arts AND SCIENCE

The magazine of Vanderbilt University's College of Arts and Science

SPRING 2011

whereAREYOU?

MARY DONALDSON

Answer found on the back cover

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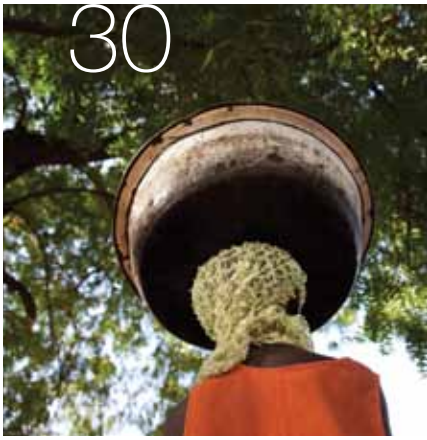

departments

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Vanderbilt University is committed to principles of equal opportunity and affirmative action.

COVER: *A girl at an internal displacement camp in Uganda, photographed by alumna Nancy Farese, BA'83, for Right to Play, a nongovernmental organization providing play therapy for kids in crisis all over the world (story on page 30).*

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DANIEL DUBOIS

AT HOME THESE DAYS, WE HAVE BEEN REFLECTING ON THE FORMATIVE RELATIONSHIPS WITH TEACHERS THAT FOREVER INFLUENCE STUDENTS' LIVES. My husband, Paul Young, is, like me, an Arts and Science faculty member: Paul is an associate professor of English, director of our dynamic Film Studies program, and a scholar and teacher of early cinema.

Paul and I have been the beneficiaries of formative teaching throughout our lives, and we both seek to give back in turn. When Paul's dissertation advisor, Professor Miriam Bratu Hansen of the University of Chicago, recently passed away, I recalled the passing in 2009 of my own dissertation advisor, Professor Barbara Johnson of Harvard. At the same time, I look forward to travel to Boston later this year to join in the retirement celebration for another Doktormutter, Professor Judith Wilt at Boston College. Many (many!) years ago, Judith was the endlessly patient and kind adviser to my endlessly long undergraduate thesis on Virginia Woolf.

Students often realize what is truly great about great teaching only years later. This is certainly true for me and for Paul as we reflect on the gifts given us by our early mentors. For in fact, truly great teachers are often those who are courageous enough to let their students make their own mistakes and then fumble their way back. It takes guts for a teacher to let a student flail, and it takes patience and confidence. Great teachers are in it for the long haul. They have the faith that the "a ha" moment will come eventually, perhaps even years after the class has ended, the honors thesis defended, the dissertation filed. Perhaps they won't even be around to bear witness, or to be thanked, or to be argued with. But they know it will happen. How fortunate the students gifted with this trust, and how subtle the lessons that unfold over hours, days and decades.

In this issue of *Arts and Science,* you will read about the scholar-teachers that represent the ideal Vanderbilt faculty member. Vanderbilt faculty are held to equally high standards in their research and their teaching, and Arts and Science prides itself on this fact. This is a daily expectation, to be sure, but it is also a criterion for faculty tenure and promotion: both excellence in research and a high degree of effectiveness in teaching are required, and superior achievement in one of those categories cannot supplement deficiencies in the other. Simply put, Arts and Science faculty must be stars in two firmaments: in the classroom and in their scholarship.

For the faculty profiled in the pages that follow, teaching and research are symbiotic. Excellence in one area is the complement—the necessary partner—to excellence in the other. Leaders at the forefront of discovery in their scholarly disciplines are exactly the people I want in the front of our lecture halls and seminar tables teaching our students. A senior thesis adviser or a dissertation adviser should be the very same person creating new knowledge in his or her field of study. While there's no doubt that profound teaching occurs every day in our classrooms and offices, the real mystery—what we must take on faith—is that the full realization of great teaching is the work of a lifetime. This is just one more lesson learned, many years after the fact, from Miriam, Barbara and Judith, and for this I thank them.

Carolyn Dever
Dean

A. V. Ramayya (left), professor of physics, was honored with an honorary doctor of science degree by India's Guru Ghasidas Vishwavidyalaya, a central university in Bilaspur, Chatishgarh State.

Jeremy Atack, professor of economics and history, was named president-elect of the Economic History Association.

Associate Professor of English and poet **Kate Daniels** received the 2011 Hanes Award for Poetry, an award given by the Fellowship of Southern Writers for outstanding literary achievement by a Southern poet.

JOHN RUSSELL

Daniels

Novelist **Tony Earley,** Samuel Milton Fleming Professor of English, has been elected a member of the Fellowship of Southern Writers.

Tony Earley, Samuel Milton Fleming Professor of English, and **Todd R. Graham,** professor of biological sciences, received 2010 Chancellor's Awards for Research. The university-wide honor recognizes excellence in research, scholarship or creative expression.

Ellen Fanning, Stevenson Professor of Biological Sciences, was elected a fellow by the American Academy of Microbiology.

Gary Gerstle, James Stahlman Professor of History, has been named the Harold Vyvyan Harmsworth Professor of American History at Oxford University for the 2012-2013 academic year.

The American Association for the Advancement of Science (AAAS) elected four College of Arts and Science faculty as fellows. **John Gore,** Hertha Ramsey Cress Chair in Medicine and professor of physics; **Jeffrey Johnston,** professor of chemistry; **Michael Stone,** professor and chair of chemistry; and **John Wikswo,** Gordon A. Cain University Professor and A.B. Learned Professor of Living State Physics, were honored for distinguished efforts to advance science or its applications.

The Association for Jewish Studies recognized a book by **Shaul Kelner,** assistant professor of sociology and Jewish studies, as outstanding scholarship in the field of Jewish studies. Kelner received the 2010 Jordan Schnitzer Book Award for *Tours That Bind: Diaspora, Pilgrimage and Israeli Birthright Tourism.*

STEVE GREEN

Kelner

Elizabeth Lunbeck, Nelson Tyrone Jr. Professor of History and chair of the department, was named Distinguished Psychoanalytic Educator by the International Forum of Psychoanalytic Education.

Terry Page, professor of biological sciences, was honored with the 2010 university-wide Madison Sarratt Prize for Excellence in Undergraduate Teaching.

Professor of French **Virginia Scott** received the university's Thomas Jefferson Award, made annually for distinguished service to the institution.

The U.S. Agency for International Development has awarded a $2.9 million award to **Mitchell A. Seligson,** Centennial Professor of Political Science, for work on a Latin American Democratic Indicators Monitoring System for El Salvador.

Tracy Denean Sharpley-Whiting, Distinguished Professor of African American and Diaspora Studies and French, was named one of the top 100 young leaders of the African American community by *The Root,* an online magazine founded by scholar Henry Louis Gates Jr. Sharpley-Whiting is director of the African American and Diaspora Studies program and director of the William T. Bandy Center for Baudelaire and Modern French Studies.

STEVE GREEN

Sharpley-Whiting

Claire Sisco King, assistant professor of communication studies, received Vanderbilt's 2010 Ellen Gregg Ingalls Award for Excellence in Classroom Teaching.

The College of Arts and Science awarded the annual Jeffrey Nordhaus Awards for Excellence in Undergraduate Teaching to **Mark Wollaeger,** professor of English (humanities), **Prasad Polavarapu,** professor of chemistry (natural sciences), and **Michael Bess,** Chancellor's Professor of History (social sciences). The Ernest A. Jones Faculty Advisor Award was presented to **David Furbish,** professor of Earth and environmental sciences. The Harriet S. Gilliam Award for Excellence in Teaching by a Senior Lecturer went to **Steve Baskauf,** senior lecturer in biological sciences and the Alumni Outstanding Pre-Major Advisor Award was presented to **Scott Zeman,** CASPAR adviser and senior lecturer in philosophy.

ANDREW MCMURTRIE, STATE OF TENNESSEE

Robert Penn Warren Unveiled

It's not often that the governors of two states make a big deal about highway signs, which says something about the signs' subject: alumnus Robert Penn Warren, BA'25. In late fall, Kentucky Gov. Steve Beshear (left) and Tennessee Gov. Phil Bredesen (right, blue tie) unveiled signs that direct travelers to the Robert Penn Warren Birthplace Museum in Guthrie, Ky. Housed in Penn Warren's childhood home, the museum offers a glimpse into Penn Warren's young life and a chance to read his work. In marking the occasion, Bredesen called Penn Warren a man who revolutionized the literary world and left an indelible mark on both Kentucky and Tennessee. "Robert Penn Warren may be best known as America's first official Poet Laureate and the only person to hold Pulitzer Prizes in both poetry and fiction—but he was at heart a teacher who recognized the importance of sharing his knowledge with future generations," Bredesen said. Mona Frederick, executive director of Vanderbilt's Robert Penn Warren Center for the Humanities, was on hand for the unveiling near the Kentucky/Tennessee border.

Renowned anthropologist holder of new Rebecca Webb Wilson chair

Tom D. Dillehay, internationally recognized for groundbreaking and highly interdisciplinary scientific research, has been named the Rebecca Webb Wilson University Distinguished Professor of Anthropology, Religion and Culture at Vanderbilt University.

Dillehay is the first holder of the chair, established by Spence Lee Wilson, BA'64 and his wife, Rebecca Webb Wilson, BA'65. Both are graduates of the College of Arts and Science and longtime supporters of Vanderbilt. The gift was made by Spence Wilson in honor of his wife, who has been a member of the university's Board of Trust since 1989.

"We feel so privileged to have someone of such international acclaim as is Tom Dillehay to be the first recipient of this chair," Rebecca Wilson says. "I majored in Spanish in high school and college, which predisposed me to an interest in Latin America, where I have traveled all my adult life. Tom's reputation as a scholar is undeniably outstanding, but it is Tom Dillehay the creative, dedicated, generous person that we are particularly delighted to have occupy the chair. He sets a high benchmark."

Dillehay was previously Distinguished Professor of Anthropology. He has received international and national awards for his research and teaching and is a member of the American Academy of Arts and Sciences. Dillehay has served as a consultant to several governments and academic institutions in Chile, Argentina, Uruguay and Mexico. His work has been featured in numerous publications and broadcast programs, including *National Geographic, Scientific American, Nova, Discover,* BBC and NPR.

JOE HOWELL

Spence Lee Wilson (left), Rebecca Webb Wilson and Tom Dillehay listen to remarks during Dillehay's installation as Rebecca Webb Wilson University Distinguished Professor of Anthropology, Religion and Culture at Vanderbilt University.

Recognition for Faculty of Distinction

Pantelides

Five outstanding professors have been honored with new endowed chairs in the College of Arts and Science, and a sixth has been designated a University Distinguished Professor.

Sokrates T. Pantelides, William A. and Nancy F. McMinn Professor of Physics and professor of electrical engineering, has been named University Distinguished Professor of Physics and Engineering, an honor which reflects his stature in both the College of Arts and Science and the School of Engineering.

Yanqin Fan, professor of economics, has been named Centennial Chair in Economics. Steve Hollon, professor of psychology, is now Gertrude Conaway Vanderbilt Chair in Social and Natural Sciences. Tong Li, professor of economics, is now Gertrude Conaway Vanderbilt Chair in Social and Natural Sciences. Sohee Park, professor of psychology, is now Gertrude Conaway Vanderbilt Chair in Social and Natural Sciences, and John Weymark, professor of economics, is Gertrude Conaway Vanderbilt Chair in Social and Natural Sciences. The named professorships honor Gertrude Conaway Vanderbilt, the university's longtime benefactor who was married to Vanderbilt Board of Trust president Harold S. Vanderbilt.

We're Where Scientists Like to Work

The Scientist magazine named Vanderbilt one of the best places to work in academia for life scientists (those who study living organisms). The university leaped to the No. 12 spot on a list headed by Princeton University, ranking ahead of other institutions including Stanford, Emory and Yale universities. In 2009, Vanderbilt ranked No. 34 in the survey.

TheScientist 2010 BEST PLACES TO WORK ACADEMIA

Advancing U.S.-British Relations

Sharing history and English on both sides of the Atlantic.

Imagine an American studying Shakespeare by exploring where his mother grew up. Picture a British historian researching slavery by examining a former slave cabin. Those perspectives are only a few of the benefits that faculty and students gain through a developing partnership between the College of Arts and Science and the University of Warwick in Coventry, England.

The Vanderbilt-Warwick International Collaboration is a venture between each institution's English and history departments to further research and develop joint projects. It's also creating synergy and cultivating what Mark Schoenfield, chair of Vanderbilt's Department of English, terms "academic citizens of the world" by broadening graduate students' opportunities and employment potential.

Schoenfield says that the collaboration is building intellectual exchanges between faculty and students in both organizations, and in doing so, creates opportunities for scholars that reach beyond what their home institutions have individually.

The collaborative effort launched four years ago and is still in its formative stages. It focuses on academic exchanges and conferences between faculty at each institution and providing opportunities for graduate students to work with or learn from each other's faculty. University of Warwick is regarded as one of the United Kingdom's leading academic institutions; it consistently ranks in the top 10 research universities in that country.

Complementary Scholarship

The faculty's commitment to the program and corresponding areas of scholarly expertise are essential to the collaboration, says James Epstein, acting chair and Distinguished Professor of History. "Warwick has one of the top history departments in Great Britain, with strengths in Latin American and Caribbean history. Warwick has a strong interest in Atlantic history and slavery, which fits with our program."

NEIL BRAKE

Similarly, Warwick's focus in South Asian history adds depth and breadth to Vanderbilt's own studies in that area. Other Warwick complementary areas include the history of medicine, religion and world literature.

