the apartment alone was more than I could handle.”

Rosemary Blieszner, associate director at the Center for Gerontology, notes that it’s helpful to make an honest assessment of one’s circumstances.

“People need to be open to new options and possibilities. Sometimes people insist that they’re going to keep everything the way it has been. … Being open to accepting help might keep some people from falling.” Said Dorothy.

Utilize available resources.

Local Area Agencies on Aging offer a number of resources and can connect older people with helpful services ranging from Meals on Wheels to transportation to and from shopping centers and doctors’ offices.

An active care-management model is ideal, involving people in decisions about what help they need and who will provide it. Volunteer programs, such as Friendly Visitors, and government-sponsored or private-pay services, such as homemaker and home-health programs, can offer assistance for those who don’t have family help or whose family members live far away. “The concept sounds wonderful,” cautioned Roberto, “but people willing and professionally trained to do that kind of work are often difficult to find.”

One concern, Blieszner noted, is that the availability of resources varies from urban to rural areas. Many services—particularly those involving transportation—are scarce in rural regions. “People in rural areas are the most vulnerable to not getting needed help.”

Make arrangements today for care that might be needed in the future.

Both Roberto and Blieszner recommended considering long-term care insurance that provides for various levels of care in a private home, adult daycare, assisted-living facility, or nursing home, depending on the person’s needs.

“The longer you wait to purchase [this insurance], the more expensive it will be,” said Blieszner. “Long-term care insurance can provide coverage for services either in one’s own home or in community facilities. Having this resource could enable the person to retain a sense of control and decision-making over care options besides relying solely on family and friends.”

Along with several of her sons, Dorothy paid into a long-term care insurance policy for more than a decade. “It’s an excellent way to know that when you get old, you’ll have the money to take care of [yourself].” Unfortunately, there are an awful lot of people who aren’t able to afford the premium.

The high cost of long-term care insurance makes its purchase difficult for some people. Blieszner, however, noted that there are other options, such as making a deposit to reserve a place at a facility offering different levels of care. “Making plans before care is needed preserves choices and [implies] to … children and others that ‘It’s not your responsibility to work this out for me,’” Blieszner said.

Leave your legacy.

A significant way forward-thinking people can prepare for the future is to engage in estate planning now. The earlier an individual starts thinking about these goals, the more likely he or she is to achieve them, experts say. “Making an estate plan is your opportunity to leave a legacy with your children or with the causes that you care about,” said Steve Clark, director of Virginia Tech’s Office of Gift Planning. “It’s a good time to consider what you want your estate to say about you. Once you’ve done that, there are a wealth of resources to help you make arrangements. Attorneys are the most important. Accountants and certified financial planners can also help. Many charities have resources for donors who want to discover ways to make gifts that make the most sense for their circumstances.”

Confront stereotypes of aging.

“We can’t make any kind of one-size-fits-all advice,” Blieszner said. “We can’t just assume that because people have reached a certain age, they’ll need a certain level of care.” She advocates that the diversity of the older population be recognized.

In addition, many people find their interests shifting from their 60s to 70s and 80s. “If you’re going to live into your 90s or more, but say you’re finished doing things at 65, that leaves a lot of open-ended time. I think people realize that they’re going to need to pursue hobbies and other interests to fill their time,” said Blieszner. One former elementary school teacher, for instance, continued to serve younger generations by hosting tours for students on field trips to a local utility company. She enjoyed this work because it still involved teaching, but with fewer demands and responsibilities, Blieszner said.

Immediately after retirement—Dorothy’s husband was a military officer, and she worked from home as a seamstress—the couple traveled around the country, visiting friends they’d made through the military. In fact, she drove until age 82. Now 89, she recommends that “people keep busy.”

Though her mobility is limited now and she uses a wheelchair, Dorothy still finds meaningful activities to fill her days. “I’m a TV nut,” she admitted. “I like ‘Law and Order’ and game shows and ‘Days of Our Lives.’” She continues to do crossword puzzles and writes letters to friends.

“Life is a journey, and people’s needs and expectations change over the course of that journey,” said Roberto. Advanced planning and knowledge of available resources can help both those giving and those receiving care to weather the journey and can perhaps make the inevitable bumps in the road less jarring.

Albert Raboteau, a writer for University Development, contributed to this story. Links to additional resources are available on the Web version of this article at www.gerontology.vt.edu. For more about the Center of Gerontology’s work and research, visit www.gerontology.vt.edu.
No frills to five-star

The best campus dining in the country

By Juliet Crichton

In light of Virginia Tech Dining Services’ award-winning food, outstanding customer service, innovative programming, and first-rate facilities, younger Hokie alumni may have trouble believing that complaints about campus dining were once as commonplace as cadet formations on the Drillfield.

According to school histories written by Col. Henry D. Temple (industrial engineering ‘34) and by Professor Emeritus Duncan Lyle Kinnear, campus dining first suffered the slings and arrows of disgruntled students when Virginia Tech was but a greenhorn land-grant college charged with feeding an ever-hungry corps of cadets. For decades, campus meals were—literally and figuratively—a mess.

A mess of a tradition
By most accounts, efforts to recast campus dining began in earnest in 1988, when a committee was formed to study Dining Services. That same year, the university welcomed a new president, James McComas, and a new vice president for student affairs, Tom Goodale.

Because dining was a unit in Business Affairs, operations were geared purely toward keeping costs low, explained Vice President for Student Affairs Edward Spencer, who, at that time, was director of Housing and Residence Life. Students joked endlessly about the “elementary-school-style cafeteria,” he recalled.

