Rock Steady
An eight-year, $1.11 billion campaign fortifies the future

The Flourish of Discovery
In Latham Hall, philanthropy helps research take root

For the Next 150 Years
Financing the margin of excellence at a world-class institution

Life Cycles
For those with ties to Tech, first impressions have lifelong impact
You did it.
You helped us raise
$1 billion—to be exact,
$1,112,703,977—to secure
the future of Virginia Tech.
We are devoting most of this edition of the university magazine to stories of
university excellence driven forward by
the recently concluded Campaign for
Virginia Tech: Invent the Future.
Generating such prodigious resources was
no easy task, but Hokie generosity and
commitment showed their strength over
the past eight years.
In these pages, you will see how
you and your fellow Hokies have made
a difference in the lives of thousands.
Here are stories about gifts, large and
small—from a first-time gift donated by
a young alumna just starting her career to
a major contribution from an established
alumna that enables critical growth in
the university’s life sciences research ef-
forts. Here are the stories of a university
finding ways to invent the future.
Achievements of this magnitude happen only because of the vision and
dedication of extraordinary people. We
were blessed throughout the campaign’s
duration with the support of stellar Hokies such as Gene
Fife (business administration ’62), Bill
Holzman (horticulture ’59), John Law-
son (geophysics ’79), and Dave Calhoun
(accounting ’79). The university was
fortunate to have the strong leadership of
Betsy Flanagan, vice president for de-
velopment and university relations, at the
helm of the fundraising team throughout
the campaign.
Nearly 900 volunteers—either alumni
or friends—zealously exerted themselves while encouraging others to participate.
They helped us host 21 events in nine
states and Washington, D.C.
Through your generosity, you not
only helped us surpass our campaign goal
but also funded 563 endowed scholar-
ships; 55 endowed funds supporting
colleges, departments, or faculty
members; and 181 endowed funds support-
ing programs in academics, research,
Extension, or University Libraries. The
funds are now generating income to help
us attract the world’s brightest minds,
extend the reach of discovery, and help
students attend college. In all, you cre-
ated 1,000 endowed funds. More than
169,000 contributors made 531,117 gifts
toward this campaign, a number
that is simply astonishing. Against that
backdrop, a thank-you seems inadequate;
still, I thank you all.

Americans are a generous lot. No
other nation in the world can compete so
much compassion and philanthropy. At
our university, the spirit of Ut Prosim
(That I May Serve), our desire to serve
our country and help others, spills over
into a generosity of spirit that will help
others for generations.
As we exit the aura of a fundraising
campaign, we do not exit an era of need.
There are young people who need our
help. To remain internationally com-
petitive, our nation must increase the
percentage of its populace with advanced
education. I see a continuing need to assist
underrepresented and first-generation
students. Only as our nation continues to
extend the benefits of higher education
will we maintain our worldwide leader-
ship.
As governments increasingly reth-
ought and pull back institutional support,
universities like Virginia Tech are becom-
ing more and more self-sufficient. Today,
private support is how we maintain the
competitive edge in which we advance
science, prepare future generations to lead,
and extend our knowledge into our commu-
nities to solve problems.
An accomplishment on the scale of
this campaign provides cause to celebrate
and look back with pride. It also provides
inspiration and resources for extraordinary
achievements in the future. You can be
certain that your continuing commitment and
involvement have a major impact not only
on Virginia Tech, but on all the communi-
ties and people that we serve.

10 | For the Next 150 Years: Financing the margin
of excellence
Just how does a university grow? Consider this: In 1991, endowed funds per student were
$5,481; 20 years later, the figure is $19,619. Get an inside peek at how Virginia Tech finances the teaching, learning, and research that define excellence.

16 | The Flourish of Discovery: In Latham Hall, philanthropy helps research take root
From growing chambers in the basement to the state-of-the-art labs on the fourth floor, Latham Hall buzzes with the promise of discovery and the potential for breakthroughs in
fields as diverse as Lyme disease treatment, watershed management, and plant genomics.
In Latham—and across campus—see how giving provides the fertile soil for innovation.

22 | Life Cycles: All paths lead to Tech
A woman who decided to give when she heard of a veterinary medicine college in
Blackburg. Different roads may have led these donors to give to the university, but the
individuals all share common milestones on their journeys to philanthropy.

28 | Athletics 30 | Arts 32 | Campaign Celebration

36 | Sister, Soldier, Surgeon: For one alumna, Ut Prosim means faith, medicine, and charity
Like so many alumni, Diane “Deedee” Byrne (biology ’78), is Ut Prosim (That I May Serve)
personified. In this first-person essay, part of the ongoing Living Pylons series, Byrne tells
the story of her triple calling—to religion, to medicine, and to service.

38 | Chris Kugelman: Dream catcher
Having served as a cameraman and producer for “Deadliest Catch” and “Orangutan
Island,” Emmy-award winner Chris Kugelman (exercise science ’94)—now a producer
for National Geographic Television—knows a thing or two about chasing a dream to the
ends of the earth.

41 | Alumni Association News
page 41: Donor recognition
page 42: Chapter scholarships
page 44: Travel
page 46: Black alumni
page 47: Distinguished Service

On the cover: At Virginia Tech, private giving is just as foundational as
Hokie Stone. The photograph was taken by Jim Stroup. On the stone’s
face, campaign imagery originally illustrated by Doug Thompson was
adapted by Robin Dowdy.
Letters to the Editor

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Editor
Jason Yel
Assistant Editor
Denise Hunsperger
Art Director
Robin Dwyer
Graphic Designer
Tiffany Pruden, Shelley Cline
Creative Services Manager
Glenn Duncan
Graduate student editor: Olivia Keas, Rommelyn Conte ’07
Copy Editor
Juliet Crichton, Richard Longenecker
Alumni Relations
Juliet Crichton
Contributors
Andrea Brons, Deirdre Byrne ’78, Dave Hunt, Amy O’Neill M.A. ’93, Albert Rabo, Rock Rosasz ’72
Photographers
Michael Kliman, Ryan Stone, Jim Stroup, Logan Wallace
Business Manager
Paula Vaughn
Alumni Notes
Alumni Notes editor: Shirley Fleet
Director of Marketing and Public Relations
Melissa Richards
Associate Vice President for University Relations
Larry Hinecker ’72, M.B.A. ’94
Vice President for Alumni Relations
Tom Tallar ’83

Letters to the Editor

Around the Drillfield

NSF grant funds study of endangered amphibians

Amphibians are among the most threatened creatures on earth, with some 40 percent of amphibian species classified as endangered or threatened. One of their primary threats is a rapidly spreading disease that attacks skin cells, a fungus called chytridiomycosis.

Lisa Belden, associate professor of biological sciences in the College of Science, is leading a team of researchers from Virginia Tech, James Madison University, Villanova University, and the Smithsonian Institution who will study the microbial communities living on the skins of frogs that are surviving the fungal scourge. The effort is one of 11 new Dimensions of Biodiversity projects funded by the National Science Foundation (NSF) with the aim of transforming, by 2020, “how scientists describe and understand the scope and role of life on earth,” according to an NSF news release.

A memorial fund has been established to support the needs of Crouse’s family. Donations can be made online by visiting https://sites.google.com/site/hokieforderek/.

At its November meeting, the Virginia Tech Board of Visitors approved offering graduate/master’s and doctoral degrees in nuclear engineering. The university will now send the proposal to the State Council of Higher Education for Virginia for confirmation. The proposed starting date for the new degree programs is spring 2013.

Techs College of Engineering revived its nuclear engineering program in 2007, and soon started offering graduate coursework that allows students to earn a master’s of mechanical engineering with a nuclear certificate.

Researchers hope to help people ‘sleep tight’

The Arlington Innovation Center: Health Research, of Virginia Tech’s National Capital Region, has been awarded a $1.5 million cooperative research and development agreement from the U.S. Army for neuroimaging studies of human performance. The agreement also includes an option for approximately $3 million of future work based on availability of funding.

Researchers hope to help people ‘sleep tight’

University mourns a fallen officer

The university mourns the loss of Derek W. Crouse, a Virginia Tech police officer who was murdered during a traffic stop on campus on Dec. 8. The U.S. Army veteran joined the Tech police department on Oct. 27, 2007, and served in the patrol division. He is survived by his wife, five children and step-children, and his mother, his father, and two brothers.

Derek W. Crouse

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“The central scientific effort of this project will be to improve our understanding of how the brain stem and thalamus regulate sleep in humans and how these systems are affected by stress and sleep restrictions,” said Seong K. Min, professor of physics, research Fellow, and director of the center.

Department strives to increase female representation in computer science

As a founding member of the National Center for Women & Information Technology’s Pacesetters program, the Department of Computer Science in the College of Engineering is striving to increase the number of women in its ranks.

Barbara Ryder, professor of computer science and the department head, and two additional departmental faculty members, Manuel Perez-Quiñones and Scott McCrickard, are pursuing what they called ‘designer minors,’ which allow students to combine computer science with such disciplines as business, mathematics, and

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Bats’ shape-shifting ears make hearing more flexible

“Certain bats can deform the shapes of their ears in a way that changes the animal’s ultrasonic hearing pattern. Within just one-tenth of a second, these bats are able to change their outer ear shapes from one extreme configuration to another,” said Rolf Müller, associate professor of mechanical engineering at Virginia Tech.

Along with Ph.D. student Li Gao and master’s candidate Sreenath Balakrishnan, Müller wrote a paper that appeared in the Physical Review Letters. Weikai He and Zhen Yan, both in the School of Physics at Shandong University, also contributed to the study.

Müller said, “In about 100 milliseconds, this type of bat can alter his ear shape significantly in ways that suit different acoustic sensing tasks. [By comparison], a human blink of an eye takes two to three times as long.”

Endowment performance recognized with award

The Virginia Tech Foundation received the 2011 Award for Excellence for Mid-size Nonprofit of the Year from the Foundation and Endowment Intelligence (FEI) information service. FEI cited an endowment performance that placed the foundation”solidly in the top quartile of performers.”

The endowment earned a 19.6 percent return for fiscal year 2011 and topped $600 million for the first time in 2011.