Currently, the cornerstone of the collaboration is developing conferences on topics relevant to both institutions. Symposia are hosted on an alternating basis in the U.S. and Britain, with faculty and graduate students at both institutions participating in presentations and commentary. Nearly a dozen College of Arts and Science faculty, students and administrators traveled to Warwick for a symposium on estrangement and the natural world last spring.

Common Ground

For Jacqueline Labbe, chair of Warwick's graduate school and director of its Humanities Centre, the program has great potential. "Warwick and Vanderbilt have a shared vision in the education of graduate students," she says. "We see collaboration as offering ways in which colleagues can complement and energize each other's

UNIVERSITY OF WARWICK COMMUNICATIONS

research. The targeted nature of the relationship allows… access to an enlarged nexus of scholarly activities."

Amanda Johnson, MA'09, a doctoral candidate in English at Vanderbilt, says the Warwick connection has enhanced her research and broadened her employment options. "Experiencing how different historians think and contributing my point of view to the conversation has been valuable," says Johnson, who attended a summer 2010 symposium at Warwick.

In addition to the stimulating, interdisciplinary discussions, Johnson valued learning how U.S. and British educational institutions differ. "For instance, the British academy takes a more traditional approach and students are encouraged to know as much as possible about a certain topic," she says. "In America, we're more comfortable wandering around accumulating knowledge. We look at topics across different theoretical paradigms and how those can be portable across a century or a discipline."

Firsthand Experiences

"Successful programs like VWIC are based on multiple strands of interest that are woven together," says Joel Harrington, Vanderbilt's associate provost for global strategy and professor of history. "Vanderbilt is always looking for ways to enhance the international dimensions of our scholarship and teaching in strategic ways that make the most of our strengths. The catalyst [for these programs] is always faculty relationships and driven by research and teaching." Harrington says discussions are ongoing about expanding collaboration with Warwick into the sciences and other areas where the two institutions dovetail.

> University of Warwick is regarded as one of the United Kingdom's leading academic institutions.

One strength for Vanderbilt students is working directly with materials in British libraries and experiencing what they've read firsthand. The Coventry Cathedral, for example, stands not far from the Warwick campus. "The sight of the bombed-out shell of the original cathedral, standing next to Basil Spence's new Cathedral built after the second World War, recalls the devastation suffered by the British people during the war and the depth of their commitment to rebuild," Epstein observes. "What better way to help students understand the resolute mood of the British people during the immediate postwar years?"

Likewise, for students in Warwick's School of Comparative American Studies, stateside experience is irreplaceable. "Warwick scholars at Vanderbilt gain more than academic knowledge," Schoenfield says. "They experience a particular slice of American culture, which adds depth and validity to their scholarship. Nashville figures importantly in American history and literature in ways more visible up close. Students gain an understanding of the forces that shaped the subjects of their research."

The program also provides advantages to graduates in the world job market. A graduate student's curriculum vitae that includes international collaboration makes a job candidate more attractive, Schoenfield notes. Jane Wanninger, MA'08, currently a doctoral candidate in English at Vanderbilt, agrees. "It's important to build intellectual and professional networks, and to access a range of mentors and a base in Britain from which to conduct research," Wanninger says. "In the time I spent in Warwick, I made valuable connections with other graduate students which gave me a more nuanced sense of the intricacies of transatlantic scholarship."

Long term, Labbe says, the working partnership's success will be measured by the passion of faculty and students. "We hope to see regular research workshops and symposia leading to sustained interinstitutional projects and annual graduate student visits and exchanges," she says. "Within a few years, this should become an embedded aspect of each department."

Mary McClure Taylor, BA'52

IF VANDERBILT UNIVERSITY COULD BE CHARACTERIZED BY ONE BUILDING, IT WOULD HAVE TO BE KIRKLAND HALL. Up the stone stairs worn smooth by a century of foot traffic lies the heart of the university.

If Vanderbilt University could be personified by one individual, it would have to be Mary McClure Taylor, university receptionist. All that is Vanderbilt flows around her station in the center of Kirkland Hall. Taylor is often the first person that visitors to Kirkland, Vanderbilt and the College of Arts and Science meet—and she represents them well. Her demeanor is pleasant. Her compassion is real. Her heart is true. Her story is one with the institution.

Taylor grew up with Vanderbilt. She's the daughter of an alumnus and faculty member (her father was Christopher Columbus McClure, MD'18, the first chair of the radiology department at Vanderbilt University Medical School), a College of Arts and Science graduate herself and a longtime Vanderbilt employee.

How did your history with Vanderbilt begin?

My dad founded the radiology department at Vanderbilt and I would walk over every day from Peabody Demonstration School (now the University School of Nashville) to catch a ride home. One day I made a wrong turn in the hospital and opened the door to where all the cadavers were kept. I didn't make that mistake again!

He (her father) was one of 10 children who grew up in Wager, Ala., which is a tiny town close to Mobile. He got on a train by himself and traveled here to go to school and then medical school. He stayed here. Chris, my brother, went here, and of course, my husband (Robert C. Taylor, BA'52, JD'55) went here. My sister-in-law, nieces, nephews, stepsons, everybody. [It is] a real way of life with me.

During that time, you've met a few of our chancellors.

I have known all but two of our chancellors. I didn't know [Landon C.] Garland or [James H.] Kirkland. Chancellor [Oliver C.] Carmichael was a good friend of my dad's. Micky Carmichael Jr. was one of my brother's best friends. Harvey Branscomb was chancellor when I was a student here. I worked for Chancellors Heard, Wyatt, Gordon Gee and now, Nick Zeppos. I was very young when I knew Dr. Carmichael. I remember how visible Chancellor Gee was on campus. He remembered everybody's names and as I watched him interact with students, I found it very rewarding. Chancellor Zeppos teaches a class each semester. The students come by my desk, so excited to be in his class, and even his past students still stop by and see him frequently. Of course, that means I get to see them again as well.

What do you like best about your work?

What makes me love my job more than anything are these students. They are very dear, and tops. They just make my day. There's just a constant stream. Of course they have to come through to go up to the third floor to change a course. That's when I see most of them, when they've signed up for a course and two days later they're getting out of it. I have made friends with some of them and have kept up with them through lunch and dinner and things like that, which mean a lot.

Where else have you worked at Vanderbilt?

Alumni Hall and Kirkland are really the only two buildings I've ever worked in.

I worked for Ed Shea for a while. He held the same position as Bob McGaw (former alumni secretary and director of public relations). I worked for Jane Sutherland in the registrar's office, but I think Bob was the first one who asked me to work for him when I got out of school. Mostly I was proofing letters, which I enjoyed doing. It's so much fun finding a mistake.

What makes me love my job more than anything are these students. They are very dear, and tops.

I probably started working full time with Skip Higgs. That was in News and Public Affairs in Kirkland. It was proofreading and just any job she needed. That's been a long time ago. We moved to Alumni during the Kirkland renovation [in the mid to late 1980s].

What other types of work have you done?

I majored in sociology and minored in political science. Looking back on it, I picked those because of the professors. We had some good professors in those two departments.

I worked at the Red Cross—volunteered—drove that big old bloodmobile. It had a guard on it, so it wouldn't go over 30 miles an hour. I did that a couple of days a week. Those were heavy things to lift, those cases that were filled with blood.

What do you do for enjoyment?

I go to basketball games. I'm a real basketball nut. I had both hips replaced and I can't handle the steps at the football games. I got seats for men's basketball that are real easy to get to. I sit behind our team…there's nobody in front of us. It's just great. It's two steps to get down in there. I've had those seats a long time.

What's your favorite time of year on campus?

It's not winter! It's spring—I live for spring. We laugh about it when five minutes of more daylight makes such a big difference. Best time of the year.

JOHN RUSSELL

In the Lab Early

As Beckman Scholars, undergraduates experience responsibility and research life.

The typical undergraduate life isn't filled with lost sleep over curing cancer. But for Joseph J. Crivelli, participation in research has done just that. For Tesniem Fathi Shinawi, her undergraduate life has featured the learning experience of juggling classes, homework and research.

Crivelli and Shinawi are Beckman Scholars, participants in a by-invitation-only national program that funds scientific research for undergraduates. The prestigious Beckman Scholars program selects universities to participate, which in turn identify student applicants. Applicants must seek out a mentor and together they complete a research proposal. Key to the program are the close mentoring by a top researcher and the ongoing, in-depth research required of the student.

Being a Beckman Scholar provides an opportunity to see how research is done in an environment where you're not guided by courses, says Jeffrey Johnston, professor of chemistry, and one of the directors of the Beckman Scholars program in the College of Arts and Science. "It really comes down to, 'There's a problem in front of me and there's not really a script.' That's very different than going into an undergrad lab and being taught the techniques."

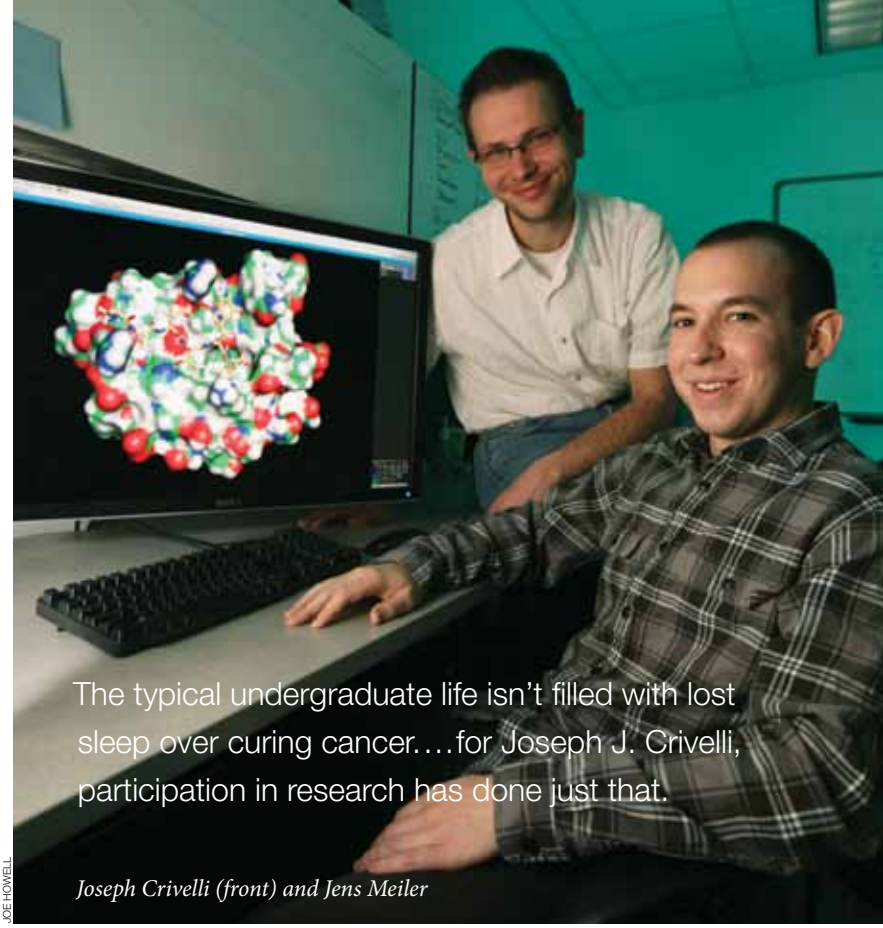
Scholars are chosen for a 15-month period; they receive a significant stipend and commit to working a set number of hours on their research, including summers. Johnston believes the investment reaches far. "There's a sobering moment, where you need to accomplish something because you're really the legacy of this program," he says. "We look for students who show some signs of being good peer leaders."

The Beckman Scholars program was founded by Arnold Beckman—regarded as one of the top inventors of scientific equipment—and his wife, Mabel, through their Beckman Foundation. Its purpose is to support the education, research training and personal development of students in chemistry, biochemistry and the biological and medical sciences.

Vanderbilt was accepted into the Beckman Scholars program in 2008. In addition to the scholars funded by the Beckman Foundation, the College of Arts and Science also names an additional Dean's Beckman Scholar, bringing the total of Beckman Scholars to seven since the program began. Here are a few of their stories.

SUSAN URMY

Katherine Friedman with senior Jessica Miles



The typical undergraduate life isn't filled with lost sleep over curing cancer....for Joseph J. Crivelli, participation in research has done just that.

Joseph Crivelli (front) and Jens Meiler

JOE HOWELL

Jessica Miles, *senior, Louisville, Kentucky*
Katherine Friedman, *associate professor of biological sciences*

DOUBLE MAJORING IN BIOLOGICAL SCIENCES AND COMMUNICATION OF SCIENCE AND TECHNOLOGY, Miles became one of the first undergraduates to participate in the program, though she only heard about it a week before the application deadline. "It was difficult to finish my application on time, but the challenge was definitely worth it," Miles says. That weeklong race to complete the application set the tone for her entire Beckman experience—challenging, interesting and intense.

"The long-term commitment within the Beckman program is really quite unique," Friedman says. "The summer, in particular, provides the student an uninterrupted time in which to pursue their research question and allows them to contribute to the mentor's research program at a depth that is difficult to achieve during the academic year alone."

Miles' work in Friedman's lab has been devoted to exploring telomeres, sequences of DNA at the ends of cell chromosomes, and telomerase, the enzyme that maintains the telomeres. "Telomeres and telomerase have significant medical implications," Miles says, explaining that telomeres prevent the ends of the chromosomes from deteriorating. "The length of the telomere limits a cell's life span, controlling the aging process. Moreover, inappropriate telomerase activity is a hallmark of an estimated 85 percent of cancers."

