

WINTER 2013

MAGAZINE

We will  
remember  
in November  
**2014**

Stop making our  
state the subject of  
The Daily Show

Public  
Schools  
Matter

Welcome to  
North Carolina  
Set clock back 50 years

EDUCATION  
should NOT  
be a debt  
sentence

# A shift in position

Changes made by North Carolina's legislature have some wondering whether Terry Sanford's brand of moderation is over.

**24**





## The Rosners

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### Advancing Engineers

Steve Rosner B.S.E. '83 didn't come to Duke with an agenda. As a freshman in 1979, he was simply excited to meet his hallmates and cheer for Duke basketball.

Oddly enough, it was a homework assignment that first attracted Rosner to engineering. His roommate's work intrigued him, so Rosner began exploratory discussions with Pratt School of Engineering faculty. Soon after, he transferred into engineering from Trinity College of Arts & Sciences.

"I have great loyalty to Pratt for the support they gave me when I transferred," he says. "I had a great experience at Pratt—it was like being in a big family. I made lifelong friends, and the value of my degree has only appreciated since graduation."

Rosner and his wife, Carol, wanted to give back to Duke in a way that was customized and personal. The couple created two planned gifts, naming Pratt as a beneficiary in their estate plans and creating a charitable remainder unitrust that will provide the Rosners with an income after retirement and a significant donation to the school.

"Pratt is engaged in exciting efforts with accomplished people; I knew it could really benefit from our support," he says. "Working with the Office of Gift Planning helped us realize how many opportunities there are for people of all means to make a difference."

You, too, can give in ways that make a lasting impact on the people and places you love at Duke. Contact our team of gift planning experts to explore how giving to Duke can also help you achieve your personal and financial goals.

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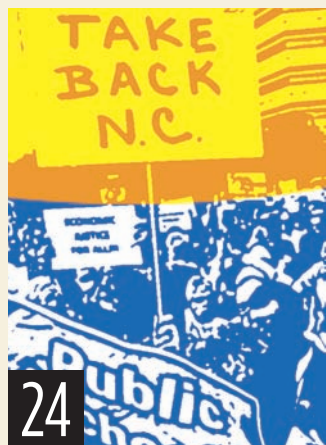
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By Barry Yeoman

To some faculty members and alumni, the North Carolina legislature's recent rightward turn is a dismantling of Terry Sanford's legacy.



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By Bridget Booher

Duke Sports Medicine addresses the care and maintenance of the world's most complex machine: the human body.



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By Robert J. Bliwise

The long journey and lasting legacy of human-rights proselytizer Raphael Lemkin—from occupied Poland to Duke to the United Nations



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By Karl Leif Bates

A Duke conservation project is building partnerships that help Madagascar's lemurs by helping its people.

COVER: Illustration by Lacey Chylack

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Duke University Archives





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villion!

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A photograph of the Penn Pavilion, a modern building with a glass facade and a curved, illuminated roof. The building is set against a backdrop of the Cathedral of Learning, a large Gothic-style building with two prominent spires. The scene is captured at dusk, with the setting sun casting a warm, golden glow over the entire scene. The glass facade of the Penn Pavilion reflects the surrounding environment, including the Cathedral and the sky. Several people are walking on the sidewalk in front of the building, and the overall atmosphere is one of architectural grandeur and modern design.

# FULLFRAME

A certain glow: The setting sun adds a new hue to the Penn Pavilion, a future events center and a temporary dining area during West Union renovations. *Photo by Megan Morr*



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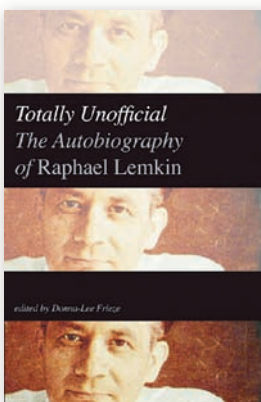
# Forum

## UNDERTHEGARGOYLES

How was the scholar Raphael Lemkin—the law professor who came to Duke as a refugee from Europe under the Nazis, invented the term “genocide,” and helped give it international resonance as a crime—perceived in his day-to-day dealings? One of the best persons to answer that question is Donna-Lee Frieze, who assembled the new Lemkin “autobiography,” *Totally Unofficial*.

That process of assembly was complex. Lemkin, at the time of his death in 1959, when he was deprived of resources, friends, and optimism, hadn't quite completed the autobiography. In wrestling with the completed portions, Frieze had a hard time reading many of the faded pages. She worked every day on the project for more than four years.

Among the findings that surprised her: “One of the aspects of his personality that has been overlooked, but that reveals itself in the autobiography, is his ability to counterattack his opponents.” Lemkin knew international law as well as if not better than most, she says. In the face of criticism of the campaign for an international convention against genocide—criticism that he was too naïve, too trusting of the law, too consumed by the personal tragedy of the Holocaust—Lemkin would offer a combination of shrewd legal ability and abundant charm.



Lemkin, profiled in this issue, loved his work as a law professor, Frieze says. Perhaps related to his attachment to teaching, Lemkin developed into an accomplished storyteller. “Had he had time to edit his last couple of chapters, I think it would have read almost like an adventure story. Had he written in his mother tongue, I think he would have been a great writer.”

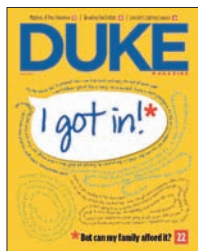
During his time at Duke, Lemkin, whose family in Poland largely was wiped out in the Holocaust, began the process of shaking off his survivor's guilt, becoming comfortable on the speaking circuit, and channeling his grief into advocacy. Duke—which, Frieze observes, was probably the first university in the world to have a course on genocide—was a formative (and protective) environment for Lemkin. At Duke he reconnected with “a fatherly figure,” his law-professor colleague Malcolm McDermott, and engaged with a wider community of legal thinkers. It was McDermott, Frieze points out, who rescued Lemkin from a terrible fate in occupied Europe.

One of the most thoughtful responses to the publication of the autobiography, in Frieze's view, comes from a commentary in *The Jewish Daily Forward*. “Lemkin has been called a prophet, and the term is not inapt. He understood humankind's capacity for destruction earlier and more fully than any of his contemporaries,” according to the commentary. “Critics can argue that Lemkin accomplished nothing. Genocide marches on. But Rwanda and Srebrenica are not refutations of his legacy; they are affirmations of his prescience. Without Lemkin, they would have been atrocities. In the light of the Genocide Convention, they were crimes.”

—Robert J. Bliwise, editor



**EDITOR'S NOTE:** There were several factual errors in the story "Why Football Matters" (Fall 2013). Specifically, the story states that Duke reported \$20.5 million in football revenue in fiscal year 2011-12, and \$25.4 million in expenses. The story further states that Duke spends more than any current or incoming conference school on football, and is the only ACC program to "operate in the red."



In fact, the publicly available reports from the Department of Education that are cited as the source note that Duke football had \$25.4 million in revenue, and \$20.5 million in expenses, for a surplus of \$4.9 million. Using just those numbers, Duke ranks sixth out of fifteen ACC programs (including Notre Dame) in football expenses. Those numbers are further distorted because they also include \$3.5 million of "Indirect Facilities & Administrative Support" added to both the revenue and expense. This is a form of depreciation that the university had historically added to the totals based on an interpretation of the NCAA Agreed Upon Procedures. Very few schools use this interpretation because it artificially overstates revenue and expense.

When the amount for Indirect Facilities & Administrative Support is eliminated from the fiscal year 2011-12 numbers, the total football expense and revenue would be \$17 million and \$21.9 million respectively. The \$17 million expense figure places Duke eleventh out of fifteen in the ACC.

Also, there were two errors in the accompanying timeline. The Jan. 1, 1942, entry should have noted that the Duke Blue Devils were upset by the Oregon State Beavers in the Rose Bowl, not the University of Oregon Ducks. The Jan. 2, 1960, entry should have been dated Jan. 2, 1961, and that Cotton Bowl appearance was Duke's last bowl appearance for twenty-eight years.

## FORUM

*A sampling of opinion from the website*

### What Price College?

I have been troubled how Duke's cost (and college tuition in general) has soared, at times doubling inflation, over the last nearly twenty-five years. My first year at Duke in 1989-90 cost \$17,538 (tuition \$12,800, fees \$353, room \$1,913, and board \$2,472—from my acceptance letter), which per the Bureau of Labor Statistics, adjusts to \$33,079 in 2013 dollars. Compare that to Duke's 2013-14 cost of \$57,824 (tuition and fees \$45,620, room \$6,354, and board \$5,850). Nearly \$25,000 more a year—Wow!—Why?

When our kids were two and four years old, we opened 529 plans for them with a goal of saving enough to go to Duke. Our financial planner said that based on realistic assumptions of market growth, inflation, and tuition trends we would need to save about \$1,000 per month...per child...until they each

## CAMPUSUPDATE



**Work in progress:** A tower crane hovers above the David M. Rubenstein Rare Book & Manuscript Library, currently under renovation. Workers are using the tower crane to remove original stack core of the library, from roof to basement. Because the original stacks held up the roof, they have to be removed carefully, one level at a time. Temporary steel braces have been installed throughout the rest of the eighty-five-year-old building to assist with structural stability while the building core is removed. It's a bit like coring an apple, says Aaron Welborn, the director of communications at Duke University Libraries. New stacks with reinforced floors and upgraded environmental controls will be built to house Duke's valuable collection of rare and unique scholarly materials. Once the new stack core is built, the crane will return the roof.



started college. As the article points out, the aid packages are not decided until the last weeks of the decision-making process after acceptance, which is really the final price of the Duke education. Thus, for parents who wish to plan, the conundrum is how much do you need to save? Do you tighten the belt and save for the sticker price, or roll the dice? Oh, and we haven't even broached graduate school costs....

*Nk8757, via the Duke Magazine website*

four years of tuition, room, board, and other expenses *plus* the income lost during those four years. The total cost of a college education, at Duke or anywhere else, has risen much faster than the earning power of those who graduate—that is the real problem.

*Ed Barksdale, via the Duke Magazine website*

Both my wife and I earned our graduate degrees from Duke and expected that our

she has flourished academically and saved her college funds for medical or graduate school. Everyone's situation is different, but given the fact that advanced degrees are required in so many fields today and student debt is such an onerous, long-lasting burden, it is rational to select an academically excellent but affordable undergraduate university and save your money or debt for postgraduate work.

*David Plott '79, via the Duke Magazine website*

**While we could have paid for her Duke education, she made the wise choice to enroll in Emory, where she has flourished academically and saved her college funds for medical or graduate school. —DAVID PLOTT '79**

This article does not focus on the total cost of a four-year education relative to the earning power of the new graduate—the key reason why the economic value of a college education is being questioned. The present value of earning the extra \$1 million of income over a *lifetime* (the amount cited in the article) is less in many cases than the cost of

daughter would likely attend Duke. Like Cameron Williamson, our daughter was accepted at both Duke and Emory, the difference being that Emory offered her a \$180,000 merit scholarship in addition to first choices on classes, dorm rooms, and many other benefits. While we could have paid for her Duke education, she made the wise choice to enroll in Emory, where

It's interesting that the article touts the fact that students are only permitted to borrow \$5,000 per year. This really puts a burden on families in that middle area. To be honest, in most metropolitan areas for families that include more than one child going to college at some point, an income of \$200,000 doesn't come near making \$58,000 a year for one kid affordable. Even with years of savings, that can mean a staggering amount of loans. It appears that Duke is asking the parents to take these loans on so that the school can boast about the low debt loads its students graduate with. Sad state of affairs.

*Zap221, via the Duke Magazine website*

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## CORRECTIONS

The Fall 2013 issue Class Notes entry about Tiffany M. Hall '00 incorrectly stated her title. She was named vice president, marketing transactions counsel. The In Memoriam entry about Dudley Turner '65 included an incorrect middle name. His middle name was Pierce.

The listing of Forever Duke Awards winners in the fall issue omitted the team winners of the volunteer service award. They are featured in this issue on page 57.

The fall issue "Retro" column misstated the year Trinity College was founded. It was 1859.





# THE Quad

NOTEWORTHY FROM AROUND CAMPUS

What's brewing: An appropriate mural at  
Duke Coffeehouse on East Campus



## BY THE NUMBERS

### The Alice M. Baldwin Scholars program

A select group of first-year female students enrolled in Trinity College or the Pratt School of Engineering hone their leadership capabilities through this program, which is celebrating its tenth class.

**1923**

The year Alice M. Baldwin came to Trinity College as acting dean; she became dean in 1926 and was the first woman to have full faculty status

**145**

Average number of applications per Baldwin class

**700+**

First interviews of applicants over the decade

**18**

Number of first-year women selected each fall

**180**

Total Baldwin Scholars

**23**

Faculty members teaching Baldwin Scholars

**1**

Annual recipient of the Unsung Heroine Award given by the Baldwin Scholars

**400**

Twelfth-grade Indonesian students taught by inaugural Baldwin Scholar class member Rachel McLaughlin '08 while on a Fulbright Fellowship



“One of the problems we currently have is there hasn’t been in the population any serious engagement with the ethics of war because we have an all-volunteer army.”

– **Stanley Hauerwas**, professor emeritus of theological ethics, on Americans’ relationship to war (*The Atlantic.com*)

**“He’s taken us from a will to do the best we could to a will to compete, and now we’re hell-bent on getting to this will to win.”**

– **Kevin White**, athletics director, on the influence of football coach David Cutcliffe (*New York Daily News*)

“Higher education, America’s flagship of international leadership, is a proud vessel in need of attention. I just hope [President Obama] won’t replace the rudder without patching the leaks.”

– **Tom Katsouleas**, dean of the Pratt School of Engineering, on handling higher-education costs (*Forbes*)



“If Microsoft doesn’t change course, it is likely to suffer the same fate as that old superpower, the former Soviet Union, whose obsession with preserving its bloated bureaucracy led to its destruction.”

– **Vivek Wadhwa**, executive-in-residence in the Pratt School of Engineering, on the future of Microsoft (*PBS NewsHour*)

“I can tell you the common characteristics of people who engage in mass shootings: It’s a picture of troubled, isolated young men that matches the picture of tens of thousands of other young men who will never do this.”

– **Jeffrey W. Swanson**, professor in psychiatry and behavioral sciences, on predicting violent behavior (*The New York Times*)





Commemoration: A multimedia event at Page Auditorium with singing, dancing, and stepping told the story of the black experience at Duke over the last fifty years.

Jared Lazarus

“I’m near the end of my life now, but most of you are going to be here for quite a while. It’s up to you to decide what the work of the past fifty years will amount to. You’re part of the picture now. What are you going to do about it?”

—Jack Preiss, civil rights activist and sociology professor emeritus, speaking as part of the 50th anniversary of the enrollment of African-American students, on his actions during the civil rights era (*Duke Today*)

**“I feel very strongly that your brain’s health is impacted by your body’s health and vice versa. You can’t just walk around the world and act as if your environment and the way you move in the environment isn’t changing your entire physiology.”**

—Staci D. Bilbo, associate professor of psychology and neuroscience, on the mind-body relationship (WUNC.org)

“God may disrupt what we thought university was all about or who we thought God was or what we thought education was or what we thought about this or that subject. God will usher in new ideas and new friends and new professors and new possibilities for your future. It will be a new experience of life and of God, because the kingdom is always surprising.”

—Luke A. Powery, dean of Duke Chapel, during Orientation Week, on being open to divine disruption





## A Legacy of Transformation

After fifteen years, Peter Lange to step down as a university provost.

He's a political scientist, yet when folks seek to describe Peter Lange in his role as provost, the word most often used is "architect." And so, as he prepares to step down in June 2014 and design the next chapter of his life, Lange is being lauded for the relationships he helped forge, the global bridges he helped champion, and the campus growth he helped spur.

"Peter Lange has made his mark on Duke University as have few others," said President Richard H. Brodhead in a statement.

When Lange departs at the culmination of a third term and fifteen years—making him the longest-sitting provost in Duke history—he'll claim a legacy that includes overseeing two five-year strategic plans: "Making a Difference" in 2006 and "Building on Excellence" in 2001, which helped to establish interdisciplinary study and research as a university cornerstone. The collaborations that concept sparked include the Duke Global Health Institute, the Social Science Research Institute, the Nicholas Institute for Environmental Policy Solutions, and the Institute for Brain Sciences.

Lange also served as a leader in the university's global expansion, including the DukeEngage program. And while his advocacy of Duke Kunshan University in China has been met with

opposition from some faculty members, the campus is scheduled to launch in 2014. He also has supported Duke's forays into on-line education.

Closer to campus, Lange was closely involved with the university's expansion planning through the addition of a new library, and arts and other university facilities. And his influence is woven into the fabric of the university staff: He was involved in the appointment of all current university deans, and close to two-thirds of current faculty members joined the university during his tenure.

"There's a grind to the job sometimes that comes with the territory," he told *The News & Observer* of Raleigh, "but there's been so much excitement, so much innovation, so much openness to doing new things."

To determine potential successors for Lange's position, Brodhead announced

the appointment of a committee chaired by George Truskey, professor of biomedical engineering and senior associate dean for research in the Pratt School, along with six other faculty members, with the goal of finalizing candidates in late February.

Meanwhile, Lange will remain the Thomas A. Langford University professor and, after some time off, will teach in the political science department.



Not walking away: Provost Peter Lange, center, will teach in the political science department.

## A Greater Sense of Responsibility

Board of trustees makes changes in endowment reporting.

Plans for greater transparency could be this era's most consistent *cri de coeur*. It's certainly the call of DukeOpen, a student coalition that aims to increase the transparency of the university's endowment. And while the group's mission hasn't been accomplished, its calls have brought change.

In October, the board of trustees revised its approach to socially responsible investing, including expanding the membership

of the Advisory Committee on Investment Responsibility, from ten to fourteen members; streamlining the process by which investment-related concerns are considered for review; and allowing DUMAC, the university's investment arm, to make available to endowment donors the ability to have their contributions invested in a social-choice fund. The group's recommendation for hard-copy, time-delayed disclosure of the endowment's direct investments was not

presented at the board of trustees meeting, to the group's disappointment.

Duke has followed guidelines on socially responsible investing since 2004. Four years later, the university stopped investing in companies involved in business with the Darfur region of Sudan. In 2012, Duke adopted voting guidelines for investment in companies that could be connected to minerals typically mined in conditions of war and to human-rights abuses.



## FROM THE PRESIDENT



# Creating the Citizens of Tomorrow

**M**ore than a decade ago, a report called *Rising Above the Gathering Storm* made the urgent case that America needed to strengthen its training in science, technology, engineering, and mathematics. Today, no one doubts the need for STEM initiatives, but one can ask whether the nation's needs can be met through STEM alone.

In 2011, charged by two senators and two Congressional representatives, the American Academy of Arts and Sciences launched a Commission on the Humanities and Social Sciences. I was asked to be co-chair, and this group, which included university presidents, artists, business and military leaders, a former governor, and the heads of major libraries and museums, met for a series of highly engaging conversations.

## Some Duke initiatives are amplifying the reach and the impact of the humanities.

There were some surprising voices: James McNeerney, the CEO of Boeing, emphasized that engineers need communication skills and the ability to connect with people of different backgrounds, while general and ambassador Karl Eikenberry, who headed military and diplomatic efforts in Afghanistan, testified that national security depends on the understanding of foreign languages, histories, and cultures—all the province of the humanities.

Commission members also all agreed that the humanities broaden and deepen human awareness. Humans are the only species capable of entering into the hopes, fears, and wisdom gained by others across space and time. As we enter into the transmitted imagination of others, we gain a magnificent expansion of consciousness. Without it, we condemn ourselves to imprisonment in our own narrow present.

This summer the commission issued its report, *The Heart of the Matter*. It aims to remind Americans that the humanities require continuous support from K-12 education through college, into community cultural life and lifelong learning.

*The Heart of the Matter* first calls for a deepened commitment to literacy as a strong foundation for learning. The report urges colleges and universities to collaborate with high-school teachers, to communicate the enabling power of liberal-arts education, and to make sure we deliver courses that help students develop broad-based skills.



Eventually, the federal government will need to restore adequate funding to the National Endowment for the Humanities and for the study of foreign languages and cultures through Title VI and the Fulbright-Hays Program. But unlike the sciences, the humanities aren't fundamentally dependent on federal support; and to succeed, we will need to mobilize actors at every level of American life, including states and local communities.

*The Heart of the Matter* has struck a nerve. Thousands have downloaded it; the PBS *NewsHour* and *The Colbert Report* introduced it to television audiences; and the media continue to engage with its ideas.

In truth, it's not a hard sell to remind people that teacher training is critical, that citizens of a democracy need some understanding of history, that in a globalized world it's dangerous to know so little about foreign people and cultures.

At Duke, the humanities and social sciences have always been at the heart of our educational mission. Generations of Duke alumni still reminisce about devoted teachers of the humanities such as Reynolds Price '55 and Wallace Fowlie. In recent years, many beloved humanities faculty have carried on that tradition, winning some of the top teaching awards at Duke—Tom Ferraro in English, Anthony Kelley '87, A.M. '90 in music, Ellen Davis in biblical studies, Bill Chafe in history, and most recently, Edna Andrews in Slavic languages and linguistics. Some humanities faculty at Duke are also collaborating with other disciplines, embracing technology to make a new kind of teaching possible, in which the magic of digital modeling lets students see twelfth-century cathedrals take shape before their eyes. These initiatives can amplify the reach and the impact of the humanities—

a glimpse of the future for a forward-thinking liberal-arts education.

The great question of education today is how to promote the fullest realization of potential in the young men and women who will be the productive and creative citizens of tomorrow. As we strive to answer that question at Duke, we know that the humanities are a part of our answer: They are a core dimension of our humanity and a crucial basis for human power. Through a liberal-arts education at Duke, we encourage students to build all the sources of their potential strength.

—Richard H. Brodhead

*Brodhead delivered the Presidential Address at the College Board Forum in October in New York. This piece is adapted from his remarks.*



## ON THE PLAZA

### Geared up for a good cause

**B**radley Hintze thrives on the adrenaline of moving with a purpose. In October, he pedaled 75 miles of rural road in coastal North Carolina for Ride Without Limits, an ultimate cycling event that benefits children and adults who struggle with disabilities.

This year marked Hintze's third time as cyclist and advocate for Ride Without Limits. Since 2011, he has raised thousands of dollars in pledges to support Easter Seals UCP North Carolina, an organization that promotes respect and opportunities for people living with muscular dystrophy, multiple sclerosis, Down syndrome, and other disabilities.

**Bradley Hintze**  
**Graduate biochemistry concentration:**  
structural biology  
and biophysics  
**Hometown:** Sandy, Utah

"Disabled children and adults live in a world for able-bodied children and adults," says Hintze. "They don't live in a world created for them." He finds this is especially true given the current political climate in North Carolina, where funding has been cut for programs like Medicaid that assist

people with mental and physical impairments.

Hintze is intimately familiar with the challenges of living with a disability. At birth, he was diagnosed with cerebral palsy. Then, around age fifteen, he developed cervical dystonia, a neurological disorder that distorts muscles in the neck and head. Together, the conditions affect his speech, balance, and fine motor coordination. "Going through puberty is hard enough and then this on top of it.... It was dif-

ficult," he recalls. But his negative perception of himself was the most debilitating part. "Whether or not you're disabled, confidence is an issue."

The disabilities have not kept him from pursuing daunting physical feats.

Besides cycling, Hintze loves hiking the mountains near his hometown of Salt Lake City. This past summer he scaled Lone Peak, considered the deadliest mountain in Utah, for the third time.

He also climbed his way from being a kid who only dreamed of attending college to a fifth-year Ph.D. student in biochemistry at Duke. Lacking automotive precision, Hintze can't handle the petri dishes and pipettes you would find in a typical lab. Instead, he works with computational software, developing ways to improve crystallography, a method of using x-rays to study ultra-tiny protein structures. Unable to write and ineffectual with a keyboard, he devised a way to take notes using the swipe function on his smartphone. "You really learn to adapt," he says. "You're faced with a problem and you come up with these creative solutions."

"A lot of the limitations that people put on themselves only exist in their head," he adds. "You've got to believe in yourself."

—Elizabeth Van Brocklin



**Willing and able:** Graduate student Bradley Hintze pedals for pledges.

Will Pleslar

## A Partnership Confirmed

Duke Kunshan University in China gets approval for a 2014 opening.

**M**ore than 800 students from China enrolled at Duke last year, a clear indication of the university's popularity in the nation. Now, after gaining the approval of the Ministry of Education, Duke will have a formal home in the country.