Around the Drillfield

Celebrities find ‘The Way’ to Tech

Two determined Virginia Tech faculty members, John Boyer and Annie Hesp, managed to convince Martin Sheen and Emilio Estevez to bring their new movie, “The Way,” to Virginia Tech in September. The film tells the story of a man’s trek along the Camino de Santiago (The Way of St. James) in Spain.

Sheen and Estevez weren’t the only celebrities to make a stop in Blacksburg; comedian Bill Cosby was the featured performer at Virginia Tech Union’s annual Laughriot Homecoming Comedy Show on Oct. 20. Cosby tickled the funny bones of a full house in the Burruss Hall Auditorium.

Electronic health records save money but pose risks

Electronic health records (EHRs) can potentially save billions of dollars in health care costs and increase patient safety, but have considerable privacy risks in the United States, more so than the European Union (EU), according to a new study co-authored by Pamplin College of Business Professor Janine Hiller.

“Certain EHRs are available to more people than they were intended to be,” Hiller said. “This can be a concern for patients who are not aware of the risks associated with EHRs.”

Software allows for putting smart phones on lockdown, wiping data

A team of Virginia Tech researchers has created software to remotely put smart phones under lockdown in order to protect users and information. The phones are given permission to access sensitive data while in a particular room, but when the devices leave the room, the data is completely wiped.

“There are commercial products that do limited versions of these things, but nothing that allows for automating wiping and complete control of settings and apps on smart phones and tablets,” said Jules White, assistant professor in the Department of Electrical and Computer Engineering. “This system provides something that has never been available before. It puts physical boundaries around information in cyberspace.”

Uses abound. A general could access classified intelligence in a secure facility without worrying about losing a phone later. A doctor or nurse could consult a patient’s electronic medical record and a parent could prevent distraction at school, with the records. In order to prevent distraction at school, parents could restrict their children’s text messaging.

Around the Drillfield
In the span of one second, approximately 10 billion electrons are fired downward, screaming at nearly the speed of light through a column so highly evacuated of air that the cylinder’s atmospheric properties are close to that of outer space. Magnetic lenses focus the electron beam’s trajectory toward where the sample rests below. Whereas a light microscope bends light rays to produce an image, the TEM capitalizes on the incredibly small wavelength of electrons to detect the electrons’ reaction when they pass through the sample.

The results are stunning. By stitching together 130 TEM images of a mineral called schwertmannite, Murayama has produced a three-dimensional view of a mineral sample pulled from a river adjacent to ancient mining sites in Spain. Zooming into the 20-nanometers-wide mineral whiskers, the microscope reveals layers of atoms, like beaded necklaces stacked on the computer screen. With this atomic-level view, researchers can examine whether arsenic, which tends to bind itself to the mineral and is thus ferried to the ocean, is encapsulated in the mineral’s interior or, more dangerously, exposed to the water on the exterior.

“It’s these details that tell us how these materials behave in nature and whether they’re going to be dangerous,” said Hochella, who was the first in the emerging field of nano-bio-geochemistry to use an instrument like the TEM to study surface properties at the atomic level. From arsenic in Spanish rivers to acid-mine drainage in Germany to toxic metals in Montana’s Clark Fork River, the work reveals how the planet functions and how humans impact the environment.

All the sophisticated gadgetry must have the personnel to match. Murayama said it was Hochella’s persistence that led the university to recognize the microscope as an instrument proportionate to Tech’s reputation in engineering and the sciences, and ultimately, to acquire the devices. Murayama himself has nearly 20 years of experience producing and interpreting atomic-level images; the schwertmannite images on his computer screen were preceded by two months of careful sample preparation by Ph.D. student Rebecca French.

Hochella noted that entire careers of scientific discovery are devoted to understanding and utilizing an instrument like the TEM. “It’s almost like we’re going to the moon with every mission,” said Hochella. “And if you don’t dedicate your life to going to the moon, you’re not going to get there.”
Randall Billingsley

Return on Investment

BY ROMMELYN CONDE ’07

In a meeting of future CEOs, area managers, and financial analysts, Randall Billingsley quietly observes “spirited discussions” as the group talks about the best course of action for managing a multimillion-dollar equity portfolio. Even though the scenario sounds like everyday happenings on Wall Street, this one occurs weekly in Room 1028 of Pamplin Hall. As a faculty advisor for the Student-Managed Endowment Educational Development (SEED) program, Billingsley interjects his thoughts into the conversation sparingly, allowing students to come to their own conclusions. Although he advises closely, Billingsley leaves in student hands the responsibility of investing the $16 million endowed fund held by the Virginia Tech Foundation.

During his 29 years at Virginia Tech, Billingsley, an associate professor who has served as assistant head of the Department of Finance, has remained committed to practical learning and critical thinking through instruction in the SEED program. Billingsley’s dedication to helping students “learn how to learn” was a key factor in his winning of the university’s 2011 William E. Wine Award for excellence in teaching.

The award came as no surprise to those who know and work with Billingsley, especially his wife, Bonnie Billingsley, a professor in the School of Education. “She wasn’t surprised, but I really have to thank my wife. Much of her work is on how to foster this kind of learning,” Milroy said.

Billingsley recognizes early on that teaching presents a lifelong learning opportunity. Concentrating on courses in investments and derivatives, he has taught all over the United States, Europe, and Asia and has consistently garnered strong evaluations from students at the university and industry levels. At Tech, Billingsley initially developed a course on equity valuation and portfolio management as a vehicle to train SEED students prior to managing the foundation fund. The course is open to all finance majors, but SEED students are required to take it.

Striving to reach beyond the standard lecture format in the classroom, Billingsley relies on engaging conversation in his teaching. “To me, I teach the way I like to be taught. What I want to do is cultivate some sort of intuition about the best way to solve a problem by getting students to put themselves in the situation,” he said. Nonetheless, finding common ground between students and difficult financial concepts can be challenging. To offset such challenges, Billingsley’s teaching philosophy focuses on providing frameworks that students can use for creating solutions: “I came in not knowing anything about finance,” said Nick Wasilewski, a senior majoring in chemical engineering. “Dr. Billingsley would walk with me every day after class and even meet with me on the weekends. Knowing my strengths, he used mathematics as a basis for explaining concepts and helped me approach it in a way I understood.” Wasilewski now serves as SEED co-chief executive officer.

In his dossier submitted for the Wine Award, Billingsley shared an example of how he explained the recent financial crisis to students. Instead of lecturing, he sparked a class discussion by asking a question. “I wove a framework for identifying and understanding the causes and consequences of the financial crisis. Posing questions and directing the resulting discussion is the best way I can make a difference in students’ intellectual development and help refine their critical thinking and problem-solving skills,” Billingsley said.

Dr. Billingsley challenges the way you think. The learning curve in his class was huge,” said Chris Haake, a senior finance major and SEED co-chief executive officer. “I was able to take the level of thinking I used in his class and apply it not only to SEED, but to other classes.”

In addition to his involvement in SEED, Billingsley has provided consultation to the CFA Institute, formerly known as the Association for Investment Management and Research; the Virginia Retirement System; and firms such as BellSouth Telecommunications, Sprint, and UBS. He also serves as an expert witness for issues concerning public utility cost of equity determination and investment-related litigation. “I’m not unique in being a professor who really tries to engage students,” said Billingsley. “Looking at it from a finance risk-and-return perspective, [I can say that] my involvement in SEED does require an enormous commitment of time and energy, but the relationships I’ve formed with students as a result have provided a really nice return.”

Rommelyn Conde (communication ’07) is a graduate assistant for University Relations.
FOR THE NEXT 150 YEARS

Worldwide, 70 of the 85 institutions that have survived since the Middle Ages are universities.¹
Why such longevity? Altruistic purposes, for one thing. Education is a cause we can all rally around. To last through the ages, however, excellence must be sustainable.

How?

Recently, only 26 U.S. higher education institutions were engaged in fundraising campaigns of $1 billion or more.²
Count Virginia Tech among them. To finance the margin of excellence—the achievements that take Tech from good to great—and to adapt to a changing business model, the university community embarked on The Campaign for Virginia Tech: Invent the Future.
Goal: $1 billion.

UNIVERSITY Operating Budget

Total Revenue: $1.146 billion
$347.47 million Tuition and fees
$280.64 million Financial assistance for E&G programs, such as grants and contracts
$249.68 million Auxiliary fees, sales, and services
$217.37 million Earned Fund
$50.82 million Federal funds, E&G sales and services, and all other income

Total Expenditures: $1.138 billion
$589.28 million Educational & general
$283.19 million Financial assistance for E&G programs
$241.68 million Auxiliary operations
$18.17 million State student financial aid
$5.66 million All other programs

STATE FUNDING

$197.9 million instructional, research, and Extension programs
$1.3 million unique military activities (Corps of Cadets)
$21.4 million

Funding sources, UNIVERSITY DIVISION

The University Division funds faculty and staff, graduate assistants, benefits, and more—essentially, direct educational costs.² In FY12, the total was $514.2 million.

RESEARCH

National Science Foundation research expenditures³

2005 $398.17 million
2006 $289.99 million
2007 $192.67 million
2008 $148.50 million
2009 $121.42 million

In 2008, Dr. X.J. Meng, a professor of molecular virology in the Virginia-Maryland Regional College of Veterinary Medicine, landed two grants totaling almost $3 million from the National Institutes of Health to develop a vaccine to protect people and animals from hepatitis E.

Blind Driver Challenge

Projects with the “wow factor”—like giving blind people the ability to drive—are often achieved via multiple funding avenues. The Blind Driver Challenge relied upon $1.486 million from the National Federation of the Blind, $7,000 from the Student Engineers’ Council (which does upon a $500,000-plus endowment held by the Virginia Tech Foundation), $550 from private donations, and $2,000 from the College of Engineering’s W are Lab.⁴

$1,112,703,977

Raised:

Sources appear on page 14.
In the campaign’s eight fiscal years, $1,100,703,977 in endowed funds were created. In the campaign’s eight fiscal years, 1,000 endowed funds were created. In the campaign’s eight fiscal years, 1,000 endowed funds were created.