Miles has learned another significant skill from Friedman: mentoring. After her Beckman Scholars experience, she and a friend created the Vanderbilt Association of Biology Students to mentor other students. "Our goal is to improve the academic experience of our members and to serve the needs of biology students who are not pursuing careers in medicine—a group that had no formal support before the formation of this organization," Miles says.

Joseph J. Crivelli, *senior, Cortlandt Manor, New York*
Jens Meiler, *assistant professor of chemistry and pharmacology*

CRIVELLI AND MEILER HAD ALREADY BEEN WORKING TOGETHER FOR A FEW MONTHS WHEN CRIVELLI WAS ACCEPTED AS A BECKMAN SCHOLAR. Crivelli had pursued the relationship early in his sophomore year.

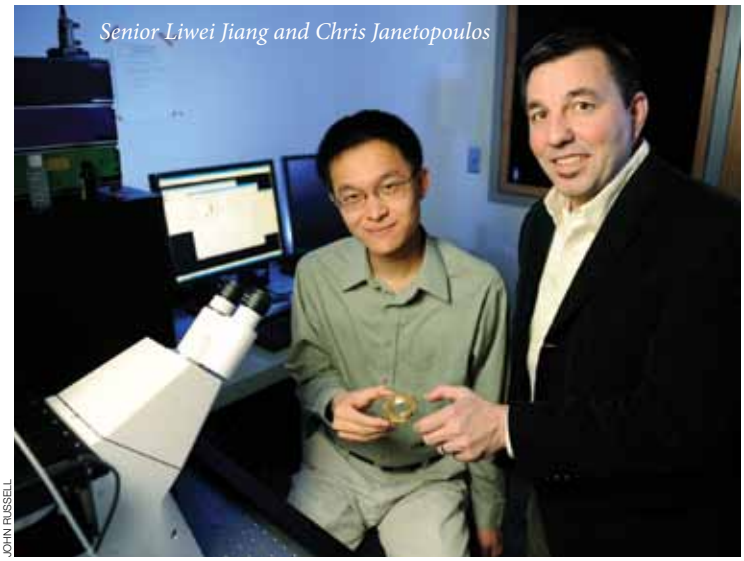
"If you would like to become involved in research at Vanderbilt but are unsure of where to start, I'd recommend that you browse lab web pages, get an idea of which research area you're interested in, and most important, send some emails," Crivelli says. "Don't be shy. There are so many amazing researchers like Jens who are eager to work with undergraduates."

Small wonder: Meiler says that he has gained "fresh and original ideas; thinking out of the box," from his work with undergraduates like Joseph.

Crivelli, a mathematics major, used a molecular modeling program to study how proteins interact with peptides. "If we're able to accurately model the signaling interactions that occur between proteins and peptides in living cells, we can design molecules to block these interactions, potentially leading to new classes of therapeutics to combat cancer and other diseases," Crivelli says. "Another exciting application of my work is the design of protein antibiotics which bind bacterial peptides. With such technology, we can target the multidrug resistant microbes that have invaded our hospitals."

That fits with the larger work at Meiler's lab, which focuses broadly on protein research.

As for the future, "While the theory behind my current work intrigues me, the long-term medical implications are what keep me up at night," Crivelli says. "I'm now most interested in using ground-breaking research for the benefit of the patient."



Senior Liwei Jiang and Chris Janetopoulos

JOHN RUSSELL

"It really comes down to, 'There's a problem in front of me and there's not really a script.'"

—Jeff Johnston, Beckman Scholars program co-director

Tesniem Fathi Shinawi, *junior, Murfreesboro, Tennessee*
David Cliffel, *associate professor of chemistry*

THOUGH CLIFFEL SAYS THE TYPICAL UNDERGRADUATE EXPERIENCE IS "NOT GEARED TO MAKING A MAJOR MARK IN RESEARCH," Shinawi may just be another exception to that rule. She began working with Cliffel at the end of her freshman year; she was named a Beckman Scholar a year later.

During her time in Cliffel's lab, she has been exploring whether optical dyes used to stain cells have an impact on the physiology of the cell.

"Because fluorescent dyes are so common in the scientific community, it is important to determine whether they are causing any unwanted or significant effects to cellular function and metabolism," Shinawi explains. She is currently completing a paper on her findings.

The junior chemistry major also received valuable mentoring for her career path; when she joined the lab, she was unsure of her career goals or even her major. She has since decided to pursue medicine and is considering a combined MD/PhD program. "I have learned how to manage my time, to investigate and solve problems, and to learn and present research information. It has helped me realize that I could incorporate research into my future career goals," she says.

Liwei Jiang, *senior, Durham, North Carolina*
Chris Janetopoulos, *assistant professor of biological sciences*

FOR JIANG AND JANETOPOULOS, THE BECKMAN SCHOLARS PROGRAM ONLY ENHANCED AN ALREADY FRUITFUL WORKING RELATIONSHIP. Jiang, a physics major, had sought out Janetopoulos a year earlier because he learned the professor "had some innovative ideas that were just waiting for people to develop into full-fledged, meaningful projects."

And develop they have. Working with Janetopoulos, Jiang has created a number of microfluidic platforms to integrate into the Commodore Compressor, a microscope-compatible mechanical device that gently squeezes a living cell or organism to hold it still for study. During his time as a Beckman Scholar, Jiang added a perfusion system to provide nutrients to the specimen, allowing it to be kept alive for several hours and enabling scientists to study the effect of chemicals on the specimen.

"Scientists around the world prefer studying live cells and organisms because one cannot observe dynamic, living processes in dead specimens. However, many live specimens move around greatly under the microscope, making studying them difficult or impossible," Jiang explains.

The Commodore Compressor is a unique tool, Janetopoulos explains, and it may have a significant impact in many areas of research. "We realized early on that there were many applications for this device without perfusion. However, adding perfusion to the device as Liwei has done makes the device extremely attractive for other fields as well," he says.

Jiang's progress and well-written description of his project led to him being chosen as one of a select few scholars to present his findings at the annual Beckman Symposium. "A few scholars gave suggestions on how I can further my project," Jiang says. "I have valued their suggestions to this day."

Jiang's suggestions are also valuable to Janetopoulos and his lab. "For a laboratory such as mine that averages four or five undergraduates, having a Beckman scholar in the lab sets the bar pretty high for the other students," Janetopoulos says.

Jiang plans to become a physician with a specialization in research. "Through my undergraduate research experience, I have become convinced that future developments in medicine lie in investigating the human body and disease in a scientific yet creative manner."

You can't judge a book by its cover—but it is fun to see what Arts and Science students, staff and faculty are reading.

Shakespeare's *Richard II, Richard III, As You Like It* and *Henry IV Part 1*

The Routledge Drama Anthology and Sourcebook, edited by Maggie B. Gale and John F. Deeney

—Maddie Fansler, *junior, theater*

The Lazarus Project by Aleksandar Hemon

Madame Bovary by Gustav Flaubert

The Yiddish Policemen's Union: A Novel by Michael Chabon

Phenomenology of Perception by Maurice Merleau-Ponty

Beautiful Democracy: Aesthetics and Anarchy in a Global Era by Russ Castronovo

—Jennifer Fay, *associate professor of film studies and English*

And since film is her field of study, here's what she's viewing:

Marwencol (Jeff Malmberg, 2010)—recently at the Belcourt

The President's Mystery (Phil Rosen, 1936)

The Hole (Tsai Ming-Liang, 1998)

TV on DVD: *Friday Night Lights*

The Sacrament of Language by Giorgio Agamben

The Implications of Immanence: Toward a New Concept of Life by Leonard Lawlor

Hatred and Forgiveness by Julia Kristeva

—Sarah Hansen, *PhD'10, lecturer in philosophy*

"On Faith" blog, Washington Post.com

The Cider House Rules by John Irving

—Gabe Horton, *senior, political science*

Anatomy of the Spirit by Caroline Myss

Double Talk by Virginia M. Scott

Elementary Hindi by Richard Delacy and Sudha Joshi

Rajasthan: Delhi, Agra and Jaipur (Fodor's Travel Guide)

—Todd F. Hughes, *director, Vanderbilt Language Center, and associate editor,* Hispania Journal

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STEVE GREEN

Senior **Will Johnson** is reading *Africa: A Biography of the Continent* by John Reader. (Will traveled to South Africa a few semesters ago as part of Vanderbilt's VISAGE program). The economics major is also reading:

The Book of Basketball by Bill Simmons

From Poverty to Prosperity by Arnold Kling and Nick Schulz

Crash Course in SWEET Entrepreneurship

The hardest I have ever worked in my life was on the Fourth of July 2010. Yet after finishing hours upon hours of arduous work and eyeing the cash my brother and I had earned, tremendous pride swept over me. We had created our own success.

I sat down with my father that March to discuss summer employment opportunities. We brainstormed potential internships, but I really was intrigued when he threw out the idea of starting my own business.

One of my first ideas was an ice cream truck business. I couldn't recall seeing ice cream trucks in town, which seemed peculiar, considering the favorable weather and number of families in our Silicon Valley, Calif. area. After some research, the concept seemed challenging but potentially lucrative. It turned out there were rival trucks, yet I felt confident in my ability to compete. After working through multiple obstacles, I developed what I thought were reasonable projections of the work and money this business would require to get started. I teamed up with my younger brother, Pete, and Foster Brothers Ice Cream Truck was born.

Planned Tweets and Sweets

To deal with area competition, we decided on an alternative business plan. Being in Silicon Valley, we thought it appropriate to utilize technology to gain a following and communicate with customers. We started a website and Facebook page, and planned to use Twitter to update followers on our locations. We also concluded that by providing an upscale experience—with better products, a good-looking truck and friendly service—we could be more appealing than the competition. In doing this, we hoped not only to cater to children, but also to create nostalgia and generate business from all generations. Lastly, we decided that while selling in neighborhoods and at parks could be effective, being available for private bookings such as birthday parties and corporate events could generate more income in a shorter time.

I soon realized that expectations can (and will) clash harshly with reality. Getting the business running was more stressful, time-consuming and challenging than I had envisioned. We bought a former mail truck that needed immense amounts of work. While we tried to do as much as possible on our own, getting the 1984 AM General vehicle painted and trips to the mechanic resulted in higher startup costs than anticipated. I navigated a labyrinth of business permits, licenses and background checks that gave me the feeling I was in over my head. We formed an LLC (limited liability company). I also found an ice cream wholesaler, negotiated discounted prices, kept accounting records and marketed the truck to potential customers. With my brother in school until early June, I did most of the startup work myself and gained an appreciation for the hours that go into building a business.

Dishing Out Ice Cream

As the weather warmed, Foster Brothers Ice Cream finally served its first customers. Business was decent, but it soon became clear that we could not compete with rival trucks in established spots. While waiting outside of an elementary school one day, another driver threatened us, forcing us to leave. We quickly realized that selling at parks and throughout neighborhoods netted relatively low profits per hour.

After working a school function for a few hours and making more than $800, a lightbulb went off. I decided to alter the business plan and pursue private bookings exclusively—and in a more aggressive manner. Instead of attempting to take market share, we would solely address a new, underserved market.

This proved fruitful, and we soon were working up to three or four events daily. We placed business cards in shops and sent

ERIC LAWSON, ALMANACNEWS.COM

FOSTER BROTHERS ICE CREAM

Clockwise from left: Brothers Pete and Joe Foster, successful ice cream entrepreneurs; a crash nearly totaled the truck and the business; Foster Brothers Ice Cream Truck delighted customers large and small.

ERIC LAWSON, ALMANACNEWS.COM

emails pitching our services to area families. Local papers covered our story, aiding marketing efforts. I contacted summer camps, which hired us to treat their campers. Corporate bookings were also very successful; we pitched employee appreciation events to companies and eventually served various Silicon Valley businesses and departments at Stanford University. We even established relationships with catering companies who hired us to handle desserts at their events. The new approach was profitable beyond our wildest dreams, but more important, I loved my job. The sense of ownership was a tremendously satisfying feeling.

On the way home from a successful corporate event on July 15, the business suddenly came crashing down. We were broadsided by a minivan that ran a red light. Pete and I were unharmed, but the truck was nearly totaled. We had to cancel all remaining bookings and close down the company while awaiting a compensation verdict from the other driver's insurance company.

Undeterred and Rolling Again

I learned how important it was that I kept up to date with accounting. I was forced to prove the truck's value and show our lost business bookings. This process also opened my eyes to the complicated insurance world. After six weeks of daily calls to the body shop, mechanic, independent appraisal firms and insurance companies, we finally received compensation. Only then, after locating unfathomably rare spare parts at a junkyard in rural Alabama, were we able to get the truck repaired and working for one final event before retiring for the summer.

Starting this business taught me lessons that will last a lifetime. Foster Brothers Ice Cream made people happy, and we were given a crash course in real life, experiencing extreme highs and lows. I cannot wait to grow the company again this summer; I would love to run businesses for the rest of my life.

Joe Foster is a rising junior majoring in economics. He's put on his marketing, accounting and general manager hat to get Foster Brothers Ice Cream ready for the 2011 summer season and is looking forward to selling ice cream sandwiches, ice pops and shakes all summer long.

BALANCING Act

Valuing teaching and service at a top research university.

by JENNIFER JOHNSTON

Associate Professor of Anthropology Tiffiny Tung perches on the edge of her office chair, mulling how to explain the importance of successfully melding research, teaching and service into her life's work at the College of Arts and Science. Each inform and elevate the other, she begins.