After a process that began in 2010, Duke Kunshan University (DKU), a partnership between Duke and China's Wuhan University, is set to open a campus in east China's Jiangsu Province in the fall of 2014. Nora Bynum '85, vice provost for DKU and China initiatives, says the goal for the student population is half from China and half from outside China. The programs that will result in a Duke degree are master's in global health, management studies, and medical physics, she says. For undergraduates, there will be a global-



**Getting the go-ahead:** Duke president Richard H. Brodhead talks with Kunshan and Wuhan officials about the progress of Duke Kunshan.

Chris Hilleneth

health module of four courses.

The approval comes after several setbacks, from weather and construction de-

lays to communication issues, delayed the campus' originally planned opening date. Some Duke professors have opposed DKU's opening, expressing concerns about academic freedom in China and the cost of the project.

Leading DKU will be Liu Jingnan, a former president of Wuhan University; Mary Bullock, a scholar of U.S.-China relations, will serve as executive vice president. So far, more than fifty faculty members from Duke are set

to teach in Kunshan for one semester. Permanent faculty spots will be filled by candidates recruited from around the world.



## BOOKBAG

### ISIS 235/CULANTH 226: ESPIONAGE, CRYPTOLOGY, AND PSYCHOLOGICAL OPERATIONS

**The catalyst:** “Wkh dwwdfn zl oo frppqfh dw gdzq.” You might see this as a bunch of gibberish, but a student in Nicholas Gessler’s class would advise you to change each letter into the letter three places before it in the alphabet. The “gibberish” is now a warning: “The attack will commence at dawn.” Gessler, an anthropologist and espionage enthusiast, is helping students examine how an intelligence agency communicates information.

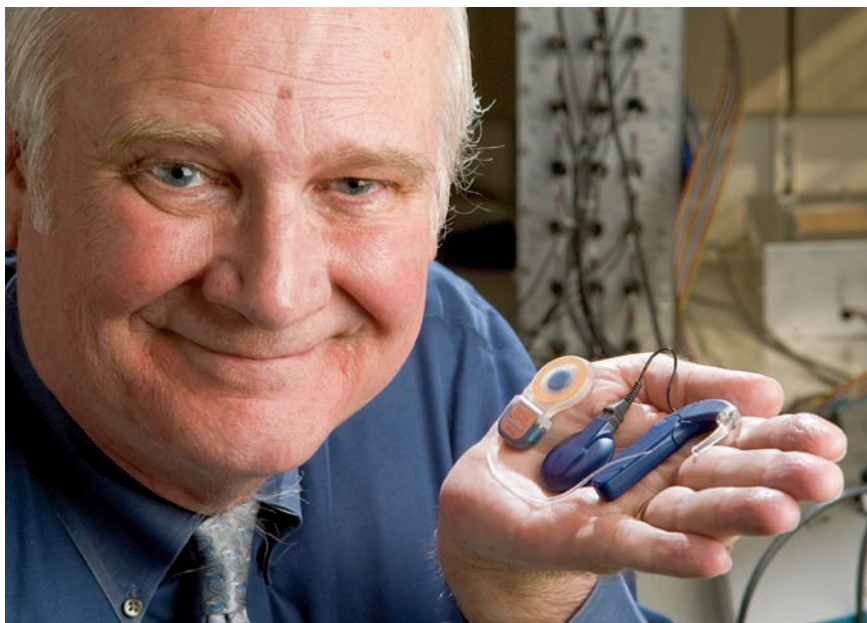
**The gist:** “Anthropology is an academic pursuit, and most academics would like to study a culture and provide information to members of that culture on how to better provide sanitation or health,” Gessler says. “For the intelligence community, their purpose is to understand a culture and obtain actionable information—they want to understand those parts of it which they can use to activate certain results in that community.” Those divergent goals are often achieved using the same tactics.

**The twist:** The class meets Wednesdays for nearly three hours, so Gessler tries to keep his students actively involved. In a recent class, students decrypted coded messages using pieces of his collection of World War II-era devices: Jefferson wheels (lettered disks that can be rotated and arranged to spell out a message) and a Swiss neu machine (an improvement on the German Enigma machine).

**Assignment list:** Students examine decades-old postcards, when people wrote encrypted messages in their letters. Successful decryption, Gessler says, requires an ability to understand the literacy and motives of the people of the time. Students also learn about theories and dissemination of propaganda materials by analyzing the effectiveness of international military propaganda leaflets throughout the twentieth century and by comparing *Triumph of the Will*, a pro-Nazi film, and *Why We Fight*, a seven-part series produced by Frank Capra for the U.S. government during World War II.

**What you missed:** Students went to Washington to tour the National Security Agency’s National Cryptologic Museum at Fort Meade and the International Spy Museum. Gessler says he’s wary of his cyber security. “I’ve always figured that anything you put into a computer is accessible by anybody else with the know-how, the time, and the computational power behind them to extract it.”

—Ryan Hoerger



**A sound choice:** The Lasker Foundation noted Blake S. Wilson’s “brilliance and relentless commitment” in improving the cochlear implant.

## Honors for Two Pioneers

Blake S. Wilson, Melinda Gates awarded Lasker prizes.

Even Blake S. Wilson B.S.E.E. ’74 is in awe of the cochlear implant, and the electrical engineer is one of the core developers of the device. “Most of today’s implanted patients can understand everyday speech with hearing alone, without lip reading—many in noisy environments, some even on the telephone. To me, that’s a flat [out] miracle,” he told *DukeMed* magazine recently.

That description of the implant’s impact explains why the Albert and Mary Lasker Foundation awarded Wilson its 2013 Lasker-DeBakey Clinical Medical Research Award. He shares the prize with fellow pioneers Graeme M. Clark of Australia and Ingeborg J. Hochmair of Austria.

The foundation also honored Melinda Gates ’86, M.B.A. ’87, Hon. ’13 and her husband, Bill Gates, with the 2013 Lasker-Bloomberg Public Service Award for their contributions to improving health in the developing world and elsewhere.

Wilson’s work dates back to the late 1980s when he built on Clark’s and Hochmair’s advances by introducing his “continuous interleaved sampling” system,

### The Lasker Awards are among the science community’s most respected prizes.

which made it possible for cochlear implant recipients to understand words and sentences with greater clarity. That work provided the basis for sound-processing strategies now widely used, and launched an expansion in the number of deaf and nearly deaf people who have received the device in one or both ears. Now, a large majority of cochlear implant users can talk on their cell phones and follow conversations in relatively quiet environments.

The Lasker Awards are among the science community’s most respected prizes. Eighty-three Lasker laureates also have received the Nobel Prize. The awards program recognizes the contributions of scientists, clinicians, and public servants who have made major advances in the understanding, diagnosis, treatment, cure, or prevention of human disease.

When he accepted his prize on September 20, Wilson spoke of the worldwide collaboration it took to develop the cochlear implant and the improvements still to be made. “This magnificent award will greatly increase awareness of how cochlear implants can enable severely and profoundly deaf persons to realize their full potential in life, and that awareness will in turn facilitate further dissemination and development of this marvelous technology,” Wilson said.



## Reckoning With the Past

Commemoration of the 50th anniversary of the enrollment of black students concludes.

During the second quarter of this year's football homecoming game against Troy University, Michael Holyfield '79 finally got the respect he deserved. The first African-American Duke Blue Devil mascot was given a letterman jacket by the athletics department.

"We wanted to honor him and the historical contributions he made," said Jon Jackson, associate director of athletics for external affairs, in a statement.

Moments like that, bigger and smaller, filled the nine-month commemoration of the 50th anniversary of black undergraduates enrolling at Duke. During "Celebrating the Past, Charting the Future," the university hosted dozens of events across campus and in Durham focused on issues of race, diversity, inclusion, and civil rights. The celebration culminated with a weekend that brought back hundreds of black alumni, some who had skipped other Duke reunions. President Richard H. Brodhead noted that the number of returning alumni indicated that they were "more than Duke diehards, but people without unequivocally happy memories" who were choosing to reconnect.

Indeed, they did more than reconnect. On behalf of black alumni, Brodhead was presented with a check for \$1.5 million to help endow the Dean Martina J. Bryant and Reginaldo Howard Memorial scholarships. Alumni also gave to the Mary Lou Williams Center for Black Culture.

The final weekend coincided with Founders' Day. State Senator Dan Blue

J.D. '73 gave an address in Duke Chapel that honored the courage of the first black undergraduate students, noted the civil rights progress the university has made and the work that still remains, and commented on the state's current political and social situation. "Too many children are

fought and bled and literally died for the fundamental right to exercise their right to participate in this democracy for us to sit idly and complacently by while that right is being eroded and weakened and even taken away from some of our fellow citizens."



Celebration: English and African-American studies professor Maurice Wallace, top, joined the celebration at Page Auditorium; former mascot Michael Holyfield receives his letterman jacket.

**"Nothing, however, was more heartbreaking than to discover that I had been excluded from university alumni functions when visiting other cities with the cheerleading squads, evidently due to my obvious blackness."**

not getting the education that will enable them to have a shot at competing to come to Duke. And too many people have

said Kevin White, vice president and director of athletics. "However, we are proud to do what's right."

Among the most emotional elements of the commemoration were the recollections posted on the memory wall of the event's website and on Facebook, in which African-American alumni wrote of their experiences at Duke. They remembered challenges, slights, triumphs, mentors, and transformations. That's where Holyfield posted a reflection on his experience of being a mascot, of being taunted by racial slurs and dodging projectiles thrown at him.

"Nothing, however, was more heartbreaking than to discover that I had been excluded from university alumni functions when visiting other cities with the cheerleading squads, evidently due to my obvious blackness. This alienation was further driven home when I was excluded from the annual athletic banquet held at the end of the academic year. Not only was I not invited, but I also was never offered, nor did I receive, the customary athletic jacket that previous Duke mascots received," he wrote.

That changed on a Saturday in September. "Unfortunately, we cannot erase the past relative to the injustice faced by Michael,"



# The General's Delivery

With humor and insight, former CIA director Petraeus tackles current events.

**Y**ou might not think of former CIA director and retired Army General David Petraeus as a jokester, and it's probably best that you don't. Yet when he visited campus in September for a question-and-answer session, he drew laughs with a joke about what happened (at a bar) when a Duke student asked a University of North Carolina at Chapel Hill student if he wanted to hear a joke about UNC. (Let's just say it wasn't favorable to UNC.)

Beyond that, in a discussion with Peter Feaver, professor of political science and public policy, Petraeus shared his views on sobering topics of the day, from Syria and chemical weapons to the war on terror and Al Qaida. Of Afghanistan, he said, "We will leave forces behind. It's inescapable, if we don't want it to crumble, that we will continue to provide support." Former National Security Agency contractor Edward Snowden "has very much damaged our national security—make no

mistake about it," he said of the leaking of classified documents, while acknowledging the revelations stoked valid questions about the balance between civil liberties and security. He declined to go into detail about drone strikes.

The event was sponsored by the Duke Program in American Grand Strategy and cosponsored by the Sanford School of Public Policy, the Triangle Institute for Security Studies, and the Duke Office of Global Strategy and Programs.

## PLANETDUKE | Turkey

### Duke in Turkey: At a Glance

Current students whose home country is Turkey:

**42**

Turkish nationals working at Duke:

**12**

Alumni living in Turkey:

**124**

Number of students who traveled to Turkey with university programs in 2013:

**29**

#### Key Duke connections:

- Duke's first Muslim chaplain, Abdullah Antepi, was born and raised in Kahramanmaraş, Turkey. He is known around campus as the "Turkish Delight Imam."
- Desmond Lee '14 was awarded a Turkish Coalition of America Scholarship for the Duke in Istanbul program in the fall of 2012.
- Duke offers a minor in Turkish language and culture, as well as four Turkish language courses.
- Each year at Springternational, the Turkish Student Association serves traditional Turkish foods such as baklava and stuffed grape leaves.

### Political unrest offers a platform for learning

About a month before students were slated to land in Turkey last summer, the capital of Istanbul erupted in a fury of protests. What began as a peaceful sit-in to oppose the demolition of Gezi Park soon morphed into large-scale demonstrations and indiscriminate police violence. After careful evaluation, Duke administrators opted to go forward with the Duke in Turkey program as planned, according to Amanda Kelso of the Duke Global Education Office for Undergraduates.

By the time students arrived, the protests had died down, but the aftermath was still tangible. "The protests then became this great opportunity to study the politics," says Erdağ Göknaç, assistant professor of Turkish and Middle Eastern studies and leader of Duke in Turkey since 2011. "So we put it on the syllabus. That was a great opportunity to turn politics on the ground into a learning experience."

"We don't want students to participate in the protests on the ground," explains Göknaç, recalling safety concerns voiced by parents. "We're trying to take a step back and say, why is this protest happening now, and what are the forces at play?"

Students studied graffiti and memorials generated during the unrest, followed news reports of the injured, and analyzed the public's reaction. "I was excited to be in

Istanbul at such a historic moment and turning point for politics," wrote Arielle Brackett '15 in an e-mail message. Jeremy Clift '15 expressed similar thoughts in a blog post: "Living in Istanbul during this period of civil unrest undoubtedly influenced my perception of the Turkish government and the associated political system."

"The city of Istanbul, which is so interesting in its contradictions, becomes a text that students explore when they're abroad," says Göknaç. Located at the crossroads of Eastern Europe, Central Asia, and the Middle East, Turkey holds a unique mix of European and Islamic culture. The program coincided with the month of Ramadan, and though she was raised Methodist, Brackett decided to attempt the fast for a few days. "I feel that while I was abroad and in this different hemisphere, I began to use the other hemisphere of my brain," she wrote.

Students lived and studied at Bogaziçi University, located on the scenic shores of the Bosphorus, a strait that divides Asia and Europe.

They spent six weeks taking courses on Istanbul's history and culture as well as gender in the Middle East. The group also visited what Göknaç terms Turkey's "greatest hits," including sites in ancient Byzantine, the otherworldly landscape of Cappadocia, and the Greco-Roman ruins of Ephesus.

**—Elizabeth Van Brocklin**



Great beauty: The Hagia Sophia museum in Istanbul



## Where the Arts and the Sciences Meet

New Media + Sciences program uses project-based teaching to forge collaboration.

In the ongoing conversation about the value of studying the arts and the humanities, some critics have pointed to the solitary nature of the humanist and the seemingly difficult marketability of a graduate with a humanities major as minuses. As it happens, the Media Arts + Sciences program, launched in October, takes on both of those issues, offering an interdisciplinary space where arts and humanities scholarship collaborates with natural sciences and social sciences to develop big, new ideas.

Led by director Hans J. Van Miegroet, the chair of Duke's Art, Art History & Visual Studies department, the program is housed in two bays on the second floor of Smith Warehouse that were remodeled to include plenty of windows to emphasize the transparency of the work being done and to include enough room to house myriad disciplines. The academic backgrounds of the faculty include art, art history, visual studies, literature, classical studies, music, and information sciences. Fifteen faculty members relocated to offices within the program's space.

That space has room for seven ongoing Duke projects such as the Wired! Lab, where faculty and students create digital mod-

els and animations of cities, architectural structures, and sculpture, and the Duke Art, Law and Markets Initiative, in which experts in art, economics, and law analyze

the international art landscape. Dig@Lab is housed there, too; the archaeological venture uses digital tools to recreate ancient civilizations. There's also lab space for both undergrads and graduate students.

"Teaching is a collective enterprise and project-based, which is why we need this space," says Van Miegroet. "We want to move away from these fifty-minute classroom slots where students don't have enough time to learn through team work and experimentation."

That experimentation could be a graduate student tinkering with a drone used to take aerial photographs for digital archaeology or surveillance, or a professor tinkering with a computer rendering of a medieval Venetian church. Students and faculty members working in any of the eight labs will have a four-person team based in the same space. The Visualization and Interactive Systems team includes a data visualization coordinator, a research scientist, a research programmer, and an information technologist giving humanities students easy access to scientific and data expertise.

"Our students need to understand the sciences," Van Miegroet says. "The placement prospects for these people? Anywhere. Everywhere."

The program is supported by the Andrew W. Mellon Foundation.



In full view: Teamwork and experimentation in one space

Jack Edinger

## Making the Numbers Add Up

Schools change their approach to calculating, sharing student class rank.

In a university of high achievers, class rankings can have real import. That's why Trinity College and the Pratt School of Engineering are changing the approach to communicating student class rank based on grade point average.

The schools will no longer calculate or publish individual student class rankings because they've been deemed misleading, says Lee Baker, associate vice provost for undergraduate education and dean of academic affairs in Trinity. How so? Cur-

rently, for instance, there could be twenty-nine tied for number one, and ten people tied for number 30, leaving no one ranked number two. Students who tied with the third-highest GPA in their class might then be ranked at one hundred.

Under the new system, Duke will use a class-rank percentile system for the sophomore through senior classes. ("First-year students experience significant grade pressure already, and there is no benefit to reinforcing anxiety or creating a sense of

competition," says Baker.) The ranking system will indicate GPA ranges for the top fifth, tenth, fifteenth, twentieth, and twenty-fifth percentile of each class. Trinity and Pratt will publish the GPA cutoffs at the end of each semester grading period on the Registrar's website. Once students access their GPA, they can view their class' GPA ranges to determine class ranks.

Dean's List, Dean's List With Distinction, and the calculation for Latin Honors will not change.



## More chances to contribute

DukeEngage adds four programs to its roster.

Since launching in 2007, DukeEngage has aimed to give students an immersive experience that enhances them and community partners. In October, the initiative added four programs to its roster of thirty-six, allowing students to go deep into the culture and issues of cities in the U.S. and abroad.

Students—up to eight in each program—can now engage in Detroit; Miami; Belgrade, Serbia; and Seoul, South Korea.

In Seoul, students will help North Korean settlers with their studies, contributing to English language classes, math, sports, art, and computer education. They'll also design extracurricular programs for the Korean students. South Korea's cultural context will also factor into the experience. "We want students to intellectually engage in the history, political economy, and culture of the two Koreas," program leader Nayoung Aimee Kwon, Andrew W. Mellon assistant professor of Asian and Middle Eastern studies, told *The Chronicle*.

Students who head to Belgrade will be placed in organizations working on social-change efforts in a country that has stabilized after enduring a number of conflicts since the breakup of Yugoslavia. In Miami, the focus will be on working with members of the city's Latino population. Participants will work with UNIDAD of Miami Beach, an organization committed to advocacy and leadership development, serving as mentors to high-school students, facilitating health care and English as a Second Language workshops, and assisting senior citizens.

Finally, in Detroit, students will be placed into teams and will collaborate with organizations to create and implement projects to help the city in several ways, including in the areas of economic development, environmental sustainability, and health innovation.



A new place: The Center for Sexual and Gender Diversity is prominently placed in the Bryan Center.

## A Visible Change

At new center's opening, President Brodhead shares regrets for the university's homophobic past.

Intolerance, Mahatma Gandhi once said, is a form of violence and an obstacle to a true democratic spirit. Although those words weren't repeated at the late-September opening of the new Center for Sexual and Gender Diversity, it seemed a sentiment with which attendees would concur. Just as the former LGBT Center had moved from the basement of West Union into the prominence of the top floor of the Bryan Center, past issues of sexual orientation and gender identity prejudice seemed to move firmly toward a far more progressive place.

It's a shift that was described by the event's multiple guest speakers. One, Tom Clark '69, the first openly gay president of the Duke Alumni Association and the first openly gay trustee of the university, traced the milestones of the LGBT group, and noted the

university had come a long way from having the Duke Gay and Lesbian Alliance dechartered by Duke Student Government in 1983 because of legal concerns about promoting homosexuality, which was then against the law.

Later at the event, president Richard H. Brodhead spoke of a time when Duke was "saturated with homophobia." He described how last year Blue Devils United students brought forward evidence of official intolerance and repression in the 1960s and shared

**"As president of this university, I would like to say today that this university regrets every phase of that history."**

memories from graduates of that era who testified how "the pressures of swimming against the stream were dispiriting and exhausting."

"As president of this university, I would like to say today that this university regrets every phase of that history. There is nothing in that past that I will not now confidently and totally repudiate. I regret every act that ever limited the human life of anyone who came here," Brodhead said.

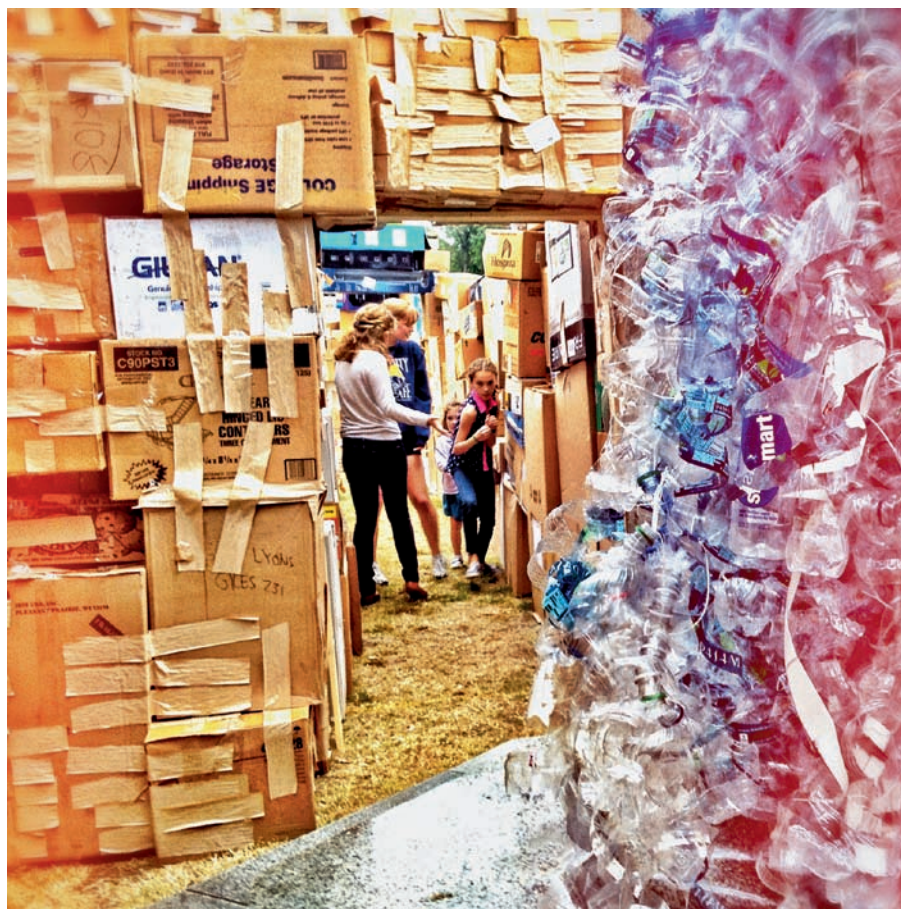
And in a nod to openness, Brodhead added that the university is a place of learning "and if there are two lessons Duke University wants everyone to learn, they are, first, that everyone must be free to define the life they are meant to live, and to respect that right in others; and second, the human family serves us best when we allow ourselves to be human together, rather than make some people victims of artificial discriminations."



## DUKE360



Thirty-five hundred move-in day cardboard boxes became Fort Duke, a 16-foot tall monument to sustainability built on the Chapel Quad on September 20. Even the James B. Duke statue got into the green spirit.



Photos courtesy @dukeuniversity Instagram

## NOTABLE



- **Fredric Jameson** has received Yale Graduate School of Arts and Sciences' Wilbur Cross Medal, which recognizes distinguished achievements in scholarship, teaching, academic administration, and public service. Jameson is a professor of comparative literature and the founder and director of Duke's Institute of Critical Theory. He is the author of twenty books of criticism and more than 150 scholarly articles.
- **Lee Baker**, Trinity College dean of academic affairs and a professor of cultural anthropology, has received the Society for the Anthropology of North America Prize for Distinguished Achievement in the Critical Study of North America. The prize is awarded to a senior anthropologist for contributions to research, teaching, and service outside academia.
- **Sydney Nathans**, associate professor of history emeritus, has won the 2013 Frederick Douglass Book Prize for *To Free a Family: The Journey of Mary Walker*, an award given annually by Yale's Gilder Lehrman Center for the best book written in English on slavery or abolition. He will receive \$25,000 for the biography about a woman's efforts to free her children from slavery.
- **Beth Holmgren**, chair of the Department of Slavic and Eurasian Studies, has received the Kulczycki Book Prize for Polish Studies. The prize is given for the best book in any discipline on any aspect of Polish affairs. Holmgren was honored for her 2011 book, *Starring Madame Modjeska: On Tour in Poland and America*, an examination of a nineteenth-century Polish stage actress.
- **Sally Kornbluth**, James B. Duke Professor of pharmacology and cancer biology and vice dean for basic science at the School of Medicine, has been elected as one of seventy new members to the Institute of Medicine. New members to the IOM are elected through a process that recognizes people who have made major contributions to the advancement of the medical sciences, health care, and public health.





# Ideas

WHAT'S NEXT IN RESEARCH

## MATERIALS SCIENCE

### Stronger Than Before

**T**he popular perception of plastic is that it's not the most resilient material we have at our disposal when it comes to wear and tear.