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**CAMPAIGN USES**

- **54** current operations
- **27** endowment
- **14** capital facilities
- **3** private grants

**SOURCES**

- **42.62%** alumni
- **27.11%** friends
- **23.47%** corporations and foundations
- **4.17%** parents and faculty/staff

- **2.63%** other

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**TREND LINES**

State funding per in-state student is lower now than it has been in 20-plus years—and the trend line isn’t even adjusted for inflation. Express the 2011-12 dollars as inflation-adjusted 1990-91 dollars, and state funding per in-state student becomes $3,050 instead of $6,083 and tuition becomes $4,462 instead of $8,899. Meanwhile, private contributions have accelerated, helping the university to continue to excel.

**Signature Engineering Building**

- A key component of Tech’s capital construction plan
- Expected to draw $50 million in state support and $50 million in private donations for its construction
- $31.72 million committed during the campaign

**FOUNDATION REVENUE**

FY11 in millions

- $10.099
- $39.46
- $8.18
- $75.06
- $98.45
- $21.09

**FOUNDATION EXPENDITURES**

FY11 in millions

- $30.33
- $21.59
- $9.52
- $8.15
- $3.92
- $51.98

**FOUNDATION ASSETS**

FY99 to FY11 in millions

- $51.98
- $21.09
- $50.00
- $22.10
- $68.30
- $124.4
- $81.0
- $70.3
- $52.7
- $40.9
- $42.1
- $123.3
- $1,023.6

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- $42.1
- $123.3
- $1,023.6
Endowment value per student is a key measure of a university’s ability to support students. Ticks increasing capacity is yet another signal that the university is establishing its rank among top-tier institutions. Two beneficiaries of endowed funds appear below.

**SOURCES**

1 According to the 2001 book, “The Use of the University,” by the late Clark Kerr, once president of the University of California. 2 In November 2010, 36 institutions—16 percent of the total—raised $2.22 billion for profit four-year colleges or universities—were engaged in $3 billion campaigns, according to statistics from the Chronicle of Higher Education and the U.S. Department of Education’s National Center for Educational Statistics. 3 Techs 2011-12 Authorized Budget Document, Consolidated Budget Summary. 4 The difference between revenue and expenditures is a deposit to auxiliary reserves; 2011-12 Authorized Budget Document, Consolidated Budget Summary. 5 Virginia Tech Foundation Inc. 2010-11 Annual Report (Based on GAAP rules). 6 As $514.2 million, the University Division is a significant portion of the $989.3 million Educational and General budget; Authorized Budget Document, Consolidated Budget Summary. 7 Office of Budget and Financial Planning. 8 Office of Budget and Financial Planning. 9 Figures include the technology fee and academic fee: 847: an appropriate or to support the educational mission of the university, and do not include the separate comprehensive fee that supports non-educational expenses. For instance, 2011-12 tuition was $8,902 with an added technology fee of $847; academic fees sometimes included in the 2000s. For students attending class on the Blacksburg campus, comprehensive fee for 2011-12 was $8,902 to support auxiliary services not funded by tuition or state funds. Rounding out the full cost of attendance, some students also pay room and board, according to their preferences, and some may pay course or laboratory fees. For out-of-state students in 2011-12, charges include $22,594 in tuition, a $47 technology fee, and a $5,153 capital and equipment fee. 10 Virginia Tech University Development and Alumni Relations. 11 Virginia Tech Foundation Inc. Working to build a brighter future, today and tomorrow. 12 Foundation Office of Sponsored Programs. 13 Extensively sponsored research is a component of the total reported to the National Science Foundation. 14 FY 11 Annual Report, Office of the Vice President for Research. 15 College of Engineering. 16 Office of University Development. 17 Figures differ because University Development ($922.3 million) adheres to Council for Advancement and Support of Education accounting standards while the Virginia Tech Foundation ($980.1 million) adheres to Generally Accepted Accounting Principles.

**James Tyler Mills Jr. (Biosciences ’91)**

James Tyler Mills Jr. used a Jerry and Leslie Gough Honors Scholarship created by Jerry (economics ’69) and Leslie (mathematics ’70) Gough to travel to the U.S.-Mexico border and observe the type of medical care available to illegal immigrants. He discussed the trip during a successful entrance interview for medical school.

**Donna Dunay (Architecture ’71, M.S. ’71)**

“Having a named professorship has helped me collaborate with architects around the world and bring their knowledge to a greater audience,” said Donna Dunay, who in June 2007 was named the G. Truman Ward Professor of Architecture. “It’s an honor to have received this position, which was created by a generous donor. And in this case, I personally know the donor, which makes it even more special for me.”

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From new buildings to named professorships, from state-of-the-art lab equipment to scholarships, the support generated by the recently completed Campaign for Virginia Tech: Invent the Future is already shaping the university by taking research to the next level.

A remarkable microcosm of how private funding spurs innovation across the university is found in Latham Hall, home to 38 research teams and 200 researchers—faculty, postdoctoral, graduate, and undergraduate—from 10 departments in three colleges.

Buzzing with the promise of discovery, the hall serves as an incubator for ideas. On the fourth floor, Amy Brunner, associate professor of forest resources and environmental conservation in the College of Natural Resources and Environment, studies trees at the microscopic level, tracing their genetics and identifying key genes that play a role in helping particular species grow stronger and faster. Without the private funding that supplied start-up equipment, Brunner's research would have lacked the necessary foundation to properly thrive.

In fact, private funds supplied much of the equipment housed in the building’s 84,277 square feet of space. That equipment will allow research teams to uncover safer insecticides to kill disease-spreading mosquitoes, improve watershed and riparian management, and discover how to recycle nitrogen from organic wastes without adverse environmental impacts—just a few of the many studies being conducted in Latham labs.

"It's fair to say that the success of research in Latham is due to our ability to attract funds from diverse sources," said John McDowell, Latham Hall director and associate professor of molecular plant pathology in the College of Agriculture and Life Sciences. Those funds include a $5 million commitment from the building’s namesakes, William C. “Bill” (general agriculture ’56) and Elizabeth H. Latham, and generous support from such sources as commodity groups, growers associations, and private industry. The $5 million endowment from the Lathams will provide the college with laboratory equipment, undergraduate research stipends, graduate student fellowships, and other forms of support for years to come.

Framed by ongoing switchgrass research, Professor of Biological Sciences Erik Nilsen (left) and graduate student Jackson Mitchell work in the Biological Sciences-Virginia Bioinformatics Institute Plant Growth Facility.

Nurtured by philanthropic support, the seeds of discovery and learning planted today at Virginia Tech will bear fruit for years to come—much like this eastern redcedar, which dates back to 1843 and was part of a College of Natural Resources and Environment research project at The Cedars Natural Area Preserve in Virginia’s Lee County.
Planting the seeds for faculty research

Brunner's lab looks like any other: stainless steel sinks, microscopes and computers, and carefully labeled drawers and cabinets. Student researchers focus carefully on their work.

Discovering the secrets to tree DNA is no easy task.

In the field of tree genomics, Brunner studies the genetic pathways of trees, finding ways to identify key genes and manipulate them to produce a desired result, such as a specific tree-crown architecture that results in greater biomass yield. Of particular interest are the species and hybrids of the genus Populus, commonly referred to as aspens. Because poplar is fast-growing (up to 12 feet per year), it also holds potential as a biofuel.

“Startup funds were vital because when I came to the department [in 2005], no one was doing what I was doing,” said Brunner. “That [funding] was really key.”

McDowell agreed. “These sorts of investments at an early stage in a faculty member’s career are an essential factor. [The investments] are typically recouped many times fold.”

Once a gene is isolated and manipulated—say, to encourage a tree to take up nitrogen from the soil at a particular growth stage—several test plants are moved to the growth chamber and even make their way to a greenhouse on campus. Some will be hesitant to support because [the ideas are] high-risk. Often times, seed money from private sources can fund the proof-of-concept experiments to show that an idea has merit.

In other words, philanthropy provides the fertile soil for innovation to flourish.

Private funds support the Reynolds Homestead, where the AREC is located. Without the AREC, forestry researchers like Brunner would be unable to examine how the tree genomics plays out in natural conditions. “It’s really important, especially if you want to make your research translational—if you’re trying to improve a biomass crop or understand the ability of a natural population to adapt to changing conditions. You need both the controlled conditions of a greenhouse and the natural conditions,” said Brunner.

Helping to meet a growing demand on a smaller land base, Brunner’s research will one day translate to practical applications. As demand increases for wood, fiber, and biofuels, simply increasing the land base on which trees are grown isn’t enough. “It’s just not sustainable—or even feasible—in some places,” said Brunner.

“Private funds allow researchers to explore ideas that federal sources of funding might be hesitant to support because [the ideas are] high-risk. Often times, seed money from private sources can fund the proof-of-concept experiments to show that an idea has merit.”

In other words, philanthropy provides the fertile soil for innovation to flourish.

Catching the research bug

Surrounded by the Jefferson National Forest, entomology graduate student Jake Bova focused his attention on a minuscule insect, the eastern tree hole mosquito. Although most people are aware of the sight of a mosquito, Bova spent his summer placing traps to attract the infected insects. He conducts research on vector-borne diseases in mosquitoes and ticks, focusing on newly emerging diseases in Southwest Virginia.

In the medical entomology lab in Latham Hall, Bova compares mosquito eggs to the number of adults collected. In the lab’s insectary, he hatches the eggs and tests for rates of infection. Bova’s research primarily centers on the La Crosse virus, a neurological disease passed on by adult mosquitoes to their eggs. When an infected mosquito bites a human, the transmitted virus can cause nausea, headaches, joint pain, and, in some cases, brain damage. “These symptoms happen when an infected mosquito bites a human, the transmitted virus can cause nausea, headaches, joint pain, and, in some cases, brain damage. These symptoms happen in a lot of other diseases, so it may be very underreported. But we’ve seen [La Crosse] around here, and there’s a need for it to be monitored,” said Bova.

As Bova continues to track the presence of La Crosse in the area, his research on the blacklegged tick is in its early stages. Blacklegged ticks carrying Lyme disease cause symptoms similar to those of La Crosse and other ailments, such as fever, fatigue, and skin rash. Severe cases can cause heart and nervous system damage. “It’s still early in the process, and we’ll need cooperation from the public to collect samples and assess the situation,” Bova said. Research produced by Bova and his team in Latham Hall will help inform the development of surveillance programs for Virginia.