She needn't answer the question, although she has many fine thoughts on the subject. The conversation is punctuated by visits from students turning in research papers or coming to work in the osteology lab. A book Tung is consulting for a research project lies open on her desk. Emails and research permits come in as she plans a summer field project in Peru that will include undergraduate research participants. A grant application for plastic skeletons has just gone into the mail. The skeletons would aid in Tung's public outreach through Vanderbilt's Virtual School, where during the week before, she had reached nearly 500 primary school students in two teaching sessions.

Tung, like much of the faculty in the College of Arts and Science, is a researcher defined more by her desire to serve the advancement of knowledge than by just the body of her work. Vanderbilt is defined as a research institution but its core mission, like Tung's, is much more expansive. What does it mean to be a research institution? What does it mean to be a faculty member in the liberal arts college of such an institution? How do teaching and service fit in?

JOE HOWELL

Tiffiny Tung (center, with students) says her goal—and that of research institutions—is to inspire new generations to become active producers of knowledge.

Teaching + Research + Service

At the very basic level, the purpose of the university is to ask questions and solve problems, a description that can be found on the website of the 63-member Association of American Universities, to which Vanderbilt belongs. Research universities train the leaders of the future by combining access to research and education, and they apply expert knowledge to real-world problems every day, according to the AAU.

At the heart of Vanderbilt is the College of Arts and Science. While its mission statement clearly includes the directive to foster well-taught programs and service to society, good teaching and a commitment to service are more than a common goal. They are a distinct part of the Vanderbilt culture, says John Sloop, senior associate dean of the College of Arts and Science and professor of communication studies.

"People sometimes think that at a research university, the commitment and dedication to teaching is a façade. But that's not true here and I can't stress that enough," he says. "The teaching culture here is rich, robust and vibrant in a way that you might not expect."

Sloop and all administrators serving in the Arts and Science dean's office—including Dean Carolyn Dever—teach every year. For that matter, so does Chancellor Nicholas Zeppos. "We make better decisions because we're in the classroom and it better informs our research," Sloop says.

Marilyn Murphy presenting at Inside Out of the Lunchbox, a series of lunchtime talks sponsored by Vanderbilt for the Nashville community.

JENNY MANDEVILLE

Tripartite Mission

At an institution such as Vanderbilt, the expectation is clear that faculty must be leaders and experts in their fields. But top researchers don't leave their classroom duties to a colleague down the hall. "What I would continue to stress is that every one of them is a really good teacher, too, and I find this unusual when compared with other university environments," Sloop says.

Associate Professor of Earth and Environmental Sciences Steve Goodbred was part of a team that interviewed potential new faculty as his department expanded. Candidates who demonstrate a record of integrating their research into the excellent teaching of undergraduates and service to the community have a leg up on others, he says. Stellar research alone won't make the cut.

"When we hire new faculty, we talk a lot about the university culture … There is not a bar to get over or a secret handshake," says Goodbred, whose research interests focus on river deltas and coastal environments. Instead, at Vanderbilt, faculty search committees routinely search for potential colleagues who are fully engaged in the complete, collaborative academic experience because that engagement meshes more fully with the institution's environment, he says. He came to the College of Arts and Science from a state university where he felt good teaching wasn't valued.

"One reason the tripartite mission works at Vanderbilt is because it's articulated to people when they come in," Goodbred says. "Research, teaching and service together are truly valued. It goes beyond rhetoric. People are willing to put in the effort it takes when they know it is not just disappearing as a checked box on their resume."

All of the professors interviewed for this article teach introductory courses and invite undergraduate participation in their research. In fact, they love teaching introductory classes and watching how students often change their worldviews as the semester progresses. These professors routinely share research findings and articles in class—their own and those of others who challenge or complement their ideas.

"These students are very used to exceeding expectations, but I'm asking them to throw expectations out the window."

—Marilyn Murphy

Murphy's "The Getaway" depicts her feelings toward the challenging, yet satisfying tasks of academic administration.

Inextricably Altered

Professor of Art Marilyn Murphy has been a member of the faculty for more than 30 years and still relishes teaching introductory art courses, "wrestling" the students into better drawing and less conventional thinking.

"These students are very used to exceeding expectations, but I'm asking them to throw expectations out the window," Murphy says. Ultimately the goal is to, literally, "heighten their awareness of the world around them."

Murphy described the reaction of one student, who said that after a class unit on creating the illusion of depth with shadows, "I could hardly walk over here." The student's way of looking at the interplay of light and dark in the world had been inextricably altered. She wondered if her path to class would ever be the same again.

Murphy says her teaching and service to the university have dramatically influenced her work as an artist. She has poured many hours into administrative duties, such as revamping catalog information for studio art, which had course entries jumbled like spaghetti with art history. She was heavily involved in all phases of construction of what is now the E. Bronson Ingram Studio Arts Center. For many years, she was a department chair.

Her dramatic artwork often presents a surprising twist on everyday life. "I started a whole series of falling paper," she remembers. Murphy realized the tumbling sheets represented the overwhelming but ultimately satisfying completion of administrative tasks that furthered and improved the mission of the university. In her piece, "The Getaway," a woman in high heels looking over a fence is caught up in barbed wire.

Patrick Abbot combines teaching with research in his biological sciences lab.

JOE HOWELL

Sparking students' interest helps keep Steven Goodbred recharged and ready for each semester to begin.

JOHN RUSSELL

"After I relinquished the world of chair, I began to do (art that included) a lot of balloons," she says with a smile.

For artists such as Murphy, publication and productivity are associated with staging exhibits and shows, which she has done all over the world. In 2004, the Frist Center for the Visual Arts presented a retrospective of the last 25 years of her work, *Suspended Animation.*

For basic scientists such as Patrick Abbot, associate professor of biological sciences, research life revolves around writing grants, conducting and guiding research, and encouraging ideas and inquiry that lead to more research. In all arenas, the mandate is to communicate information clearly.

"It's very common for me to be working on a paper, and to get up and grab my lectures. My brain is very much into how to best describe a point," he says. He strides into the classroom ready to share and expand on ideas.

Abbot's research focuses on insects, typically those that feed on plants and mammals. The ultimate goal is a more comprehensive understanding of the interaction between species. "It's very hard to find an insect that doesn't have an important function. Sometimes it's just not visible," he says.

"We Do it…Because We Love It"

Good teaching and basic science breakthroughs would not be possible without institutions such as Vanderbilt, Abbot says. Professors, in turn, understand the critical need to "participate in the maintenance and improvement of these institutions." That's where service, such as editing journals, jurying research or serving on faculty committees, naturally comes in.

"The most obvious reason we do it is because we love it," Abbot says. There's also a strong commitment to paying it forward and paying homage to previous mentors. "I don't

know a single colleague who can't point to somebody in their life who was a member of an institution like Vanderbilt who was critical in facilitating their development and getting them to where they are. I don't know anyone who doesn't keep that in the back of their mind when they engage with students."

He relishes the opportunity to follow the careers of students who have matriculated through his lab and gone on to graduate school and careers in the sciences. Many publish papers before they graduate from Vanderbilt, he says.

"They really have a home and the opportunity to be part of something," he says. Students have full access to laboratories like Abbot's and the opportunity for an intensely hands-on experience. "By the time they're done with their research projects, walking into a crowd and doing a PowerPoint presentation is nothing. When they go on interviews and they're asked about what they did, they can be very specific."

His pride is almost parental. "It becomes effortless. I've seen them give better talks than I can give. The educational value is just immense."

Inspiring New Generations

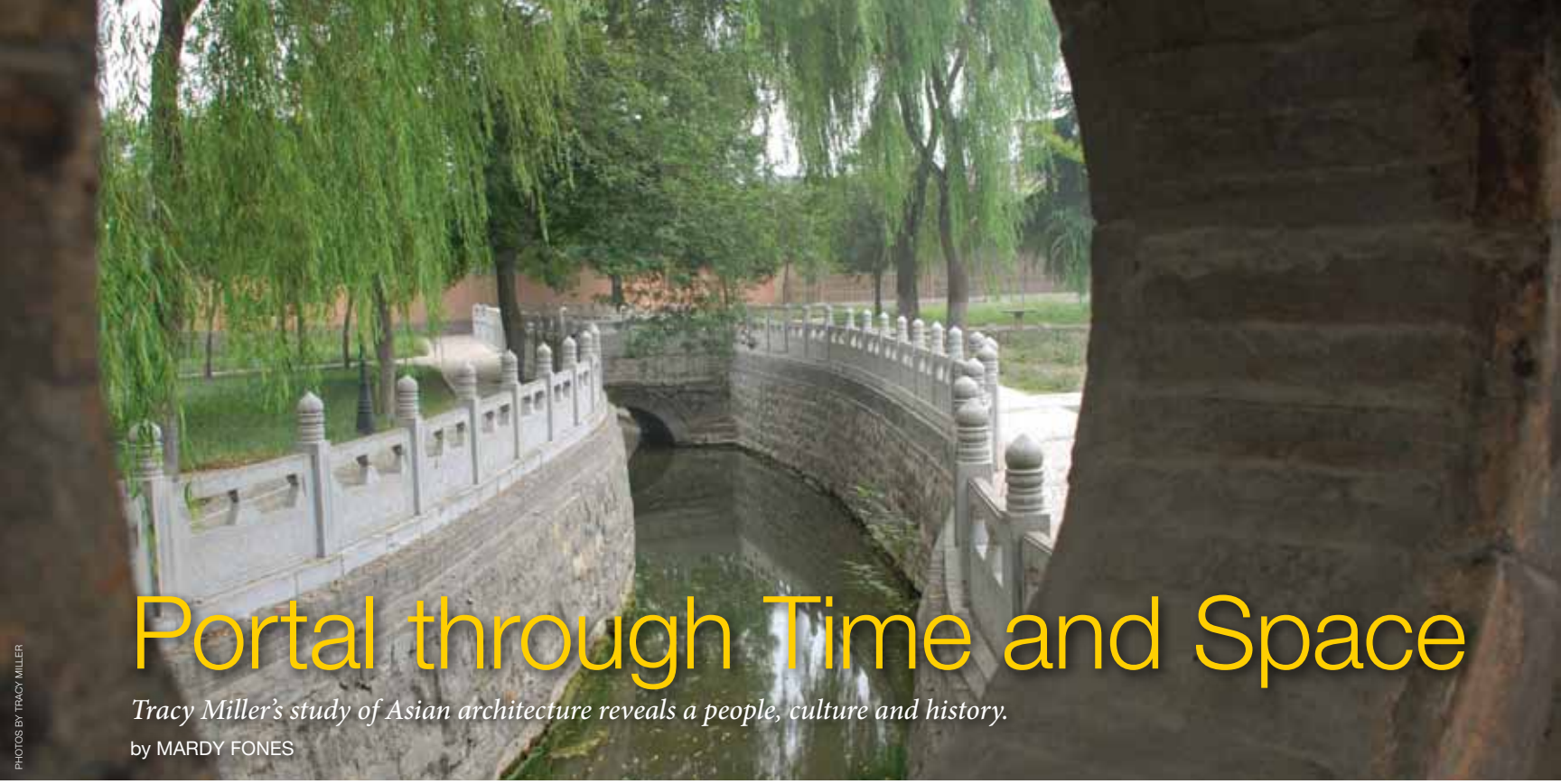
That is part of the ultimate goal of a research institution–to inspire new generations to become active producers of knowledge, according to Tung, who has made a strong commitment to public science education and encourages her students to continue that tradition as well.

"This is a place where new ideas are being implemented and they have the opportunity to tap into that," Tung says.

A bio-archaeologist, Tung takes undergraduates and graduate students to central Peru to study the Wari culture, a pre-Incan civilization that lived in the Andes 1,400 years ago. Undergrads who have completed Tung's osteology course have the opportunity to participate in research and become involved in teaching a similar course on skeletal analysis to high school students in the U.S. and Peru. In the laboratory portion of the class, the undergraduates work hands-on to manage different stations. "When I see my undergrads teach the high school students, I know that they really comprehend the material," Tung says. "I sit and watch it unfold."

While Tung emphasizes that research and teaching can be creatively blended into service, she acknowledges there are many unglamorous challenges to daily work and to keeping a balance. Goodbred agrees.

"I'm not a great multitasker, so at the end of the semester, I'm ready for the semester to end," Goodbred admits. But then, he says, there's a kind of rebirth and a longing to begin again. Often that's fueled by knowing he's created a spark in a student, like the one who sent him a lengthy email thanking him for the way he so effectively taught a course. The email is taped to his wall. "That made my year," he says.



PHOTOS BY TRACY MILLER

Portal through Time and Space

Tracy Miller's study of Asian architecture reveals a people, culture and history.

by MARDY FONES

Buildings represent a three-dimensional record of a people, art and culture. For Tracy Miller, associate professor of history of art, tracking these facets of medieval Chinese life through free-standing timber frame buildings is a passion and an exploration that began early.

"My grandmother painted furniture in the *chinoiserie* style," Miller says, explaining her early exposure to China through the decorative painting technique.

Later, as an art history major at Arizona State University, Miller took a Chinese painting survey class. "In Chinese paintings, there is a sense of a landscape through which you can walk, as though it's a portal, a way to travel through time and space," Miller says. She stepped through that portal, becoming fluent in Mandarin and spending three years studying language and architectural history at Chinese universities in the 1990s. She later earned a doctorate through the University of Pennsylvania's Asian and Middle Eastern Studies program.

History and Culture through Architecture

Miller is the artist in a technically minded family. Her mother is a mathematician and software test specialist. Her siblings and father are engineers. "Math is interesting, but it doesn't thrill me," she says. (Even so, she does find herself with a math renaissance as she runs multiplication drills with her third-grade daughter while driving. She and her husband, Peter Lorge, a senior lecturer in the history department, have another daughter, age 5.)