The following year, Dining Services was moved under the administrative umbrella of the Division of Student Affairs, and Spencer was named director of Residential and Dining Programs. Both McComas and Goodale were “very interested in student quality of life,” said Spencer; “and McComas asked me to turn the program around into something we can be proud of.”

And so changes began to occur. In 1990, Paul Fairbrook, a retired dean of the Culinary Institute of America, was brought in as interim director of Culinary Services, a new title within the unit. “He was well loved and provided a spark for the program,” Spencer said. “He would personally give [food-preparation] tips to chefs and walk around with a thermom-eter in his pocket to check the temperature of the soup to make sure it was warm enough. Although he stayed for only eight or so months, he placed high emphasis on quality and doing things right.”

Fairbrook was followed by John Engstrom, whose three-year term was successful enough that Spencer still labels him “a marketing genius.” During these transitions, the seedlings of a new dining culture had clearly begun to take root at Tech.

Organized by a student group that included Ray Smao (English 69, M.S. education administration 71), now CEO of the Virginia Tech Foundation, the demonstration was anchored by a student nattily clad in a cockroach costume and carried around on a stretcher. Not that these goings-on required explanation, but the protest bemoaned reports of cockroaches in one of the dining facilities, particularly in one extra-juicy slice of pecan pie. To the students’ delight, the boycott and protest received extensive attention in the local media—and earned a photograph in the annual Bugle of a student toting a cardboard skeleton with a sign proclaiming, “Another satisfied? but dead Owens victim.”

Despite the demonstration, dining on campus seems to have remained generally unsavory though not necessarily substandard. As Kinnear notes in his 1972 history, The First 100 Years, “any alumnus can testify that grumbling about the food and the way it is prepared has never been a monopoly belonging to any one class or period in Tech’s history. In fact, it is a matter of record that every administration in VPI’s first century had to face this problem at one time or another.”

Going forward, the university’s second-century administrators must surely have chewed on that predicament for a while.
The transformation of Dining Services into its current status as a nationally re-
pected and highly decorated operation was guided by the sure hand of Rick Johnson, who was hired by Spencer in 1993 to serve as director of Dining Services and was later named director of Housing and Dining Services. In February, after 17 years at the university, Johnson departed for Duke University, where he was named assistant vice president of housing and dining.

At Tech, Johnson brought a student-centered approach to campus dining, and his careful attention to quality, execution, industry trends, and student requests shepherded Dining Services to the very top. “Part of the pursuit of being best in class or best in the United States was the willingness to dream big and take risks,” he said. “I’m proud that we had the vision, and we pursued it.”

On Johnson’s watch, Dining Services became a genuine powerhouse, not only benchmarked by more than 50 colleges and businesses nationwide but also ranked No. 1 for “Best Campus Food” in both the 2008 and the 2010 editions of The Princeton Review. The rankings are especially gratifying because they are calculated from polls completed by students. Not surprisingly, current Hokies are calculated from polls completed by students, and we welcome feedback directly from them as employees.”

Because of these forums, Dining Services has made changes to its menus, improved its facilities, and modified hours of operation to tailor their services to students’ needs. The grandest result of student recommendations to date, however, is Turner Place, Dining Services’ newest venue, for which ground was broken in February. Scheduled to open in fall 2012 behind McBryde Hall on the north, or academic, side of campus, the 800-seat facility was designed specifically to complement the existing dining centers on the south side of campus near the residence halls.

Just as frequently, the unit looks within its own ranks for inspiration—and for the inside line on the student mindset. “At any given time, Dining Services employs 900 students,” noted Faulkner, “so they are both our employment base and our spokespersons. They’re living the life, so to speak, as students, and we welcome feedback directly from them as employees.”

Besides being responsive to students’ requests and suggestions, the movers and shakers in Dining Services collectively point to the power of looking at market trends. This bold spirit, intrinsic to the university’s climate of innovation and service, ensures that Tech students are eating the very best food in the very best venues.

“In order to implement cutting-edge policies and practices, we frequently step back and note what’s popular in the restaurant industry and evaluate the hot trends,” Faulkner said. “The trick is to take these forecasts, benchmark them against some of the world’s best, and then adapt for Tech. Most of the time, our students are eating the very best food in the very best venues.”

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In a nod to the unit’s collaborative mélange, Johnson explained he was “most proud that a group of dedicated managers and staff was able to begin work in 1993 to transform a large, somewhat middle-of-the-road dining program into the nation’s No. 1 dining program, a cutting-edge enterprise against which peers nationwide benchmark their programs.”

Keeping Dining Services on course those days is Senior Associate Director of Dining Ted Faulkner, who has been at Virginia Tech for 13 years, the past eight as associate director. Like Johnson, Faulkner believes that “one of the main keys to sustaining success is allowing Virginia Tech students a voice in what they’d like to see in their dining centers.”

To that end, Dining Services sponsors a student advisory committee that meets monthly to generate ideas and works closely with the Student Government Association. In addition to encouraging students to fill out comment cards both on paper and online, the unit sponsors an annual forum called Table Talk Live, during which a manager occupies a special table in each dining center, allowing students to offer their feedback in person. Once the suggestions have been compiled, the most viable are implemented and posted online for review. (Go to www.studentprograms.vt.edu/dining/ 
table_talk_live.php to see the latest.)

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Based on the breadth and scope of its successes during the past two decades, Dining Services has more than mastered the process.
By decreasing food-processing needs; supporting organic and local growers; serving more whole grains and more locally grown and organic foods; and eliminating trans fats, Dining Services is doing its part to keep Hokies—and the planet—healthy.