Bova, whose grandfather also attended Tech, initially majored in building construction. Realizing his interests lay elsewhere, Bova found a better fit in entomology; with the support of a swimming scholarship, he earned his bachelor’s degree in 2008. “I’ve always loved science, and the people in [the entomology] department have the passion for science that I was looking for.”

When he’s not hatching mosquitoes and conducting tests, Bova reaches principles of biology undergraduate labs. He often relates his own research to class discussions. “I enjoy passing on knowledge and also learning from my students. I like the social interaction involved,” he said.

In a lab session on polymerase chain reactions—the process of producing copies of a DNA sequence—Bova used a YouTube video to explain the concept to students. “I remember being an undergraduate and doing my best in classes where professors engaged their students, so I try to help facilitate that in my teaching.”
Bitten by the research bug, Bova plans to continue after graduate school, although not necessarily in academe. He entertains the thought of applying his research in the military. “There’s a phenomenal preventive medicine program with the Army,” he said. “I’ve always been intrigued about joining the military from that perspective.”

Cultivating undergraduate excellence

In a Latham lab run by biological sciences Associate Professor Dorothea Tholl, senior biological sciences major Tim Nguyen is examining the chemical communication of plants with their environment. More specifically, Nguyen is learning how phytochemicals protect the roots of plants against soil-borne pests and pathogens and exploring the cell-specific organization and molecular regulation of chemical defenses in roots.

Funded by a National Science Foundation (NSF) Research Experiences for Undergraduates supplement, Nguyen’s research project aims to uncover natural ways for plants to protect themselves from their “enemies.”

He then began working in Tholl’s lab as a summer intern in May 2010. He had discovered the opportunity through the Multicultural Academic Opportunities Program, an academic enrichment program that received additional gifts during the course of the campaign.

Combined with Tholl’s mentoring, the lab experience has helped Nguyen gain invaluable knowledge. “I’ve seen [Nguyen] grow in terms of his understanding of how to approach research, how to troubleshoot protocols and experimental approaches, and how to communicate with the graduate students, postdoctoral fellows, and other scientists,” Tholl said.

In addition, Nguyen has gained experience in one of life’s toughest lessons: time management. “Before I started working in the lab, sometimes I was productive, sometimes I wasn’t. But the moment I started working in Dr. Tholl’s lab, it forced me to be more efficient with the time I have,” he said. Currently, Nguyen devotes about 10 to 15 hours per week to lab work.

Tholl’s lab team currently is comprised of one postdoctoral fellow, two graduate students, and three undergraduate students, including Nguyen. “Any student benefits from undergraduate research, not only [gaining] an understanding of lab skills and a sense of how things are done, but also [gaining] maturity and a sense of independence,” she said.

Tholl was recruited to Virginia Tech with the promise of funding to establish her lab—and she said that about $150,000 from the Fralin Life Science Institute fulfilled that promise.

Several endowed Virginia Tech Foundation funds, such as one from Horace Fralin that provides more than a quarter-million dollars a year to the institute, support life sciences research across the university and allow students like Nguyen to benefit from undergraduate research experiences.

In the spring 2012 semester, Nguyen will present his research at two undergraduate research conferences at Tech, the Molecular Plant Science Mini-Symposium and the Virginia Tech Biological Sciences Research Day. Following graduation, Nguyen intends to spend a year gaining clinical experience before applying to medical school. He looks forward to the challenge of medical school and even entertains the idea of becoming a surgeon. According to Tholl, Nguyen has acquired skills that will benefit him, no matter where his career takes him. “His undergraduate research experience has prepared him well for his future studies and professional development,” said Tholl.

In a Latham Hall growth chamber, rows of metal shelves house Plexiglas cubes, each carefully labeled and containing a tree seedling. The secret to the future of viable biofuels might one day grow out of this room.

For Virginia Tech, such a discovery wouldn’t be a first. New revelations appear every day in the labs and classrooms in Latham, where researchers are hard at work unraveling the mysteries of the sciences, from forestry to agriculture to biochemistry and more.
LIFE CYCLES
All paths lead to Tech

The university community abounds with stories of generous donors from all walks of life. Though their paths and gifts differ, these donors share one thing in common: an affection for Virginia Tech that has grown stronger over time. Here are but a few of the tales from a milestone fundraising campaign.

BY ALBERT RABOTEAU AND AMY OSTROTH M.A. ’97

ALEX ANING

Born as the fourth of an elementary school teacher’s eight children, Alex Aning may not have had many material possessions while growing up in a two-room house in Accra, Ghana, but he did have access to good schools and a family who made education a priority.

“It was tough, so education became the key for us,” Aning said of himself and his siblings. “Fortunately, the schools in Ghana are very good, so I got a good background.”

Aning drew on those skills while earning his bachelor’s in physics from Morgan State University, but the need to work full time was still challenging.

“It was hard,” Aning said. “I was a parking lot attendant. I’d go to work at midnight, take all my books and stuff with me to study during the night, and bring a face towel and toothbrush in my backpack so that, after getting off at 8 o’clock, I could freshen up a little in the bathroom at Morgan, then go sit in the classroom.”

The long nights and hard work paid off. Not only did Aning graduate, he went on to earn a doctorate from what is now Missouri University of Science and Technology.

As an associate professor of materials science and engineering at Virginia Tech, he has heard stories from many students whose experiences parallel his own. Aning said they inspired his regular gifts to the Ronald S. Gordon Materials Sciences and Engineering Undergraduate Scholarship Fund.

“I see some of those students really trying hard, and I think, for those kinds of students, if there’s any help that can be given, they should get it,” said Aning.

1972
Accepted at Morgan State University, moves to U.S.

1974
Takes classes and works full-time job as parking lot attendant

1982
Ears doctorate in metallurgical engineering from Missouri University of Science and Technology

1983
Accepts first faculty position in physics at Morgan State

1986
Named head of electrical engineering department at Morgan State

1992
Joins Virginia Tech faculty

2005
Learns about the scholarship named for department head, is inspired to donate

2009
Begins making regular donations to Ronald S. Gordon Materials Sciences and Engineering Undergraduate Scholarship

RUTH & DAVID HENDERSON

Like many recent graduates heading off for a first job, David Henderson (geophysics ’73) was a bit nervous on his drive to New Orleans to work for Amoco after having earned his degree from Virginia Tech.

“My concern was whether they were going to expect me to know everything there was to know about geophysics,” said Henderson. “But when I got there, they were so happy with what I knew. They were hiring people with math degrees and physics degrees and strong science backgrounds, but my training was very specific—and very relevant.”

Henderson took advantage of the head start his education provided him to embark on a notable career in energy exploration that has taken him to 43 countries and six continents. After serving as a vice president at several energy corporations, including EEX, where he also was chief operating officer, he co-founded a new company, WBH Energy Partners LLC.

Henderson credits three Tech professors—John Costain, Gil Bullinger, and Ed Robinson—with preparing him to excel. Along with those mentors, he also found the love of his life in Blacksburg; Henderson met an English major named Ruth Drinkard (English ’73) during their freshman year, and they married shortly before their senior year.

Residents of Spicewood, Texas, the Hendersons had supported Virginia Tech generously for many years when they agreed to serve as co-chairs of the Houston regional committee within The Campaign for Virginia Tech: Invent the Future. Ruth Henderson said joining the team of hundreds of alumni made her feel excited about the future of Virginia Tech.

“We have an obligation to honor those who have contributed to our success,” David Henderson said. “We have a debt to pay forward to help a new generation succeed. That is why we contribute with our presence, gifts, and service.”

1966
Ruth Drinkard accompanies her older sister, Sylvia, on a visit to Virginia Tech

1969
Ruth enrolls at Tech, as does David Henderson

1970
Ruth and David meet

1972
Ruth and David start dating

1973
Ruth and David marry

1978
The Hendersons graduate

1993
The Hendersons give their first gift to Tech

1994
The Hendersons are inducted into the UT Prosim Society, a select group of the university’s most generous donors.

2005
David elected to the Virginia Tech Foundation board

2008
David and Ruth are inducted into the Legacy Society for those who make planned gifts to Tech

“We have a debt to pay forward to help a new generation succeed. That is why we contribute with our presence, gifts, and service.”
“I never realized I would be going back and forth so often, but since I created a scholarship, I wanted to see what went on down there. I think it’s a very good school—a wonderful school—and I’ve gotten so much enjoyment out of visiting and seeing the students.”

MARY LEACH

Before it held its first class, the Virginia-Maryland Regional College of Veterinary Medicine had a generous scholarship to offer one of its students—thanks to Mary Leach.

Unlike many donors, Leach never attended the school that became a focus of her philanthropy. A lifelong resident of Arlington, Va., she decided to make a gift in memory of her parents. Looking for a cause to support, she learned from the American Veterinary Medical Association that a veterinary school would be opening on the Blacksburg campus of Virginia Tech.

“My mother and father were fond of pets and always had them,” Leach said. “I had racked my brain to think of what I could do that would be appropriate to honor them.”

Originally, she had planned to make a generous donation through her will. A desire to witness the effects of her generosity firsthand, however, led her to give several thousand dollars in 1979 to create a scholarship in time for it to be issued to a student in the veterinary college’s first class, which arrived on campus in fall 1980.

In subsequent years, she added thousands more dollars to the Clarence and Gertrude Leach Memorial Scholarship, an endowed fund providing a four-year scholarship to a member of each entering class. Two of her students, Andy Meadows (animal science ’90, D.V.M. ’96) and Aaron Lucas (biological sciences ’04, D.V.M. ’10) have won the college’s Outstanding Graduating Student Award.

“Blacksburg at one time seemed far away,” said Leach, who for decades operated a tennis club in Arlington before moving to Blacksburg. “But really, I was a Hokie from birth,” said the resident of Salem, Va. “As the daughter of Southern Baptist missionaries, Rice spent nearly her entire childhood in Eastern Africa, but some of her early memories include watching VHS tapes of Hokie basketball games that her father, James (secondary education ’69, business ’69), received by mail.

Rice did get to see her father’s alma mater in person several years before she applied for admission, when her family moved to nearby Christiansburg, Va., for a year on furlough.

“We had a field trip to one of the robotics labs,” said Rice, who spent her high school years in Nairobi, Kenya. “I thought it was fantastic that the university would let a class from the local middle school come and see all their high-tech equipment.”