Miller's academic specialty is the art and architecture of East Asia, with an emphasis on ritual sites in China between 618-1644 C.E., and the ways in which regional identity is expressed through construction techniques.

She makes frequent trips to Shanxi Province, where 70 percent of premodern Chinese architecture is located. Key in her research are the timber bracketing systems that support the roofs of ritual structures such as temples and palaces, bracket systems that are also replicated with masonry in tombs.

JOHN RUSSELL

Tracy Miller admires a Ming dynasty (1368-1644) tomb model house that's part of Vanderbilt University Fine Arts Gallery's permanent collection.

"These buildings and bracket systems are markers of self-awareness and self-confidence in a specific time and place," Miller says, explaining that her work documents Chinese regional identity which persisted despite new rulers who sought to import styles from other regions. "The style of the bracketing is helpful in tracking the path of architecture and culture as the southeast increased its influence over north-central China from the 10th through the 13th centuries."

Each trip to China is both a journey into the familiar and an adventure in the unknown.

Studying the construction styles, Miller is able to create an in-depth picture of the geo-political forces that drove design of ritual sites and influenced architecture, culture and history. Her current research is for a second book regarding Chinese medieval architecture; her first, the award-winning *The Divine Nature of Power: Chinese Ritual Architecture at the Sacred Site of Jinci,* was published by Harvard University Press in 2007.

Adventures in China

China's increasing receptivity to Westerners has expanded and quickened the pace of her research. "I used to spend a lot of time waiting for people to tell me 'No, [you] can't have access,' " she says. "Now you talk to locals and let them know you're not there to steal or take pictures for a glossy magazine, and they say, 'Talk to Mr. Lin. He has the key.' Things are more open now, but it is China. They could close at any time."

Her China trips typically consist of 10 intensely focused days visiting rural locations where she photographs, documents and moves on to the next site. "I'm trying to get a sense of [medieval buildings] while looking at regional and cultural forces through architectural style," she explains. "Ultimately, that means seeing as many free-standing buildings as possible and searching for patterns to see how things are the same, how they differ. If access gets sticky, sometimes I just have to move on."

Each trip to China is both a journey into the familiar and an adventure in the unknown. In many rural areas only the local dialect is spoken, sometimes causing difficulty in communication. This is compounded by her "foreign" blonde hair and fair skin. She recalls trying to get directions to a temple site, while overhearing a growing crowd of curious locals saying, "What language is she speaking? Is she speaking German? Is it English? Russian? Oh, wait, she's speaking Mandarin."

Other adventures are both humorous and intimate. Miller, at 5 feet, 4 inches, says in China she frequently is the tallest woman in a group. In the '90s, an older woman was overcome by curiosity and began stroking Miller's then waist-length blonde hair.

In Taiwan, where Miller and Lorge studied classical Chinese with a local professor, a slip in Chinese etiquette—handing their teacher cash in payment for lessons—once yielded quick correction. "The professor said, 'Next time, use an envelope. This isn't a grocery store,' and handed the cash back," Miller recalls. "In both China and Taiwan, teachers of all levels garner great respect."

In the Classroom

While her trips to China, Japan and Korea further her understanding of art, architectural history and tradition in Asia, Miller prizes her time in the classroom. Current courses include the art of Japan and a study of East Asian architecture and gardens. Last semester, she taught a writing seminar for first-year students that was titled House, Temple, City—Sacred Geographies of China.

"I love teaching freshman. They're so open, so interested," Miller says. "When you teach freshman, you have the luxury of talking about issues as if you didn't know anything. Freshmen will challenge you, not just about your thinking but about the information itself. They keep me sharp."

Miller also serves as acting director of the Asian Studies program in the College of Arts and Science. Her hope is that some of her students will find their life's work in the study of China and build Vanderbilt's role as a center for research of all things Asian.

"Vanderbilt is looking toward finding a footprint in Asia," she says. "As we get to the point in the History of Art program where we're considering a graduate program, some of these students may be a part of it, and we'll be able to attract excellent people who will help us build it."

For the Civil War's sesquicentennial, students and scholars examine its issues, image and legacy.

BEYOND NORTH AND

by SANDY SMITH

Some 150 years after the first shots were fired, the Civil War still raises questions and strong emotions. Some of its foundational issues—whether citizenship can be defined by race and whether states can secede from federal jurisdiction—are as current as today's headlines. Other matters haunt us when we're forced to face them.

Still, Michael Kreyling, Gertrude Conaway Vanderbilt Professor of English, wonders if there will be significant national events to mark the sesquicentennial of the war's beginning at Fort Sumter in April 1861.

"It's hard to find in the Civil War a metaphor for what we're going through now," says Kreyling, who just finished teaching two courses devoted to the topic, including one that compared the 1961 centennial and 2011 sesquicentennial celebrations. "In the 1960s, at the centennial, it was uncomfortably easy to find a metaphor. We remember things not because of what happened in the past, but because there are things we need to think about in the present. I wonder what the anniversary will help us with."

Kreyling predicts that the sesquicentennial will be celebrated largely as a tourist event—but not in the College of Arts and Science. Here, students and professors explore various issues and aspects related to the war.

What it Means Today

That, believes Mona Frederick, executive director of the Robert Penn Warren Center for the Humanities, is vital to Vanderbilt's mission. "It's very important that on our campus we have careful scholarly examination of the 150th anniversary and that we do not allow the anniversary to rehash a perhaps mythical North/South divide," Frederick says. "It's not only the sesquicentennial of the Civil War, but also of the inauguration of Abraham Lincoln, and that comes as we have our first African American president. It's important that our students get an opportunity to study this more deeply and think about it in deep ways, to reflect what it's about and what it means to us today." As part of the dialogue, the center's annual Harry C. Howard Lecture brought historian David Blight to campus in March to discuss Warren's look at the centennial, *The Legacy of the Civil War.*

Campus discussions will not solely look back. Richard Blackett, Andrew Jackson Professor of History, believes that many issues are contemporary. With Kreyling, he team-taught the spring Humanities 161 course, which brought in numerous guest lecturers from around the country.

The Civil War "transformed America from being a series of states—of entities that aspired to achieve the principles that were enumerated in the American Revolution—into a country with a strong central government," Blackett says. "As a result, what we have had ever since are these attempts to question the legitimacy of a strong federal government by individual states. We see it even today… Periodically in its history, America always finds a way to stretch itself over a barrel on issues that you thought were previously resolved."

Shifting Images of the War

The war continues as a popular theme of movies and books and a passion for re-enactors. But its image has changed through the past 150 years. Rory Dicker, senior lecturer in English and women's and gender studies, taught a course that explored the fiction of the war, both that written in the immediate aftermath and that with the perspective of time.

"You can see a change through the shift into realism," Dicker says. "If you think about Stephen Crane (*Red Badge of Courage*) or William Faulkner (*The Unvanquished*), there's more artistic license. Earlier on, as with Louisa May Alcott (*Hospital Sketches*), writers are trying to get at the point of

SOUTH

KURZ AND ALLISON CHROMOLITHOGRAPH OF THE BATTLE OF FRANKLIN, NOVEMBER 30, 1864, LIBRARY OF CONGRESS, PRINTS & PHOTOGRAPHS DIVISION

view of someone who has been there. There is more literary distance in things that were written in the 20th century."

Visual images of the war and of African Americans also have changed in perspective, says Vivien Green Fryd, chair of the Department of History of Art. Her advanced seminar explored how artists dealt with this scar on American history in work ranging from Thomas Ball's depiction of a paternalistic Lincoln hovering above a subservient freed slave in his *Emancipation*

> "We **REMEMBER** things not because of what happened in the past, but because there are things we need to think about in the present."
>
> —Michael Kreyling

Group, to work by Edmonia Lewis—herself part black—that showed slaves celebrating their newfound freedom.

"Slavery is such a fraught issue in the U.S.," Fryd says. "We're supposedly a country founded on the concept of freedom. Yet our founding fathers had slaves, so they themselves made distinctions between white people and African American slaves. Some images in the nineteenth century denigrate African Americans, while others, especially after the Civil War, show genre scenes of everyday life among African American families that depart from mainstream racist caricatures."

Vanessa Beasley, associate professor of communication studies, also myth-busted in her course on the rhetoric of the American experience, tackling the most celebrated figure from the war years. "We have this idea of Lincoln as the reluctant hero," she says. "Lincoln clearly wanted to be president, and he has more ambition than is represented. He's also not as consistently anti-slavery throughout his career as popular culture represents him. He's not always convinced that it's a good idea to abolish slavery in slave states, for example. Often, he's depicted as this isolated man in the White House who knows the right thing to do. There seems to be an ongoing need to depict the presidency in particular ways of this notion of a strong individual who doesn't want to have the power."

Founded Out of the Conflict

Because of the campus' proximity to war sites, Teresa Goddu, director of the American Studies program and associate professor of English, offered a traveling course to area Civil War monuments, memorials and battlefields.

Students in Brandi Brimmer's first-year seminar on black women's activism in post-Civil War America also visited local sites. Assistant Professor of History Brimmer and her students explored locations connected with the life of Callie House, a Tennessee woman born into slavery who later led the fight to secure pensions for slaves.

Vanderbilt University's ties to the Civil War are indelible, and not just because the Battle of Nashville was fought a few miles from where the campus stands. Shipping magnate Cornelius Vanderbilt supported the Union Army and loaned numerous ships to the Northern war effort. Nearly a decade later, he made his first—and only known—significant charitable endeavor: $1 million to found a university in the South to help the region heal from the ravages of war.

It is partially for that reason and partially because it is located in the South that Vanderbilt must lead in discussions of the Civil War, Beasley believes.

"We need to have these conversations for a lot of reasons," she says. "What does it mean to be a leading intellectual center in the South? Do we have a special obligation to the rest of the nation because we're in the South?"

Like the Civil War itself, sometimes the questions have no easy answers.

BRIEFS

STEVE GREEN

Bryan Ringstrand with liquid crystals

Your New TV is So Yesterday

THINK IT CAN'T GET ANY BETTER THAN THAT 52-INCH FLAT SCREEN PLASMA TELEVISION ON YOUR WALL?

Sorry—it may be passé before long, thanks to Associate Professor of Chemistry Piotr Kaszynski and graduate student Bryan Ringstrand. The two have created a new class of liquid display crystals that could make everything from digital watches to televisions more energy efficient, work faster and have better contrast.

"Our liquid crystals have basic properties that make them suitable for practical applications, but they must be tested for durability, lifetime and similar characteristics before they can be used in commercial products," Kaszynski says. (Even so, commercial companies have already expressed interest.)

If they pass testing, the new class of liquid crystals could be added to the molecular mixtures used in liquid crystal displays. Their findings—the result of more than five years of work—adds to the scientific body of knowledge about liquid crystals.

Repairs Better Than Duct Tape

EVERY HUMAN BODY IS, EVEN AT CONSERVATIVE ESTIMATES, MADE UP OF TRILLIONS UPON TRILLIONS OF CELLS. Inside those cells is DNA, which serves as the body's basic operating system—it keeps our hearts pumping, our lungs breathing, cells reproducing and even our hair growing. But DNA can also be damaged—by environmental toxins, radiation and medical treatments like chemotherapy. When that happens, DNA's own enzymes immediately start the repair process on the cells.

Associate Professor of Biological Sciences Brandt Eichman, along with colleagues from Pennsylvania State University and the University of Pittsburgh, has discovered a new way that those cell enzymes detect and repair damage to DNA. Finding this new DNA repair mechanism could lead to improved treatments for a variety of diseases, including cancer.

"Understanding protein-DNA interactions at the atomic level is important because it provides a clear starting point for designing drugs that enhance or disrupt the interactions in a very specific way," Eichman says.

This discovery could lead to chemotherapy drugs that attack cancerous cells without harming healthy ones. Another benefit might be fewer of the harmful side effects associated with chemotherapy treatments such as nausea, hair loss and debilitating fatigue.

Arts and Science graduate student Emily H. Rubinson assisted in the project. Detailed findings of Eichman's research were published in the online journal, *Nature*. The research was funded by grants from the American Cancer Society, the National Institutes of Health and the U.S. Department of Energy.

Got Shopping on the Brain? Blame the Dopamine.

YOU PROBABLY KNOW SOMEONE WHO JUST CAN'T RESIST A GOOD DEAL. Chances are they're on a first-name basis with their UPS delivery person, have a closet full of unworn clothes, and every gadget under the sun stuffed in their kitchen drawers.

Two College of Arts and Science researchers, David Zald, associate professor of psychology, and Joshua Buckholtz, a Ph.D. candidate, have learned that people who act impulsively—perhaps buying everything they see advertised on television—may have higher-than-normal levels of a chemical called dopamine in their brain.

All healthy brains manufacture dopamine, which has important roles in behavior, cognition, voluntary movement, sleep, mood, attention, working memory, learning and more. Dopamine also affects impulsivity and even the urge to acquire things. In healthy brains, sensors keep dopamine at proper levels. But some people have a specific deficit in the way the brain regulates dopamine. In those brains, the levels increase and rash behavior increases as well.

"You can think of it as very similar to a thermostat," Buckholtz says. "The brain has a number of different thermostats, which sense the levels of certain brain chemicals and adjust the output of those chemicals accordingly. We show that one particular thermostat-like mechanism—midbrain autoreceptor regulation of striatal dopamine release—is out of whack in people with high levels of trait impulsiveness."