• In February, the Sustainable Endowments Institute released its annual Green Report Card and assigned Virginia Tech an overall grade of B+. Receiving an A in the Food and Recycling category, Dining Services sources food from 25 local farms as well as the on-campus College of Agriculture and Life Sciences’ farm and the dining facilities’ own garden. More than half of eggs served on campus are local and organic; some seafood is sustainably harvested; and fair and direct trade coffee is purchased. More than 200 tons of pre- and post-consumer food scraps are composted. Virginia Tech achieved a 36.5 percent recycling rate of its waste stream in 2009, three years ahead of its goal.

Read the entire report online at www.greenreportcard.org.

• The Farms and Fields Project, which opened in Owens Food Court in January 2009, is dedicated to establishing partnerships with local farmers and providing farm-fresh, local, organic, and sustainable food on campus. Such food affords students, faculty, and staff the opportunity to try new recipes with seasonal, fresh ingredients, along with premium products, such as grass-fed beef. More than 7,500 students are fed each day. However it’s sliced or diced, dining on campus is worlds away from the cafeteria meatloaf and mashed potatoes and the crème brûlée. Campus food at Virginia Tech is the best in the country.

Richard Leveque and Hillary May (English ’12) contributed to this article.

To learn more about Dining Services—and to plan a meal when you visit campus—visit www.dining.vt.edu.
Annual donors answer the call

BY ALBERT RABOTEAU

Last year, Melissa Burgess got a call from an undergraduate working in the Office of Annual Giving's student calling center. Though it was the first time she had received such a call, Burgess (political science '08) knew just what to expect because, as a student, she had worked as a caller, a supervisor, and eventually a shift manager at the center.

“It was really nice to be able to not only hear [someone doing] what I had done over several years, but then decide that now was the time for me to give back to the school,” said Burgess, who is still in Blacksburg working toward her master’s in sociology. “I did give to my department, and I will continue to do so each year.”

Donors who answer the calls to give—whether by phone, e-mail, or direct mail—are a vital source of support for programs and initiatives across campus. The university’s Annual Giving program raised $3.07 million in gifts last fiscal year, funds that benefit about 20 different colleges or programs.

More than half of that money was raised through the student calling center, which employs nearly 80 students, including Monica Black (mechanical engineering '13).

“When I first started working here, I didn’t expect people to be as receptive as they have been,” Black said. “Most people are happy to hear from Virginia Tech because they usually had a good experience here.”

“Alumni give because they value what the university has done for them, and they understand that their participation helps guarantee those same benefits for the next generation of Hokies,” Director of Annual Giving Randy Holden said.

Donors who said “yes” when asked to give by a student caller last year: 14,727

People who have made annual gifts at least two years running: 10,534

Given or pledged last year in response to calls: $1.64 million

Students who work in the call center: 78

“Annual gifts, no matter the size, do more than make a difference to students and faculty on campus. They also have a very positive impact on our national reputation.”

Tech’s reputation gets a boost when a graduate makes a gift, in any amount, because he or she adds to the alumni donation rate, which factors into high-profile university rankings. Many alumni make a point of giving annual gifts to show that they remain passionate about their alma mater and to remember the important role it played in their lives.

One such alumnus is Donald Stewart (mechanical engineering ’43), of Winchester, Va., who has given one or more gifts every year since the Carter administration. He often contributes to athletics, the College of Engineering, and the Virginia Tech Corps of Cadets.

Looking back on his education, Stewart said he is “amazed at how much I got out of it” but is also impressed at how much larger and more prominent his alma mater is today, thanks in part to alumni support.

“Fortunately, there are enough people out there who feel the same way about the university as I do, and it’s really made an impact on the growth of the university as a whole,” Stewart said.

During their many conversations with people like Stewart, student callers see their job not only as raising money but as building and maintaining relationships, said Danielle Harris (African studies, international studies, Spanish ‘11), who works as a shift manager at the call center.

“Even if they’ve moved away or they haven’t come back to visit in maybe 10 or 15 years, they still feel connected to the university [while] they’re talking with students,” Harris said. “It gives them an opportunity to … talk about Virginia Tech in a meaningful way and also to express, possibly, their love for Virginia Tech through financial giving.”

Albert Raboteau is a writer for University Development.
Dan Maguire (management science ’94) describes himself as a “huge fan” of the Hokies. Since graduating, he has bought football season tickets and makes a point of bringing his children to games each year.

“It’s great to take them to campus and show them where I went to college,” said Maguire, of Great Falls, Va. “I get a lot of enjoyment from that, but I also know that the school as a whole benefits greatly from having successful athletic programs.”

For Maguire and thousands of alumni like him, following the Hokies means more than checking the Bowl Championship Series standings; it also means paying attention to their school’s academic rankings and the reputation of its graduates.

Maguire’s interest in the university’s overall success led him to serve as a volunteer for The Campaign for Virginia Tech: Invent the Future and to broaden his commitment of financial support. Along with his business partner J.P. Foley (management science ’92), he recently created an endowment within the Division of Student Affairs to support Leadership Tech, an undergraduate leadership training program. Maguire and Foley operate a management and information technology consulting firm, Dominion Business Solutions Inc.

Their aim in underwriting Leadership Tech is to help students graduate with the type of interpersonal skills that will allow them to continuously advance in the workplace, said Foley, who is also a generous donor to athletics and a campaign volunteer.