Yet, Duke researchers have developed a version that gives our favorite polymer a little more respect in the durability department. Their plastic not only withstands stress, it also solidifies under pressure

as it undergoes small changes in its molecular structure. The material is a type of "mechanophore": Mechanical stimuli, rather than chemicals, light, or heat, prompt its bonds to split and reform into a stronger arrangement. When researchers put their plastic to the test, compressing it in a technique called nanoindentation, it hardened two hundred-fold.

The study has generated significant buzz about potential applications, ranging from heart valves and aircraft materials to prosthetic limbs and iPhone cases. Stephen Craig '91, a professor of chemistry at Duke and one of the study's multiple authors, says there is good reason for the optimism. "The idea that you can take destructive energy and turn it into constructive energy is pretty exciting."

# Ideas

## ENVIRONMENT

### A Fish-Finding Mission

**T**ourists bring them home as travel keepsakes. But for ecologists tracking fish populations, menus are serving a wider purpose.

Menus taken as souvenirs from seafood restaurants in Hawaii have helped a team of researchers glean important insights into the historical trajectory of the state's fisheries. A critical part of that history—a span of forty-five years in the middle of the twentieth century—is obscured by the lack of official records.

“Market surveys and government statistics are the traditional sources for tracking fisheries,” says Kyle Van Houtan Ph.D. '06, coauthor of the study and an adjunct professor at Duke's Nicholas School of the Environment. “But when those records don't exist, we have to be more creative.”

Van Houtan and his colleagues believed that restaurant menus could be a useful indicator of the local supply of ocean fish during Hawaii's undocumented period. To test that assumption, they gathered a sample of 376 menus dating from 1928 to 1974. Most came from private collectors and library archives, preserved more for their beautiful artwork than their historical or scientific value. Together, the menus illustrate that the prevalence of

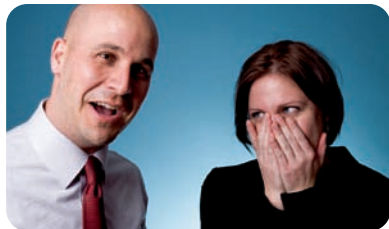
certain types of fish over others as restaurant dishes likely coincided with their relative abundance in the wild.

For example, reef and other near-shore fish were once a staple of restaurants in the early 1900s. By the time Hawaii was admitted as a state in 1959, however, they composed less than 10 percent of all seafood offerings. Pelagic species like tuna and swordfish, their ocean stocks swelling, quickly grabbed the top spots as menu items. In fact, 95 percent of the menus sampled from 1970 onward featured some variety of these large, offshore fish. Populations of reef fish, by comparison, were in precipitous decline. While still the delight of snorkelers, they have become a rarity in the seafood kitchen.

Van Houtan and his fellow ecologists acknowledge that changing tastes probably account for at least some of the evolution in the menus they looked at. Additionally, everything from market dynamics to ocean currents can affect which fish the consumer can order and when. Still, the researchers are convinced that seafood consumption in Hawaii historically has had as much to do with supply as demand. They hope their study encourages other scientists, across disciplines, to seek similar kinds of alternative sources to use with hard data.



## WHAT WE'VE LEARNED: SPOUSAL EMBARRASSMENT



istockphoto

Psychologists have long recognized the importance of embarrassment as a human emotion—its anticipation alone can moderate social behavior. Why, then, are spouses so quick to make each other blush?

**Mark Leary**, professor of psychology and neuroscience and director of Duke's social psychology program, outlines four categories of embarrassment to explain why the feeling arises in marriages and how it can be a source of potential conflict.

**1. Empathetic:** Your spouse alone carries the embarrassment of his or her mishap, but by virtue of your relationship, you empathize a little. He stubs his toe, and you feel for him—as you try to hold back a laugh. Empathetic embarrassment is harmless and short-lived, Leary says. Unfortunately, it's also the least-common type of embarrassment found in relationships.

**2. Reflective:** You get embarrassed when your spouse behaves in a way that might reflect poorly on you. After all, Leary says, you see your spouse as your other half. During a night out with friends, your husband regales the dinner table with a crude story or two. You sense your otherwise clean image has taken a hit.

**3. One-sided:** As the term suggests, you feel embarrassed by the action of your spouse, who apparently lives without shame. She spots a celebrity in public and doesn't hesitate to request a photo. Meanwhile, you do your best to keep a safe distance. Clearly, you and your partner differ on what constitutes embarrassing behavior.

**4. Targeted:** Generally the most damaging of the four types, targeted embarrassment occurs when your partner, intentionally or inadvertently, embarrasses you and you alone. She lets slip to a friend a personal detail you would have rather kept private. You cringe and try to shift the discussion. Later, she tells you to get over it, but secretly, you feel your trust has been violated. If left undressed, Leary warns, these incidents can fester into serious relationship problems.



**Mbaye Lo:**

### “Egypt’s Exhaustion”

Mbaye Lo, assistant professor of the practice of Asian & Middle Eastern studies and leader of this past summer’s DukeEngage in Cairo program, reflected during that time about Egypt and the rest of the Middle East. He believes the dreams of the 2011 Arab Spring are still alive, but that Egyptians are in a state of “political exhaustion.”

#### **On the likelihood of dictatorial rule in Egypt:**

The return of dictatorial rule, supported by popular will, is highly possible in the current situation. Remember millions of Egyptians came out...to support General Sisi’s request for a popular mandate to fight terrorism. The most popular regimes in modern Egypt were both dictatorial—Muhammad Ali and Gamal Abdel Nasser. They are also the most successful ones in building Egypt economically and politically. Both had strong military components.

#### **On the structure of government in the Middle East:**

The dominant ruling class of the Arab world since World War II has been associated with either military dictatorship, as is the case in the Sudan, Egypt, Mauritania, and Algeria; oligarchical rule, as is the case in Libya, Yemen, Iraq, Syria, and Tunisia; or tribal monarchies, as is the case in the Arabian Gulf, Jordan, and Morocco.

Since the Arab uprising or “Arab Spring” only occurred in countries in the first two categories, the available choices to the Arab streets were between the ruling military/oligarchy elements and Islamist groups. I believe, however, that with time and opportunity, other political groups will be able to develop to the point that they can offer a third way. I think the current developments in Egypt and Tunisia, as well as in the Sudan where Islamist governments are or were at the front seat, ultimately will result in a more open political sphere, diversity, and political pluralism.

#### **On the role of the U.S. government in the Middle East:**

The U.S. government should be forthcoming in supporting democratic opening and progress in Egypt regardless of the governing party. I think the Obama administration contributed to the political impasse in Egypt. When Mohamed Morsi was elected to office, he had no positive models of democratic governance in the Arab world. The U.S. needed to pressure and reward him to adopt good practices from elsewhere.

## HEALTH

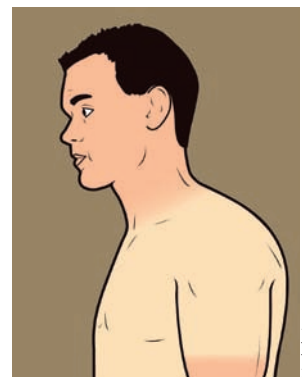
### Don’t Feel the Burn

**W**e’re all too familiar with the symptoms of prolonged exposure to UV rays. There’s the crimson skin, the itchiness, and of course, that overpowering feeling of lethargy. But what actually makes the skin hurt to the touch? A Duke researcher believes he has an answer for sunburned beachgoers: TRPV4.

The protein, which is found in cell membranes in the skin’s outermost layer, begins the pain pathway that culminates in what we feel as sunburn. As ultraviolet B rays meet the skin, they activate TRPV4 molecules, which allow calcium ions to enter the epidermal cells. Close behind the calcium in transit to the epidermis is endothelin, which is both a pain-producing agent and a trigger for the process to start again.

Wolfgang Liedtke, an associate professor of neurology and neurobiology at Duke’s School of Medicine, teamed up with a professor from the University of California in San Francisco and an investigator with the Howard Hughes Medical Institute to design an experiment highlighting TRPV4’s role in producing pain. After genetically engineering mice to lack TRPV4, the researchers exposed the animals’ hind paws to UV-B rays. The mice exhibited little signs of pain or even sensitivity. By comparison, the control group, which did not have their TRPV4 molecules inhibited, yielded the typical effects of sunburn. Liedtke and his colleagues then applied a drug that inhibits TRPV4 to human skin samples, discovering once more that the harmful effects of UV radiation were largely negated.

The findings suggest that TRPV4 inhibitors, if incorporated into the makeup of sunscreen, could alleviate pain resulting from sunburn and perhaps even limit the risk of skin cancer. “If we understand sunburn better, we can understand pain better because what plagues my patients day in and day out is what temporarily affects otherwise healthy people who suffer from sunburn,” says Liedtke.



## MEDICINE

### Better Detection for Infections

**T**here’s a significant difference between a bacterial infection and a viral infection, and, apparently, not discerning the difference has serious consequences. Although their symptoms are comparable to those of bacterial infections, viral infections cannot be treated by antibiotics like your typical Z-Pak. So when a patient sick with a virus takes an antibiotic, it allows certain bacteria in the body to strengthen and mutate. According to the latest report by the Centers for Disease Control and Prevention, 23,000 Americans die annually from drug-resistant infections.

Health officials believe the over-prescription of antibiotics used to fight respiratory illnesses contributes greatly to the development of these untreatable bacterial strains. But there may be a solution. Researchers at Duke, intent on stopping the spread of these “superbugs,” have designed a blood test to more quickly and accurately determine whether a patient has a viral or bacterial infection. The test detects specific genes activated when the immune system is under viral siege. (These same genes remain latent during a bacterial infection.) Given to 102 patients at Duke Hospital’s emergency room, the test was 90 percent accurate in diagnosing infections as viral or bacterial—and it took only twelve hours.

Geoffrey S. Ginsburg, coauthor of the study and director of Genomic Medicine in the Duke Institute for Genome Sciences & Policy, believes the test could help combat emerging diseases in addition to identifying common infections. “Current tests require knowledge of the pathogen to confirm infection because they are strain-specific,” he says. “But our test could be used right away when a new, unknown pathogen emerges.”

## The Way of the Hand and the Foot

Duke Taekwondo prepares for a tournament, kicking and screaming all the way.

| By Elizabeth Van Brocklin | Photography by Les Todd

“Ki’ap!” “Ki’ap!” “Ki’ap!” “Ki’ap!” “Ki’ap!” “Ki’ap!”

The cries pop and echo across the room like a lit pack of firecrackers. Hands poised in loose fists, eyes narrowed in fierce concentration, nearly two dozen warriors advance upon invisible opponents beneath squares of fluorescent light in a room lined with blue foam. The traditional war whoop of taekwondo, *ki’ap*, helps focus the mind, flex the core, and summon the fighting spirit.

On this Tuesday night in September, the Duke taekwondo team is shouting *ki’ap* and practicing *kyorugi*, or sparring, in the basement of Wilson gym. Young men and women in T-shirts and athletic shorts dart to and fro while Eric Mastrodonardo ’16 keeps the rhythm by smacking two kicking targets together. Tall and broad-shouldered, with a serene yet jovial air, he wears white cotton pants and a tunic cinched with a strip of black. He pauses the drill momentarily to show his teammates how to keep momentum by staying on the balls of their feet.

“In taekwondo, a huge part of it is footwork,” Mastrodonardo tells his teammates, who already are heaving and flushed just minutes into practice. “Even if your kicks aren’t very good, if your footwork is good, your opponent can’t touch you.”

“Yes, sir!” the group nods in collective deference. Mastrodonardo knows his stuff: As a freshman, he won Duke’s first medal in a black-belt division at the National Collegiate Taekwondo Championships. He’ll shoot for nationals again this year. The coach is absent this week, so he has stepped up to instruct the team.

He calls on a wide-eyed newcomer with glasses and a crew cut to demonstrate for the group. Philipp Lattermann, a Fuqua student from Germany, hesitates. “Me?” It’s his first time doing taekwondo. Mastrodonardo nods. Lattermann enters the ring shyly and performs a gazelle-like double skip. “Wow,” says Mastrodonardo,

eyebrows raised, turning to the others. “He’s got power. That was a very excellent demonstration.”

From first-timers like Lattermann to star fighters like Mastrodonardo, the group represents a spectrum of ethnicities, weight classes, skill levels, and belt colors. When Cameron Aubin ’14 was a freshman, about five people came to practice regularly. But due to the enthusiastic recruitment and promotional efforts of students like him, the group has grown into an established club sport. Now nearly thirty members strong, taekwondo is the largest of the three teams that make up the Duke Martial Arts Club (DMAC). The two other teams are Brazilian Jiu-Jitsu and Israeli Krav Maga.

“We’re all here for different reasons,” says

just days away. Duke will compete against five other schools from the Atlantic Collegiate Alliance of Taekwondo, marking the team’s first big scrimmage in the South, where college taekwondo teams are somewhat of a rarity.

Still, Mastrodonardo and Aubin are taking time to teach the beginners. A compact five feet seven inches, Aubin is practically bouncing with excitement to be back from the summer hiatus. While the fourth-tier black belt loves the flashy side of taekwondo—he holds multiple medals in board breaking—he also appreciates the focus and discipline involved, not to mention the self-defense skills. “It turned me into a measured person,” he reflects.

“Taekwondo is like a house,” notes Aubin. “You need to have a good foundation. It’s all about technique. Speed, strength, style—that’s all going to come with a good foundation.”

In taekwondo, fighters face-off and score points with strikes to the chest, sides, or head. And because legs are longer than arms, kicks are the surest weapon. “It’s kind of like fencing with your feet,” Aubin says. In fact, *taekwondo* means “the way of the hand and the foot.”

Building upon the footwork, the team transitions into kicking—the kinetic essence of the sport. “Fast as you can, hard as you can, *ki’ap-ing* as loud as you can,” Aubin shouts. Lauren Ellis ’16 teams up with Emily Hardgrove ’17, two longtime sparrers and brand-new friends. Hardgrove holds a kicking target, a padded implement shaped like a small tennis racquet, while Ellis kicks. With a forceful “ki’ap!” Ellis delivers the round-house kick, swinging her leg in a semicircle, hitting the target with the side of her foot, and returning to fighting position all in one swift motion. For the axe kick, she extends her leg high and brings her foot down on the target like a boxer batting down a balloon.

Finally, “when in doubt, back kick,” so goes the team’s unofficial motto. Sean Mc-



Respect: Taekwondo students bow and shake hands before sparring.

Aubin, president of DMAC and acting coach alongside Mastrodonardo. He says many are hungry to compete, some want to improve their fitness, and others are just curious to learn about the Korean martial art, whose early forms trace back centuries. “But the commonality is that we all do want to get better. That’s why, despite coursework and grades and all these other commitments you have to worry about, we still come to practice every day.”

Tonight’s training is especially critical because the first tournament of the year is





Aim high: Team president Cameron Aubin in a midair axe kick

## **“Even if your kicks aren’t very good, if your footwork is good, your opponent can’t touch you.”**

Croskey, a slim freshman with coppery hair, holds a large black foam shield. Mastrolonardo practices a few airborne back kicks—pivoting on one foot and driving his heel straight back into the shield, as a horse might ram its hoof in defense.

“Oh, my aim! Where did it go?” He shakes his head, a flip-flop tan perhaps hinting at a summer of irregular practice. He tries again, this time kicking with such forceful precision that he sends McCroskey flying.

“You found it!” says McCroskey, reeling like a Slinky from the blow.

“Oh, did I hit you?” Mastrolonardo asks

earnestly, putting his hand on McCroskey’s shoulder. The latter rubs his nose and nods but laughs it off.

Meanwhile, Latterman is struggling with the roundhouse kick. Mastrolonardo wanders over to give him a few pointers and assures him: “You’ll learn. We’ll teach you.”

Cheeks flush pink, and the room grows humid. The kicking wraps up and the rookies filter to one end of the room to practice more basics, led by Aubin. At the other end of the room, a smaller group prepares for the crowning moment of practice: sparring.

They suit up in an assortment of worn,

yellowed protective gear: arm and shin guards, padded insteps like toeless gloves for the feet, and red and blue chest protectors, which look like stiff lifejackets. At the tournament, sensors embedded in the pads will register scoring based on contact and amount of pressure. For now, the athletes must kick accurately and powerfully without harming the opponent. Or in the words of Aubin, “No knockouts.”

Ellis and Hardgrove enter the ring and face each other. Mastrolonardo, playing referee, calls out Korean commands: “*Charyuht, choon bi, kyung nae*,” meaning, “Attention, ready, bow.” The teammates bow and shake hands like courteous diplomats. Then Mastrolonardo signals the start with an emphatic “Ki’ap!”

In an instant, they clash, ponytails sailing. Ellis and Hardgrove employ the footwork and kicks from earlier in the evening. They pursue and retreat, revolving and lunging at each other like fiddler crabs. To the untrained eye, sparring looks like a blur of scuffling limbs, grapples, and blows. But upon closer inspection, it is clear that the women are engaged in an intricate dialogue of strategic blocks, light-speed fake-outs, and dynamic kicks. Each move seems to combine the calculation of chess with the flexible brawn of ballet.

As he surveys the sparring, Mastrolonardo calls out with reminders for control and decisiveness: “Be watchful,” and, “Kick once, kick twice, clench or get out of the way.

Have a purpose in mind.”

After many rounds of sparring, Aubin calls time. The fighters circle up, dazed and sweaty. As they peel off their gear, Mastrolonardo preps them for the imminent tournament and offers feedback. “Whatever happens, always learn from your mistakes,” he says. “Even if you win everything, *still* learn from your mistakes.” Even the black belts are not above critique.

“The black belt’s really just the first step,” notes Aubin. “A lot of people think the black belt is the end, but it’s not. It’s really just the beginning.” ■



# The End of Moderation?

To some Duke professors and alumni, the North Carolina legislature's recent rightward turn is a dismantling of Terry Sanford's legacy.

By Barry Yeoman

Under a moonless sky in the North Carolina mountains, a Democratic gubernatorial candidate named Terry Sanford stood on the steps of the Henderson County courthouse and made a proposal that seemed audacious for 1960. It had been a stinking hot May day, but the night was cooling rapidly, and 350 voters had shown up to hear this former FBI agent and World War II paratrooper describe his vision.

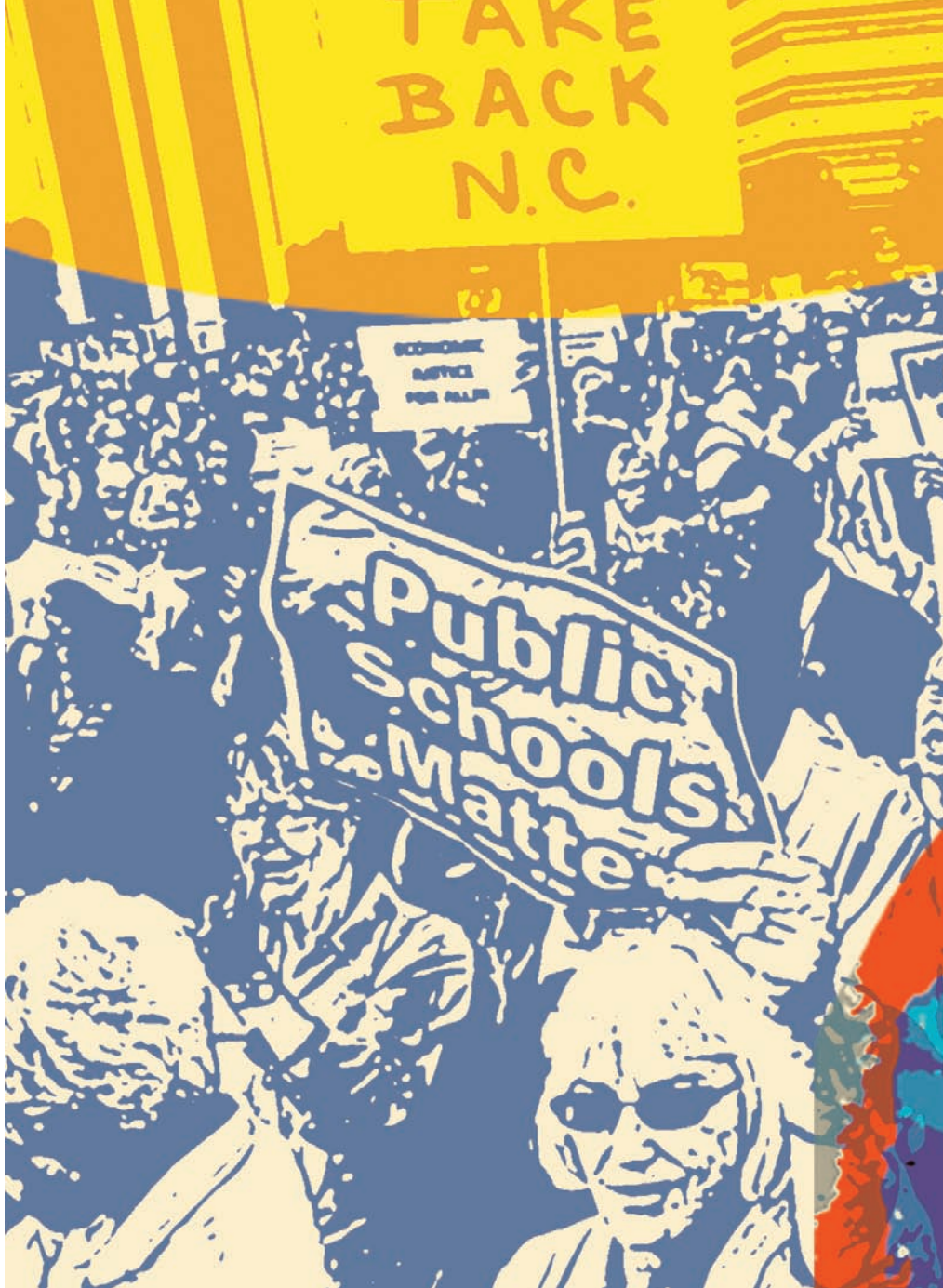
Sanford spoke slowly and deliberately. He warned that North Carolina's economic growth was being stymied by a school system that ranked among the ten worst nationwide. "This is not good

enough for my children or for yours," he said that night. "We can do no less than to offer the individual child the educational opportunity to compete in today's competitive world." Better jobs required better schools, even if that meant raising taxes. "We cannot put our children in deep freeze," waiting for the state's tax base to grow, he said.

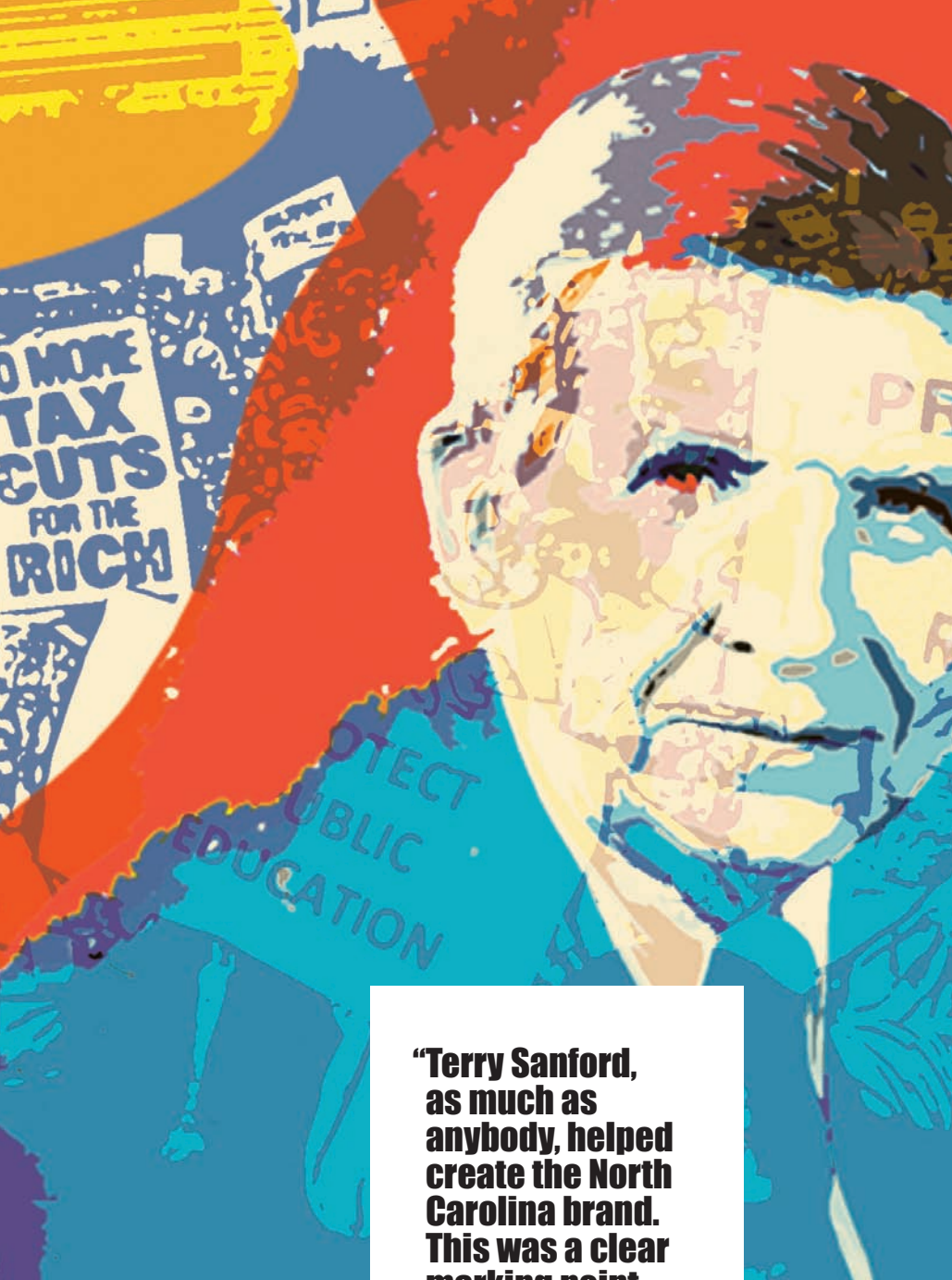
His detractors had been warning voters to guard their wallets from Sanford's profligacy. "The primary need is not an outpouring of funds but a revival of learning," said Sanford's main opponent, a segregationist attorney named I. Beverly Lake. Another candidate, John Larkins, called Sanford's education agenda "pure tommy-

rot," warning that it consisted of "cure-all programs, many of which have dubious merit and all of which are expensive." Voters disagreed. That November they elected Sanford as their governor, then watched as he launched an ambitious campaign to modernize North Carolina.