During their collaboration, Zald and Buckholtz scanned the brains of 32 healthy volunteers with varying levels of impulsivity. Those characterized as more impulsive were given a drug that releases dopamine and their brains were rescanned.

"The people who scored highest on our trait measure of impulsivity had upwards of four times the amount of dopamine released," Buckholtz says.

Because dopamine is produced in the area of the brain associated with reward, excessive levels can lead to much more destructive behavior than overspending—it can cause a strong craving for stimulants such as cocaine and methamphetamine. Additionally, people who tend to seek rewards without considering the consequences may not be able to stop their actions.

A certain amount of impulsive behavior is a good thing, and can lead to creativity. However, Buckholtz and Zald hope that their findings will lead to a better understanding of—and better treatment for—certain psychiatric disorders that involve impulsive behavior. One outcome could be more targeted drug therapies that help the brain's "thermostats" regulate dopamine levels.

BRIEFS

DANIEL DUBOIS

The Powerful Prayers of Martin Luther King Jr.

LEWIS BALDWIN, PROFESSOR OF RELIGIOUS STUDIES AT THE COLLEGE OF ARTS AND SCIENCE, HAS BEEN FASCINATED BY MARTIN LUTHER KING JR. SINCE HIS HIGH SCHOOL DAYS IN CAMDEN, ALA. In his fourth book about King, *Never to Leave Us Alone: The Prayer Life of Martin Luther King Jr.,* Baldwin discusses how prayer and church life shaped King's identity, thought, vision and sense of mission.

Baldwin explores the ways in which King redefined prayer during the civil rights movement and made it an instrument for social change by combining religion and nonviolent activism with prayer vigils, prayer marches, prayer campaigns and prayer rallies. Through these efforts, King widened his appeal to include not only the traditional black churches, but Catholics, Jews and the nonreligious as well.

Arts and Science Shaped the Mind of This Late-Night TV Comedy Writer (Seriously)

Matt O'Brien, BA'01
Writer, *Conan*

PLACE OF RESIDENCE
Los Angeles, Calif.

FAVORITE PLACE TO VISIT
Quonochontaug, R.I.

FAVORITE BOOK
The Ungovernable City by Vincent J. Cannato

FAVORITE MOVIE
Death Wish 3

Turns out liberal arts, the disheveled, right-brained uncle of curriculum theory, holds its weight outside the shadow of Cornelius.

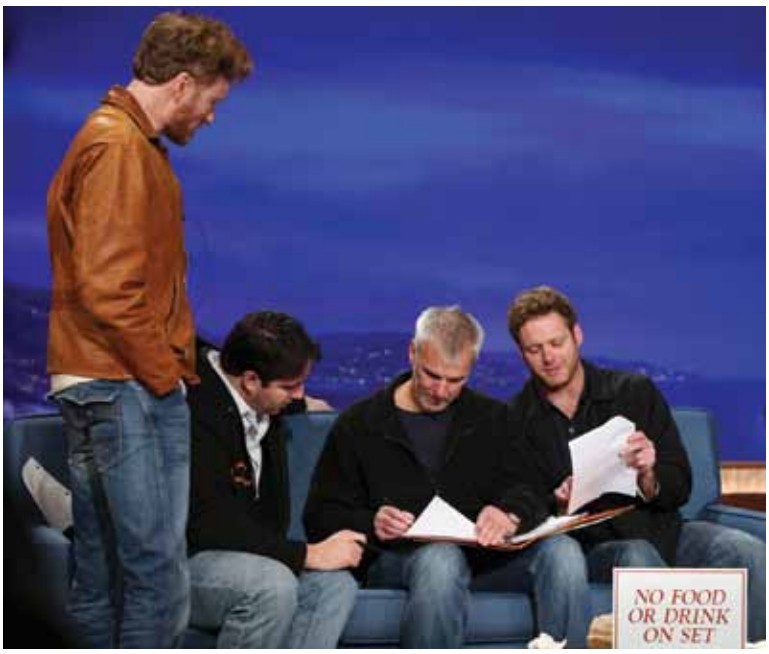
CONGRATULATIONS! IF YOU'RE READING THIS, YOU'VE RESISTED THE URGE TO THROW YET ANOTHER ALUMNI MAILING DIRECTLY INTO THE NEAREST TRASH OR RECYCLING BIN. I don't blame you. Reading that opening sentence was the longest either of us has ever gone without Vanderbilt asking for money. How many more student centers and nude marble carvings of Jay Cutler can the campus possibly hold?

I'm ashamed to admit I haven't given Vanderbilt a dime post-graduation. Sure, they've asked for money, even angrily at times. I was mailed a picture of Cornelius Vanderbilt holding a chainsaw with the words "See you at Homecoming" scrawled across the top in pheasant blood. But for whatever reason (crippling student loan debt), I still haven't managed to send that generous check the university so rightfully deserves. I feel bad about it. Truth is, my Vanderbilt education has served me well. It's helped me navigate the viper's nest of show business, and ultimately, land a job writing for Conan O'Brien (no relation).

How I got to *Conan* is another story in itself, and I won't bore you with the details. No, on second thought, I will. They want this article to be around 1,000 words. I need filler. Sorry.

Shortly after graduating from the College of Arts and Science in 2001 with a degree that combined communication studies and computer science (plug), I moved to New York City to pursue comedy. Through a bit of luck and timing, I was hired as an entry-level assistant at *The Daily Show with Jon Stewart.* The position was the bottom rung on the ladder, the pay was Falkland Islands bad (plug), but it was a chance to see how smart, irreverent comedy was distilled from the inside. I was a doe-eyed fool watching Jon Stewart, Stephen Colbert and Steve Carrell perform and write comedy better than I could ever hope to. It was equally intimidating and inspiring.

For five years, I churned slowly in New York and developed a sense of what it took to be a writer—lofty intelligence and an untreated serotonin deficiency. Like every other comedian in the city, I was looking for a break. Then through happenstance I met



ALL IMAGES CREDIT: MEGHAN SINCLAIR/TEAM COCO

Above left: Comic geniuses (i.e., writers) toil over the script for that day's Conan *show. Matt O'Brien is far right. Host Conan O'Brien is at far left. Above right: For some reason, Conan O'Brien (right) loves punching Matt O'Brien (no relation. No, really.).*

Robert Smigel, the godfather of comedy writing (*Saturday Night Live, Late Night with Conan O'Brien*). Maybe he was drunk, maybe his Jewish guilt was inflamed, or maybe he didn't understand the question, but when I asked if I could pitch him some jokes for his popular character Triumph the Insult Comic Dog, he said yes. Even better, he ended up using some of my jokes on television. It was a small break, but a break nonetheless, and it would continue to grow.

I left *The Daily Show* and was hired to write on several short-lived shows you've never heard of. Some jobs would last six months, others six hours. All that really mattered was gaining experience as a writer and getting laid (not true). Then in late 2007, a much bigger break came my way. Conan.

I had watched *Late Night with Conan O'Brien* almost every night of my life since ninth grade. It was a sad reflection of my social life, and my parents agreed. I carried the habit to college, and in my Lupton Hall freshman dorm room, above my desk, sat a poster of Conan. I idolized the guy. His show had set the pace for an entire generation of comedy writers. Working deep in the Roker-haunted bowels of 30 Rockefeller Plaza and writing for Conan—it just doesn't get more exciting than that.

I've been writing for Conan for four years now and still consider it a privilege. I slink into work, sift through the news, whittle out a funny idea (add fart sounds to Karzai interview), and sometimes it's broadcast on national television 12 hours later. Letters pour in expressing outrage over the controversial Karzai fart interview. My life is threatened. Then Charlie Sheen buys and snorts the ashes of Bea Arthur, and everyone moves on. Still, it's a lot of fun. Getting paid to do it is surreal.

In 2009, I moved with Conan to Los Angeles when he took over *The Tonight Show.* Yes, that *Tonight Show,* the Mount Olympus of comedy. An untouchable institution. Who better to take the reins than Conan, one of the smartest and acclaimed funnymen of our time? As a writer, *The Tonight Show* was the job that would never go away.

Then it did. Jay Leno's primetime show dragged in the ratings, NBC executives retreated to the fetal position, and *The Tonight Show with Conan O'Brien* lasted only nine months. We all lost our jobs.

Luckily, the whole ordeal yielded new opportunities. I toured the country with Conan for two months on his *Legally Prohibited from Being Funny on Television* tour. Thirty-three cities in 60 days. My job was to write local jokes at each stop, usually about an ugly statue or the local stripper who crushes beer cans between her breasts (plug). Then TBS gave Conan a new show and we got our jobs back. Life returned to normal. End of scene.

Finally comes the part of the article where I shoehorn in specific examples of how a Vanderbilt education played an instrumental part in my success. It did. The most important skill for any comedian or comedy writer is a vast frame of reference, and the only way to get it is through a thorough and well-rounded education. I got that in the College of Arts and Science. Turns out liberal arts, the disheveled, right-brained uncle of curriculum theory, holds its weight outside the shadow of Cornelius. The majority of classes I dismissed as teaching me "crap I'll never use," have turned out to be an exceptionally valuable asset.

When I need to write a joke about gully erosion (Geology 100) or Plessy vs. Ferguson (Communication Studies 222) on the same day, I'll be ready. Thanks Vandy, check's in the mail.

Focused for Social Change

Alumna Nancy Farese believes in changing the world one photo at a time.

by FIONA SOLTES

Nancy Farese was once again on foreign soil, reflecting on differences.

LIZ HALE, BSN '82

This time it was a Ugandan village on the banks of the Nile, watching a woman in a "teeny, tiny hut" without electricity use a new solar-powered flashlight. Candles mean danger when flammable malaria nets are nearby, and Farese, camera in hand, was struck by the nuance. It was not the poverty that caught her artful eye, however. It was the sparkling white apron the woman wore, a sign of dignity in a village with no running water.

"It was such a combination of being impressed by the way she presented herself and daunted by the environment she was in," says Farese, BA'83. "I remember thinking, 'I don't know if I could do this.' She was so strong, so much stronger than I am. I love being put in situations that cause you to reflect on your own strength, resilience and morals. It feels healthy to me to do that."

Farese was in Uganda documenting the works of a nonprofit called Living Goods (www.livinggoods.org). It's a network of salespeople who offer products for personal hygiene and prevention and treatment of disease, and it's just one in a long list of agencies Farese has touched.

Matching Photographers with Need

A photographer who first picked up her camera to take snapshots of her five growing kids, she went on to found PhotoPhilanthropy (www.photophilanthropy.org), an organization that helps match nonprofit organizations needing fresh images with photographers willing to take them. PhotoPhilanthropy's mission is to change the world—one photo at a time.

"The genesis of PhotoPhilanthropy was to put an award out there—to see if other people were doing this kind of work—and reward that kind of behavior," Farese says. Launched in 2009, the Activist Award, which highlights photo essays of nonprofit work in various categories, drew 209 submissions from 63 countries in that first year. In 2010, there were 256 entries from 83 countries.

The initial interest and success helped Farese see she was on to something; in addition to the matching assistance, PhotoPhilanthropy also helps the photographers get their photo essays seen. The group encourages photographers to donate their efforts whenever possible; as for Farese, she splits her work between professional paid gigs and non-paid adventures.

"We actually have a very specific protocol we suggest to all of our photo-philanthropists," she says. "We work with students, adult amateurs and professionals, all levels of sophistication, and when you're interacting with a nonprofit, you want them to realize that something very credible and positive can come out of this."

Storytelling with a Purpose

Cate Biggs, a freelance writer and global issues consultant, met Farese in 2007 through a mutual acquaintance. As both were interested in using storytelling as a way to support groups doing important work in Africa, Biggs says, the two became fast friends.

"From the beginning, I think we recognized in each other a sense of humility about our roles as storytellers and a desire to always be reconsidering what we think we know—about others and the world," Biggs says. The pair traveled in Liberia with Mercy Corps in 2009, documenting programs aimed at empowering women in a country now led by the continent's first female head of state, President Ellen Johnson Sirleaf. They tacked on work for several other organizations while there, and in November 2010, went to Ghana and Liberia with The Carter Center, founded by former President Jimmy Carter and his wife, Rosalynn. They're now working on a book to help educate the public about The Carter Center's efforts in peace, governance and mental health. The book's second purpose, Biggs says, is "to inspire PhotoPhilanthropy's base to hit the road."

"Nancy is truly one of my favorite people in the world: a friend, mentor and model," Biggs says. "I don't know that I have ever met anyone like her, a blend of warm and gracious Southern manners, genuine compassion, professional rigor, sense of humor and deep intellectual curiosity. She is tremendously accomplished: fabulous kids, a community leader, a no-nonsense business woman, a superlatively talented photographer, a great sense of style, and all the while, really down to earth, open and downright fun."

Amazing Stories Beautifully Told

Farese, who grew up in Georgia, now lives in San Francisco with her husband, fellow Vanderbilt grad Dr. Robert Farese Jr., MD'85, and family. The kids who first inspired her photography are now ages 16 to 24. When she's not snapping photographs, involved in community activities or on the road, she enjoys reading, trail running and sharing stories with other Vanderbilt friends who live in the area.

A French and economics major, Farese says her Arts and Science experience fostered numerous long-term relationships, similar to those relationships she builds now. She also credits her study abroad through Vanderbilt in France as helping her develop interest and comfort in being in different cultures and around different languages and people.

She says she's frequently surrounded by different cultures, languages and people today. "That's now what I do a lot," she says. Her list of travels, in addition to Uganda, Liberia and Ghana, includes Kenya, Tanzania, Haiti, and in 2011, Vietnam, with friend and fellow Vanderbilt alumna Liz Schwartz Hale, BSN'82, also a photographer.