KRISTEN RICE

Kristen Rice (political science ’06) didn’t step onto Virginia Tech’s campus until she was in the eighth grade.

“But really, I was a Hokie from birth,” said the resident of Salem, Va. “As the daughter of Southern Baptist missionaries, Rice spent nearly her entire childhood in Eastern Africa, but some of her early memories include watching VHS tapes of Hokie basketball games that her father, James (secondary education ’69, business ’69), received by mail.

Rice did get to see her father’s alma mater in person several years before she applied for admission, when her family moved to nearby Christiansburg, Va., for a year on furlough.

“We had a field trip to one of the robotics labs,” said Rice, who spent her high school years in Nairobi, Kenya. “I thought it was fantastic that the university would let a class from the local middle school come and see all their high-tech equipment.”

In light of how she grew up and in a nod to her alma mater’s motto of Ut Prosim (That I May Serve), it’s hardly surprising that Rice sought a career helping others.

As a program coordinator with the Council of Community Services—a nonprofit based in Roanoke, Va.—she teaches public health courses on the prevention of sexually transmitted diseases.

While much of her work is done in prisons and drug treatment centers, she often returns to Tech to provide health testing at Schiffert Health Center.

Using her expertise to help students is just one way that Rice gives back. She also has made gifts to the university’s Annual Fund in support of the College of Liberal Arts and Human Sciences.

Rice said that while she had hoped to attend Tech since she was a child, “One of the big reasons why I decided to go was a scholarship that I was offered—a scholarship funded from alumni donations. . . . Once I graduated and was working and pulling in a paycheck, it just seemed appropriate that I should donate back so that future students could have the same opportunities that I did.”
Jane Huddle is a Tar Heel. The North Carolina native applied to only one school—the University of North Carolina. She graduated in 1978 with a degree in math and went on to work for Duke Energy, where she is still employed. She met her husband, Jim, at the company, and he is a Tar Heel, too.

You might be asking yourself what two Tar Heels have to do with Virginia Tech. The answer is simple: The couple has two children—John and Johanna—and both are Hokies.

When the Huddles’ older child, John, was getting ready to graduate from high school in 2003, he knew he wanted to study engineering; and while he visited a number of schools, Virginia Tech was the place for him. “As he was doing the campus tour,” Jane said, “I could tell by the look on his face that this was where this child was going.”

John graduated in 2007 and now works for a general contractor in Richmond, Va. In 2008, Johanna followed her brother to Virginia Tech, where she is currently a double major in architecture and Spanish.

For the Huddles, it makes sense to support the institution where their children receive their educations, so they have been generous supporters of Virginia Tech. They’ve given to the Hokie Parents Fund, the Center for the Arts, the Women in Leadership and Philanthropy (WLP) Endowed Lecture Fund, and more.

In 2008, Jane attended Tech’s WLP Conference. That fall, she was invited to be a member of the WLP Council, which provides advice to university administrators about ways to engage women with university initiatives.

For anyone considering getting involved at Virginia Tech, either through philanthropy or service, Jane has this to say: “You do not have to be a Virginia Tech graduate. Your association can come through any number of ways—a spouse, your children, or just a desire to support a school doing great things. Find what interests you, and get involved.”

Albert Raboteau is the director of development communications. Amy Ostroth (M.A. English ’97) is the former publications editor for University Development.

1978
Gradsates from the University of North Carolina

2003
Son John matriculates at Tech, Jane and Jim make first gift to Parents Fund

2007
John graduates from Tech

2008
Attends Women in Leadership and Philanthropy (WLP) conference

2008
Daughter Johanna matriculates, Jane becomes member of WLP Council

2009
Makes generous pledge to the WLP Endowed Lecture Fund

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PremierNotes™
There’s a time and a place Chuck Fontana (business administration ’60) won’t likely ever forget. On Nov. 26, 1999, Fontana was bounding across Lane Stadium’s Worsham Field, a grandchild perched on his shoulders, celebrating Virginia Tech’s win over Boston College. Michael Vick and the Hokies, undefeated at 11-0, had just cemented their shot at the national championship, and a cameraman asked Fontana what it felt like.

“I don’t know,” Fontana said. “It must be football heaven.”

To the Hokie Nation, Fontana’s sentiment is hardly hyperbole. But in the late 1990s, Lane Stadium was ready for a face-lift. When Director of Athletics Jim Weaver arrived in the fall of 1997, he recognized that the environment fostered by Head Coach Frank Beamer—one of continuity and stability—meant the program was poised for long-term success. Years later, it’s apparent that a trek to a title game and 18 consecutive bowl games have a way of raising the stature of a football program.

After the 1999-2000 season, seats and a much-needed visitors’ locker room for football and other sports were added behind the south end zone. Later, the westside expansion, rising six stories in time for the 2006 home opener, became one of the most visible structures on campus. The expansion houses a press box, a president’s box, luxury suites, indoor and outdoor club seating, a memorabilia area, a ticket office, and athletic fundraising offices. The entire third floor, meanwhile, accommodates Student Athlete Academic Support Services, which assists students on all athletics teams.

When Fontana took one of his grandsons on a tour of the newly opened expansion, he proudly pointed out the wall of All-Americans—the Academic All-Americans. “That’s what you have to aim for right there,” Fontana told the boy.

In the mid-1980s, after 23 years with the U.S. Air Force, Fontana retired as a colonel and landed a job with Lockheed at NASA’s Kennedy Space Center in Florida. Back then, he’d scour the sports section’s fine print to find Hokie football scores, and University of Miami and Florida State University fans would ask him who the Hokies were. “Now they know,” said Fontana, who retired in 2006 as logistics program manager for the United Space Alliance shuttle operations. Although he and his wife, Betty, maintain a home in Florida, they live in the New River Valley during football season.

A similar attitude is reflected across the Hokie Nation: In the eight-year Campaign for Virginia Tech, athletics donations accounted for $226.89 million. The westside expansion itself received $13.11 million in commitments.

Donors like Fontana see their philanthropy as an investment in—and appreciation of—the family feeling of football and the continuity of athletic programs in general.

“Togetherness” is the term Beamer uses. “From our alumni and the people who support us to the students, when we all get in that stadium, everybody has the same goal,” said Beamer, who just finished his 25th season at Tech. “We are extremely fortunate to have tremendous support. By some generous donations, we’ve built what I think is one of the great stadiums in the country—one of the loudest, most exciting stadiums there is. You put fans in there, and they really help us win.”

Those partial to Hokie sports know there’s no finer sight than a sold-out, rockin’ Lane Stadium on game day. In the west-side expansion’s press box, members of the media are reminded before kickoff that cheering for either team is prohibited, a rule which is especially hard to follow when the thunderous jumping that accompanies “Enter Sandman” sends tremors through the stadium.

For his part, Fontana confesses that he doesn’t have a lucky jersey or any other pre-game ritual. “No matter what I do, it doesn’t make a difference,” he said. “It’s between the ears of the players.”

On the contrary: Consider what he and countless other fans have helped to build. Hokie confidence has a way of spilling off the field and into other university initiatives, and it’s not a stretch to believe that athletics unites the university, the communities of the region, and the entire Hokie Nation.
Construction of the center is under way at the intersection of Main Street and Alumni Mall. Slated for occupancy in late summer 2013, the center will host a fall season of preview events, followed by official dedication festivities in spring 2014.

Students won’t be the only ones to reap the benefits. “The center is here as much for the community as it is for Virginia Tech,” Waalkes said. “We see it … blurring the lines between the university and the community.” By offering new programs for area residents, fostering cultural tourism, and attracting young professionals and retirees alike to the area, the center will offer regional economic benefits.

The Vocal Arts and Music Festival, which will celebrate its third season in summer 2012, serves as a perfect example of how the center, even in its nascent stages, is blurring university and community. The festival brings vocal coaches, musicians, and rising opera stars from around the world to Blacksburg for two weeks of master classes and world-class performances. The vocalists audition with International Vocal Arts Institute founders Joan Dornemann and Paul Nadler, both of the Metropolitan Opera, to vie for a spot in the festival. During the festival, the vocalists are immersed in rigorous training and rehearsals with the coaches—many of whom are legendary in the opera world—and perform almost nightly.

Late in the campaign, the Center for the Arts was added to the list of capital projects. Private funding is expected to cover 30 percent of the project—or $28 million, of which about $18 million is still to be raised—along with 29 percent in state support and 41 percent from university and other sources, according to Waalkes.

Having a strong arts presence on campus is vital for Virginia Tech’s continued growth and success, Waalkes concluded. “We’re continuing to think forward even as we celebrate this incredible milestone—the closing of a $1 billion campaign.”

Widely recognized for its strengths in such fields as engineering and architecture, Virginia Tech now aims to put itself on the map in another arena: the arts. Ruth Waalkes, executive director of the Center for the Arts at Virginia Tech, said the center will not only add to those existing strengths, but also help the university remain competitive with other top-tier institutions that already have a significant fine arts presence on campus.

“You can’t really separate the arts and creativity from other academic disciplines such as engineering,” Waalkes said. “The center will connect the arts to other areas in meaningful ways.”

New institute unites art, science, and technology

The boundaries of art are not confined to the swirling brushstrokes of Van Gogh’s “Starry Night” or the high notes of Puccini’s “La Bohème.” For researchers at the newly established Institute for Creativity, Arts, and Technology (ICAT), art extends right to the center of scientific research and discovery.

“Through art and design, we experience technological innovation and explore new realms of scientific inquiry,” said Benjamin Knapp, ICAT director. Acting as a hub for research that transcends the boundaries between art and science, the institute will help support both ongoing and new transdisciplinary research on campus.

ICAT will go one step further, promoting the use of this research in the development of new materials and methods for teaching STEM (science, technology, engineering, and mathematics) disciplines in pre-K-12 and higher education environments.

On cue: Performances during the 2011 Vocal Arts and Musical Festival gave arts patrons a glimpse of what the Center for the Arts will offer.
One for the ages

In a testament to the dedication of the Virginia Tech community, an ambitious goal was stretched and then exceeded—and, rightly so, celebrated. Before the Campaign for Virginia Tech: Invent the Future was launched in 2003, the university’s fundraising consultants said that an $800 million goal was possible, but cautioned that it would be a stretch. University leaders and volunteers knew something the consultants didn’t know and boosted the goal to $1 billion. “We followed our instincts,” said President Charles W. Steger. “Our outside experts couldn’t know what it’s like to be inside the Hokie Nation. They don’t know the depths of support our friends and alumni have for this institution. And they had no idea what happens when you challenge the Hokie Nation with a goal.”