During his single, constitutionally limited term, from 1961 through 1965, Sanford persuaded the legislature to levy a tax on food and medicine sales, then used the revenues to hire 2,800 new teachers and raise their pay by more than one-fifth. He helped consolidate the state's university system and build a network of community colleges. He founded the North Carolina Fund, a five-year effort to eradicate poverty







**“Terry Sanford, as much as anybody, helped create the North Carolina brand. This was a clear marking point where North Carolina emerged on a different path than the rest of the South.”**

Lacey Chivick/Olivia Seward

and discrimination. He took a measured approach to desegregation at a time when other Southern governors were calling for resistance. Many historians and policy experts say that Sanford—who later became Duke University’s president, serving from 1970 to 1985—helped set in motion a moderate bipartisan consensus that, over the past half century, has fostered a robust and stable business climate.

That consensus held until 2010, when voters elected a Republican legislature committed to dramatically overhauling state policy. Then, in 2012, they elected former

funding, and social-welfare programs; loosened regulations on businesses; expanded gun owners’ rights; and passed new restrictions on voter registration and poll access.

“There’s almost nothing the legislature did that doesn’t have a precedent in some other state or country,” says John Hood, president of the John Locke Foundation, North Carolina’s most influential conser-

Charlotte Mayor Pat McCrory as governor, giving the GOP its first lock on state government since 1870. The new majority has made broad changes to tax policy, school

vative think tank. “What was truly unprecedented was action on all of those issues in one year.” Hood calls the sweep “spectacular” and says it was “based on the best available empirical data about what makes state economies prosper.”

Critics don’t believe the shift has been data-driven at all and fear it will harm both commerce and social and economic equity. Throughout the 2013 session, North Carolinians descended on the Legislative Building in Raleigh for a series of exuberant and peaceful protests, known as Moral Mondays, which garnered international headlines and more than 900 arrests. Within the Duke community, where Sanford casts a long shadow fifteen years after his death, some faculty members and alumni describe the rightward turn as a deliberate dismantling of Sanford’s legacy.

**“TERRY SANFORD’S** a hero of mine, but he wouldn’t want me to tell you he was a saint,” says Pope “Mac” McCorkle III J.D. ’84, director of graduate studies for the Master of Public Policy program at Duke’s Sanford School of Public Policy. At his idealistic best, Sanford envisioned a future in which the South would shed its reputation as a moral and economic drag on the country. But he also knew that winning elections required circum-spection. During the 1960 Democratic primary battle against Lake—who had defended North Carolina’s single-race schools during the arguing of *Brown v. Board of Education*—Sanford offered himself as a more modulated supporter of segregation. “It was not a time to be a purist,” he told William Chafe, now the Alice Mary Baldwin Professor of history emeritus, around 1975. “I was trying to keep the banner flying, but I was trying to mute it enough so that I didn’t get slaughtered on pure principle.”

If Lake hovered to Sanford’s right, on his left were the civil rights activists who found their collective voice first at the Greensboro Woolworth’s lunch-counter sit-ins in February 1960 and later at demonstrations throughout North Carolina. Sanford didn’t like the protests; he preferred that enlightened leaders like himself quietly enact reforms. But once he became governor, the protesters lent him political cover as he set out to tackle issues involving race, poverty, and education. “The Greensboro sit-ins liberated Terry Sanford,” says Chafe. “They changed the terrain. Moderation becomes different.”

Sanford knew there were still compromises to be made. Investing in public schools meant imposing the only tax to which North Carolina's large landowners, high-wage earners, and tobacco executives would consent: a regressive sales tax on food and nonprescription medicine. But Sanford calculated that better education would help the poor more than the extra pennies on each food dollar would hurt them.

Sanford also wanted to address other root causes of the state's 37 percent poverty rate, from racial bias to low industrial wages. "He realized the poverty that he saw all around him, from the mountains to the

coast, was going to hold the state back," says Robert Korstad, the Kevin D. Gorter Professor of public policy and history at Duke. Sanford knew the legislature wouldn't allocate a penny to these efforts. So he persuaded the Ford Foundation, along with the North Carolina-based Z. Smith Reynolds and Mary Reynolds Babcock foundations, to finance the North Carolina Fund, a precursor to President Lyndon Johnson's War on Poverty. (It received federal dollars, too.) Led by a board drawn from the state's bankers, industrialists, and educators, the fund was best known for sending racially mixed

teams of volunteer college students into low-income communities. But it evolved to support efforts to organize poor North Carolinians, black and white, to advocate for themselves. And it spun off organizations that focused on job training, rural development, and affordable housing. "That's really the apogee of progressivism in North Carolina," says Korstad, who coauthored a book about the fund called *To Write These Wrongs*.

**"TERRY SANFORD**, as much as anybody, helped create the North Carolina

# The Truth About Art Pope

**"I believe that a free society is both the most just society and the one that's going to help eliminate poverty and bring the greatest prosperity for the most people."**

**A**rt Pope J.D. '81 wants you to know that he did not buy North Carolina's 2010 elections. "Depending on your perspective, I get far more credit and far more blame than I deserve," says the Raleigh businessman, who in January 2013 became Governor Pat McCrory's budget director. He believes that voters would have swept in the state's first Republican legislative majority in modern history even without the influence of a handful of Pope-funded conservative organizations. "But the left-wing groups had to come up with an excuse," he says. "So they used me and my name as the bogeyman to blame [the GOP victory on] the state being sold."

Pope—president and CEO of Variety Wholesalers, a chain of 370 discount stores developed by his father—clearly worries about how the media depict him. During a two-hour interview with *Duke Magazine*, he referred several times to a 2011 *New Yorker* article by Jane Mayer, called "State for Sale," which credited him with "spending millions" to build "a singular influence machine" consisting of multiple organizations pushing "the same aggressively pro-business, anti-government message." Mayer's article suggested that by targeting key legislative races for infusions of campaign money, Pope and his network helped orchestrate the 2010 state Republican takeover.

Pope says he has grown dismayed by the repeated characterization of him as a privileged kingmaker. "If this sounds a little bit defensive, it's because of the false propaganda that I supposedly started off life as an heir with a silver spoon in my mouth," he says. "I'm not an heir. I did not inherit any of my wealth from my father. I did benefit greatly from partnering with my father in a family business." In fact, Pope says, he spent his earliest years living in a three-bedroom rental house in the town of Fuquay Springs (which later became part of Fuquay-Varina) before his family moved to a larger home in nearby Raleigh.

What Pope clearly did inherit from his parents were his political beliefs, which celebrate free enterprise with minimal government interference. "I grew up with the values of my father and my mother," he says. He listened to Bob Dylan and Joan Baez and knew that his older brother protested against the Vietnam War, but he says he was more influenced by his father's business success. "I believe that a free society is both the most just society and the one that's going to help

eliminate poverty and bring the greatest prosperity for the most people," he says.

After graduating from Duke Law, Pope worked in private practice and then as special counsel to Republican Governor Jim Martin. In 1986, his father asked him to join the family business and to start the John William Pope Foundation, which would channel money from the family and its business to charities, education, and the arts. (The foundation has given significant funding to Duke's Center for the History of Political Economy.) "Rather than just treat the symptoms of poverty, we wanted to treat the underlying causes," Pope says—which to him meant supporting policy groups that advocated for "individual liberty" and "limited constitutional government." Giving to such groups, he says, "is also charity."

At the time, Pope says, there were no conservative policy organizations in North Carolina to his liking. So Pope—who in 1988 was elected to the state House—threw the foundation's resources behind the creation of the John Locke Foundation, which opened in 1990 (with additional support from the E.A. Morris Charitable Foundation) and became the state's premier conservative think tank. Other Pope Foundation-funded groups followed, including the Civitas Institute, which publishes substantive policy papers and also posts police mug shots of Moral Monday protesters; the North Carolina Institute for Constitutional Law, which litigates issues ranging from charter schools (which it favors) to the individual mandate in President Obama's health-care reform (which it opposes); and North Carolina's chapter of the Americans for Prosperity Foundation, a small-government organization cofounded by billionaire energy executives David and Charles Koch. (Pope, a friend of the Koch brothers, served as one of Americans for Prosperity's national directors.) Variety Wholesalers helped fund Civitas Action and Real Jobs NC, which have produced mailers and robocalls targeting individual politicians.

"He was involved, in some fashion, in founding all of these organizations," says John Hood, president of the Locke Foundation. "It is entirely legitimate to say Art Pope was an integral part of building the conservative movement in North Carolina." Thanks to Pope, he says, "what we have now is a rich tapestry



brand,” says John Drescher M.P.P. ’88, executive editor of *The News & Observer* in Raleigh and author of *Triumph of Good Will*, a chronicle of the 1960 gubernatorial race. “This was a clear marking point where North Carolina emerged on a different path than the rest of the South.” Sanford’s legacy endured most visibly in the area of public education. Republican Governor Jim Holshouser expanded kindergarten statewide during the 1970s. Democrat Jim Hunt began an early-childhood initiative called Smart Start in 1993. Eight years later, Democrat Mike Easley championed More at Four, an academic pre-

kindergarten for at-risk children. Measured by teacher pay and student-teacher ratios, North Carolina stayed in the middle of the national pack but ahead of most of its Southern neighbors. Education fueled economic expansion—witness the tech and pharmaceutical sectors in Research Triangle Park and the banking industry in Charlotte—which in turn bolstered school

spending without major tax hikes. “It was a virtuous circle,” says McCorkle.

North Carolina took a leadership role on other issues, too, ranging from coastal protection to fairness in criminal sentencing. And it expanded access to the polls through policies like early voting (with same-day registration) and preregistration for sixteen- and seventeen-year-olds.

**“To suggest that a Southern state cannot make progress unless it has a moderate-to-liberal Democratic political culture would strike the rest of the South as parochial.”**



**No kingmaker:** Pope gives a lecture to a philosophy class at UNC-CH last spring.



Taylor Sweet/The Daily Tar Heel

of public policy groups on the left *and* on the right. I think that’s good. Not everybody does.”

Those wary of Pope’s power point to the impact of the past two elections on state policy—the cuts to education and social programs, the shift in the tax burden toward the less affluent, and the restriction of voting rights. “This is extremism gone crazy,” says the Reverend William Barber II M.Div. ’89, state president of the NAACP. “It’s morally indefensible, and it’s economically insane.” And it stems directly, Barber adds, from Pope’s funding priorities. “He’s the most ultraconservative force in the state, who makes his money off of poor people and then supports policies through Civitas and John Locke that actually hurt poor people.”

**I**n the academic community, Pope’s foundation is known for funding the John W. Pope Center on Higher Education Policy, a spinoff of the Locke Foundation. The Pope Center has been a strong critic of universities, public and private, that veer away from teaching traditional Western civilization or that promote “politically correct” and “socialist” beliefs.

In 2011, for example, the Pope Center chastised the University of North Carolina at Chapel Hill for halving the number of sections of “Elements of Politics,” an honors class that explores the writings of Western thinkers like Plato and Locke. “Carolina doesn’t seem to have enough money for serious courses, but plenty

of money for frivolous courses,” Pope Center president Jane Shaw wrote at the time. Among the honors course she considered “lightweight” was “The World of the Beat Generation: Transcultural Connections.”

The Pope Center also has criticized Duke, most excoriatingly in a 2011 column on the organization’s website by supporter Albert Oettinger Jr. B.S. ’62, M.F. ’66 about why he stopped donating to his alma mater. Oettinger cited a liberal bias on the faculty and a “racial, sexual, class, and political orthodoxy to which one must adhere.” In 2009, Shaw attended a Duke conference on race that she later described as “Orwellian,” particularly the majority

view that racism continues to thrive in the U.S. “I assumed,” she wrote, “that the election of Barack Obama...suggests that racism is behind us.”

The Pope Center has singled out two Duke programs for praise: the Focus Program, which offers interdisciplinary course clusters to freshmen, and the Program in American Values and Institutions, which emphasizes freedom, responsibility, and liberty.

Pope notes that he doesn’t necessarily agree with everything the Pope Center says. “I have a laissez-faire approach to curriculum,” he says. “If academic standards are met, and there’s a sufficient number of students who choose to take a course, then I am fine with that course being offered. Now, in a free society, others are free to criticize whether a course is a good course or a bad course, a silly course or an academically challenging course. I support that open criticism and debate.”

As with his role in state politics, Pope believes his academic critics treat him like a “bogeyman” because of the Pope Center’s views. “University professors are very protective of their academic freedom,” he says. “Yet they presume, or just lie, about my saying various things as if I controlled and edited and directed everything written by independent organizations like the Pope Center for Higher Education [Policy]. Would you ascribe to the president of Duke University every single thing that’s written by a professor at Duke University?” — **Yeoman**

This was hardly a straight-line path. Sanford's agenda produced a backlash that elected a conservative successor, Democrat Dan Moore, as governor in 1964. And in federal elections, North Carolinians have wandered all over the ideological map, most notably sending one of the nation's most rock-ribbed civil rights opponents, Republican Jesse Helms, to the U.S. Senate from 1973 until 2003.

"We can't over-mythologize the moderate nature of North Carolina," says the Reverend William Barber II M.Div. '89, state president of the NAACP—noting for example, that five rural school districts had to sue the state in the 1990s for adequate funding. "And yet, when I've traveled south, people in Mississippi [and] Alabama would always say, 'We're looking to North Carolina,' in terms of our universities and the Research Triangle Park and all of those things that would not be possible if North Carolina had not taken some deliberate steps away from the philosophy of the segregated South."

Not everyone shares this narrative linking prosperity to moderate politics and activist government. "North Carolina's economic history is not an uninterrupted climb until 2007, when suddenly we fell," says Locke's John Hood. He notes that the past half century has been filled with peaks and dips, which can be attributed to factors ranging from state highway spending to international manufacturing trends. Hood also says that Texas and Virginia have developed strong economies with more conservative governance. "To suggest that a Southern state cannot make progress unless it has a moderate-to-liberal Democratic political culture would strike the rest of the South as parochial," he says. "They would pat you on the arm and say, 'That's very nice.'"

**IT TOOK A** confluence of factors to set the moderate consensus crumbling recently. North Carolina's Democrats, who dominated politics for a century, fell into disarray. Governor Easley, House Speaker Jim Black, and Agriculture Secretary Meg Scott Phipps were all criminally convicted in separate corruption scandals. The party

had lost considerable credibility by 2009, when Governor Bev Perdue discovered that the Great Recession had ground the "virtuous circle" to a halt. "When Bev got shelacked with a budget that said, just to keep pace, with some cuts, we're going to have to raise taxes \$1 billion, North Carolina was not ready for that," McCorkle says.

Meanwhile, Democrats had done little to cultivate fresh leaders. "Terry always had young people around him, giving them influence, talking with them, working with them," says Korstad. "The Democratic Party had lost its ability to perpetuate itself."

At the same time, conservatives were creating a brain trust—groups like the John Locke Foundation, Civitas Institute, and North Carolina Institute for Constitutional Law—funded in part by the fam-

In 2010, this conservative infrastructure was able to seize on the public's economic despair and diminished faith in its leaders. "The opportunity was created by events," Hood says. "But the ability to respond was absolutely the result of years of investment and years of planning."

**THE NEW LEGISLATURE'S** most direct confrontation with the Sanford legacy came in the area of K-12 school funding. Its \$7.868 billion appropriation for 2013-14 represents a \$117 million cut from the "base budget," which is defined as what's "necessary to continue the current level of services." (Budget director Pope disputes that funding was cut, saying the base budget is "based on preliminary information and arcane budget rules.") The legislature reduced funding for teacher assistants by 20 percent and eliminated bonuses for future teachers with master's degrees. The Locke Foundation has opposed both of these budget items, saying they don't demonstrably boost student achievement.

The new budget also created a voucher system for low-income families to send their children to private schools at taxpayer expense. "Too many minority children are lagging academically," wrote Bob Luebke, senior policy analyst with the Civitas Institute, in a June 2013 column. "Many of these children are trapped in schools that are struggling or failing or don't



**Moderate consensus:** Governor Terry Sanford, his gubernatorial successor Dan K. Moore, and former N.C. Governor Luther H. Hodges, from left, at the 1964 Democratic convention in Atlantic City.

**"I think Terry would probably try to rally his network of business leaders and political elites and create some kind of official opposition. The Democrats have not known what the hell to do. Instead, those of us who are protesting and getting arrested are taking the place of what Terry would have done."**

ily fortune of lawyer, retailer, and former state legislator Art Pope J.D. '81, who is now state budget director. "[We were] building out a policy infrastructure in response to what the left had already done with greater amounts of money and more organizations," says Hood. (Indeed, Sanford's North Carolina Fund helped turn the Reynolds foundations into major funders of social-justice and community-development organizations.)

fit their needs." Vouchers, he wrote, provide families "the ability to choose the type of school that is best for their child."

Critics put a harsher spin on the \$10 million voucher program. "They are paying people to leave the public schools," says historian Tim Tyson Ph.D. '94, senior research scholar at Duke's Center for Documentary Studies. If Sanford were alive today, "he would be cutting them a new"—Tyson pauses here—"angle of vi-



sion. He would be serving it up red hot.”

The two sides disagree on what the budget will mean for the number of teachers in North Carolina classrooms. Pope says the final figures will not come out until February, but that “based on our estimates, there is sufficient budgeting to hire more teachers per student this year than last.” The state Department of Public Instruction, by contrast, estimates that 5,200 positions will be lost because the legislature altered the student-teacher ratio used for hiring. “We have started a spiral where we are slowly starving our public schools,” State Superintendent June Atkinson, a Democrat, told a television reporter in August.

The legislature also cut unemployment insurance; rejected a federally funded Medicare expansion; repealed the Racial Justice Act, which gives relief to death-row inmates who can prove that race influenced their prosecutions; passed abortion restrictions that will limit insurance coverage for some women and tighten licensure requirements for clinics; and expanded the venues where permit holders can carry concealed weapons, including playgrounds and funeral processions. It lowered the corporate income-tax rate and let expire the earned-income credit for low-paid workers.

Few measures stirred more discussion than the one dialing back North Carolina’s expansive voting policies. The new law reduces the number of early-voting days, requires voters to show government-issued IDs at the polls (college IDs don’t count), ends same-day registration and youth pre-registration, makes it easier to challenge a voter’s eligibility, and bans local election boards from extending polling hours because of extraordinary circumstances, like long lines. Defenders call the law, especially its photo-ID provision, an anti-fraud measure; the State Board of Elections documented two cases of voter impersonation between 2000 and 2012. “Part of the problem is it’s hard to detect voter fraud when there’s such loose standards,” says Pope.

Opponents call the fraud argument a smokescreen, arguing that the law is intended to reduce turnout among more liberal constituencies. Take early voting, for

example. “Black American churches, where I’m from in North Carolina, during election season we have an abbreviated Sunday service and have buses that transport folks who otherwise would not have transportation to the polls,” says Jay Pearson, assistant professor of public policy at Duke. Extended voting also benefits workers with inflexible schedules. Curtail the number of days that the polls are open, he says, and “you have an institutionalized mechanism that has been altered, systematically disenfranchising working-class, blue-collar folks.”

Pearson argues that, as governor, Sanford recognized that poverty stemmed from “structural inequality,” rather than individ-

“But the fact that these demonstrations are respectful and controlled and ‘moderate’ gives you some sense that that Sanford tradition is still in place,” Chafe adds. “People are not fighting the police. They are not aggressively transgressing the boundaries that have been established. These are polite protests.”

Like Chafe, others in the Duke community who knew Sanford wonder how he would have responded to a wholesale undoing of his policies. McCorkle, who worked closely with Sanford after graduating from law school, believes the former governor would have invested his energy developing new leaders to recapture power.

“It would be very clear to him: Go young, and go diverse,” McCorkle says. “He would be counseling people: Step aside. Be the elder statesmen. But bring in the young. They’re going to make mistakes, but they’re the future.”

And Tyson, who also got arrested during a Moral Monday protest, believes Sanford would reach out to the twenty-first-century demonstrators, just as he did in the 1960s to civil rights activists like North Carolina A&T student-body president Jesse Jackson. “Sanford would have immediately sent out trays of sandwiches and urns of coffee, and maybe deviled

eggs—there would be a little Southern touch to it—and said, ‘Come, let us reason together,’” Tyson says. “Without clogging the engine of the movement, he would have tried to get it tied to a crankshaft that was going to do something positive and powerful.”

During the 1960s, protesters made Sanford uneasy. But Tyson believes the former governor would have appreciated today’s racially diverse expressions of outrage. “We are the embodiment of the values he tried to advance in this state,” the historian says. “I think he would say, ‘At long last. At long last. My people.’” ■

*Yeoman is a journalist based in Durham. His recent work has been published in OnEarth, Audubon, The American Prospect, Parade and The Saturday Evening Post.*



Rallying cries: Protestors at the Moral Monday demonstrations opposed the legislature’s changes.

ual failings and understood how the machinery of government could be mobilized to give poor people power. The new majority, he says, understands how the machinery of government can be used to take that power away.

**HISTORIAN CHAFE**, who was arrested during a Moral Monday demonstration in May, sees a connection between Sanford’s governorship and the 2013 protests. “How would Terry handle it?” he asks of the rightward shift. “I think Terry would probably try to rally his network of business leaders and political elites and create some kind of official opposition. The Democrats have not known what the hell to do. Instead, those of us who are protesting and getting arrested are taking the place of what Terry would have done.”









# Peak **Performance**

From helping injured athletes get back in the game to pioneering innovative injury-prevention tools, Duke Sports Medicine addresses the care and maintenance of the world's most complex machine: **the human body.**

By **Bridget Booher**



**O**n a sun-drenched Sunday afternoon in late September, the Duke women's varsity soccer team trails Virginia Tech 0-1. Seven minutes into the second half, forward Kelly Cobb '15 falls to the field clutching her right leg. Cobb is considered one of the best goal-scorers in the country; she played on the 2012 U.S. World Cup team that won the gold in Japan. But she's also been plagued by injuries that have warranted surgery, physical therapy, and rehab.

For a few tense minutes, the team's athletic trainer assesses her condition, probing for pain and measuring stability as team physician Alison Toth M.D. '94 looks on. As play on the field continues, Cobb gets her ankle taped and gingerly puts weight on the foot. She takes a few tentative steps and quickly progresses to jogging along the sidelines. Within ten minutes, she's got the green light to go back in the game. A short time later, she spots an opening in the Hokie defense and launches a twenty-two yard kick to score Duke's only goal for the day.

Also clocking major game time are teammates Kaitlyn Kerr '14 and Kim DeCesare '14. Midfielder Kerr helped lead her high-school team to four state championships and her club team to a national title, but she's also suffered multiple setbacks—a torn quadriceps tendon in high school and subsequent surgical repairs to her left knee (torn meniscus) and right ankle (broken). Forward DeCesare tore her anterior cruciate ligament (ACL) and meniscus her

senior year of high school and was red-shirted as soon as she got to campus (she's a fifth-year senior), yet she managed to come back strong and was part of the 2011 team that made it to the NCAA finals.