Nancy Harris Beitle (mathematics ’72) is a former Hokie cheerleader who has maintained her enthusiasm for supporting Virginia Tech’s sports teams. She has extended that fervor to nonathletic endeavors, such as the Women in Leadership and Philanthropy (WLP) initiative. WLP spotlights women who contribute to the university through service and leadership, brings students and mentors together, and sponsors guest lectures. Beitle, also the director of the alumni career resources program, has contributed to both athletic and nonathletic programs, and helps with athletic fundraising as a volunteer Hokie representative.

For thousands of alumni, following the Hokies means more than checking the Bowl Championship Series standings; it also means paying attention to academic rankings and the reputation of graduates.
Biotech pioneer

BY DENISE YOUNG

For Charles Hamner (animal husbandry ’56), economic development and academic research go hand in hand. In a career that spans three decades, Hamner and his deft touch for growth have guided the state of North Carolina toward a thriving biotech industry.

Since the 1980s, Hamner has played a key role in making North Carolina a hotbed for biotechnologies, which has fueled major economic growth in the state. “For the past 15 years, we’ve been forming new companies and creating new technologies and creating jobs. We’ve created [more than] $50,000 jobs over the last 10 years in North Carolina,” said Hamner of his work and the partnerships he has helped to create. As president and CEO of the North Carolina Biotechnology Center and as namesake and chair of the board for The Hamner Institutes for Health Sciences, Hamner has worked to unite universities, state government, and industry to build a stronger biotech sector.

Common thread

The push to establish North Carolina as a leader in the biotech industry heated up in 1981, when the state general assembly created the North Carolina Biotechnology Center. Joining the organization in 1988, Hamner sought to convince state leaders biotechnology was important to the future. No small undertaking, his campaign had several carefully planned components, all with one goal.

The center began by setting up an eminent scholar program, helping state universities to hire the world’s best life-sciences professionals. “You have to have innovative, leading-edge, first-class research personnel. Then they make discoveries and create technologies,” said Hamner.

For the next step, Hamner convinced state leaders to provide funds for universities to begin major new discovery programs. “You have to have innovative, leading-edge, first-class research personnel. Then they make discoveries and create technologies,” said Hamner.

“But the next step—the tricky part—is to make deals for these new universities and companies to realize the value of these discoveries,” said Hamner. “Hamner said leveraging biotechnology for economic growth boils down to one thing: translational research, or taking research from the theoretical stage to a fully developed product or technology that can enhance people’s lives.”

Hamner’s plan had a far-reaching vision, encompassing early-education programs about life-sciences careers for students in middle and high school and a public-awareness campaign explain- ing to taxpayers why biotechnology funding would stimulate job growth and enhance the quality of life for people across the state. The center also lent money to startup companies to create business plans so they could then seek support from venture capitalists.

The process sounds complex and risky, but Hamner had the foresight to sow the seeds for the short- and long-term growth of North Carolina’s biotechnology industry. “The way it worked is exactly how we planned it,” said Hamner.

As both a high school and undergraduate student, Bill Huckle, now an associate professor of biomedical science at the Virginia-Maryland Regional College of Veterinary Medicine, did lab research with Hamner. Huckle said that Hamner played a large role in building a stronger industry from the framework already in place. “That work was under way long before he got to [North Carolina]—Research Triangle Park started in the late ’50s and by the ’80s had already attracted major pharmaceutical companies to set up shop—but certainly he was instrumental in making it possible for startup companies to prosper there.”

Hamner said leveraging biotechnology for economic growth boils down to one thing: translational research, or taking research from the theoretical stage to a fully developed product or technology that can enhance people’s lives. “It’s kind of popular now for universities to talk about translating their research and discoveries into some kind of product, but 20 years ago, people didn’t understand that’s what needed to be done,” recalled Hamner.

The pioneer of biotech understands the model well. So well, in fact, that Hamner has been awarded three honorary doctoral degrees, including one from the University of Ulster in North Ireland, which recognized his work recruiting pharmaceutical companies to establish manufacturing facilities in the region.

“I think Virginia Tech is fortunate to count [Hamner] as an alumnus,” said Huckle. “He was also instrumental in building the case for the state of Virginia to have a veterinary school and to locate [it in Blacksburg]. He’s been an advocate for Virginia Tech beyond being an illustrious alumnus. Huckle also noted Hamner’s “sterling” career at the University of Virginia, where he served as a professor and later as associate vice president for health affairs at the university’s medical center.

Despite his retirement in 2002, Hamner emerged in 2006 to help lead The Hamner Institutes for Health Sciences, an organization established in 1975 as the Chemical Institute for Industrial Toxicology and renamed in his honor. There, he has guided the institute’s shift from chemical research to product development with an emphasis on safety assessments of potential products.

The organization has worked on technologies that range from...
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Hamner’s connection to the series goes beyond a shared hometown. His cousin, Earl Hamner Jr., created “The Waltons.” In fact, Hamner’s rural roots in Schuyler, Va., famed birthplace of the Waltons.

Hamner still tends a perennially blossoming biotechnology industry in North Carolina.

In his sustainable development course, Ellerbrock teaches his students about the costs and benefits of specific environmental policies, international agreements on environmental issues, and economic incentives to improve air and water quality. He also teaches students that capitalism does not have to be in conflict with conservation and preservation.

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Revisiting age-old debates between religion and science in a class with students from diverse backgrounds presents a number of challenges, but Ellerbrock has plenty of experience dealing with potential complications. As a chaplain for the Virginia Tech football team from 1996 to 2006, he counseled students from diverse faith traditions. He also conducts at least 10 weddings for Catholic students every year.