What happens is $1.11 billion raised, and a fitting celebratory gala on Nov. 12, 2011, attended by about 1,000 generous donors.

I equate the university as kind of a human body. The students are the body that we’re trying to nourish; the administration, the faculty, and the staff are all the nerves, the bones, the muscle, the blood, and the fiber of that body ... and the library is the heart of that body.”

—F. Richard “Dick” Quible (civil engineering ’53), who died in 2009, was co-chair of the campaign committee focused on University Libraries.

“I felt that to do a good job we needed more support, more things to take care of the students. There’s a greater need now than I think there was during my career because obesity is increasing annually.”

—Dr. Charles W. Schiffert, namesake of the health center on campus and the university’s former student health director, made a $1 million commitment to create the Dolores S. Schiffert Health Education Endowment, named for his late wife. It was a record commitment to a program within the Division of Student Affairs.

“Dad’s passion and lifetime interest in the 4-H program have impacted not only my life but my husband’s as well. In the spirit of giving, we are hoping that our contributions ... will help to enrich the lives of our youth and to continue the exceptional work being done at the 4-H Center at Smith Mountain Lake.”

—Jean Skelton Montague, daughter of the namesake of the W.E. Skelton Educational Conference Center at Smith Mountain Lake, who, with her husband, John Montague, contributed generously toward a new welcome center at the 120-acre facility in Wirtz, Va.

The campaign touched every corner of campus. In many places, the impact is already evident. Here are but a few samples:

“I wanted to ensure that there will always be a place for horses within the mid-Atlantic region to be treated when they are critically ill or injured. In terms of equine surgery and internal medicine, I just don’t know where you can find better care and knowledge at work.”

—Shelley Duke, owner and manager of Rallywood Farm in Middleburg, Va., who pledged a gift of more than $10 million through her estate to Virginia Tech’s Marion duPont Scott Equine Medical Center.

“Monumental goal, fitting celebration

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“I equate the university as kind of a human body. The students are the body that we’re trying to nourish; the administration, the faculty, and the staff are all the nerves, the bones, the muscle, the blood, and the fiber of that body ... and the library is the heart of that body.”

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The Virginia Tech Corps of Cadets had great success in the recent comprehensive campaign, first eclipsing its original goal of $30 million and then surpassing the revised goal of $35 million adopted by the corps. The corps had three priorities for the campaign: funding for scholarships, the improvement of Lane Hall, and the Rice Center for Leader Development. All three areas are critical to the corps’ future.

Brothers Bob Archer (marketing ’69) and Jim Archer (industrial engineering ’72) are excellent examples of alumni stepping forward to keep the corps’ growth robust. They established the VTCC Archer Family Endowment, the earnings of which will fund the Archer Family Scholarship until construction begins on the hall. In their minds, it is hard to imagine the corps without Lane Hall, which links the corps to a proud past and points to a bright future of service.

Former Commandant of Cadets Gen. Jerrold Allen’s vision, which is further evolving under the leadership of current Commandant of Cadets Gen. Randal Fullhart, proposes top-notch facilities to complement the world-class leadership program currently being taught in the Rice Center and in our outstanding ROTC detachments. Cadets deserve the best in residence and academic facilities so that the corps can continue to attract the best student leaders—leaders who will go on to great careers in both military and civilian fields.

The immediate beneficiary of the Archers’ generosity is Kelsey Ginn, a Civilian-Leader Track cadet and the first recipient of the Archer Family Scholarship. Growing up in Salem, Va., Ginn attended Tech football games with her father. For her, the most memorable part was not the game but watching the cadets march down the road to the stadium.

Ginn has excelled in the corps, becoming a fire team leader as a sophomore and serving on the Golf Company training cadre as a junior. She is also active outside the corps, competing as a vault and floor specialist on Tech’s gymnastics team. Ginn’s opportunities exist because of the generosity of the Emerging Leader Scholarship that the Archer endowment funds.

Lane Hall will house the Rice Center for Leader Development, an existing program that is already benefitting from the campaign. The earnings from the $380,000 committed to the center during the campaign will improve our annual national leadership conference by increasing the number of invitations we extend, as well as allowing for additional activities for visiting cadets and developing a program for faculty delegates.

Exceeding our goals in the campaign will have lasting effects on the Corps of Cadets by way of scholarships, facilities, and leader development—and we’re just getting started.

Col. Rock Roszak ’71, U.S. Air Force (retired), is the alumni director for the Virginia Tech Corps of Cadets.
My calling to religious life, which is a lifelong commitment to service, began when I was a young girl growing up in McLean, Va., in a very devout Catholic family. My parents were daily Mass-goers, which gave them the spiritual nourishment, strength, and joy to do the work they do, and that always inspired me. My father was a busy thoracic surgeon who still made it a priority to attend Mass every day before going to the hospital. My mother would get us ready for school and then dart off to the 9 a.m. Mass—no small commitment which gave them the spiritual nourishment, strength, and joy to do the work they do, and that always inspired me.

Growing up, I looked at the events of the world around me through a religious lens in an attempt to find their deeper meaning. The religious life—serving Christ by serving the poor—was a constant draw for me and led me to take vows of poverty, charity, and obedience. Serving the sick, the poor, and wounded soldiers as a surgeon was a triple gift from God, and He entrusted me with an awesome gift that I do not take for granted. I have to admit what unfolded in my life was not planned. “We propose, and God disposes,” as the proverb says.

My years at Virginia Tech (from 1976-78) would provide a solid foundation for both my medical career and my religious calling. I was a biology major aspiring to go to medical school, and the programs prepared me well. I had fantastic, caring professors and enjoyed interacting with my fellow students. Because I felt the call to religious life even in college, I became involved in service-oriented activities; my participation in the Newman Community at Virginia Tech (a Catholic campus ministry) provided a connection to the church even during the rigors and routines of my studies. After graduating from Tech in 1978, I attended Georgetown Medical School on a U.S. Army scholarship. Knowing your calling doesn’t come without challenges and sacrifice. Having completed a residency in family practice, I finished my second residency in general surgery in 1997. Like many female doctors, I spent my “dating years” working 120-hour weeks in the hospital. In my case, the work was a blessing, as it strengthened my vocation to serve as a religious sister-doctor. I was sustained during this grueling surgical training by daily reception of the Eucharist and stolen moments in the hospital chapel for quiet reflection on the scripture readings for the day. Following my parent’s example of communion with and reliance on the Lord saw me through this time in my life. This was spiritual sustenance for me. It was in this same year that, by the hand of God, I had the opportunity to serve as Mother Teresa’s doctor for five days during her visit to Washington. This was an affirmation that the work I was doing was, in fact, part of God’s plan for me.

On Sept. 11, 2001, I was in Manhattan helping a religious sister who was getting some medical checks when the twin towers crumbled to the ground. Officials were calling for doctors and specifically surgeons, and so by the end of the day, I had made my way to Ground Zero with some of the sisters. I saw firsthand the destruction of the towers and, more tragically, human life.

In tandem with this experience, I met a priest who had served as a Catholic chaplain during the Vietnam War; he introduced me to the Little Workers of the Sacred Hearts, a religious order that included a medical component, and it was a perfect fit for me. I entered my formation in 2002, took my first vows in 2004, and recently made final vows.

Because our Italian-based Little Workers community had experienced the integrity and goodness of the U.S. troops who freed them from German occupation during WWII, I was called back to active military service to support our wounded soldiers, post-Sept. 11, with the blessings of my mother general. I served first at Walter Reed Army Hospital and then in Afghanistan as a military surgeon reservist in Operation Enduring Freedom and Iraqi Freedom.

I now practice medicine at the Spanish Catholic Center in Washington, D.C., and provide medical care to the hardworking people of this community. Through my religious order, I am still able to help others around the world in need of medical care. After the devastating earthquake in Haiti, I provided relief services to victims near Port Au Prince, and I travel to Sudan and Kenya every year. Christ is the servant of servants, and in spite of my human frailties, I aspire to imitate his call to serve. The vocation of sister-soldier-surgeon affords me triple the opportunity to serve, most importantly as the healing touch of Christ and to make him known, loved, and served throughout the world.

Sister Deirdre “Dede” Byrne (biology ’78) is a general surgeon at the Spanish Catholic Center in Washington, D.C., and a fully professed member of the Little Workers of the Sacred Hearts of Jesus and Mary. She holds the rank of chaplain in the U.S. Army Medical Corps.
Dream Catcher
BY ANDREA BRUNAS

Fans of the Discovery Channel’s “Deadliest Catch” can only imagine what it’s like to be aboard those Bering Sea vessels. The ships pitch and roll against waves that can reach as high as 30 or 40 feet. Cameramen dodge sliding half-ton crab traps and dance around ropes that could sweep them overboard—all while gripping expensive equipment and heeding the bellows of grizzled captains.

None was more gruff and tattooed than the late Phil Harris, the chain-smoking captain of the Cornelia Marie, recalled Emmy-winning cameraman and producer Chris Kugelman (exercise science ’94). “The first few days on any boat, I would make it my business to keep a low profile until the captain got to know me. The captains and crew were always yelling at the cameramen. They’d get irritated when we’d mess things up or get in their way. A lot of this was in good fun, as they were initiating us.”

Kugelman, part of the “Deadliest Catch” team that won an Emmy in 2011 for Outstanding Cinematography in a Reality Series, successfully ducked Harris until the third day. Then Harris called for him.

“I thought, ‘This guy’s going to scream at me for doing something to his boat,’” Kugelman recalled, laughing. “Instead, he asked, ‘Are you the one who does ‘Orangutan Island’?’”

It turned out that “Orangutan Island” was the captain’s favorite show. Kugelman, the show’s producer, had spent month-long stints over two years with the young, orphaned orangutans while the primates were being trained in life skills for survival in the wild. The Animal Planet show drew a fanatical following of viewers who loved the orangutans’ endearing personalities and followed their harrowing trials.

“How much did you live on that island with those monkeys?” Harris asked.