Soccer fans familiar with the players' struggles could be forgiven for cringing whenever Cobb, DeCesare, or Kerr wind up horizontal on the Bermuda grass. (Late in the second half, DeCesare gets tangled up with a Virginia player and lies prone for a few seconds as her teammates start yelling: *Get up! Get up!*) But all three say that they have been able to resume playing—and get even tougher physically and mentally—thanks to Duke Sports Medicine.

"Soccer has been my life since I was two," Kerr says a few days before the Virginia Tech game. "My lifelong dream has been to play soccer in college and then profession-

**Back in the game:** Varsity soccer players Cobb, Kerr, and DeCesare, from far left, have come back strong after a host of injuries.

ally. So even though I've had a lot of injuries—it feels like I've been in rehab the whole time I've been at Duke—I can't get distracted by them. If you go out there worried about getting injured, or if you're at all hesitant, that's when things go wrong."

Duke Sports Medicine is based in the Finch Yeager Building overlooking Wallace Wade Stadium, but its reach extends far beyond the Duke campus. Its resources are illuminated under the Friday-night lights of Durham high-school football games, in

Medicine, Moorman is at the helm of a growing interdisciplinary enterprise focused on what he calls "the world's most complex machine—the human body."

"We're involved with everything from primary care—helping people avoid and manage injuries—to developing new surgical and rehab protocols. On the research side, we're exploring how things like genetic and metabolic testing can help determine an athlete's peak performance capabilities. We work with trainers and

partment, Sports Medicine employs state-of-the-art surgical techniques such as minimally invasive arthroscopic joint reconstructions and extracellular matrix reconstructions for massive rotator cuff tears. For Kaitlyn Kerr, whose knee injuries had left her with little cushioning cartilage between her tibia and femur, doctors recommended micro-fracture surgery. The arthroscopic procedure involves making tiny fractures in the bone, prompting stem cell-rich blood and bone marrow to seep out and create new cartilage.

Other non-surgical interventions such as PRP (platelet rich plasma) injections also use the body's repair mechanisms for maximum therapeutic effect and reduced recovery time. When an injury occurs, the body produces platelets that speed the healing process. With PRP, a patient's blood is extracted, platelets are isolated, and the concentrated plasma is injected directly into the injured site, thus expediting and amplifying the body's natural healing process. The procedure is relatively fast—a couple of hours—and carries almost no risks.

Moorman says that the optimal approach to sports medicine combines high-tech solutions with a low-tech, patient-centered approach. "No athlete is any more valuable than another athlete," he says. "We look at where that athlete is physically and mentally and decide the best course of treatment, whether that's cellular therapies or working with nutritionists and trainers."

For varsity players like Cobb, Kerr, and DeCesare, Duke Sports Medicine is one of the first places they go upon arriving

on campus. All varsity athletes receive a host of diagnostic screenings, including an intake history and a physical; a biomechanical assessment to gauge any imbalances, restrictions, or weaknesses; an EKG; a ferritin test to determine iron levels in the body; and a concussion baseline test that can be repeated if an athlete sustains a blow to the head. Those arriving with pre-existing injuries go straight to physical therapy and rehab.

"Almost from the second I got here I was in the weight room doing rehab," says DeCesare. "That year there were seven of



Megan Morr

**Undeterred:** Despite her grueling experiences with surgery and rehab, Kerr has never wavered in her determination to play competitive soccer at the highest level.

innovative orthopaedic surgical techniques that deliver better outcomes, through sports equipment whose design is informed by quantitative data to reduce injuries, and on military battlefields where soldiers' physical durability is crucial.

From his office on the third floor of Finch Yeager, Claude T. Moorman III '83 has a view of the field where both he and his father, Claude T. Moorman II '61, M.D. '66, played varsity football. Like his father, the junior Moorman is an orthopaedic surgeon; he's also Duke's head team physician. As director of Duke Sports

coaches, nutritionists and psychologists, surgeons and researchers, and everyone from people who just do sports on the weekend to professional athletes."

Former varsity basketball player Jay Williams '03 came to Durham for three of the many surgeries he required following the motorcycle wreck that nearly killed him. Moorman was the lead physician on a team overseeing Williams' care, which included extensive musculoskeletal and microvascular repairs, as well as intense rehab and physical therapy.

As a division of Duke's orthopaedic de-



us with season-ending injuries, so at least we had each other to go through it with. Now when a player on our team tears her ACL—and it seems like everyone at some point tears their ACL—there are so many of us who know exactly what she's in for and what every step of her rehab will look like." Despite her scars and setbacks, DeCesare and teammate Kerr, both of whom graduate in December, are hoping to be drafted into the professional National Women's Soccer League.

Robert "Hap" Zarzour, the director of athletic medicine, says that Duke's integrated approach is designed to attend to the physical and emotional wellness of athletes throughout their time on campus. "Our coaches, staff, and trainers spend a lot of time getting to know each individual athlete," he says. "It's not just about fixing a broken ankle; it's about getting them psychologically ready to go back on the field. Or if it's a kid who had a serious enough injury that they won't be able to play again, how do we help them emotionally? The psychological impact of an injury is huge.

barked on a training and nutrition plan that included cross-country hiking with a weighted backpack, climbing stadium steps in Wallace Wade, strength training, stretching exercises, and a specially designed carbohydrate-rich diet. The eighteen-week training program paid off: Croft arrived at the end of the 111-mile hike feeling "on top of the world."

"You don't have to be an elite athlete to come here," says McElveen. "Our clients include endurance and pro athletes, but we also work with clients who have recovered from cardiac bypass surgery and want to build fitness. We start by asking people what their goals are and then work with them to reach those goals."

On the research side, Duke Sports Medicine faculty members are engaged in refining the diagnosis and treatment of conditions that have traditionally been handled through subjective and imprecise measurements. For example, concussions are the most vexing injuries an athlete can sustain. Symptoms may be obvious (dizziness, headaches) or ab-

effects of sustaining multiple concussions over a career, as well as developing research protocols and standardized return-to-play recommendations to make the game safer.

"If we think a player tore her ACL, we can do an MRI to confirm that it's torn, but there is no MRI or CT scan equivalent for concussions," says Bytomski. "Right now we are diagnosing and treating concussions based largely on subjective information—what the player tells us they are experiencing—but that isn't always accurate. Our treatment recommendations are also dependent on subjective feedback, so we'll start with cognitive and physical rest and then slowly begin adding specific activities back into a person's routines."

**"We look at where that athlete is physically and mentally and decide the best course of treatment, whether that's cellular therapies or working with nutritionists and trainers."**

You can't isolate a physical injury from how it affects an athlete's outlook and attitude."

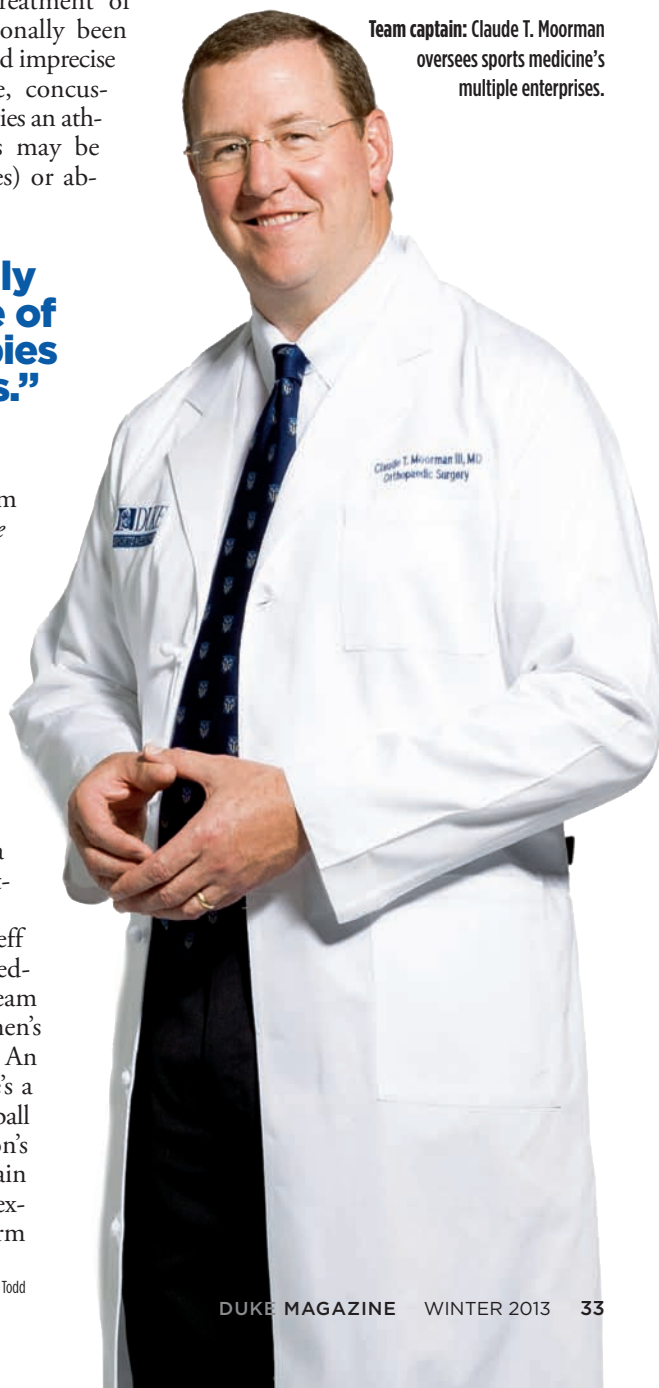
But it's not just Blue Devil athletes who benefit from Duke Sports Medicine expertise. The Duke Sports Medicine Clinic offers a range of services to the wider community, including diagnostic services, surgical and non-surgical treatments, and physical-therapy regimens. On any given day in the clinic, patients might include a high-school lacrosse goalie with a sprained wrist, a septuagenarian marathon runner suffering from tendonitis, or a tennis league player with rotator cuff inflammation.

Once physical ailments are addressed, people who want to enhance their athletic capabilities can work with the staff in Sports Medicine's sports performance division to set personal goals. That was the case with breast-cancer survivor Jan Croft, who was determined to celebrate her seventieth birthday by trekking to base camp at Mount Everest. Working with a team that included a sports-medicine physician, a nutritionist, and exercise physiologist Greg McElveen M.B.A. '93, Croft em-

sent. A star player may claim she's fine—*put me back in the game, coach!*—but not disclose that she blacked out for a few seconds after getting tackled. Diagnosing a concussion, which is a form of traumatic brain injury, is an imprecise science. And there are no quick-and-easy diagnostics for determining the severity of a concussion or how long a player should wait before getting back on the field.

Osteopathic physician Jeff Bytomski is Duke's head medical-team physician and team physician for the U.S. Women's and Men's Basketball teams. An authority on concussions, he's a member of the National Football League Players Association's Mackey-White Traumatic Brain Injury Committee, which is exploring the negative long-term

**Team captain:** Claude T. Moorman oversees sports medicine's multiple enterprises.



Les Todd





Les Todd

**On-site assessment:** Dan Mangiapani '06, M.D. '12, a second-year orthopaedic resident, evaluates Jordan High School's Micah Marsin-Lewis as part of Duke Sports Medicine's outreach efforts.

When Duke varsity student-athletes arrive on campus, they're required to take a cognitive screening test called ImPACT. Originally devised for NFL players, the ImPACT model has been adopted by a growing number of schools, club teams, physicians, and coaches. It's a computer-based screening that measures reaction time, verbal and visual memory, and other

mental functioning. The results serve as a baseline so that if a concussion is sustained (or suspected), a second ImPACT test can indicate the degree of impairment.

Sports-medicine and health-care professionals are exploring how to prevent or reduce the risk of concussions in the first place. For example, some neurologists have begun to question whether there should be

age thresholds for certain contact sports, since children's neurological and musculoskeletal development puts them at greater risk for concussions than college and pro athletes.

As these conversations continue to play out on the national and international level, Bytowski and his Duke colleagues are promoting educational-awareness programs in the Duke and Durham communities for parents, players, and coaches; medical-school students and primary-care physicians; and emergency-room staff.

"One of the biggest things we're focusing on right now is educa-

**"You can't see a concussion. So part of education is changing the culture that says if you can't see an injury you're fine, or that if you're injured you play through it."**



tion,” he says. “It’s like hydration thirty years ago. You used to hear about coaches who would withhold water, not give water breaks if the team or a certain player wasn’t playing hard enough. That would never happen in this day and age. But we continue to let kids play who have had concussions because some coaches might not know what to look for or think that a kid isn’t really injured. You can’t see a concussion. So part of education is changing the culture that says that if you can’t see an injury you’re fine, or that if you’re injured you play through it.”

Bytowski has launched the multi-disciplinary Sports Concussion Clinic, a collaboration between Sports Medicine and the medical center’s neurology and neuropsychology departments. Duke Sports Medicine can assess and triage members of the Triangle community who may have sustained concussions. A patient needing short-term care would be seen in the Sports Medicine practice, while those exhibiting more concerning symptoms would be referred to the medical center for more extensive neuro-imaging and intensive follow-up.

As part of its educational and community outreach, Sports Medicine also has joined with nearly a dozen public and private middle and high schools in the Triangle, assigning a dual-certified physical therapist/athletic trainer to work with the schools’ trainers and coaches. These individuals not only share the most up-to-date information and protocols for preventing injuries, they’re also on the sidelines for varsity home football games.

Physical therapist and athletic trainer Alanna Cooley Baker, the Sports Medicine liaison with Durham’s Jordan High School, coordinates the community outreach program. “We’re often the first line of care for these athletes,” she says. “We can assess and treat injuries as soon as

they happen.” The community outreach initiative also works with the Triangle Futbol Club and the Triangle United Soccer Association.

Injury prevention is a central focus of the Michael W. Krzyzewski Human Performance Laboratory, known as the K-Lab for short, as musculoskeletal injuries are one of the most common problems in sports medicine. A component of sports

the suburbs to war zones. Assistant professor of physical therapy Robert Butler says that augmenting routine physicals with movement screenings has a range of beneficial effects.

“Every year the U.S. military spends about \$560 million on musculoskeletal injuries,” he says. “In fact the number-one reason for medical evacuations from the front line in Afghanistan and Iraq was non-

battle specific injuries—knee, hip, back, or ankle injuries that happened as part of training exercises or other activities to get ready for battle.” Researchers at the K-Lab form part of a research group aimed at designing, implementing, and refining an economical and efficient screening protocol that can assess athletes’ ability to move efficiently and to remain durable.

Butler says that “industrial athletes” such as firefighters, police officers, and sanitation workers are another population where movement screening can benefit employer and employee. “We work with towns and municipalities to reduce injuries because that can help reduce the massive costs associated with worker’s compensation claims. But more important, we can encourage people who have minor problems to seek treat-

ment before it gets worse. No one wants to be out on permanent disability.”

Whether it’s expediting an athlete’s return to the game she loves or developing preventive health techniques for blue-collar workers, Butler says he and his Sports Medicine colleagues always keep the long-term perspective in mind.

“Human bodies are designed to move. When people don’t engage in physical activity, you see things like a rise in obesity, higher blood pressure, and a whole host of things that reduce lifespans. So we want to find ways to get people moving and reduce the risk of injuries so that they are active and healthy throughout their lives.” ■



**Everest ready:** Jan Croft works with Greg McElveen to prepare for her Himalayan trek.

Courtesy Jan Croft

medicine, the lab was launched in 1997 and conducts studies that examine everything from injury risks associated with certain types of field turf to better orthotic design and understanding the risk factors associated with osteoarthritis and stress fractures. Nike is a major industry partner, funding a range of research on foot, ankle, and knee injuries in order to design more protective cleat and athletic-shoe design.

K-Lab research also contributes to a broader understanding of kinetics and kinematics—how bodies move and the patterns associated with those movements. Those studies are informing policies and practices in settings ranging from

## The Man Who Criminalized

# Gen.

The long journey and lasting legacy of human-rights proselytizer  
Raphael Lemkin—from occupied Poland to Duke to the United Nations

BY ROBERT J. BLIWISE

This is how you mend a broken world. A war-crimes tribunal presses a genocide charge, some decades later, against the leader of the Bosnian Serbs. The president of Sudan, wanted on charges of genocide in Darfur, where violence broke out in 2003, stirs embarrassment and angst with his plan to attend the United Nations General Assembly. Bangladesh sentences a former lawmaker to death for the mass murder of Hindus during the country's 1971 war of independence from Pakistan. Romanian prosecutors charge the commander of a Communist-era prison with genocide—an echo of charges against the former dictator Nicolae Ceausescu, who was executed in 1989.

That's a roster of recent events. Along with word from Iran's foreign minister that his country does not deny the historical reality of the Holocaust, which he labels, aptly, genocide. A low-bar prerequisite, surely, for a long-stymied diplomatic conversation.

You're an agitator against genocide. In fact, you invented the word "genocide." So what would you think if you were to survey today's global nastiness, deeds that reveal the worst of human na-

ture and exact the worst of human costs? Would you still think giving a name to something makes it possible to squeeze it out of the system?

Genocide, it seems, never goes out of fashion, or at least never lies beyond the realm of the humanly possible. This summer, it found a different kind of relevance—the past creeping up on the present through a singular figure—with the publication of *Totally Unofficial: The Autobiography of Raphael Lemkin* (Yale University Press). Lemkin's autobiography, unfinished and unpublished at the time of his death, was edited by Donna-Lee Frieze, a senior fellow at the Center for Jewish History in New York and a visiting fellow at Deakin University in Australia.

As the Nazi stain spread over Europe, Lemkin, a refugee in America, invented the term "genocide" and worked to propel the idea to international legal status. In his time, he was nominated for the Nobel Peace Prize. But his name is not widely recognized today. Nor is it widely recognized that an American institution gave him safe harbor at a critical point. That institution was Duke.

History hasn't completely ignored Lemkin. This past spring, his



# • cide

work was a major theme in the annual Distinguished Lecture in Ethics—on “The Ethics of Globalization and the Globalization of Ethics”—sponsored by Duke’s Kenan Institute for Ethics. The speaker was Michael Ignatieff, former leader of the Liberal Party of Canada and a professor at both the University of Toronto and Harvard University’s Kennedy School of Government. In the lecture at Duke, and in his writing over the years, Ignatieff portrays Lemkin as a figure with an extraordinary moral imagination—and as an original thinker who could see, early on, the contours of a perverse form of jurisprudence.

“His central insight was that the occupation, not just in Poland but all across Europe, had inverted the equality provisions of all the European legal traditions,” Ignatieff says. “Food in Poland was distributed on racial grounds, with Jews getting the least. Marriage in occupied Holland was organized entirely on racial lines: Ger-



Adviser and advocate: Lemkin's War Department identification card

American Jewish Historical Society, New York and Newton Centre

mans responsible for getting Dutch women pregnant were not punished, as would be the case under normal military law; they were rewarded, because the resulting child would be a net addition to the Nordic race.” Lemkin was the first scholar to work out the logic of the system. “From its un-

remitting racial bias, he was able to understand, earlier than most, that the wholesale extermination of groups was not an accidental or incidental cruelty, nor an act of revenge. It was the very essence of the occupation.”

The essence of Lemkin's legacy is the starting point for the Pulitzer Prize-winning *A Problem From Hell: America and the Age of Genocide*, published just over a decade ago. The author is Samantha Power, once a correspondent in Sarajevo, a capital city under siege during the Bosnian War, and now U.S. ambassador to the United Nations. Lemkin failed to win support for any meas-

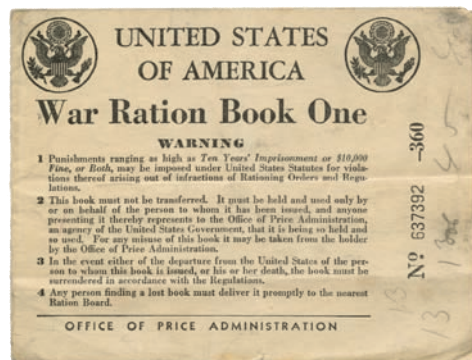
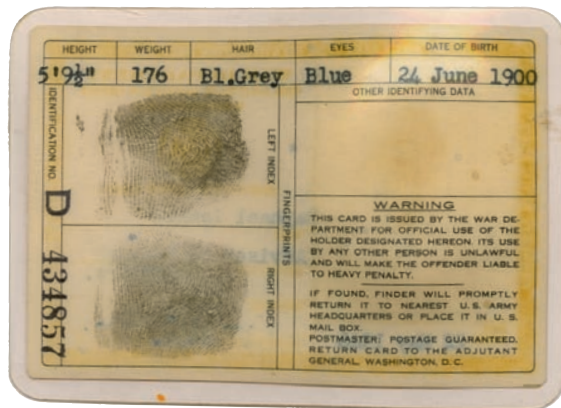
ure to protect the Jews against Hitler's designs. But, Power points out, he later secured the passage of the first-ever United Nations human-rights treaty, the treaty that outlawed genocide.

Human-rights abuses were an early and obsessive interest for Lemkin, who grew up in a Jewish household. He writes in his autobiography that as a twelve-year-old, he was struck by an account of ancient Rome and particularly of Emperor Nero's massacres of Christian converts. He built a reading list around similar grim accounts through history. History, though, hit close to home. When he was just five, Jews were murdered in pogroms in his home region of Bialystok in Poland.

As a twenty-one-year old linguistics student at the University of Lvov, Lemkin learned of the case of a young Armenian. The Armenian had been charged with assassinating a former Turkish interior minister, an official who had set out to rid Turkey of its Armenian "problem," igniting a campaign that reportedly brought the deaths of a million people. Lemkin asked his professor why

ity," meaning "the premeditated destruction of national, racial, religious, and social collectivities," along with "vandalism," referring to the "destruction of works of art and culture, being the expression of the particular genius of these collectivities." But the Polish Foreign Ministry, interested in an accommodation with Germany, would not allow Lemkin to travel to Madrid. His proposal was tabled at the conference.

In September of 1939, Germany invaded Poland. Lemkin began a 14,000-mile journey to freedom—and eventually to Duke. He boarded a train from Warsaw; just as it got under way, the train was bombed by the German Luftwaffe. He hid for days in the nearby forest and lived for a time in Poland's Soviet-occupied territory, where he sought refuge in the house of a baker. As he relates in his autobiography, Lemkin resisted his host's sentiment that in the end all would work out for the Jews, whose lot it had forever been to suffer and wait. Lemkin responded that this was a different war. "It is not a war to grab territory as much as to destroy whole



the larger crime had gone unpunished. The professor said there was no law under which the chief perpetrator could be arrested.

The case became an international sensation. According to *The New York Times*, the documents introduced in the trial "established once and for all the fact that the purpose of the Turkish authorities was not deportation but annihilation." Lemkin was uncomfortable, though, with the fact that the assassin had acted as the "self-appointed legal officer for the conscience of mankind," as Power puts it in her study. "Passion, he knew, would often make a travesty of justice." Retribution had to be legalized.

A decade later, in 1933, Lemkin, by then a public prosecutor in Warsaw, wrote a paper for an international criminal-law conference to be held in Madrid, drawing attention both to Hitler's ascent and to the slaughter of the Armenians. If it happened once, he argued, it would happen again. If it happened there, it could happen here. "Lemkin offered up a radical proposal," Power writes: Preventing genocide must be a global imperative, one enshrined in international law. His draft law would outlaw "barbar-

**A journey against genocide:** This page from top, the back of Lemkin's War Department ID card, Lemkin's wartime ration stamp book alongside the "Certificate of the Registrar" and accounting pages contained within it; opposite page from top, a 1950 flyer advertising a public debate on the genocide treaty, Lemkin's admission card for meetings that began in 1946 at Lake Success—a temporary location for the U.N., Lemkin's admission card to the Paris U.N. General Assembly of 1948

peoples and replace them with Germans."

Lemkin reunited briefly with his family in eastern Poland; they refused to join him in flight. He next journeyed to Lithuania, and then to Stockholm in neutral Sweden. While lecturing on international law at the University of Stockholm, he visited a Swedish corporation for which he had done legal work in Warsaw. He requested a favor: to ask their branch offices to send government pronouncements from the occupied countries. "I started to read them, and I also found official gazettes of the German Reich in library collections in Stockholm," he writes in his autobiography. It became clear to him that Germany was pursuing "denationalization followed by dehumanization."



That would mean “the death of the nation,” in a spiritual and cultural sense alike. “As for the Jews, ominous signs pointed to their complete destruction in gradual steps.... In the peaceful library of Stockholm I saw an entire race being imprisoned and condemned to death.”