"One thing I always encounter is this feeling of disbelief that I'm right here and experiencing this thing," she says. "The camera, in some way, has become a tool that leads me to—or creates access to—really interesting cultural experiences."

And she's anxious for others to do the same. Recently, she returned to campus to share her work and experiences with undergraduate photography students.

"It's eye-opening as Americans to see what people all over the world are doing to make people's lives better and to address critical need in their communities," she says. "There are amazing stories out there that can be beautifully told."

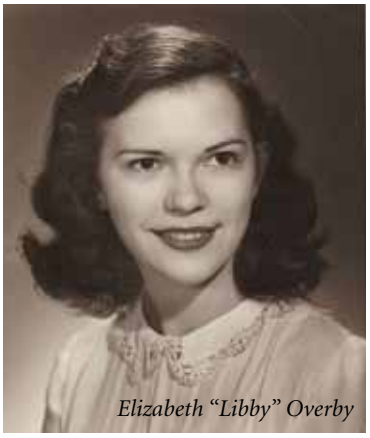
"It's eye-opening…to see what people all over the world are doing."

NANCY FARESE

Traveling for the Carter Center, Farese captured dignity and beauty in Ghana (above) as well as this woman and child at Phebe Hospital in Liberia (below).

Beyond Hardship, Tragedy and Loss, One Family's Legacy of Hope

IN LACY OVERBY'S FINAL YEARS, HE BEGAN TELLING HIS WIFE OF 45 YEARS AND CHILDREN STORIES THEY'D NEVER HEARD. The stories were completely surprising, yet completely consistent. They had always known what was important to him, but now they finally knew why.


Elizabeth "Libby" Overby


Lacy Overby

He talked about being a boy on a tobacco farm lost in the Depression, a mother having a nervous breakdown, a sister's death from tuberculosis, and the day his father literally dropped him off at the side of the road because he could no longer afford to care for Lacy and his sibling.

Lacy Overby was only 10.

The Lacy Overby his wife and kids knew was an accomplished scholar and researcher known for helping isolate the Hepatitis B and C viruses. He had earned bachelor's, master's and doctorate degrees in science and physics at Vanderbilt University (BA'41, MS'45, PhD'51), and had taught chemistry there in the '40s. He and his wife, Elizabeth "Libby" Hulette Overby, BA'47, deeply instilled the values of education and working for the greater good in their children.

So deeply ingrained are those values that the family has gone on to establish three scholarships in the College of Arts and Science. The first was from a family tragedy in 1959, then a second in Lacy's name upon his death in 1994, and a third in Libby's. That third scholarship was established from a bequest in the will of their daughter, Brooke Overby, a Tulane University law professor who died suddenly in 2009 from a brain hemorrhage.

"What they taught us was that education empowered a person to fulfill their dreams, but your dreams should always include making the world a better place," says Megan Overby, the eldest of the Overby children. "It was a lesson by example. Our father helped create a number of important discoveries that really altered the lives of millions of people.

"As a child, when you have a parent who does that kind of thing, you can't help but internalize that mindset toward the meaning of life."

Dream Big

The family received equal inspiration, however, from their mother. At a time when most women who worked were either secretaries or teachers, Libby studied chemistry.

"My mom was an original feminist," says Ross Overby, who has spent close to 30 years as an environmental engineer and consultant. "Susan B. Anthony would have loved her. She had guts. She always believed if you had an aspiration, a dream of something big, that you should just do it." Her son has followed that advice and recently ran for Congress.

Libby Overby grew up in a well-to-do home in Frankfort, Ky., and though her father believed money spent on a woman's education was money wasted, she found a way to earn her degree anyway. Libby Overby also watched her own mother's independent—yet compassionate—spirit in action, as down-on-their-luck townsfolk knew to meet her on the back porch if they were in need of food.

"Now, when we'd visit Frankfort, Mom would never say, 'Ross, Scott, Megan, Brooke, do these things,'" Ross Overby says. "It was more subtle. It was more like, 'Dream big.' When you mix the intellects of my parents together, two people with differing but complementary backgrounds, it was like gasoline and a match. They go together quite well if you want to make a fire."

Lacy and Libby Overby instilled a commitment to learning and giving in their children, from left, Scott, Brooke, Megan and Ross.

When Libby and Lacy Overby, who met while students in the College of Arts and Science, were a young couple, that fire could easily have burned out. They had a son, Stevie, born after Megan, who died from an accidental poisoning at age 3.

"The loss of a child at any age is unimaginable," Megan Overby says. "But to lose such a young child like Stevie in such a manner? Despite their grieving, throughout my life, I always felt that they were fully engaged in my development and education. The lesson was not to reflect on one's misfortune, no matter how grievous that may be, but to move ahead…. There will always be people who have more problems than we do."

The Overbys moved ahead by establishing a scholarship in Stevie's name before the boy had even been buried.

"It wasn't like they hemmed and hawed," Ross Overby says. "It was just, 'This is what has to be done.' People were sending sympathy notes and including $5 for the scholarship. There was an immediate need to move on in a constructive manner."

Find a Unique Path

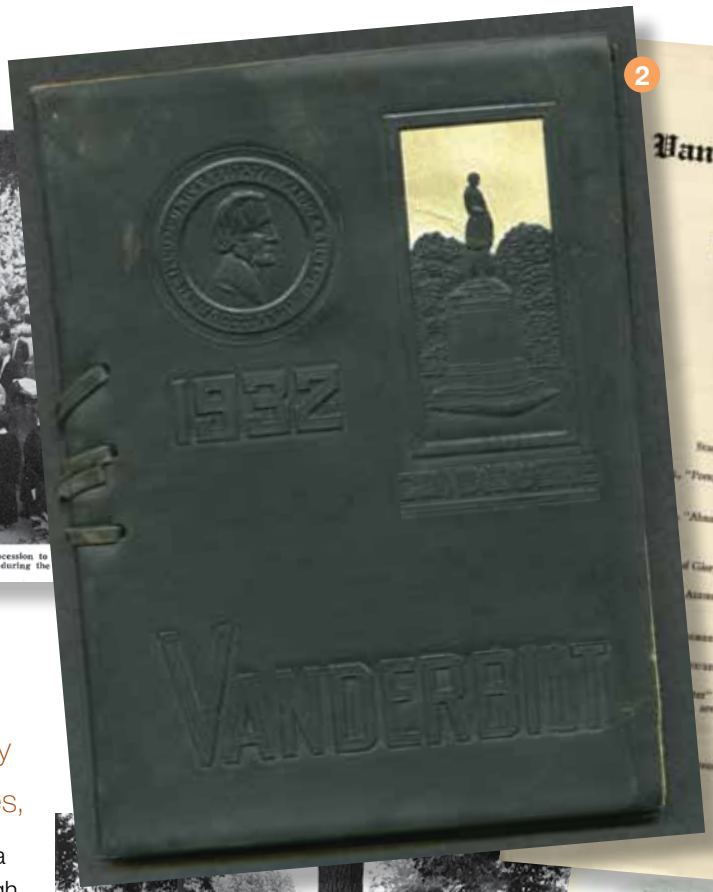
As the surviving four kids grew up, their parents spoke of Vanderbilt as the place they became themselves. The children were expected to go to college, but not necessarily there. Each was to find a unique path, with the promise that the cost of an undergraduate degree would be covered. There was, however, one stipulation; the family lived in Illinois at the time, and the kids were told to travel out of state for school for the experience.

Scott Overby, the youngest of the Overbys and now a vice president of data warehouse and decision support at Discover Financial Services, applied to Vanderbilt, but attended Emory University after being wait-listed. Megan received a Ph.D. at University of Nebraska-Lincoln in speech-language pathology. Brooke—who got a pass on going out of state since she'd attended boarding school—went to Northwestern University, then became an attorney and highly esteemed professor at Tulane University Law School. And Ross, wanting to head west, earned a bachelor's at the University of the Pacific and an MBA at the University of Wisconsin.

Yet each member of the family remains connected to the College of Arts and Science through the scholarships and the personal letters they receive from scholarship recipients, as well as the knowledge that without Vanderbilt, no one in their family would have been the same.

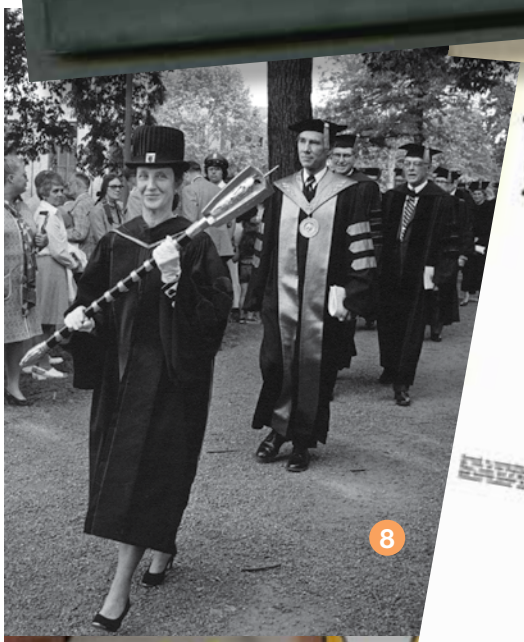
Brooke's decision to honor their mother with a need-based scholarship (plus add funds to the others)—bringing the total value of her bequest to just over $1 million—more than met with family approval.

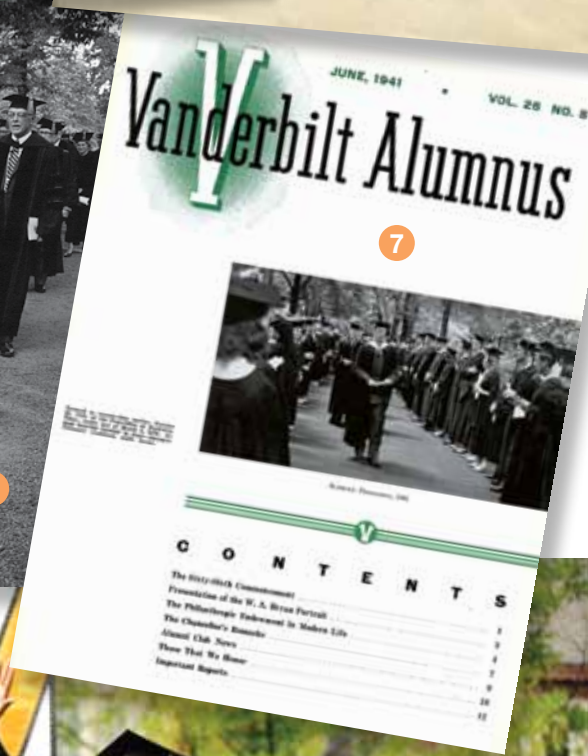
"We've all been impressed with the way Vanderbilt has clearly provided value back to students with these scholarships," Scott Overby says. "They're treated as investments. I've never personally met any of the kids that have benefited, but it doesn't matter. The letters from them are so important. I share them with my own kids, too. Maybe they'll have a little bit of understanding of the legacy my parents created."



One year's photo of gowned Arts and Science graduates can appear like that of any other year—except for the hairstyles, shoes, glasses and of course, the statistics. Take a look at Commencement in past years as seen through the pages and lenses of campus media and photographers. (Facts and stats are from Commencement 2011.)

- 18,000 programs printed
- 43 faculty marshals used to organize graduates and faculty
- 75+ volunteers
- 27,550 chairs and 27 tents set up
- 18,000 bottled water containers for guests and graduates
- 300+ recycling containers
- 20,000 hand fans distributed
- Estimated 17,000–20,000 graduates, guests and faculty on Alumni Lawn
- In the 2010 ceremonies, a graduate's name was called every 3.8 seconds (adding one second to each name would add 26 minutes to the event).





(1) Vanderbilt Alumnus, *Vol. 45, No. 5, May–June 1960; (2) Commencement program, 1932; (3)* Vanderbilt Magazine, *summer 2008; (4)* Vanderbilt Today, *Vol. 23, No. 1, summer 1983; (5)* Vanderbilt Today, *Vol. 27, No. 3, summer 1988; (6)* Vanderbilt Register, *Vol. 15, No. 31, May 6–19, 1996; (7)* Vanderbilt Alumnus, *Vol. 26, No. 8, June 1941; (8) Faculty Senate Chair Mildred Stahlman, professor of pediatrics; Chancellor Alexander Heard; Board of Trust President Sam Fleming and former Board President William Vaughn, 1975; (9) Awarding of Arts and Science degrees, Commencement 2010.*

IMAGES REPRODUCED COURTESY OF VANDERIBLT UNIVERSITY SPECIAL COLLECTIONS AND ARCHIVES. STATISTICS COURTESY OF THE COMMENCEMENT OFFICE.

Strawberry Fields Forever
It took 5,000 pounds of sweet, ripe Driscoll strawberries to feed the masses at Vanderbilt's Commencement on May 9. More than 3,000 undergraduate, graduate and professional students received their degrees, and thousands more family and friends joined them at the Strawberries and Champagne Celebration following graduation exercises. Photo by John Russell.

Graduates Celebrate 108th Commencement

Plant Operations staff makes Commencement go smoothly

by Lew Harris

Peck. There are 26 events relating to commencement all taking place in less than 24 hours, and all set up by Hughes, Wilkerson and their co-workers.

They transport stage parts to Alumni Lawn, Curry Field, Library Lawn, the Student Recreation Center, Magnolia Circle and Memorial Gym. The gym is fully prepared to house graduation ceremonies in the event of rain. The last time rain forced the exercises indoors was in 1970.