Although Ellerbrock’s career has taken him around the world, he always returns to Virginia Tech, his home for the past 18 years. “I enjoy working for Virginia Tech and living in Blacksburg, and I hope to continue to do what I do for years to come,” he said.

Michael Sutphin (communication ’06) is a public relations specialist for the College of Agriculture and Life Sciences.

The course incorporates his typical Socratic teaching style. “The word ‘education’ derives from the Latin ‘educare’ or ‘to draw out,’” he explained. “My goal as an instructor is not just to put facts and figures in my students’ heads. Every student has the capacity for wisdom, and we as teachers are not here to instill [wisdom], but to draw it out.”

Hamner’s Virginia Tech professors taught him the fundamentals he needed to excel in higher education, and the lessons paid off. He went to school for 10 more years, earning from the University of Georgia a master’s in organic chemistry, a Ph.D. in biochemistry, and a doctorate in veterinary medicine.

Those academic roots still play a role in Hamner’s life today, in the form of a 1-acre vegetable garden where he grows 26 vegetable varieties interspersed with the bright hues of roses, dahlias, zinnias, and marigolds. He reflects fondly on his time at Virginia Tech and the professors who nurtured his budding talents.

“If I hadn’t [received] the kind and helpful instruction from my basic teachers my first two years at Virginia Tech, I wouldn’t have had the background I needed to move on through the higher education system,” said Hamner. The investment Virginia Tech made in the young student paved the way for a decades-long career that continues well into retirement, as Hamner still tends a perennially blossoming biotechnology industry in North Carolina.

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In June, when Maj. Gen. Jerry Allen, U.S. Air Force (retired), steps down as the longest-serving commandant in the history of the Virginia Tech Corps of Cadets, the university community will pay tribute to a man who has achieved a remarkable vision for the corps.

Allen first learned about the Virginia Tech Corps of Cadets while attending the Air Force Academy. During his time as the academy’s cadet wing commander, he paid a visit to the corps’ annual leadership conference. He was so impressed that he invited Tech cadets to visit the academy later that year.

Allen arrived on campus as commandant in 1999, just as the corps had peaked after a growth surge and was at its largest since 1985. After evaluating the regimental system, he began to articulate his vision of the corps: to graduate leaders of exemplary character with a commitment to service and the highest standards of honor and integrity. From that time on, the corps grew steadily and strengthened its leader development program.

The corps serves as a laboratory for learning and practicing leadership, and Allen’s legacy will be the high quality of the leader development program. Allen reaffirmed the transition away from the “old corps” training environment, a shift that had been initiated by his predecessor, Maj. Gen. Stan Musser. To further prepare graduates for a complex world, Allen sharpened the training program’s focus on leadership.

During his tenure, the concentration in leadership became a full-fledged academic minor in leadership studies. The weekly leadership laboratory achieved certification and now offers college credit to cadets. The corps formalized the Cadet Leader program, training freshmen, sophomores, and juniors to prepare them for leadership opportunities in their next year as cadets. The program was recently expanded to include a capstone course that provides an additional level of preparation for seniors. The academic emphasis has paid off: Average cadet GPAs have risen steadily, from 2.60 in fall 1999 to 2.93 in fall 2010.

The results of this focus on leadership have been astounding. The university’s Undergraduate Student Leader of the Year has been a cadet for seven consecutive years; the three ROTC programs routinely lead the nation in training scores, commissioning numbers, and scholarships awarded; and cadets’ dedication to service was rewarded with the 2009 Governor’s Award for Volunteerism and Community Service. The increase in quality has driven membership upward. The regiment is now its largest since 1969, with expectations for its size to grow even more next year.

Allen doesn’t dwell on the fact that his vision has been realized. He would say that he is inspired by the dedication cadets show and by the accomplishments of alumni, particularly those who willingly go into harm’s way to serve the nation and protect its freedoms. Even so, the strength of today’s corps is largely due to its long-time commandant. The university community, cadets, and corps alumni wish him and his wife, Joan, the very best in the next chapter of their lives.

Col. Rock Roszak ’71, U.S. Air Force (retired), is the alumni director for the Virginia Tech Corps of Cadets.

Virginia Tech Magazine Spring 2011 45
Commentary

The campus is bustling with the kind of activity that seems to gain momentum each spring. As winter melted away, more students emerged to enjoy the outdoor venues of the campus that most of you remember, but are now expanded with more facilities, park-like areas, and intramural playing fields. As the university grows, the Drillfield remains the true center of the campus. Students navigate campus efficiently by walking or by riding the Blacksburg Transit buses, their bikes, or their skateboards.

For alumni and friends, the nexus of activity is often the Holtzman Alumni Center and The Inn at Virginia Tech and Skelton Conference Center. After more than five years of operation, the building has been visited by several hundred thousand people. It has become a hub for alumni gatherings, conferences, banquets, weddings, and festivals. The hotel draws many compliments for its comfortable, modern rooms decorated in tasteful Hokie colors. The fine-dining restaurant, Preston’s, and its lounge, the Continental Divide, are popular gathering places for hotel guests, campus visitors, and local residents. The alumni center wing offers many features for visitors to enjoy, including an extensive museum collection, alumni library, and art gallery exhibits.

The Benchmark Hospitality organization is the new operator of the inn and conference center. Their staff, in conjunction with our dedicated alumni relations team, extends true Virginia Tech hospitality to all who visit the facility. There are room specials during certain periods of the year, and golf packages for the signature Pete Dye River Course, a course operated by the Virginia Tech Foundation.