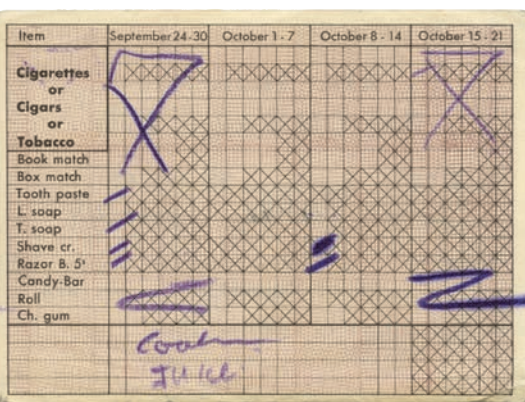
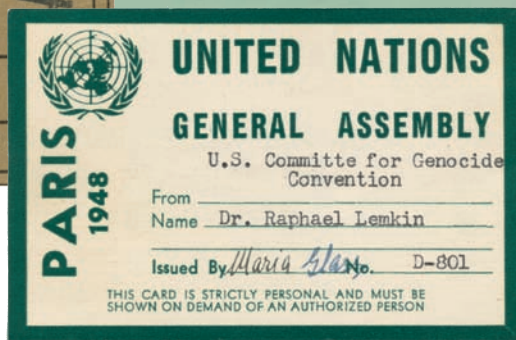
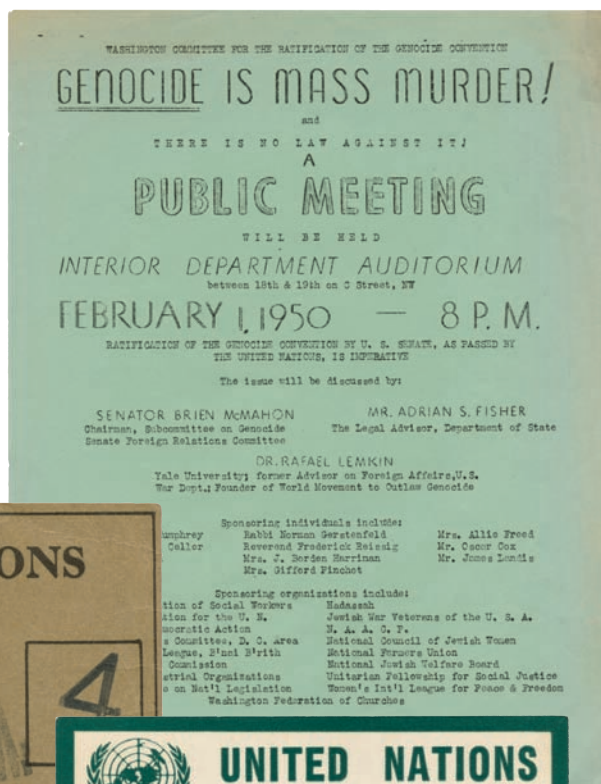
Lemkin became desperate to get to the U.S. And here’s where a Duke scholar enters—or more precisely, re-enters—the picture: Malcolm McDermott, a member of the Duke law faculty, who, in 1941, arranged for Lemkin’s status as a “special lecturer.”

In 1932, Lemkin had worked with McDermott to translate the Polish criminal code into English. The work accented such unusual features in the code as imprisonment up to five years for publicly inciting warfare; it was

caught a flight to another chronic bad-weather spot, Moscow, followed by a ride on the Trans-Siberian railroad to Vladivostok. From there he picked up a small boat, the “floating coffin,” and endured three days of stormy seas en route to the Japanese port of Tsuruga. He was in the country long enough to learn and muse about the mass murder of Catholics in Japan, an episode that began in the seventeenth century and lasted some two centuries. Another, more passenger-friendly boat brought him from Yokohama to Vancouver and on to Seattle, the U.S. port of entry, where he landed in April of 1941. A few days later, he arrived by train in Durham.

McDermott was waiting at the station; this was their first meeting in five years. Lemkin’s first impression of Durham was of “a lively, bustling city smelling of tobacco and human perspiration. There were gasoline stations on the corners, cars crowding bumper to bumper, people moving along. ... People greeted each other in a casual, friendly manner: ‘Hiya, John!’ ‘Hey, Jack!’”

Once McDermott drove him to Duke’s campus, Lemkin found nothing of “the European university atmosphere of worry.” He was led to “a huge quadrangle of high buildings, clean-cut and dressed in stony dignity,” and noted the well-manicured lawns and the imposing trees that surrounded them. “Young men and women moved about the campus with a remarkable ease. The boys wore white shirts open at the



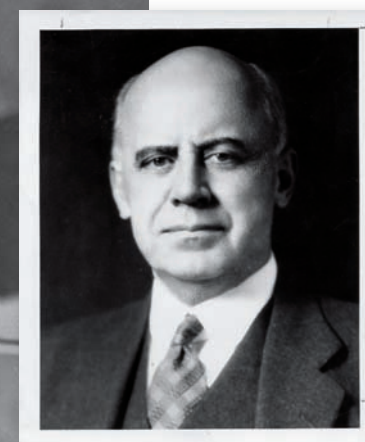
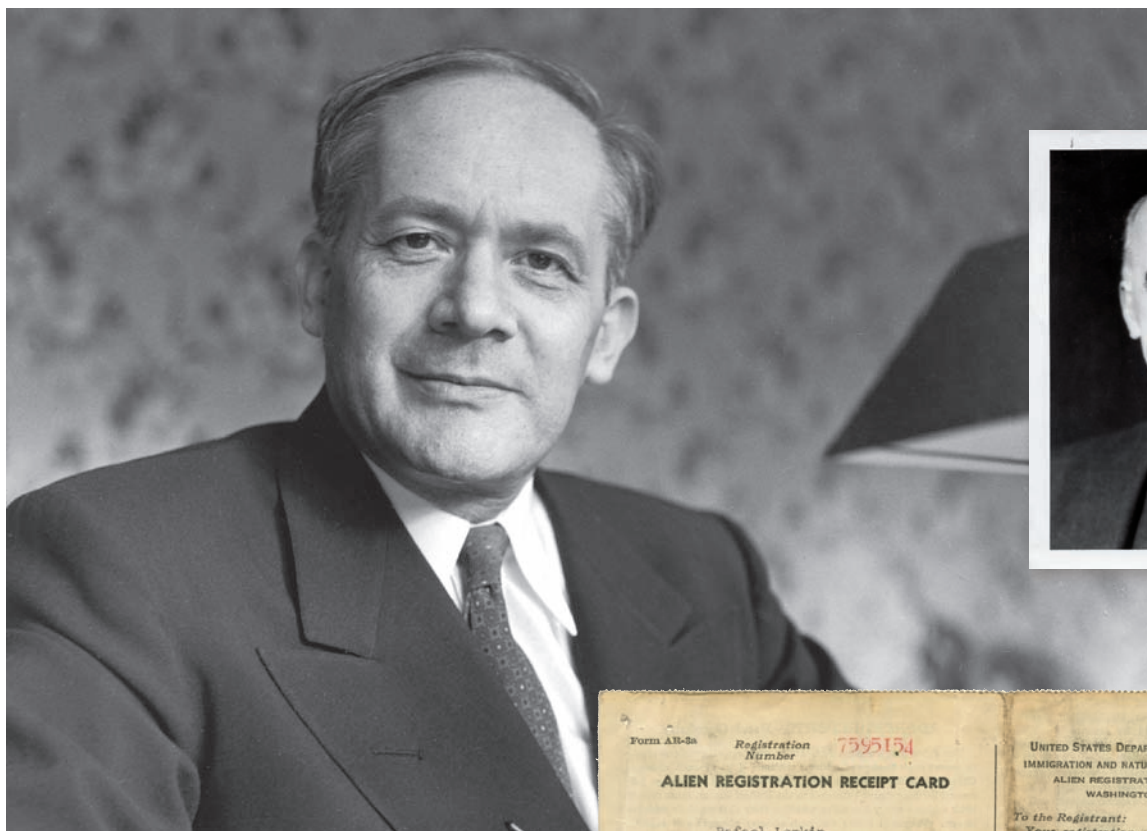
“When the rope is already around the neck of the victim and strangulation is imminent, isn’t the word ‘patience’ an insult to reason and nature?”

published by Duke University Press. A few years later, from 1936 to 1937, McDermott was a visiting lecturer at the universities of Krakow and Warsaw. On his return to campus, he expressed admiration for the “law-abiding” tendencies of the Poles. “Mr. McDermott,” reported Duke’s *Law School Bulletin* in March 1937, “finds the Poles like Americans in many ways. One quite un-American trait, however, is that they almost never talk about the weather, which is mostly bad. They dress as if they expected the worst, and usually get it.”

With Duke as his destination, Lemkin left Stockholm and

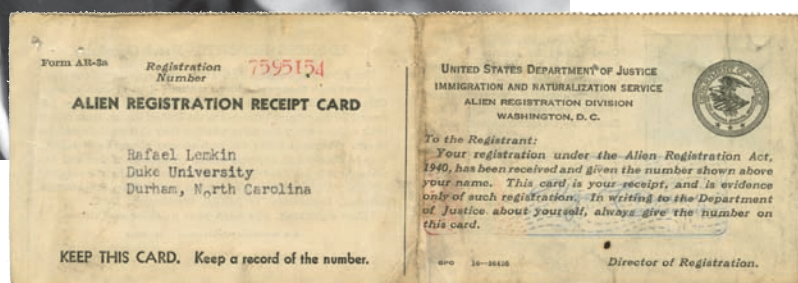
collar; the girls wore no stockings—they had on light summer dresses and carried many books and even more smiles, which they distributed generously.”

On Lemkin’s very first day, McDermott delivered an early surprise: “There is an alumni dinner this evening with the university president [Robert Lee Flowers], and I promised that you would speak.” And he would speak, of course, in English, a language that he had never used for “everyday living.” McDermott promised to sit right behind him and whisper prompts as needed. But Lemkin found his message without coaching from the sidelines:



Duke University Archives

Arthur Leipzig



**Working partners:** Lemkin postwar; inset, top, his Duke mentor, Malcolm McDermott; inset bottom, Lemkin's U.S. alien registration card

"If women, children, and old people would be murdered a hundred miles from here, wouldn't you run to help? Then why do you stop this decision of your heart when the distance is 5,000 miles instead of a hundred?"

Since he had arrived near semester's end, Lemkin didn't have immediate teaching duties. Still he would talk with students, often from a seat on the porch of the law school (then located along the academic quad). "The American student's most interesting quality is his curiosity," he writes in the autobiography. "This is probably due to the fact that the high schools in America are of lower quality than those in Europe: I believe this makes the American student feel that there is always something new to discover that he should have learned in high school, when he could have been organizing his mind and knowledge."

At Duke, Lemkin found himself organizing his mind and knowledge with plunges into the speaking circuit. (His mentor, McDermott, took to the road with equal exuberance, on such subjects as "the history of liberty.") As he recalls in his autobiography, "I visited many towns in the state and told the same story to Chamber of Commerce meetings, to women's groups, to gatherings of young people." He bought a white suit along with white shoes and white socks, all of which he would wear with a dark silk tie, "in order to attend the dinners I was invited to." In the midst of all those public forays, Lemkin received a letter from his parents on a scrap of paper. "We are well," the letter read.

Just days later, in June of 1941, he heard a radio broadcast announcing that Germany had declared war on the Soviet Union; separate German and Soviet zones in Poland had dissipated with the abrogating of the German-Soviet non-aggression pact. Forty-nine members of his family would perish in the Holocaust.

The Holocaust was never far from Lemkin's teaching, lecturing,

and writing at Duke. He began putting together the pieces that would form his major work, *Axis Rule in Occupied Europe*, published in 1944. In the book's credits, McDermott is among those acknowledged, along with "the Library of Duke University for establishing a special documentation center on laws of occupation at the suggestion of the author."

In generally detached language and through a narrow legal prism, the book analyzes Axis authority and policies in occupied Europe. Lemkin writes in the preface that the book grew out of a desire to reveal, "based upon objective information and evidence," the contours of totalitarian rule. "Every phase of life, even the most intimate, is covered by a network of laws and regulations which create the instrumentalities of a most complete administrative control and coercion. Therefore these laws of occupation are an extremely valuable source of information regarding such government and its practices. For the outside world they provide undeniable and objective evidence regarding the treatment of the subjugated peoples of Europe by the Axis Powers."

Its first section considers aspects of the German occupation through multiple lenses, from "Police" to "Property." Another section looks at the occupation in individual countries—France, Norway, the Netherlands, Poland, and on and on through a continent adrift. In a chapter on "The Legal Status of the Jews," Lemkin declares, "The treatment of the Jews in the occupied countries is one of the most flagrant violations of international law, not only of specific articles of the Hague Regulations, but also of the principles of the law of nations as they have emerged from established usage among civilized nations, from the laws of

Raphael Lemkin Collection ; P-154; American Jewish Historical Society, Boston and New York.



humanity, and from the dictates of the public conscience—principles which the occupant is equally bound to respect.”

“Genocide,” coined by Lemkin, appears for the first time in print in his book. “New conceptions require new terms,” the one-time student of linguistics writes. “By ‘genocide’ we mean the destruction of a nation or of an ethnic group.” This particular new term, he goes on, is made from the Greek word *genos* (race, tribe) and the Latin *cide* (killing), thus corresponding to tyrannicide and homicide. Genocide, he elaborates, signifies “a coordinated plan of different actions aiming at the destruction of essential foundations of selves. The objectives of such a plan would be disintegration of the political and social institutions, of culture, language, national feelings, religion, and the economic existence of national groups, and the destruction of the personal security, liberty, health, dignity, and even the lives of the individuals belonging to such groups.”

*Axis Rule* had immediate resonance. *The New York Times Book Review* devoted a cover story to the book, comparing its picture of Axis rule to a “monster” that “gorges itself on blood.” A *Washington Post* editorial titled “Genocide” later singled out the word in question as adequately capturing a brutal revelation: the gassing, over a period of two years, of some 1,765,000 Jews at Auschwitz-Birkenau. According to the editorial, the profound point about those killings “is that they were systematic and purposeful.”

In June of 1942, Lemkin left Duke to work as chief consultant for the federal Board of Economic Warfare and the Foreign Economic Administration. Two years later, he started with the War Department as an expert in international law. Power writes that Lemkin pleaded with President Franklin D. Roosevelt to have the U.S. adopt a treaty against barbarity and to make protection of Europe’s minorities a central war aim. Roosevelt urged patience. Lemkin’s response, as recorded in his autobiography: “[W]hen the rope is already around the neck of the victim and strangulation is imminent, isn’t the word ‘patience’ an insult to reason and nature?” He saw a “double murder,” one by the Nazis against the Jews and the other by the Allies, who refused to publicize or denounce Hitler’s extermination campaign.

Lemkin, in the book’s preface, underscores the importance of bringing to justice “the considerable numbers of Germans responsible for the great carnage.” In the spring of 1946, he went to Europe to search out surviving members of his family—and to observe the international military tribunal at Nuremberg as a kind of lobbyist, as Power describes him. His goal was to highlight mass slaughter as a crime in any context; the prosecutors, though, largely focused on aggression that grew from violations of another state’s sovereignty. He did manage to score what Power calls an occasional victory—including an indictment stating that some defendants “conducted deliberate and systematic genocide,” the first official mention of genocide in an international legal setting.

Lemkin arrived at U.N. headquarters in the fall of 1946, just as the new international organization was considering a resolution on genocide. That December, the General Assembly unanimously passed a resolution that condemned genocide as “the denial of the right of existence of entire human groups.” It was deemed shocking to “the conscience of mankind,” and contrary to “moral law

and to the spirit and aims of the United Nations.” The resolution charged a U.N. committee with drafting a full-fledged treaty that would mark genocide as a violation of international law. It was a triumphant moment for Lemkin when, in December of 1948, the genocide convention finally passed. Around the crime of genocide, offending states would no longer have the legal right to be left alone; in fact, other states would have the legal responsibility to put to trial those suspected of committing genocide. Lemkin had felt that a mere declaration of human rights would be meaningless without an enforcement mechanism.

Early U.S. leadership on the genocide treaty, though, evaporated—a consequence, argues Power, of traditional hostility toward any infringement on U.S. sovereignty. That hostility was only amplified by the Red Scare of the 1950s. Lemkin himself

became a target, if not directly of anti-Communist zeal, then at least of politically convenient slander: A member of the Senate Foreign Relations Committee complained that the “biggest propagandist” for the treaty was “a man who comes from a foreign country who...speaks broken English.”

After a number of countries signed the convention in 1957, *The New York Times* lauded

Lemkin as “that exceedingly patient and totally unofficial man.” But the U.S. wouldn’t ratify the treaty until the 1980s. And it was only in 1998 that the International Criminal Tribunal for Rwanda convicted Jean-Paul Akayesu of genocide; it was the first such prosecution by an international court since the adoption of the 1948 convention. American policymakers had deliberately avoided the term “genocide” out of a concern that a genocide finding would have obliged the U.S. to act—a sad irony of the Lemkin legacy. Three years later, the International Criminal Tribunal for the former Yugoslavia found Radislav Krstic guilty of genocide for his role in the massacre of some 8,000 Bosnian Muslims in the town of Srebrenica. That was seen as the worst atrocity on European soil since World War II.

*Totally Unofficial*, the incomplete autobiography, ends with fragmentary notes for a concluding chapter. Lemkin refers to “an uphill fight, especially since I have to borrow money for postage to write to influential and interested people.” At that point he was jobless and penniless; he complains about critics who, “aware of my extreme poverty, use it to humiliate and undercut me.”

Still campaigning for his cause, still aspiring to see genocide elevated as an international crime, he was living in a one-room apartment on West 112th Street in Manhattan. On a visit to a Park Avenue public-relations agency, he died of a heart attack in August of 1959, at age fifty-nine.

Would Lemkin have been disappointed that genocide persists, irrespective of international opprobrium? Today the editor of his autobiography, Donna-Lee Frieze, says he had long acknowledged that the struggle to eradicate, prevent, or punish genocide would be long, and that an international convention was just a framework for the task. “Looking at the surface of Lemkin’s ideas, one could argue that he would have been disappointed and shocked. But I don’t think that’s the case,” she says. “He wasn’t so naïve as to expect a convention would immediately eradicate genocide. He was so deeply a student of genocide history that he understood that this was a ‘disease’ of humankind that continually occurs.” ■

“He was able to understand, earlier than most, that the wholesale extermination of groups was not an accidental or incidental cruelty.”



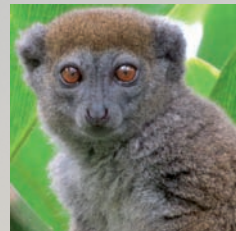


Inset photos this page Karl Leif Bates

Preserving nature: Mist surrounds Leaning Rock Mountain in Marojeiy National Park, Madagascar; inset, left, Duke Lemur Center's Charlie Welch with postdoc fellow Erik Patel; inset, right, erosion in the Andapa Basin; far right, a northern bamboo lemur







Jonathan Jacques Hanson

# Islands of Recovery

Duke's **SAVA Conservation Project** is building partnerships that help Madagascar's lemurs by helping its people.

By Karl Leif Bates

Cloud-draped Marojejy National Park rises like a deep green island on a pastel sea of human disturbance. In each muddy quadrangle of rice paddy around the island's feet, a single cow is staked out to graze and defecate. This rainforest preserve is a dwindling refuge of Madagascar's native biodiversity, 80 percent of which exists nowhere else on Earth. The park's steep flanks have a moth-eaten look, dark above, light green below, as slash-and-burn agriculture—the cutting and burning of the trees to make fields—climbs to the park boundaries, and sometimes beyond. Just 10 percent of what Madagascar once had survives relatively unscathed. Today, it is an island of islands like this.

**T**his is the best road in all of Madagascar," the Duke Lemur Center's Erik Patel shouts from the cramped backseat of a pickup as it zips perilously past chickens and children at forty-five miles per hour on the road up to Marojejy. Highway 3B is a two-lane asphalt ribbon that conveys trucks heavy with rice down from the paddies of Andapa Basin to Sambava and other cities along the Indian Ocean on the east coast. But this also might be called "the vanilla highway." In every hamlet along its sixty-five-mile journey, side yards are carpeted with woven palm mats on which chocolate brown vanilla beans are in neat rows, drying slowly in 90 percent humidity. The air is wood smoke and vanilla.

Patel knows this road well, spending about half of the week at a hotel in Andapa



and the other half at a hotel on the beach in Sambava, where there is an airport, reasonably good Internet, and some office space rented by the Lemur Center. Patel has spent more than a decade in this north-eastern region called SAVA—an acronym for its four principal cities. He first arrived as a field researcher, but grew into an environmental crusader and minor media celebrity, the subject of BBC documentaries and articles in *Smithsonian* and *National Geographic*. Today, he's a Duke postdoctoral fellow, heading the Lemur Center's two-year-old SAVA Conservation project centered on Marojejy. With an annual budget of just \$50,000, the project encompasses a web of satellite operations, including three fish farms, three tree nurseries, some model agriculture, libraries and schools, and a cooperative that manufactures an alternative fuel called "green charcoal"—essentially flammable compost.

SAVA Conservation is Duke's new beachhead in Madagascar, where the Lemur Center has had a physical presence in conservation and research since the mid-1980s. The university's new drive toward globalization has connected the SAVA region to Durham in ways never before imagined. Nicholas School of the Environment master's students have been doing field research with Patel in Marojejy Park. Charlie Nunn Ph.D. '99, a new joint-faculty hire in evolutionary anthropology and the Global Health Institute, will be working in the Andapa region as well, studying the evolution of infectious disease in primates and a host of other topics. Two DukeEngage students joined Patel for the summer, encouraging fish farming and working on a private nature reserve, and lending a hand to most of the other projects SAVA Conservation is launching. Duke's connection is practical and solutions-oriented, says local partner Rabary Désiré. "What they do here, you can see it, you can measure it, you can weigh it."

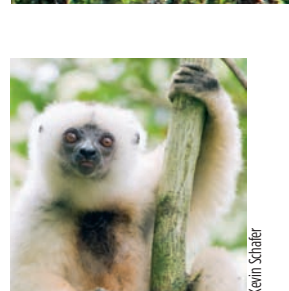
### SAVING LEMURS WITH BOOKS

Folded up next to Patel in the back seat of the pickup is a tall, quiet man in quick-drying clothes. Lemur Center conservationist Charlie Welch is a zookeeper by training; he has devoted his largely unsung and sometimes unpaid career to the deep-green patches of Madagascar's natural heritage. Yet it's his ability with people, more than lemurs or trees, that has done the most good.

Behind them, in the bed of the truck, are three fifty-pound duffels stuffed with heavy-duty raincoats for the "village guards," civilian volunteers who live

around Marojejy's borders and keep an eye out for those who would poach lemurs and trees. "You can't find any raincoats here that last more than a week in the forest," Patel says. These impressively heavy, black Carhartt coats, imprinted with SAVA Conservation's Malagasy slogan and the logo of Madagascar's National Parks, "may be one of the most valuable articles of clothing a village man may have—for a decade," Patel says. Experience has taught Patel and Welch that it's the little touches that make Malagasy diplomacy work. The coats will be a hit in their meeting with National Parks officials later in the week.

Welch first came to Madagascar in 1987 with his wife, Lemur Center curator of the animal collection Andrea Katz '77. They had been dispatched by then-Lemur Center director Elwyn Simons at the invitation of the Malagasy government to try to help rescue Parc Ivoloina, a decaying former forestry research station built by the French at the turn of the twentieth century. Lying just a few miles north of the coastal city of Tamatave (now Toamasina), it had been



Kevin Schaller



Karl Leif Bates

Renewed connections: Lemur geneticist Anne Yoder, left, with DukeEngage students Sophia Staal, Cameron Tripp, and Erik Patel

smashed hard by an Indian Ocean cyclone the previous year. The park's captive lemurs, which had been rescued or seized from human hands by Madagascar's forestry department, were bedraggled and neglected, living in and around too-small cages torn open by the storm and breeding strange hybrid species.

"Ivoloina was a disaster," Welch recalls. "The government had no money. Not only did you not see cars, the people didn't have enough to buy bicycles." Remoteness, the collapse of French imperialism, and some poor choices in self-governance had left the island nation largely cut off from the rest

of the world for decades.

By 1989, the Duke couple was living at Ivoloina full time in a small wooden home without electricity or plumbing. Laundry was done in a bucket on the veranda, and a trip to the grocery store required a dugout canoe ferry across the river and a two-mile hike. Katz was on a half-time salary from the Lemur Center, and Welch was just along for the ride. "But you know, it doesn't cost much to live in Madagascar," he says with an easy smile that creases his face and raises the ends of his bushy moustache. He's a nerdier Sam Elliott, with a Mississippi drawl.





**A new path:** Staal takes in the Andapa Basin. As part of her DukeEngage project, she visited roadside fish stands in the area; inset top left, red-ruffed lemur.