“We talked about that show for three hours,” Kugelman said. “After that, I could do no wrong on his boat. He actually turned out to be the most warm-hearted guy, a big teddy bear.”

Kugelman, now a staff producer for National Geographic Television based in Washington, D.C., spent time on two other “Deadliest Catch” boats: the Wizard, which is sometimes captained by Keith Colburn—hot-tempered and briefly famous for roughing up a cameraman—and the Northwestern, captained by Sig Hansen. Kugelman and his colleagues also won the Outstanding Producers award from the Producers Guild of America in 2011 for “Deadliest Catch.”

“It’s as dangerous as the show portrays it, especially for the cameramen,” Kugelman said. “We’re not experienced on these ships, and there are big heavy pieces of machinery swinging around, plus the hold where they put the crabs. You could fall in there. You’ve got giant waves, the boat moving the entire time, and your eyes glued to the camera. When a big wave would come, the crew would shout at us to find something to grab onto, saying, ‘What, are you an idiot?’

As a producer, director, and cameraman, Kugelman enjoys a career most people can only dream of. His work has taken him to every continent, including Antarctica, providing a creative outlet while satisfying a quest for adventure.

Kugelman ties to Virginia Tech date to boyhood. He attended summer camps held by the Northern Virginia 4-H Educational Center, part of Virginia Cooperative Extension, where he took his first photography class and first encountered John Dooley, now Tech’s vice president for Outreach and International Affairs.

Dooley, who directed the center in Front Royal, Va. throughout the ’80s, remembers taking the high-spirited youngster aside for earnest talks about what it meant to be a model
Alumnus Profile

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Beginning with a campaign in the late 1890s that raised $20,729 in donations to build a YMCA building, alumni have understood the power of private support. Little did those late 19th-century donors know, but they were laying the foundation for major campaigns in the 1980s, 1990s, and 2000s. With the most-recent campaign breaking the magical billion-dollar mark, our deepest gratitude is extended to all alumni, friends, foundations, corporations, and others who helped achieve this milestone.

We understand that it is often difficult for some alumni to return to visit campus. Nonetheless, we try to create many opportunities or “excuses” throughout the year for visits to happen. If alumni are unable to return, perhaps they are able to attend chapter events, Hokie Club events, or away games. All are meaningful expressions of being part of the Hokie Nation.

During this winter, spring, and summer, we invite you to visit campus for the association’s Drillfield Series, the traditional spring football game, the challenge of the new Pete Dye River Course, camps for kids, summer orientation for new students, or an admissions weekend for future college applicants—plus many more opportunities. Simply put, it is important to connect with other alumni in celebration of your university’s successes.”

Thanks to you, Virginia Tech’s star continues to rise.

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A successful campaign is not an ending. Rather, it is the beginning of a new foundation of support that will encourage others to generously support the university efforts to which they’re most connected. Through the years, our Alumni Association has pursued a principal mission of engaging alumni. We want them to continue to be an integral part of the success of various facets of the university—teaching, research, outreach, alumni engagement, athletics, or capital expansion—and to feel some ownership of those elements. We strive to help make these connections possible.

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Virginia Tech Alumni Association chapters build strong relationships among alumni and students, enhancing the university's community image while supporting university students. By awarding scholarships annually to students attending Tech from their chapter areas, alumni chapters provide a tremendous benefit. Since the first chapter scholarship was awarded in the late 1960s, the program has grown every year. Chapters use a variety of programs to engage local alumni and raise scholarship funds, including hosting golf tournaments, wine-tasting events, silent auctions, career fairs, and more. They also conduct service projects and community events. More information about individual scholarship programs may be found on chapter websites via www.alumni.vt.edu/chapters.

Three excellent examples of students benefiting from this program are Mauricio Castro, Alyssa Hoffmaster, and Kristianne Macaraeg, who received scholarships in their freshman years.

### Chapter Scholarships

**Mauricio Castro, Class of 2013, business information technology**
- **Hometown:** Coral Springs, Fla.
- **Home chapter:** South Florida

Mauricio Castro has been attracted to technology and the Internet for as long as he can remember. "I received my own AOL account from my parents when I was just 6 years old," Castro said. Since then, he’s been interested in utilizing technology to its fullest, and his coursework and internships through Virginia Tech are teaching him to do just that.

Being awarded his local chapter’s scholarship made a significant impact on Castro’s ability to attend Tech. "If I hadn’t received the scholarship, it would have been a tough decision between going here or going to an in-state college in Florida. The scholarship swayed me toward Virginia Tech."

The South Florida Chapter also provided an opportunity for Castro to meet other students from his area and experience Hokie Spirit away from campus. "My dad and I went to the VT-Miami game at Sun Life Stadium, and we found the visitor’s section filled with people I recognized from the South Florida chapter."

### Alyssa Hoffmaster, Class of 2012, Spanish
- **Hometown:** Lancaster, Pa.
- **Home chapter:** Central Pennsylvania

Alyssa Hoffmaster has been studying Spanish since she was 5 years old, and she wanted to continue her passion for the language in college. "I love that my classes are small, and I’ve gotten to know the other Spanish majors very well," she said. Hoffmaster enjoys the unique learning opportunities that are part of the Spanish program at Virginia Tech, including teaching Spanish to elementary school students in an after-school program.

Receiving the Central Pennsylvania Chapter scholarship was a significant moment for Hoffmaster. "I won the scholarship my senior year of high school, and it made me so excited to go to Virginia Tech." The summer before her freshman year, she was drawn to the university’s Hokie Spirit and sense of community when she attended the chapter’s welcome picnic and scholarship recipient reception. "This was a great way to get to know people and hear about their experiences at Virginia Tech."

Hoffmaster also minors in business, and she hopes to craft a career that combines Spanish with the business knowledge she is gaining.

### Kristianne Macaraeg, Class of 2013, chemical engineering
- **Hometown:** Virginia Beach, Va.
- **Home chapter:** Tidewater

For Kristianne Macaraeg, chemical engineering was an opportunity to combine her passion for calculus and chemistry in an academically rigorous program. "I love the challenge," she said, "and because it is so challenging, the professors in my field have stressed the importance of working in groups. As a result, we all get to know each other well. I enjoy spending time with my classmates, doing homework or just hanging out."

Macaraeg’s first interaction with the Tidewater Chapter was her scholarship interview. "I was nervous at first, but I immediately warmed up to the interviewers because they were so welcoming. Their descriptions about their time at Virginia Tech made me excited to start college life."

Winning the scholarship gave Macaraeg a sense of accomplishment for her achievements in high school, eased her financial situation, and encouraged her to work hard while at Tech, a place she has come to love. "The Hokie Spirit on campus gives me a sense of belonging. Although Virginia Tech is a large university, I feel that our campus is really a close-knit community."
2012 and 2013 Travel Tours

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

2012 Travel Highlight
South Africa
April 12-21 | $3,999*
Optional Victoria Falls extension | $1,799

An amazingly diverse land unequalled in beauty and splendor, South Africa boasts terrain ranging from bushveld to deserts and grasslands, from snow-capped peaks to wide, unspoiled beaches and coastal wetlands. Home to the “Big Five” animals (elephant, rhino, buffalo, lion, and leopard) as well as a variety of other wildlife and rare plant species, South Africa contains some of the world’s most astonishing creatures and remarkable landscapes.

Explore bustling Cape Town, with its dramatic Table Mountain backdrop. Travel South Africa’s coastline ranging from bushveld to deserts and grasslands, from snow-capped peaks to wide, unspoiled beaches and coastal wetlands. Home to the “Big Five” animals (elephant, rhino, buffalo, lion, and leopard) as well as a variety of other wildlife and rare plant species, South Africa contains some of the world’s most astonishing creatures and remarkable landscapes.

2012 Travel Highlight
Best of Australia
July 14-24 | $3,500*

From lush green rainforests to the isolated Outback and diverse coral reefs, Australia epitomizes a land of extremes. Explore the highlights of this vast continent on a 10-day tour, which includes the iconic sights of Sydney, the Great Barrier Reef, and the ancient rainforests of Daintree National Park. Join the optional four-day extension to the exotic Fijian Islands and enjoy pristine white sand beaches and a welcoming traditional culture.

NEW 2013 TRAVEL TOURS ANNOUNCED!

Treasures of Costa Rica
AHI Travel
Feb. 27-March 10 | $3,895*

Asian Explorations
Go Next (Oceania Cruises’ Nautica)
March 23-April 9 | $3,999* (air included)**

South Africa
Go Next
April 12-21 | $3,999*
Optional Victoria Falls extension | $1,799

Living Abroad in Ecuador
AHI Travel
May 3-June 2 | $3,495*

Historic Reflections: Mediterranean
Go Next (Oceania Cruises’ Riviera)
May 25-June 5 | $3,299* (air included)**

European Mosaic
Go Next (Oceania Cruises’ Riviera)
June 16-27 | $3,999* (air included)**

Italy: Tuscany with Florence
AHI Travel
June 20-28 | $2,795*

Canada and New England: Fall Foliage
Go Next (Oceania Cruises’ Regatta)
Sept. 25-Oct. 7 | $3,999* (air included)**

India and Nepal
AHI Travel
Oct. 14-28 | $5,595*

South Africa
AHI Travel
April 12-21 | $3,999*
Optional Victoria Falls extension | $1,799

Waterways of Russia
AHI Travel
July 4-17 | $4,111*

Best of Australia
Continuum Education Travel
July 14-24 | $3,500* Optional Fiji extension July 23-26 | $1,500*

Scotland: Stirling
AHI Travel
Aug. 15-23 | $3,050*

Ancient Mysteries of the Americas
Go Next (Oceania Cruises’ Regatta)
Jan. 5-23 | $3,499* (air included)**

Caribbean Discovery
Go Next (Oceania Cruises’ Riviera)
Feb. 12-22 | $1,999*

Ancient Civilizations
Go Next (Oceania Cruises’ Nautica)
Nov. 4-15 | $2,949* (air included)**

Australian outback and South African bushveld

* Dates and prices are subject to change. Pricing is per person based on double occupancy without air, except as noted.
** Free air is based on departure from select North American gateway cities.

www.alumni.vt.edu/travel
Black Alumni Reunion | March 15-18, 2012

All black alumni are invited to campus for the Alumni Association’s Black Alumni Reunion this March. Don’t miss this opportunity to visit both familiar and new places on campus as you reunite with friends and meet fellow alumni at mini-reunions, such as those for Greek life and athletics.