Whatever lures you back to Blacksburg, whether it’s a reunion, college homecoming, or Drillfield Series seminar, you should put the alumni and conference center on your radar. Being on campus is invigorating and brings back fond memories for alumni who traveled this road earlier in life. See the incredible growth around the campus, which has preserved its unique Hokie Stone traditional and contemporary architecture. Check out the inn and its specials at www.innatvirginiatech.com, or call 540/231-8000. Come stay with us, and we promise to make your stay memorable.
Share the Hokie Spirit with other alumni this fall

Reunions and homecomings

Class reunions from the 25th to the 50th anniversaries are held at five-year intervals. Each reunion includes a Friday evening meal and plenty of time for reminiscing. Saturdays typically feature a morning brunch and then pre-game festivities. Seeing the Hokies play in Lane Stadium is a treat for all reunion participants. Special seating at Tech’s sold-out stadium is arranged for the reunion registrants.

The exception to the typical Friday/Saturday reunion agenda is for a Thursday evening game, when the banquet follows on Friday. Rooms are set aside at The Inn at Virginia Tech for reservation by reunion registrants. A special game-day reunion is also held for several classes of young alumni. Register early at www.alumni.vt.edu to guarantee game tickets and accommodations.

REUNIONS

Sept. 3 - Virginia Tech vs. Appalachian State
Class of ’86, 25th reunion
Young alumni reunion for Classes of ’91-’93 and ’00-’02

Sept. 17 - Virginia Tech vs. Arkansas State
Class of ’81, 30th reunion

Oct. 1 - Virginia Tech vs. Clemson
Class of ’71, 40th reunion

Oct. 8 - Virginia Tech vs. Miami
Class of ’76, 35th reunion

Oct. 22 - Virginia Tech vs. Boston College
Class of ’61, 50th reunion (traditional parade)

Nov. 17 - Virginia Tech vs. UNC (night game)
Class of ’66, 45th reunion

Multiple homecomings are hosted throughout the football season to coincide with home games. Eight college programs are spread across the home schedule, along with other special homecomings for graduate alumni, corps of cadets alumni, and multicultural alumni. Homecomings are open to all alumni of the constituent groups, regardless of graduation year. In each case, there is a game-day gathering, a guarantee of good food, and the opportunity to reunite with friends, faculty, and staff. Lodging and game tickets are available to registrants of homecomings on a first-come, first-served basis, so it’s best to register early at www.alumni.vt.edu.

HOMECOMINGS

Sept. 17 - Virginia Tech vs. Arkansas State
Graduate degree alumni
Corps of cadets alumni
College of Natural Resources and Environment alumni
Marching Virginians alumni

Oct. 1 - Virginia Tech vs. Clemson
College of Architecture and Urban Studies alumni
College of Science alumni
Multicultural alumni

Oct. 8 - Virginia Tech vs. Miami
Pamplin College of Business alumni
College of Engineering alumni
Cheerleader alumni

Oct. 22 - Virginia Tech vs. Boston College
College of Agriculture and Life Sciences alumni
Highty-Tighty alumni
Student Affairs reunion: Residential Learning Community, Virginia Tech Union, Homecoming King and Queen alumni

Nov. 17 - Virginia Tech vs. UNC (night game)
College of Liberal Arts and Human Sciences alumni
Virginia-Maryland Regional College of Veterinary Medicine alumni

The Class of 1969 celebrating its 40th reunion

Fans tailgating before the Georgia Tech game

The Class of 1969 celebrating its 40th reunion
Virginia Tech Alumni Association tours are the way to go

For nearly 40 years, the Virginia Tech Alumni Association has sponsored group-travel opportunities around the globe. The association works with reputable tour providers that arrange for transportation, local excursions, and, often, meals. Alumni travelers say that they appreciate the convenience of these turnkey programs, and that the real bonus is meeting fellow alumni and sharing memories.

Alumni tours span all of the continents, even Antarctica. Trips include ocean and river cruises, land tours, and Alumni Campus Abroad educational tours, and excursions to U.S. cities, national parks, the Masters, and the Kentucky Derby. Some travelers have been loyal repeat participants for a decade or more.

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She praised the program. “It was billed as a ‘once-in-a-lifetime trip,’ and that was exactly what it was,” Brown said. Her group visited the towns of Jasper, Lake Louise, and Banff, and traveled the Icefields Parkway among glacial peaks, imposing cliffs, and snow-capped mountain ranges. In 2009, the Alumni Association started offering tours to Augusta National for the Masters, said to be golf’s best battle on golf’s greatest stage. Tech alumni were part of the “roar of the crowd” that makes the Masters one of the supreme sporting events in the world. Patrick (history ’74) and Gene O’Leary experienced a fun-filled two days. Said Patrick, “Gene and I really enjoyed this trip. It was great to be at the Masters.”

In her book Under the Tuscan Sun, Frances Mayes captures the charm and romance of Italian living. Tech alumni experienced this idyllic world firsthand in June 2010 on their travels to Cortona in Tuscany. The tour combined guided sightseeing with a total immersion in community life. Alumni walked the cobbled streets of Etruscan Cortona and discovered the art, architecture, cuisine, and culture of one of Italy’s most-beloved regions. “I would definitely travel with the Virginia Tech Alumni Association again,” said Leslie Skinkem (elementary education ’82). “This tour was well organized and we made many new friends.”