While carpenters, painters and electricians complete the assembling of the stages, Wilkerson and Hughes' crew begins the arduous task of placing 12,745 chairs on Alumni Lawn in perfect rows. The spacing between rows and seats in the graduating students seating area is wider than the guest seating area in order to accommodate the bulky academic regalia. The aisles used by the processions are wider than the ones dividing the seating blocks. The preparation is that detailed.

Visitors and the Vanderbilt community are impressed by the precision of the rows. String is staked to the ground to mark the rows. The chairs are then carefully placed one by one to form a row of 25 chairs. There are never more than 25 chairs in a row in order to prevent those sitting in the middle from having to step over a lot of people. On rows that must be curved to conform with the lawn, the crew uses a curved pipe.

The crew places the chairs beginning from the foot of the stage and moving back to the end of the lawn, marked by the flagpole. It takes about four or five days of work by the eight-man crew to reach the flag pole.

"We look forward to getting to the flag pole," Hughes said. "It sure looks like a long way off when you first start."

The crew places another 6,500 chairs at various venues for the conferring of degrees for the School of Law, the Owen Graduate School of Management, Peabody College and the Graduate School. The ceremonies for the Schools of Medicine, Nursing and Divinity take place indoors.

The Graduate School ceremony is held in the Student Recreation Center, site of an cocktail reception for parents and friends of undergraduates given by the Alumni Association the night before graduation. That means the crew can't finish setting up the stage and chairs for the commencement ceremony in the SRC gym until after the cocktail party.

"We look forward to getting to the flag pole. It sure looks like a long way off when you first start."
—Don Hughes

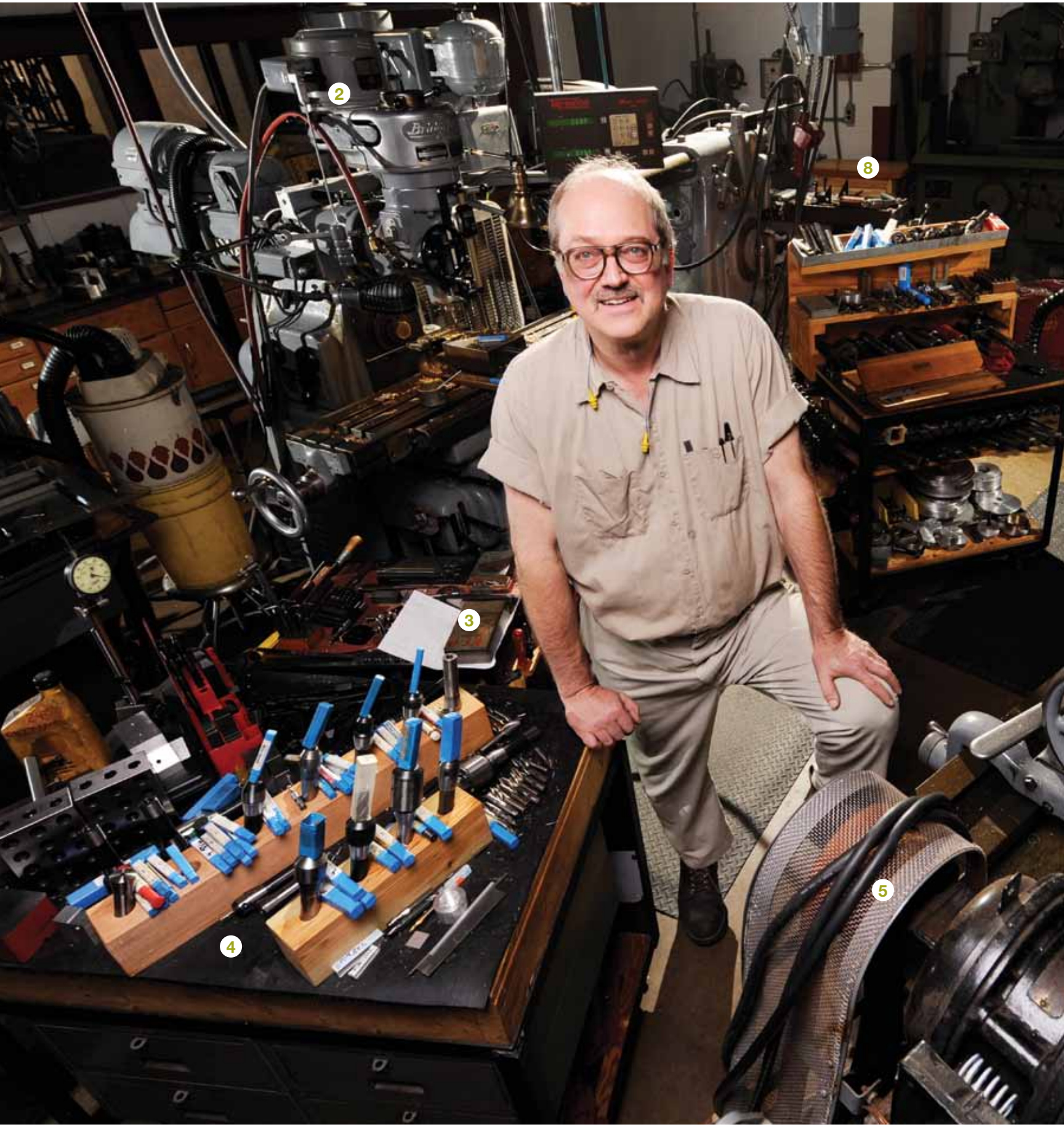
"I think they finished about 1:30 or 2 a.m. last year," Peck said. "The slept until 4 a.m., then got up again and started to work. I was on campus at 6 o'clock that morning and they were already on Alumni Lawn."

The crew's work is not over when the festivities end. More than 20,000 chairs will be struck and loaded into trucks. The Student Recreation Center set-up will be dismantled as quickly as possible to give access to the basketball courts. Beginning early the next week, the stage parts will be labeled, dismantled and stored for the next year.

"Commencement is the single biggest event we do each year," Wilkerson said. "There are lots of people here."

Photo by Billy Kingsley

Crew chiefs Sam Wilkerson (left) and Don Hughes take a seat after they and their Plant Operations co-workers set out 12,745 chairs on Alumni Lawn for Friday's Commencement ceremony. They also set up about 6,500 chairs at other campus venues for the conferring of degrees for the School of Law, the Owen Graduate School of Management, Peabody College and the Graduate School. The ceremonies for the Schools of Medicine, Nursing and Divinity take place indoors.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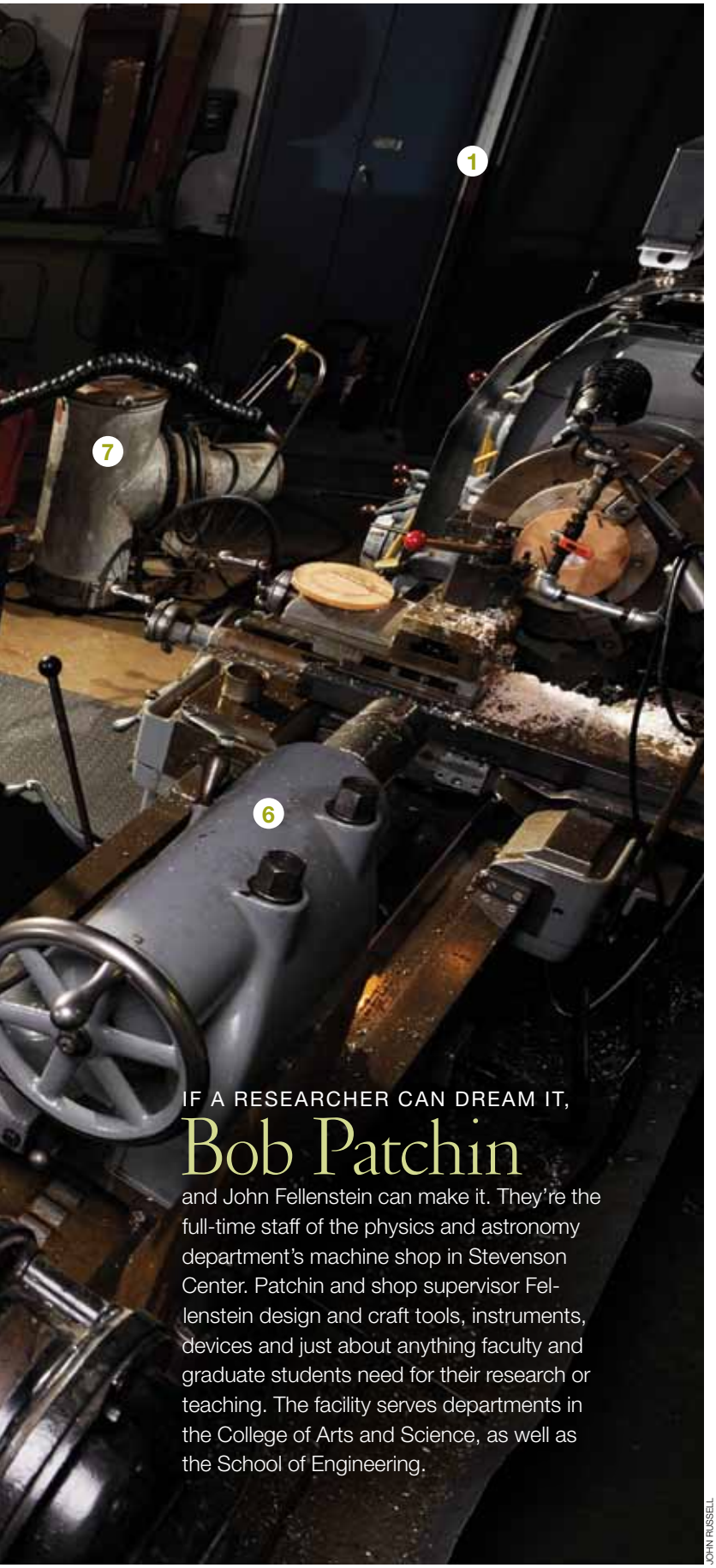

IF A RESEARCHER CAN DREAM IT,

Bob Patchin

and John Fellenstein can make it. They're the full-time staff of the physics and astronomy department's machine shop in Stevenson Center. Patchin and shop supervisor Fellenstein design and craft tools, instruments, devices and just about anything faculty and graduate students need for their research or teaching. The facility serves departments in the College of Arts and Science, as well as the School of Engineering.

JOHN RUSSELL

1 Every bit of space in the 3,000-square-foot machine shop gets used. Equipment includes four lathes, five mills (including two modern CNC machines), four drill presses, two surface grinders, five saws and six vacuums. The shop also has woodworking facilities, complete with table saw, jointer and panel saw. The wood shop made nonmagnetic items for John Wikswo, Gordon A. Cain University Professor and A.B. Learned Professor of Living Physics, to use for his SQUID magnetometer research.

2 Patchin says he can make just about anything on this Italian-made milling machine (circa 1950s). He's used it to craft tiny valves to go inside robotic arms for use by disabled veterans, and he used it to machine welded flanges onto pipes four inches across and 16 to 18 feet long.

3 A tool and die maker, Patchin figures out how to build things others envision, either from scratch or by modifying existing items. The shop makes one-of-a-kind pieces, prototypes and equipment used in labs and demonstration classes. Patchin says he particularly enjoys "demo work," creating or adapting the equipment used to demonstrate physics principles to classes. On his bench currently are components that professors will use to build a light bulb demo.

4 A library of cutters provides the right shape, tool and hardness to cut almost anything, including materials for an engineering professor's research with diamonds.

5 This nearly 100-year-old universal shaping saw is nicknamed Old Betsy. "It'll cut off large stainless-steel pieces very accurately, which is a tough job because the material is very hard, and that saves machining time later on," Patchin says. "It'll cut very closely, even as ancient as it is."

6 A WWII ordnance plant veteran, this lathe still puts piles of chips on the floor. Patchin modified the heavy machine to incorporate a programmable digital readout system.

7 The shop's previous supervisor had a keen eye for surplus equipment. Despite its scruffy appearance, this U.S. Navy surplus vacuum proved its worth when the shop worked on a project for Professor Victoria Green. They cut G-10 composite material, which has slivering and dust qualities somewhat like fiberglass, and they ran the vacuum constantly for nine months to clean up scraps. "It just sat there and gobbled it down, we'd empty it, and put it on every day, it was just great for that," he says.

8 The most unusual device he was ever asked to build, Patchin says, was a lizard track. A post-doctoral researcher in biological sciences wanted to keep his Anolis lizards healthy, so they constructed a running track. It used an electric drill to vary the speed. A close runner-up was crafting a worm-rooping stick for Ken Catania, associate professor of biological sciences, who was studying the phenomenon of worm grunting.

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Where Are You? Answer: Delighting in spring's return to the courtyard between the E. Bronson Ingram Studio Arts Center and Student Life Center on 25th Avenue South.

STEVE GREEN

GREEN LIGHT(S)

Campus plant operations crews replaced 150 50-watt halogen light bulbs in Buttrick Hall with 6-watt light-emitting diode (LED) bulbs. The new LED lights will save 57,000 kilowatt-hours per year and avoid producing approximately 34 metric tons of greenhouse gas emissions annually. The College of Arts and Science supported and funded the changeover, as well as a lighting retrofit of the Stevenson Center Math Building perimeter. Workers replaced approximately 70 incandescent bulbs there with LED bulbs, which last a minimum of five years. They are in the process of doing the same to the perimeter lighting in the Stevenson Science and Engineering Library courtyard and upgrading the pole lights on campus to LED bulbs.