In addition to providing time to reconnect with fellow Hokies, the reunion features an exciting program. On Friday, March 16, explore career and personal development opportunities and discover how you can assist Virginia Tech’s recruitment efforts. Plan your time together with fellow classmates and friends at the evening kick-off reception and then enjoy the Overton R. Johnson step show and decade parties for ’70s, ’80s, ’90s, and 2000s graduates.

On Saturday, March 17, join students at your college’s hosted lunch and participate in this year’s forum topic, “Building the Black Alumni Network.” At the Black Student Panel, alumni will have the opportunity to mentor students and hear about their experiences.

The highlight of the reunion is the Influential Black Alumni awards dinner, at which this year’s honorees will be recognized. Additionally, Black Alumni Scholarship donors will be recognized as part of the goal to endow the scholarships, which this year’s honorees will be recognized. Additionally, Black Alumni Scholarship donors will be recognized as part of the goal to endow the scholarships, which are designed to help the next generation of students.

Make plans now to join the reunion in March. To register or for more information, visit www.alumni.vt.edu/blackalumni/reunion.

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Alumni Association Board of Directors ballot

The Alumni Association Board of Directors nominating committee has proposed the following nominees for election to three-year terms from 2012 through 2015. Please vote for up to seven nominees and return the ballot by April 15. Results will be announced at the Alumni Association board meeting in late April.

- Kendley J. Davenport ’84, Chicago, Ill., public administration/management
- Colin L. Goddard ’08, Washington, D.C., international studies
- Lisa Glasscock Miller ’87, Staunton, Va., veterinary medicine
- Jean Skelton Montague ’69, Midlothian, Va., English
- Joy S. Poole ’78, Glen Allen, Va., agriculture education
- A. Carole Pratt ’72, Pulaski, Va., biology
- Philip S. Thompson ’77, Collierville, Tenn., materials science and engineering

Write-in Nomination

Signature

Return to: Virginia Tech Alumni Association, Holtzman Alumni Center (0102), Blacksburg, VA 24061
Many campuses have a columbarium where alumni and others may choose to be interred. Virginia Tech’s columbarium, on a grassy knoll near the Duck Pond, is footsteps away from the Holtzman Alumni Center, and several reservations have been received since the 2011 announcement of the columbarium’s construction.

The Hokie Stone structure houses 60 niches that may be purchased for individual or dual interments. Each niche is covered with a maroon granite face, on which names are engraved and filled with gold lettering. Behind the columbarium, a walkway leads to a terrace area, which is designed to accommodate expansion. For more information, contact Josh Burnheimer at 540-231-6285 orffburnin@vt.edu.

**Virginia Tech’s Columbarium**

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BOOKS BY FACULTY AND STAFF

NONFICTION


BOOKS BY ALUMNI

NONFICTION

Critical/Reference


Biography/Memoir


SCIENCE


Tom Sonnora (M.S. biochemistry and nutrition ‘71), “Midori and the 1,000 Stitch Belt,” novel, Imperialistic Japanese Army, W.WII era, Outskirts Publishing.

POETRY

Lynda Allen (communication ‘89), “Illumine,” Peace Evolutions LLC.


CHILDREN’S/TEEN


FEATURED AUTHOR

Frankie Y. Bailey, “Forty Acres and a Soggy Grave” is a faculty member in the School of Criminal Justice at the University of Albany-SUNY, Frankie Y. Bailey (psychology ‘74) specializes in crime and mass media/popular culture and crime history. Bailey’s books include “American Mystery Writers: A Historical and Thematic Study” (2008), for which she received the International Mystery Readers’ Macavity Award; “Wicked Daveville: Liquor and Lawlessness in a Southside Virginia City” (2011); and “Forty Acres and a Soggy Grave” (2011), the fifth mystery featuring fictional crime historian Lizzy Stewart. Bailey is now at work on a police procedural novel set in 2019. The 2011-12 president of Sisters in Crime, an international organization for female writers of crime fiction, Bailey is also a past executive vice president of Mystery Writers of America. Below is a brief excerpt from Bailey’s latest book, “Forty Acres and a Soggy Grave” (Silver Dagger Mysteries).

Friday, Sept. 10, Eastern Shore of Virginia

All I needed to do was get through this weekend without making Quinn’s friends wonder what on earth he saw in me. All I needed to do was charm their socks off. But first I needed to get him to tell me what was wrong. Preferably before we were in the midst of the weekend gathering of his old West Point buddies.

“I know about that, Quinn. I learned about that in those policing classes I took back in grad school, I know about cops not taking home what happens on the job,” I’d like you to tell me.

“Then what’s wrong? And don’t say ‘nothing’ like you did the last two times I asked. “You may not have considered this, Lizabeth, but not everything requires discussion.”

“You are saying you want me to ignore the fact that you’ve been reckless and preoccupied for the past week?”

“Yes, that’s what I’m saying.”

“In a good relationship…”

“Lizabeth, I’m not in the habit of sharing the odds and ends of my life. After years of being a cop and not taking my work home…”

“I know about that. Quinn, I learned about that in those policing classes I took back in grad school, I know about cops not taking home what happens on the job. I reached for my water bottle and unscrewed the top. “But we’re not talking about your work. And you aren’t a cop anymore.”

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Class Notes

Alumni, we want to hear what you’ve been doing. Although we are not printing stories or obituaries, you can post online photographs of weddings, babies, and spirited alumni. Mail photos to Virginia Tech Magazine, 105A Media Building, Blacksburg, VA 24061, or email them to vtmag@vt.edu. Please mail retirement, wedding, birth, and death notices to Alumni Notes, Virginia Tech Alumni Association, Holliﬁman Alumni Center, Blacksburg, VA 24061, or send them via email to retire@vt.edu. Alumni can also submit content online at www.vtmgazine.vt.edu/student/classnotes/.

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Birds and adaptations

In 2011, Ignited’s eighth year of operation, the company earned an honor on Virginia Tech Magazine | Winter 2011-12

Alumni "cave out niche in legal industry"

BY ROMMEY CONDE ’07

Guggar Datta (computer engineering’01) and Russ Kaubick (business information technology’02) first bonded during their undergraduate years at Virginia Tech when they discovered a shared interest in cars. Their friendship would later become the foundation for one of the fastest-growing small companies in the country: Ignited Discovery LLC, an electronic discovery and discovery services provider.

After graduating, Datta and Kaubick both worked for a technology company offering “e-discovery products and services for the legal industry.” E-discovery assists law professionals in building cases through computer forensics, discovery, and document review, digitizing what traditionally had been a manual process for lawyers.

“The company we worked for was dealing with high-tech stuff, but we felt we were doing it in a low-tech way. We thought we could do it better and more efficiently,” said Datta. Among the services Ignited Discovery offers is data hosting, providing clients a searchable online database of evidentiary documents related to specific cases. As a 22-year-old duo, the pair launched Ignited Discovery with a rented Fairfax, Va., office with $20,000 in combined personal savings, four computers, and two phone lines. In 2009, Ignited Discovery ranked No. 360 on the Inc. 500, an annual nationwide list of America’s fastest-growing private companies. In Inc.’s ranking of the top companies in the Washington, D.C., area, the company ranked No. 34. In 2011, Ignited Discovery was on pace to achieve revenue of $10 million, an increase from $4.6 million in 2010.

“Seeing this company go from two people to 10, then 15, to now, where we have a team of 30 and we’re still looking to hire, it’s a great accomplishment,” said Datta.

In 2011, Ignited’s eighth year of operation, the company earned another honor on the basis of its growth: a place in the Inc. 500, an annual nationwide list of America’s fastest-growing private companies. In Inc.’s ranking of the top companies in the Washington, D.C., area, the company ranked No. 34. In 2011, Ignited Discovery was on pace to achieve revenue of $10 million, an increase from $4.6 million in 2010. “Seeing this company go from two people to ten, then fifteen, to now, where we have a team of 30 and we’re still looking to hire, it’s a great accomplishment for us,” said Datta.

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Obituaries

Hassan Aref, who held a chaired professorship and was a former dean of engineering at Virginia Tech, Sept. 9. As the former chief scientist of the San Diego Supercomputer, Aref and Virginia Tech are in its efforts to develop supercomputers. System I, upon Aref’s arrival in 2003, he also suggested to Tech’s Division of Engineering that faculty members transition the division into the Department of Engineering and Computer Science, in order to provide quality technology teachers for K-12. Faculty members agreed to the novel concept, and the department offers graduate degrees related to engineering education. The department also hired several technical communicators to enhance the communication skills of engineering students. Additionally, Aref helped to move the discipline of computer science into the College of Engineering, which led the engineering education department to develop a new freshman curriculum.

John A. Rohr, professor emeritus of public administration and a former dean of the College of Architecture and Urban Studies, died 9/9. A member of the Virginia Tech alumni community since 1970, Rohr contributed to the research and study of governance and public administration, writing numerous articles and seven books. In 1988, he received the Distinguished Research Award, presented jointly by the American Society of Public Administration and the National Association of Schools of Public Affairs and Administration. Rohr was conferred the professor emeritus title by the Virginia Tech Board of Visitors in 2003.

Jeffrey Robert Stewart Jr., (business education ’53), a member of the Virginia Tech faculty for 35 years, died June 10. After earning his bachelor’s degree at Tech, he served for three years as a U.S. Air Force jet fighter pilot. Following his military service, he earned his master of science in business education from Tech and his educational doctorate in business education from the University of Maryland. He retired with the rank of professor emeritus in spring 1992. Stewart authored more than 50 business tests that were used as teaching tools at Blacksburg High School, throughout the United States, and in many other countries. Stewart was inducted into the U.S. Prolin Society in 2004.
Virginia Tech is fueling growth throughout the commonwealth. Our partnership with the University of Virginia and Rolls-Royce has created a new center for advanced manufacturing in Prince George County alongside the company’s manufacturing campus. Providing research power, intellectual capital, and job creation, Virginia Tech is a catalyst of growth and innovation, and a resource to help businesses be more competitive. To learn more, visit www.vt.edu/impact.