Karl Leif Bates

“We thought we were going to be living in a tent, so that little house was pretty good,” interjects Katz, who now shares an office with her husband at the Lemur Center, where they’re both on the payroll. “We were all about the lemurs,” she says. “But when you live there and see the amount of lemur habitat destruction going on, you realize that there is no way anyone can do anything to turn that around until local people have alternative agricultural technology and are educated about the environment.”

Their model took years to develop and included patching together a budget with

foundation support and building effective partnerships with the Malagasy, who were initially “confused by this whole Western fixation on conservation,” Welch says. “Breeding animals in captivity was only going to make a small dent. We quickly realized that if we wanted to do anything, we were going to have to go way beyond lemurs. About 95 percent of our conservation is working with people.”

The program at Ivoloina branched out into environmental education, teacher training, model agriculture, and tree farming. Sometimes their partners got paid, sometimes they didn’t. The park was re-

stored and reforested, and it thrives today, with 20,000 annual visitors who, just as people do in Durham, come for their first glimpse of lemurs living comfortably in cages. The partnership developed a Saturday-school program for kids living around Ivoloina to help them develop critical skills for their sixth-grade test, as well as expose them to environmental education. A typical pass rate for the sixth-grade national exam was about 5 percent in the rural areas; around Ivoloina, it rose to 80 percent and then past 90. Teacher training sessions and a sixty-eight-page curriculum that was government-approved and easy to photo-



copy supported the effort. Patel is using it now in the SAVA project.

In 2004, shortly after helping secure a long-term lease from the government that allows an NGO (non-governmental organization) called the Madagascar Fauna Group to manage Parc Ivoloina, Welch and Katz somewhat reluctantly decided to return to the States for their daughter's education and to be near their aging parents. "It was a very difficult decision for us to leave," Welch says. "But it was good for the project to let it stand on its own." The couple were knighted by the Malagasy government for their contributions, after fifteen years of service.

## REVIVING THE OLD MODEL

When lemur geneticist Anne Yoder Ph.D. '92 took over as Lemur Center director in 2006, Katz was the half-time conservation coordinator in Durham, Welch was unemployed, and Duke had hardly any conservation presence on the ground in Madagascar. But Yoder remembered when conservation had been one of the Lemur Center's core values and the name Duke was recognized throughout Madagascar. Yoder rehired them both and set Welch on a mission of finding a new conservation project the Lemur Center could lead with philanthropic support.

Welch, who also leads Duke Alumni As-

sociation tours of Madagascar, spent a couple of years searching the country for a spot with high conservation value and a relatively low level of do-gooder attention before settling on the SAVA region of northeastern Madagascar. "It was a matter of just giving Charlie the chance to get things going again," Yoder says, as if the outcome had never been in doubt. After all, everywhere "Monsieur Shar-lee" goes in Madagascar, people greet him warmly. A full foot taller than most Malagasy, Welch is pretty easy to spot. His French is a slow drawl, accented with hard R's that would set any high-school French teacher's teeth on edge, but he's never lacking for understanding, vocabulary, or charm.

Welch says the appeal of the SAVA region was not only Marojejy's relatively unspoiled nature and a good road up from Sambava, but Patel, who was already something of a conservation celebrity by the time Welch met him. A Chicago native with an Indian father and a German mother, Patel had formed his own charity, Simpona, to build libraries and support people living around the park, and he had been involved in documentaries exposing some of the illegal trade in prized Malagasy rosewood. "I didn't want to get into a situation where we'd end up getting kicked out of the country," Welch says. "But as I got to know him better, I understood he wasn't an over-the-edge type."

Welch and Yoder implored Patel to finish his Cornell dissertation—ten years in the making—on the vocalization and scent-marking of the critically endangered silky sifaka so that they could offer him the Lemur Center's first-ever postdoctoral fellowship and leadership of the newly formed SAVA Conservation Project. Patel had come to Marojejy in 2001 to track and study the park's signature lemur, the ethereal silky sifaka. An all-white version of *Zooboomafoo*, the Lemur Center's celebrity Coquerel's sifaka, silkies are shy and spectacularly athletic canopy-dwellers, making them hard to spot and earning them the moniker "ghost of the forest." Working with a patient and encyclopedic local tracker, Désiré, Patel spent years acclimating several troops of animals to human presence, studying diet and ranges, in addition to communication. "The first year was hell," says Patel. "It was raining the whole time. We walked around for eight weeks and didn't see anything." Climbing muddy slopes all day and squatting to eat, he endured his knees throbbing constantly. "It was really hard. We started arguing about everything. We ran out of food."

## ABOUT MADAGASCAR

**Fourth-largest island in the world;** separated from the continent of Africa about 165 million years ago, long before separating from the Indian subcontinent; it was free from human intervention until the arrival of the first settlers more than 2,000 years ago.

**Madagascar officially shares one culture and**

**language,** yet the Malagasy people are divided into eighteen tribes whose boundaries are based on old kingdoms rather than ethnic characteristics. Most Malagasy are of mixed race; some, such as the Merina from the Antananarivo area, are predominantly Indonesian in appearance, and others, like the Vezo of the southwest coast, have close ties to eastern Africa and resemble black Africans.

**French is the official language,** but Malagasy is widely spoken. It belongs to the Austronesian language family, which includes Indonesian and many Polynesian

languages, and its closest linguistic cousin is spoken on southern Borneo. It also has adopted words from French, Arabic, nearby African languages and English.

**The Portuguese, the English, and the French all tried and failed to dominate and colonize Madagascar,** though the French did establish colonies as early as 1642. By 1904, the French had full control of the island.

**In 1958, Madagascar—renamed the Malagasy Republic—became autonomous within the French community,** and in 1960, Madagascar became a fully independent state, retaining a friendly association with France. In 1975, the country was renamed the Democratic Republic of Madagascar.

**Lemurs are native only to Madagascar.** Duke's collection of lemurs for noninvasive research and conservation started with a few animals brought from Yale University in the mid-1960s. Today, the Duke Lemur Center is the world's largest collection of the animals outside Madagascar.

**The Duke Lemur Center** has been working on conservation projects with the Madagascar Water and Forest Department and various non-governmental partners since the mid-1980s. Source: [visitmadagascar.com](http://visitmadagascar.com); [madagascar-embassy.org](http://madagascar-embassy.org)



Home sweet home: Two silky sifaka lemurs

Kevin Schaller





Success did come slowly, and he still tries to do field work in Marojejy one week a month during the ten months a year he's in Madagascar. But now he has his hands full supervising SAVA Conservation, typically trading six to ten e-mail messages a day with Welch when there's an Internet connection.

Patel's speech is a patois of French, Malagasy, and a curious Malagasy-accented English he uses only with his long-standing local partners, like Désirè. The well-read tracker, whose age can only be guessed as "sixty, maybe" by Patel and Welch, is a natural teacher who has guided generations of researchers and played major supporting roles in all the news stories about Patel's research. With his guiding fees and a \$10,000 conservation prize from the Seacology Foundation, which he travelled to San Francisco to collect three years ago, Désirè is buying up parcels of semi-forested local land on a little rise in the paddies that harbor a few remaining bamboo lemurs. This tiny but more accessible nature reserve, Antanetiambo, is his gift to the area's children, few of whom have ever seen a live lemur.

Antananarivo to the SAVA region, Welch adds, but that is probably a good thing for the remaining native forests.

A few minutes past the turnout, where one can pose in front of the 7,000-foot Marojejy Massif that gives the park its name, and just across a river where women wash clothes in rocky, knee-deep water, there's Manantenina, a village that looks like any other cluster of small homes along the road except for a pair of hand-painted signs announcing the national park and listing partners, including the SAVA project.

Manantenina's spindly two-track road

built by Patel's Simpona charity.

Each of the libraries, now operated by SAVA Conservation, holds more than a thousand books in French and English, but what really brings in the customers is news from the capital. "We try to attract them with newspapers," says Lanto Harivelo Andrianandrasana, a compact and soft-spoken Malagasy who is SAVA Conservation's project manager and has worked with Patel since 2006. Following the model pioneered by Welch and Katz at Ivoloïna, SAVA Conservation is training teachers, deploying the sixty-eight-page environmental education curriculum, and providing English lessons for adults—a key skill for ecotourism. "If people are not aware of the importance of the forest and the lemurs, it's hard to protect them," Andrianandrasana says. He has a degree in paleontology and biological anthropology from the University of Antananarivo and grew up in the capital. He has moved his young family north to Sambava for the SAVA Conservation job, and in July 2013, he spent a month in Durham, with support from Duke's Africa Initiative, to learn



Branching out: Tree farming is just one of the initiatives the Duke Lemur Center supported at Parc Ivoloïna.

"Breeding animals in captivity was only going to make a small dent. We quickly realized that if we wanted to do anything, we were going to have to go way beyond lemurs. About 95 percent of our conservation is working with people."

## ISLANDS AND BRIDGES

As the truck hurtles up the vanilla highway, a man and two cattle in harness climb up to the shoulder. All three are coated in fresh mud from tilling the paddies. This crucial highway with sturdy bridges was modernized with World Bank funding by the same government that knighted Welch and Katz, not long before it was deposed in a coup. Everyone seems to agree that the new president—commonly referred to as "The DJ" for his career before becoming mayor of the capital, Antananarivo—has let things slide. And much of Madagascar's international aid is being withheld because of how he came to power. Corruption is on the rise, people feel less safe, and infrastructure improvements have stopped. There has never been any real road from

fades after six kilometers, and from there it's a four-hour hike uphill to the park's first base camp, a semicircle of bungalows where porters will be waiting with hundreds of pounds of rice they've carried up. Most of them live near the entrance in the "village of the guides." The unofficial patron of the village is Tonkasina Jacques Harson—Jackson—who has worked with Patel for almost a decade. This summer he was also the patron saint of SAVA Conservation's first pair of DukeEngage students, acting as translator, guide, handyman, and parasite-removing field surgeon. One of several buildings Jackson owns in Manantenina stands facing the local library, a prim little wood building with a wide verandah. This and a second library on the other side of the park were

about the Lemur Center's operations.

On a slight rise behind the Manantenina library, a dozen adults and adolescents are manufacturing charbon vert, another SAVA Conservation project designed to ease human pressure on the forest. "Green charcoal" can be made out of just about anything organic, but this batch started as discarded rice hulls and old cardboard. After a week fermenting in a plastic garbage bin filled with water, the brown slurry is formed into cylinders, compressed into puck-like rings and dried. Two of these briquettes provide the heat to cook one cup of rice, Jackson explains, showing off an inventory of clay "rocket stoves" designed specifically to burn the pucks efficiently. Garlands of pucks strung on twine dry on racks above them. The charbon vert

consortium goes by an impossibly long Malagasy name that has been reduced to an acronym: MAFIA. Jackson laughs knowingly at the joke.

A few kilometers more toward the park, across a concrete bridge over a clear stream, another yellow sign bears the SAVA Conservation-Duke brand. Down the slope behind some homes, there's a pépinière—a tree farm. A Belgian charity called Graine de Vie (Seed of Life) is operating ten nurseries like this around Marojejy, with Duke's SAVA Conservation paying for tools, plastic pots, and labor at three sites. Graine de Vie provides SAVA with supervisor Gerard

operating the first of three fish farms it will be supporting to provide a new source of protein. Using an elegant French verb, they've named the effort "repoissonnement," or re-fishifying.

The first pond is a little less than an acre of water, ringed by a high fence, with a caretaker's cabin and a palatial coop for domestic ducks that share the pond. The fish, a native species called fony or paratilapia, were selected by Andapa restaurateur and fish-lover Guy Tam Hyock, who has been the driving force behind the project, and is considered one of Madagascar's leading fish-farming experts. The fish are

kilograms at five dollars per kilogram. Then repoissonnement: 500 immature fony were poured into the nearby Matsobe River. Hyock, who is developing the fishing regulations, saw to it that gendarmes in uniform were on hand for the event, an unmistakable signal that there will be some rules about harvesting.

Staal, a member of Duke's rowing crew who grew up in Kenya, focused her DukeEngage project on the fish farm. That included market research on the roadside stands around Andapa to find out what fish were available—mostly dried specimens from the coast—and figuring out who might be willing to pay for a truly fresh filet. The dried fish smell horrid, she says, but not as bad as a cooler full of bloody lukewarm water and "fresh" fish from the coast.

Tripp, who is an Eagle Scout, spent his summer mapping Désirè's "petit reserve" Antanetiambo with a GPS logger. "Fourteen-point-two-two hectares," Désirè declaims, squaring his shoulders and puffing up slightly. A third-generation Duke student and member of the university's marching band, Tripp also mapped the location and approximate size of stands for three different species of bamboo, which are important for sustaining the four northern bamboo lemurs that live in the tiny island reserve. It also harbors an unknown number of nocturnal mouse lemurs. Near the end of his project, he conducted a house-to-house census, counting people, cows, and chickens surrounding the oasis. In addition to serving as a teaching resource for local school kids, the reserve is a life raft for Madagascar's native biodiversity, but nobody knows how much range the remaining lemurs need to survive.

There are about a dozen of these little islands of recovery around the big island of Marojejy Park now. Désirè keeps adding parcels of land to Antanetiambo, and SAVA Conservation keeps building new partnerships with visiting scholars from Duke. To reverse Madagascar's losses, "you start building islands, and then you start connecting islands," Yoder says. But it will be the people, not the land, that turn the tide. "The outlook for 200 years from now is a lot better," she says. ■

*Bates is director of research communications in Duke's Office of News and Communications. In August, he accompanied Yoder, Welch, and Patel on a tour of SAVA Conservation activities. The only lemurs they saw were captives. For more on the tour and the SAVA Conservation project, visit [research.duke.edu](http://research.duke.edu) and [lemur.duke.edu](http://lemur.duke.edu).*

Anytime locals see the fishpond,  
"they always ask us, 'Can we do that?'"



Erik Patel

**Restocking:** SAVA Conservation operates three fish farms to offer the Malagasy another form of protein.

Poncet, a trim caramel-skinned man with military bearing and crisp French, who proudly shows off 25,000 seedling trees of eight species, including cacao, mandrarofa, a wood for charcoal and furniture, and hintsia, a fast-growing furniture wood. They're raising proven native species as well as trees that have economic value without being cut, like coffee and cloves. "Giving people wood they can use takes the pressure off the natural forest," Welch says. In just four years, Graine de Vie has planted 1.25 million trees in Madagascar.

### A NEW SOURCE OF PROTEIN

Wood isn't the only thing running short after Madagascar's population doubled in the last two decades. Protein deficiency is a prevalent health issue, and bush-meat hunting poses a significant threat for the few lemurs that remain. Near the southwest boundary of Marojejy Park on land provided by Désirè, SAVA Conservation is

fed a mix of 80 percent rice hulls, which are easy to come by in Andapa Basin, and 20 percent tiny dried shrimp, which can be pricey. The SeaWorld & Busch Gardens Conservation Fund has contributed to the project as well. Converting a rice paddy to fish farming would yield higher income, Désirè says, and cooking fish requires less charcoal than cooking beef or chicken. Anytime locals see the fishpond, "they always ask us, 'Can we do that?'" Andrianandrasana says.

In July, the pond was drained to about two feet deep, and DukeEngage students Sophia Staal '15 and Cameron Tripp '15 jumped in with a local Peace Corps volunteer and about a dozen others to catch the fish by hand. By the end of a long day, they had counted more than 1,700 fish from the 400 immature fry planted just a few months before. Six hundred sub-adult fony were returned to the pond, and almost 600 adult fish were sold—forty-four





# Muse

**Weathered:** In his new book *The Chesapeake and Ohio Canal*, photographer Gary Anthes '68 captures moments of natural beauty along the 184-mile waterway, including this shot from Maryland's Bear Island.



## Artistic Alignment

Faced with life's transitory nature, Oshri Hakak '09, M.M. '10 realized his purpose on Earth is to embrace his passions.

Oshri Hakak stood on the banks of the Ganges River in March 2012 and watched the lifeless bodies burn. He stood where countless others have stood through the ages, witnessing the sacred Hindu ritual that releases a person's eternal soul from his or her earthly existence. For a young man pondering his place in the world, the stark reminder of human mortality and the enduring quest for spiritual transcendence was profound.

"It was a real push for me to consider what I'm going to do with my life, and deepened my commitment to living more fully in the moment," says Hakak. Soon after his return to the U.S., he gave his notice at the management-consulting firm where he'd been working and made the leap into the unknown, embarking on a journey as a full-time professional artist.

In fact, Hakak had been walking the tributary paths toward that journey all his life. As a boy he would take the aluminum foil his mother used to wrap his school lunch and craft little human figures. He learned how to play the oboe and could lose himself in the thrilling riffs of an improvisational composition.

At Duke, he studied cognitive and behavioral neuroscience with professor Warren Meck and took music classes with artist-in-residence Joseph Robinson, the former principal oboist of the New York Philharmonic. Under Robinson's tutelage, he also cofounded the Duke Chamber Players, a student-run chamber orchestra that is still active on campus. In anticipation of a summer trip to Sierra Leone, he studied beekeeping and started the Duke Apiary Club.

And he kept making foil sculptures. It was almost second nature to him. They would appear overnight when no one was looking. A

**Let it flow:** Hakak's *Life is Long, Enlightened Foil*, and *Electrified Thoughts*, top to bottom

tiny figure in the lotus position, meditating in the concave curve of a leaf. An aspirational figure reaching toward the sky from its perch on a lamppost. A couple of shiny friends on all fours, crouching atop a display case in Perkins Library.

A friend joked that Hakak should drop out of school and become an artist, since that was where he seemed to be headed anyway. Hakak laughed and ignored his friend. He earned a graduate degree

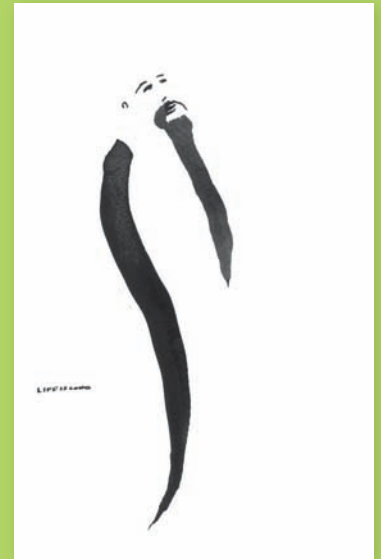
from the Fuqua School of Business, moved to California, and started working a desk job in consulting.

But that moment in India brought into sharp focus that his life was richer, his emotions deeper, his spirit lighter, when he was engaged in creative expression. The act of shaping a foil figure, painting a joyous mural, playing Indian music on his oboe, or practicing Kundalini yoga—these were the things that made his life feel balanced and whole.

"A year ago I wouldn't have predicted I would be a full-time artist, but as I began to fill my days with things that were meaningful to me, it started adding up," he says. And by following his instincts, other opportunities have presented themselves: invitations to show his artwork in galleries and events, commissions of murals and sculpture for jewelry, and collaborations on stop-motion animations.

Hakak says he continues to be guided by the question he contemplated in India. "Every day I ask myself, what am I going to do with my life, even if today is all there is?"

**—Bridget Booher**



**"A year ago I wouldn't have predicted I would be a full-time artist, but as I began to fill my days with things that were meaningful to me, it started adding up."**







## FILM

# Belarusian Subversion

In her first documentary, *The Lottery*, director-producer Madeleine Sackler '05 explored the controversy surrounding the role of charter schools in America's public-education system. Now she's turned her lens to protest art and political tyranny in Eastern Europe.

*Dangerous Acts Starring the Unstable Elements of Belarus* focuses on the underground theater group Belarus Free Theater and its attempts to question and subvert the repressive government that's been in power since the dissolution of the Soviet Union. By pulling from 300 hours of smuggled footage, as well as uncensored interviews, Sackler and her film crew capture the wrenching consequences of the group's provocative underground performances.

As the country heads into another presidential "election" in 2010, KGB agents crack down on Free Theater founders. (President Alexander Lukashenko, who has been called Europe's last remaining dictator, has refused to relinquish power since assuming the position in 1994, with opponents and protestors routinely beaten and arrested.) The film follows the Free Theater members as they are forced to choose between the safety of exile or staying in their repressive homeland and continuing to create subversive art with the hope of sparking social change.

*Dangerous Acts* had its world premiere at the Toronto Film Festival in September and will be broadcast on HBO in 2014.

—BB

## MEDIA

# Phab App

Phil Haus '08 wants to pheed the world. More specifically, with Pheed—the new all-in-one text, photo, video, and audio social network—he wants to change the social-media landscape. The app, which debuted in November 2012, was dubbed "the social-media company of the year" by *Business Insider*. Yet the most impressive aspect of Pheed isn't the convenience of combining aspects of Instagram, Twitter, SoundCloud, Vine, and Facebook in one app, or that it breaks the 140-character threshold. Unlike the rest of the social-media universe, Pheed users own their content. And they can monetize it.

Haus is no stranger to the mix of artists, teenagers, and producers that make up Pheed's community. After graduating from Duke, he started his acting and producing career in New York, then moved to Los Angeles to work on MTV's *Punk'd* series. After several meetings with music producer Tony DeNiro and Hong Kong Internet entrepreneur O.D. Kobo, the nascent Pheed team began talking about what was missing in the entertainment world: a way for creators to monetize and control their content. Instead of continuing to hack at the ad-sale model, they began thinking about how to access vast, pre-existing social networks. The result? An app that taps into

Facebook and its kin and allows users to create channels to push out content across platforms simultaneously.

Pheed benefited when Instagram changed its terms of service last fall and claimed ownership of users' photos. Though Instagram later reversed its policy, Pheed's copyright-button feature and audio-download settings lured users into creating content. Haus points to a few Pheeders like teenager Acacia Brinley Clark, who has more than 138,000 followers and posts constantly. When Acacia posts something on Pheed, it has five times the engagement of something from Snoop Dogg, he says. Haus says there are more than 500 young Pheeders—more than 80 percent of whom are under the age of twenty-five—with more than 10,000 subscribers.

Pheed recently debuted its first live, pay-per-view streaming event, featuring comedian Hal Sparks. As community director, Haus sees the feature as transformative not just for celebrities, but also for the budding artists that make up its key demographic. He imagines a high-school band that could publicize a streaming concert to its followers to raise money for a demo or a trip. "Even if it's only 100 or 200 people being charged \$1.99, they're still making 200 bucks. It works on a micro level, too."

—Elissa Lerner



Next big thing?: Haus and his Pheed team aim to transform the social-media landscape.



# Sports

## A Chance to Keep Things Physical

The Rec&PE department helps students stay active. | By Bridget Booher

As a high-school athlete, Parker Poliakoff '14 played football, lacrosse, and golf, rowed crew, and was a nationally ranked wrestler who hoped for a walk-on position with the Blue Devils. But when back and knee injuries put a damper on his varsity aspirations, Poliakoff was forced to regroup.

"I couldn't *not* do a sport," says Poliakoff, who has played competitive sports since he was a boy. So the Miami native sought opportunities to stay active through the university's Recreation & Physical Education (Rec&PE) Department. Last year, Poliakoff was one of more than 13,000 members of the Duke community—including faculty and staff, but mostly students—who competed against a rival intramural team, sweated out miles on a treadmill or elliptical machine, lifted weights, swam laps, took a Zumba or hip-hop dance class, worked with a personal trainer, went rock climbing and backpacking, played in a cornhole tournament, learned to kayak, or earned their American Red Cross lifeguard certification.

"Duke students are very health and fitness conscious," says Felicia Tittle, executive director of Rec&PE. "They really like to work out, and they get upset if they can't. Our goal is to get as many members of the community involved in some form of activity as possible."

With the motto "Work Smart, Play Well," Rec&PE provides a positive alternative to the "Work Hard, Play Hard"

mindset that many Duke students embrace. While the latter phrase conveys a delineation between academics and leisure—and with some students interpreting "Play Hard" as an endorsement of risky behaviors such as binge drinking—"Work Smart, Play Well" promotes a healthy mind-body balance.

Rec&PE's Sports Club program comprises thirty-seven sports, from badminton to women's water polo. Last year nineteen

got together to row. "I was used to a high level of competition and a strong work ethic, so it was a little discouraging," he says. Even though he was elected president of the club his freshman year, Poliakoff considered transferring to another school where he could compete at the varsity level.

Instead, Poliakoff decided to embrace the challenge of transforming the relatively dormant group to a nationally ranked



In sync: Duke Men's Crew has evolved from a moribund club to a nationally ranked collegiate team in a few short years.

clubs went to national competition, with Duke cycling and martial arts securing first-place honors. The equestrian team and men's rugby were national runners up.