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Virginia Brown took the Canada Rockies Rail tour in May 2009.

Virginia Tech Alumni Magazine Spring 2011
The Drillfield Series continues this summer with weekends devoted to the topics of sustainability and the arts and concludes in August with Blacksburg's 21st annual Steppin' Out summer festival. Make plans now to attend these programs and take advantage of the specially discounted accommodations available at The Inn at Virginia Tech.

Sustainability in Gardening, Crops, Urban Forestry, Livestock, and Food Safety
June 16-19, 2011
Adults: $149 | Children ages 6-12: $99
Children 5 and under: free
Highlights
• Hahn Horticulture Garden Sessions will cover topics for small- and large-scale growers alike.
• Kentland Farm Explore Dining Services’ garden plots and ongoing research, including pests and weed control and soil quality.
• Virginia-Maryland Regional College of Veterinary Medicine Take the college and hear presentations on disease prevention, livestock care, and more.
• The Catawba Sustainability Center Tours showcase research and demonstration plots.

Off-Off-Broadway: A Behind-the-Scenes Look at Theatre Arts
July 1-3, 2011
Adults: $99 | Children ages 6-12: $60
Children 5 and under: free
Highlights
• A Behind-the-Scenes Look at Theatre Productions Learn about sets, makeup, and other details that make a show happen. Includes a question-and-answer session with the play’s cast.
• The Future of the Arts at Virginia Tech Hear from Sue Ott Rowlands, dean of the College of Liberal Arts and Human Sciences.
• Reception and Performance of “The Complete Works of William Shakespeare (Abridged).” Enjoy hors d’oeuvres and wine, and browse the art collection in the Perspective Gallery; then watch a talented cast bring this theatre production to life.

Steppin’ Out at Summer Around the Drillfield
Aug. 4-7, 2011
Adults: $160 | Children ages 6-12: $110
Children 5 and under: free
Highlights
• Blacksburg Steppin’ Out Festival The annual festival showcases offerings from 185 artists and craftpeople and includes three stages of live performances.
• Popcorn, Pizza, and a Movie, “Dirty Dancing” Enjoy the movie before heading off later in the weekend to scenic Mountain Lake, where “Dirty Dancing” was filmed. The movie is rated PG-13.
• Campus Tours Tour the Virginia-Maryland Regional College of Veterinary Medicine, the Edward Via College of Osteopathic Medicine, and the Department of Recreational Sports.
• Miles C. Horton & Martin Observatory Explore observational astrophysics with physics Professor John Simonetti.
• Mountain Lake Eat lunch, bike, take a tour, and enjoy a dinner featuring a “Dirty Dancing” performance by the Sapphire Dance Group.

• Topics, times, and locations are subject to change. Please visit www.alumni.vt.edu/drillfieldseries for updated information.
John McCormick
Virginia Tech fuels brainpower, passion, and creativity in the classroom. But we’re also fueling performance on the raceway and efficiency on the highway. Working with the Institute for Advanced Learning and Research and Old Dominion University, we launched the Virginia Institute for Performance Engineering and Research (VIPER), a national center for performance testing, engineering, and research services. By way of facilities at Virginia International Raceway and NASA Langley, VIPER benefits military, motorsports, and automotive-industry clients alike. To learn more about how we’re collaborating to create positive change throughout the commonwealth and across the country, visit www.vt.edu/impact.

John R. Seiler, forestry
John Seiler, a professor known for his passionate teaching, is an internationally recognized dendrology researcher. Since earning his doctorate at Virginia Tech in 1984 and beginning to teach, he has earned teaching awards at the university, state, national, and international levels. A previous graduate student said of Seiler, “His energy and enthusiasm for his job, his coworkers, and his students are contagious and uplifting and serve as a model that I strive for in my professional career.”

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A professor since 1982, Tom Gardner consistently earns rave reviews from his students, including those who describe him as the best professor they’ve ever had and his class as the one they learned the most from at Virginia Tech. A playwright who has also published five books, Gardner helps students examine world issues through poetry. “He teaches students to read and think about poetry as they never have before,” said Carolyn Rude, professor and chair of the Department of English.

Two Alumni Distinguished Professors named
The Alumni Distinguished Professor program was established and endowed in the early 1970s to recognize and reward exceptional teaching and scholarship. There are currently 10 Alumni Distinguished Professors, and the Alumni Association is pleased to introduce the two newest appointees.

On Nov. 6, 2010, the Alumni Association celebrated its 1875 founding with a 135th anniversary celebration gala dinner, which was held in conjunction with the fall board of directors meeting. Former board members were invited back to campus and inducted into the association’s new recognition society, the Gateway Society. This year also marked the fifth anniversary of the Holtzman Alumni Center, as well as The Inn at Virginia Tech and Skelton Conference Center.

Those in attendance heard remarks from President Charles W. Steger; Tom Tillar, vice president for alumni relations; John Dooley, vice president for outreach and international affairs; and Curry Roberts, Alumni Association president. A reenactor offered a “surprise visit” from Addison Caldwell, Tech’s first student in 1872 who later became the first Alumni Association secretary. The evening concluded with a musical performance by Nancy Glisson Lucy, a former board member and 1993 Miss Virginia.

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But the research shows that transitioning from the nurturing environment of middle school to high school can be one of the most difficult transitions in a young person’s life.

Three educators—Sa—(City Schools Superintendent Alan Seibert (secondary education '91), Ed.D., educational leadership and policy studies Ph.D.), Salem High School Assistant Principal Scott Habeck (B.A., M.A.Ed. curriculum and instruction '97), and English teacher Ray Moore (English '71)—have deemed this the “freshman problem.”

Prior to Seibert’s appointment as superintendent, the trio worked together as educational consultants, co-authoring a book entitled The Ninth Grade Opportunity: Transforming Schools from the Bottom Up. The book is meant to provide schools throughout the United States a model for giving ninth-graders the skills necessary for moving from middle school to the more academically rigorous environment of high school, without sacrificing academic standards.

“Ninth-grade decisions have a long-term impact,” Habeb said. “Kids that are age not mature enough to grasp the magnitude of those decisions.” Moore echoed that sentiment. “[Ninth-graders] are often not making the best decisions,” he said. “But by this age, those decisions really do count.”

While the three men share a philosophy about education, a difficult challenge for the authors was to unite three distinct voices in one book. “One of the biggest challenges was attaining a common voice,” Seibert said. “But we all have our area of expertise, and we’re profoundly student-centered, so the book came together around that notion.”

Each credits his Virginia Tech roots as a bond that drew them together. “It didn’t hurt that we’re all Hokies,” Seibert said. “It gave us plenty to talk about.”

As superintendent, Seibert has diverted himself from the consulting team yet remains committed to ensuring that teachers and their students have the resources necessary to navigate the rocky transition to high school. Habeck and Moore continue their consulting work and have plans for a follow-up book about inspiring and connecting with students.

Chad O’Kane (M.A. communication ‘11) is a graduate assistant with Virginia Tech Magazine.
there. The worst thing that can happen is we'll have all of these wonder-
show] is going in the direction we want it to go, school will always be
understand the difficulty of attaining success in the entertainment indus-
ful nationwide tour, and a 2010 performance on "Dick Clark's New Year's
While ambitious and focused, the performers are also realists. They
served as the chapter's president during the Virginia Tech vs. Georgia
1/24/10.
99 Stacey Chapman, Califor-
10/23/10.
97 Robert T. Hicks.
Virginia Tech Magazine 2011 Spring
Class Notes

Virginia Tech Magazine Spring 2011

Helicopter pilot cooks her jets in Blacksburg

BY HILARY MAY ’12

U.S. Army Aviation is not a common career choice for women, but Brande Goracke Reeves (environmental resources management ’01) is used to taking the path less traveled. At Virginia Tech, she was one of only 23 Virginia Tech Corps of Cadets (VTCC) members in the College of Natural Resources and Environment (CNRE) and a female in the traditionally male-dominated corps. So it is little surprise to those who know her that she was one of a small number of women to ever pilot the AH-64 Apache, the Army's only attack helicopter.

Described as a “star cadet” by former Virginia Tech Army ROTC commander Denny Coddran, Reeves graduated with a commission to command Resources and Environment (CNRE) and a female in the traditionally male-dominated corps. So it is little surprise to those who know her that she was one of a small number of women to ever pilot the AH-64 Apache, the Army’s only attack helicopter.

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### Class Notes

- **It's a university requirement to change PID, Hokies, and Oracle/Banner passwords:**
  - Change your passwords at least once per year.
  - Protect your email, MyVT account, filebox, etc.
  - Change your passwords at least once per year.
  - Be secure, be unique, and keep your online world safe.

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**When making an annual gift, you can choose to support any college, department, or program you wish. And you don't have to wait for a call from Monica on her colleagues to make a different impact.**

Meet Monica Black (mechanical engineering '13), who is not only working toward her degree, but to advance Virginia Tech. Last fiscal year, more than 14,000 alumni or friends of the university said “yes” when asked to donate by a student caller like her. Combined, they gave more than $1.6 million.

Whether it's a first gift by a recent graduate or a substantial contribution from a longtime donor, every one of the thousands of donations we receive each year is important. That's because each gift, regardless of its size, represents a true commitment to help Virginia Tech fulfill its mission and maintain its reputation.

Virginia Tech Office of University Development (514)
University Gateway Center, Blacksburg, VA 24061

540/231-2801 or 800/533-1144 | www.givingto.vt.edu
SHARE THE
HOKIE SPIRIT
WITH OTHER
ALUMNI
THIS FALL!

www.alumni.vt.edu

September
Sept. 3 - Virginia Tech vs. Appalachian State University
Class of ’86, 25th reunion
Young alumni reunion for Classes of ’91-’93 and ’00-’02

Sept. 17 - Virginia Tech vs. Arkansas State University
Class of ’81, 30th reunion
Graduate alumni homecoming
Corps of cadets homecoming
College of Natural Resources and Environment homecoming
Marching Virginians homecoming

October
Oct. 1 - Virginia Tech vs. Clemson University
Class of ’71, 40th reunion
College of Architecture and Urban Studies homecoming
College of Science homecoming
Multicultural alumni homecoming

Oct. 8 - Virginia Tech vs. University of Miami
Class of ’76, 35th reunion
Pamplin College of Business homecoming
College of Engineering homecoming
Cheerleader alumni homecoming

Oct. 22 - Virginia Tech vs. Boston College
Class of ’61, 50th reunion (traditional parade)
College of Agriculture and Life Sciences homecoming
Highty-Tighty homecoming
Student Affairs homecoming; Residential Learning Community, Virginia Tech Union, Homecoming King and Queen alumni

November
Nov. 17 - Virginia Tech vs. University of North Carolina (Thursday)
Class of ’66, 45th reunion
College of Liberal Arts and Human Sciences homecoming
Virginia-Maryland Regional College of Veterinary Medicine homecoming