Director Tittle says she and her staff are happy to work with students who want to create a new club or revitalize one that has been dormant. When Poliakoff sought involvement with the men's club crew team, he was dismayed to discover that it was just a handful of men who occasionally

contender. He recruited new rowers and implemented six-day-a-week, crack-of-dawn practices on Lake Michie in Bahama, North Carolina. (The team shares a boathouse with women's varsity crew.) He also worked with Rec&PE's sports clubs director Mike Forbes to navigate the administrative requirements of rebuilding and managing the club. By the end of the 2012-13 season, men's rowing was able to field four teams in the Southern Intercol-

## DUKETICKER

**TENNIS:** Women's tennis ended the San Diego State University Fall Classic on the weekend of September 29 with two singles titles and a doubles crown. The singles titles were earned by **Alyssa Smith '17** and **Annie Mulholland '15**, right, who won against fellow Blue Devil **Marianne Jodoin '14**. Mulholland scored three wins over the weekend. To secure the doubles crown, Smith and Jodoin won 8-7 (3) against San Diego State.



**SOCCER:** **Laura Weinberg '14** recorded her fourth assist of the season against the Virginia Tech Hokies, moving her into a tie for fifth on Duke's all-time assists list with twenty-two in her career.





Alexander Mase

**Pump it up:** Fitness classes range from yoga and pilates to kickboxing, cardio dance, and interval training.

legiate Rowing Association's (SIRA) Championship Regatta, which attracts both club and varsity teams. Three of the four Duke teams advanced to the finals, and the novice four-person team won its division—the first time a Duke boat has ever brought home a SIRA championship.

For students who don't have the intense drive or spare time to devote to competing on a club team, or who prefer to play on a coed team, intramurals (IM) provide a more informal outlet for recreation. "IM has a real mix of people; some of them were high-school stars and others, not so much," says IM president Josh Weiss '14, who's played on the IM soccer team The Goon Squad since freshman year. Even

though he had played competitively in high school, Weiss liked the "more laid-back" atmosphere and fun social outlet of intramurals.

For the student who prefers individual pursuits, fitness classes and gym equipment are available at Wilson and Brodie gyms. Fitness classes (yoga, pilates, cycling, cardio/dance/toning) are offered from morning to night every day, but they are routinely at or beyond capacity. Tittle says having so many people taking advantage of Rec&PE offerings creates challenges.

"It all comes down to space," she says. "Based on demand, we'd like to be able to double the number of fitness classes we offer, but we just don't have the room."

Relief may be in sight. There are plans on the drawing board for constructing a new intramural building to replace the aging facility wedged between the tennis courts and Wilson Recreation Center. A neglected field near Central Campus, currently serving as a repository for fill dirt from various campus construction projects, could be converted into two full-size turf fields. And there are conversations about adding a new softball field, multi-purpose field, and sand volleyball courts on some to-be-determined location (or locations) on East Campus.

Until those plans become reality, Tittle and her staff continue to think creatively about ways to get (and keep) the Duke community moving. Last year they launched an annual flag football tournament to raise money for injured football player Blair Holliday '15; this year's tournament was cosponsored by Zeta Tau Alpha to raise money for breast cancer research. The first NFL combine-style competition, held in October, put participants through drills such as bench press, forty-yard dash, and vertical leaping. And they're in the planning stages of sponsoring a video game tournament to attract students who prefer Wii to working out.

"Our goal is to promote healthy lifestyles for everyone, including people who might not see themselves as the type to join a team or go to the gym," says Tittle. "Not everyone can be a varsity athlete, but everyone can be active."



Photos by Jon Gardiner

#### FOOTBALL: Jamison Crowder '15

earned ACC Receiver of the Week recognition after accumulating 149 receiving yards and one touchdown during Duke football's victory over Troy University during homecoming weekend. Crowder passed the 100-yard receiving mark for the third time this season and the eighth time in his career.



## THE SCORE

# 16:28.9

Course record set by Fuqua graduate student **Juliet Bottorff** on the 5,000-meter WakeMed Soccer Campus cross-country course, leading Duke to a first-place finish at the Adidas XC Challenge





**Ashley Young**

Ph.D. Candidate, History  
Graduate Winner, Andrew T. Nadell  
Book Collecting Contest,  
Duke University Libraries  
Second Prize, National Collegiate  
Book Collecting Contest

# CRAZY SMART

Take one bibliophile with an interest in Southern food. Marinate in a top-ranked graduate history program. Add a dash of Creole seasoning.

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Since 1947, we've sponsored a book collecting contest to promote a lifelong love of reading among Duke students. Like Ashley here. Her collection of books about 19th-century New Orleans cuisine won first prize in our contest and second prize in the National Collegiate Book Collecting Contest—the "James Beard Award" of college book collecting competitions.

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True Blue: DUHLAA board members join the Blue Devil at Homecoming, where they and other DAA volunteer award winners were honored.

# Forever Duke

## DUKE ALUMNI ASSOCIATION

[www.dukealumni.com](http://www.dukealumni.com)

The joint was jumping: The President's Homecoming Dance in Wilson Gym prompted people of all ages to show their moves.

**"He's not thorough. He's obsessive. Drew is that guy that, an idea pops into his head, time stops, and he just starts cranking out ways to test his theory."**

—Recruiting analyst **Dave Telep** on Drew Cannon '12, a statistician and sportswriter who works for the Boston Celtics

Duke Photography

©Angélique Drossaert Photography 2013

Duke Photography

Duke Photography



# DAAConnections

ENGAGE. CONNECT. CELEBRATE.



Fill in the map: Don't see your city here? Launching a Duke Alums Engage project is easier than ever.

## In Your Own Backyard

Duke Alums Engage 2014 taking shape.

Have you thought about helping a worthwhile organization in your community but are wary of an ongoing time commitment? Do you want to meet other Duke alumni in your area who share your interests? Duke Alums Engage (DAE) offers the perfect opportunity to work in partnership with a local community organization alongside fellow Blue Devils, friends, and family members within a well-structured framework supported by the Duke Alumni Association.

In 2013, there were thirty-six DAE projects, ranging from hunger-relief efforts with local food banks to gardening and beautification projects to community health fairs. For 2014, the DAE organizers have set a goal of having sixty projects taking

place in new or existing partner cities. DAE projects will occur April 25 to May 4.

## “It’s as easy as 1, 2, 3.”

Jack Boyd '85, a member of the Duke Alumni Association board of directors, has been actively involved with planning and executing the annual DAE event in New York. He says that getting a project off the ground is not as daunting as it may seem.

“It’s as easy as 1, 2, 3,” he says. “First, contact the DAA for ideas and background on how to get a project started. Second, look around your community and identify a well-established partner organization that you would like to work with. And third, invite your friends.”

Boyd notes that the DAA has compiled a wealth of resources for alumni interested in starting a project based on feedback from past participants. These include a series of training tools on the DAA website, including tips on selecting a suitable community partner, steps for planning and executing a project, and guidelines for thoughtful engagement, as well as a Frequently Asked Questions section.

To learn more, visit [dukealumsengage.com](http://dukealumsengage.com) or contact Angela Karl at [angela.karl@daa.duke.edu](mailto:angela.karl@daa.duke.edu).

## Find Your Moxie

2014 Women’s Weekend set for February.

Whether you’re navigating the early stages of your professional career, experiencing a major life transition, or pursuing deeper engagement with issues that matter to you, the Duke Alumni Association’s 2014 Women’s Weekend promises insights, inspiration, and expert advice.

“Find Your Moxie: Duke Women Creating Change” will take place February 20-22 on campus. The biennial Women’s Weekend provides informal networking opportunities with current Duke students, senior administrators, faculty members, and fellow alumnae, as well as panel discussions and presentations by special guest speakers.

“Find Your Moxie” will include three tracks: Breaking the Rules, Leading the Way, and Building Community. Participants

can choose from the concurrent tracks, which will be offered several times during the weekend. Sessions will explore a wide range of topics, including the growing power and influence of women’s philanthropy, effecting change both from within and from outside existing organizations, and connecting the personal and political.

At press time, confirmed speakers include:

**Lesley Jane Seymour '78**, editor-in-chief of *More* magazine, and former editor-in-chief of *Marie Claire*, *Redbook*, and *YM*. She is also the chair of the *Duke Magazine* Editorial Advisory Board.

**Jane Buckingham '90**, founder and president of Trendera, a marketing and media consulting firm focusing on digital and non-traditional trend forecasting

**Nia-Malika Henderson '96**, national political reporter for *The Washington Post*, where she covers the White House.

For more information, visit [www.duke-womensweekend.com](http://www.duke-womensweekend.com).





# Building a Better Community

Volunteer service shapes Duke's local, global impact

While service to others—and one's alma mater—is reward enough for most volunteers, the Duke Alumni Association's awards program recognizes the contributions of alumni who have gone above and beyond. These include:

**The Distinguished Alumni Award**, the highest honor bestowed by the DAA recognizes individuals who have distinguished themselves by making outstanding contributions through their field of work, in service to Duke University, and toward the betterment of humanity.

**The Charles A. Dukes Award**, which recognizes alumni volunteers who have served in Duke leadership roles and devoted themselves to extraordinary, long-term efforts that helped Duke further its mission.

**The Forever Duke Award**, which recognizes alums for excellent recent volunteer service to Duke, the Duke Alumni Association, and other alumni groups. Although originally envisioned to honor individuals, for the first time in 2013, the Forever Duke Award was presented to three separate groups of alumni volunteers:

## **The DUHLAA (Duke University Hispanic/Latino Alumni Association)**

**2011-13 board of directors:** Nelson Bellido '89, Christopher Brandt '00, Paul Lagunes '03, Timothy Mendoza M.B.A. '92, Roberto Olivares III '88, and Roberta Oyakawa '86

**Duke Tampa Bay leaders** Tiffani Sherman '95, Michael Stein '97, and Harry Venezia Jr. '97, M.B.A. '92

**Duke New York City board members** Bill Bermont '97, Beth Higgins '07, and Linda Martin J.D. '96

Do you know someone who fits the bill? The nomination process for 2014 awards is now under way. To get started, visit the Duke Alumni Association website ([dukealumni.com/about-daa/awards-scholarships](http://dukealumni.com/about-daa/awards-scholarships)). To learn more, see past winners, and nominate a volunteer (or volunteers) using the easy, online nomination form. **The deadline is March 1.**

# How are you ForeverDuke?

*Sterly Wilder '83, associate vice president for alumni affairs, talks with Matt Koidin M.B.A. '05, co-chair of DukeGEN and chief technology officer of Pocket.*

**SW: How has Duke become more interested in entrepreneurship?**

**MK:** I think Duke has always had an entrepreneurial spirit, but the launch of the Innovation & Entrepreneurship Initiative has placed the efforts front and center. The core idea is that all students can benefit from this type of training—it's not exclusive to starting a company.

**SW: What are the characteristics of an entrepreneur that would carry over to other areas?**

**MK:** We're talking about the ability to identify problems, find solutions, and nurture a team that will work through those problems. You need to be quick on your feet and to be decisive. You need passion, drive, and a willingness to take ownership and run with something. Entrepreneurs really exist on a spectrum. On one end, you have these incredibly creative and innovative people who have that spark, who come up with the ideas. On the other end, you have people who are insanely great operators, who are really good at taking a small company and making it a little bigger and managing it through all those stages.

**SW: When did you first become an entrepreneur?**



Photo courtesy of The Muse

**MK:** I was the neighborhood computer kid who went around and helped people get their computers up and running—so I guess I was always doing something entrepreneurial. It didn't really hit home that I would go the start-up path until I took a class at Stanford; that took me down that route, and I did a couple of start-ups before I came to Fuqua. I had a strong technology background, but my experiences taught me that being a leader at a startup was more than writing code. So Fuqua for me was learning about marketing, finance, and other areas that would round out my education and better prepare me for my next entrepreneurial endeavor—which it did!

**SW: Talk a bit about the work of DukeGEN.**

**MK:** In some respects, it's a classic entrepreneurship story, in the sense that DukeGEN started as a small grassroots effort and grew from there. Howie [Rhee] and Michael [Cann] saw a need to connect Duke entrepreneurs and set about to make it happen. We're interested in how we can help this community of entrepreneurial Dukies find each other in their own locations, but also how we can build ties back to Duke. We started a number of programs—for example, the annual pitch event, which is about connecting Duke investors with Duke entrepreneurs who are at the early stages with their companies. That's led to financing in some cases, but the bigger idea is to provide an avenue for offering advice and feedback. Then through our Summer Innovation Program, we've brought a number of Duke students out to the Bay Area. Half of them worked at start-ups, and half of them have worked on their own ideas at an incubator called RocketSpace. Once a week we got everyone together to hear from the successful entrepreneurs and investors.

**SW: How are we doing in getting out Duke's name in the Bay Area?**

**MK:** The community is great out here and it grows bigger and tighter every day. Every time I go to a different event, I meet new people, and it reinforces the idea that the university is working hard to connect us. And those connections are critical, because with entrepreneurship, in particular, there's a lot that happens through connections.

**More information:** [dukegen.com](http://dukegen.com) and [getpocket.com](http://getpocket.com).



Chris Hildreth



# Life's Broad Sea

ALUMNI IN THE SPOTLIGHT | By Bridget Booher



Cynthia Frank

**Shirley Fulton J.D. '80** and **Robert Bridges Ph.D. '79** are among the twelve individuals selected for North Carolina's 2014 Heritage Calendar, which honors contributions to the African-American experience in the state. In conjunction with the calendar's release, the N.C. Department of Public Instruction has developed lesson plans and other materials online that teachers can use in their classrooms.

Fulton earned her law degree as a single mother. After graduating, she moved to Charlotte and became the city's first black female prosecutor; she became the first black woman elected to the state's Superior Court in 1988.

Bridges has spent his career in the education field. In the mid-1980s, an all-white school board named him the first African-American superintendent of the Wake County Public School System. He became provost at Saint Augustine's College (now Saint Augustine's University) in Raleigh, and then worked as an education and management consultant and chaired the N.C. Advisory Commission on Raising Achievement and Closing Gaps.

When a casting agent invited **Mia Fram Davidson '01** to play a cantor in the film *This Is Where You Leave Me*, she initially thought she was being punked. As it turned out, a friend had suggested Davidson to the agent, who was seeking a real-life cantor for the movie. Based on the novel of the same name by Jonathan Topper, the comedy centers on a dysfunctional family sitting shiva after the death of the family patriarch. Davidson, associate cantor at Westchester Reform Temple in Scarsdale, New York, knew it was no prank when she sat down for hair and makeup near leading actresses Jane Fonda and Tina Fey. The film, directed by Shawn Levy (*Night at the Museum*, *Date Night*), also stars Jason Bateman, Connie Britton, Adam Driver, and Timothy Olyphant.

Davidson spent three days on set. She taught Fonda how to sing the traditional Jewish hymn "Hineh Ma Tov," and actor Ben Schwartz, who plays a rabbi, how to wear his prayer shawl correctly. She also shivered alongside Fey during a cold day on location at a cemetery for one of the movie's opening scenes.

In addition to her cantor duties at Westchester Reform Temple, Davidson writes a parenting blog, Mia, at [ima-mia.blogspot.com](http://ima-mia.blogspot.com).



Courtesy Mia Fram Davidson

This is where you find her: Davidson on set with Tina Fey

In his *Washington Post* column "Innovations," technology entrepreneur Vivek Wadhwa took Twitter to task for having no women on its board. A follow-up column listed sixteen women who Wadhwa, executive-in-residence in the Pratt School of Engineering, management program, believed would be exceptional additions to Twitter and other tech company boards. Two Duke alumnae made the list: **Sonal Shah A.M. '93** and **Brooks Bell '02**.

Currently a senior fellow at the Case Foundation, Shah was the inaugural director of the White House Office of Social Innovation and Civic Participation. She also led Google's global development initiatives for its philanthropic division



Ryan Jones

Tech leader: Brooks Bell

and was a vice president at Goldman Sachs, where she helped develop and manage the firm's environmental strategy. Born

in Mumbai, she also cofounded an international nonprofit, Indicorps, which offers fellowships to encourage development projects in India.

Bell is founder and CEO of Brooks Bell, a testing and optimization company that works with national consumer organizations to increase market share. She cofounded HQ Raleigh, an incubator offering office space and networking opportunities for high-impact startups. In 2012, she was president of the Raleigh-Durham chapter of the global business network Entrepreneurs' Organization, and she has served on the Duke Task Force for Innovation and Entrepreneurship.



# ClassNotes

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**Alexander Hartemink '94**,

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and Biology

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## 1950s

**James M. Fulcomer '57** published *Dottage Cheese*, a collection of his poems about aging and being a senior.

**Reba W. Williams Ph.D. '58** published a mystery novel titled *Restrike*. A graduate of Harvard Business School, she joined a Wall Street brokerage firm as a securities analyst and wrote about Wall Street for *Institutional Investor* magazine. A sequel, *Fatal Impressions*, will be published in 2014.

## 1960s

**Llewelyn G. Pritchard LL.B. '61** was recognized with the American Bar Association's Solo, Small Firm and General Practice Division's Lifetime Achievement Award. He is a partner in the Seattle law firm of Helsell Fetterman, where he specializes in family law.

**John L. Hash '62** wrote his third book, *Lero's Mission*. Previously, he wrote *Honey Branches: The Meade Estate and Starkeeper*. He is a former lawyer and a licensed pilot.

**S.T. Kimbrough Jr. B.D. '62** published *Radical Grace: Justice for the Poor and Marginalized—Charles Wesley's Views for the Twenty-First Century*. He is a research fellow at Duke Divinity School's Center for Studies in the Wesleyan Tradition.

**Daniel C. Lavery '62** published a memoir, *All the Difference*. It recounts his experiences at Duke, his time in the Navy during Vietnam, and his career as a civil rights lawyer at the American Civil Liberties Union.

**'64 50th Reunion** April 11-13, 2014

**Donald McAdams A.M. '65**, **Ph.D. '67** published his third book, *The Redesign of Urban School*

**'60**

## Kay Kincaid Moss '60

published her fifth book, *Seeking the Historical Cook: Exploring 18th-Century Southern Foodways*. The book is a guide to historical cooking methods from 18th- and 19th-century "receipt" (recipe) books and

explains how those methods can be used in modern kitchens. Moss founded the Eighteenth-Century Backcountry Lifeways Studies Program at The Schiele Museum of Natural History in Gastonia, N.C., and teaches open-hearth cookery at John C. Campbell Folk School in Brasstown, N.C.



Courtesy Kay Moss



**Systems.** His prior two books also dealt with urban school reform. He is founder and chair of the Center for Reform of School Systems.

**William Christopher Barrier** '67 cowrote an article, "Still Fugacious After All These Years," to be published in the Winter 2013 issue of *U.A.L.R. Law Review*. The article updates a 2007 primer on oil-and-gas law in Arkansas. Of counsel at Mitchell Williams in Little Rock, Ark., he continues to be listed in the real-estate section of *Best Lawyers* and *Chambers USA*.

**Patrick D. Coleman** '68 was elected chair of Seniors on a Mission, a faith-based, nonprofit organization serving Jacksonville, Fla., senior citizens and other local nonprofits. The organization encourages independent-living seniors to find meaningful work and renewed purpose through the donation of community-service hours and helping local charities and ministries.

#### '69 45th Reunion April 11-13, 2014

**Steven Lindberg** '69 received the 2012 Kathryn R. Mahaffey Lifetime Achievement Award in Mercury Research. He was a leader in acid deposition research, wrote more than 100 papers, and gave lectures at more than 100 institutes and conferences worldwide. He is an emeritus fellow at Oak Ridge National Laboratory in Roane County, Tenn.

## 1970s

**John Park** '70 retired as dean of the Anglican Cathedral of the Good Shepherd in Lima, Peru,

where he served for nine years. Previously, he spent 18 years as a parish priest and archdeacon of the Episcopal Diocese of Honduras.

**Philip J. Weaver** '70 was elected the executive director of the National Organization of Coaches Association Directors, which comprises 38 state coaches' association directors representing more than 150,000 scholastic coaches nationwide.

**Robert Burgin** '72 published *Going Places: A Reader's Guide to Travel Narrative*. The book examines the various categories of the travel narrative genre, categorizes and describes approximately 600 titles, and identifies hundreds of other fiction and nonfiction titles as read-alikes and related reads.

**Thomas L. Richardson** '73 was named tunnel construction manager at HNTB Corp. based in Arlington, Va. He has managed multiple projects for the Department of Defense and Washington Dulles International Airport.

**Kenneth G. Starling** '73 retired as a partner at DLA Piper and attended the University of Cambridge, where he was awarded the LL.M. degree in 2013.

#### '74 40th Reunion April 11-13, 2014

**Ronald H. Hoevet** J.D. '75 has been named *The Best Lawyers in America 2014* Lawyer of the Year for Criminal Defense: White Collar in Portland, Ore. He also was selected for inclusion in the 20th edition of *The Best Lawyers in America* in the practice areas of bet-the-company litigation,

criminal defense: non-white-collar, and criminal defense: white collar.

**Lisa Williams Kline** '75 published a fictional series, *Sisters in All Seasons*, for 8- to 12-year-olds, released over the past year by Zonderkidz. The latest installment in the series was released in April. The series is available in bookstores and online.

**Michael Kuhn** '76 was recognized in *Texas Super Lawyers 2013* and was selected for inclusion in *The Best Lawyers in America 2014*. He practices law as a member of Jackson Walker in its Houston office.

**James Johnson** A.M. '77, Ph.D. '80, an internationally recognized expert on the War for Independence in the Hudson River Valley, was appointed the Dr. Frank T. Bumpus Chair in Hudson River Valley history at Marist College. He has taught courses on the region and military history at Marist for the past 13 years.

**Kimberly A. Yelkin** '77 was a co-recipient of *InsideCounsel* magazine's Sharing the Power Award as part of the second annual Transformative Leadership Awards West program. She is an executive partner at Gardere Wynne Sewell in Austin, Texas, and is chair of the firm's government affairs practice group.

**John Coleman** '78, J.D. '81, a partner at Burr & Forman's Birmingham, Ala. office, was selected for Human Resources Executive by *Lawdragon* as among the Nation's Most Powerful Employment Attorneys: Top 100 for the fifth consecutive year.

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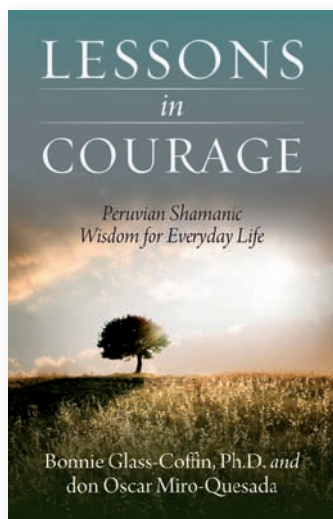
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'76

## Oscar M. Miro-Quesada '76

coauthored *Lessons in Courage: Peruvian Shamanic Wisdom for Everyday Life*. He is the originator of the Pachakuti Mesa Tradition of cross-cultural shamanism and was initiated into the southeastern

Andean paqokuna shaman/priesthood. He has been guiding cross-cultural ethno-spiritual apprenticeship expeditions to sacred sites of the world since 1986, with special emphasis on Peru and Bolivia. His work and programs have been featured on CNN, Univision, A&E, and the Discovery Channel.



He also was named to *The Best Lawyers in America* for the 20th consecutive year.

### '79 35th Reunion April 11-13, 2014

**Gary Dunkel** '79 was named a litigation lawyer at Fox Rothschild in West Palm Beach, Fla. He also serves as chair of the Palm Beach alumni admissions committee for Duke.

**Bruce Freedman** '79, M.D. '83 summited Mount Kilimanjaro in Tanzania, along with his son **Michael Freedman** '10, his daughter **Katie Freedman** '14, and **Jessica Sutton** '10. At 19,340 feet, it is the highest point in Africa and the tallest freestanding mountain in the world.

**William T. Wilson** J.D. '79 was named to the 2013 Pennsylvania Super Lawyers list in the area of employment and labor law. He practices with MacElree Harvey Ltd. in its West Chester, Pa., office.

## 1980s

**Andrea L. Behrman** M.S. '80, A.H.C. '80 received the John HP Maley Award from the American Physical Therapy Association. She is a professor at the University of Louisville Department of Neurological Surgery and Kentucky Spinal Cord Injury Research Center.

**Bruce Ruzinsky** '80, J.D. '83 was named a 2013 Texas Super Lawyer and was selected for inclusion in *The Best Lawyers in America 2014*. He practices law with Jackson Walker as a partner in its Houston office.

**Neil Smit Jr.** '80 was inducted into the Broadcasting and Cable Hall of Fame. He is president and CEO of Comcast Cable Communications and executive vice president of Comcast Corp.

**Lisa Higginbotham** '82 and her husband, Jeff, received recognition for their Cary, N.C., business, 5Star Awards Inc., which was named Small

Business Retailer of the Year by the Awards and Recognition Association at its annual International Awards Market gala held in Las Vegas.

**James Myrick** '82 was appointed to a leadership position in the American Bar Association's tort trial and insurance practice section, one of five lawyers in the nation to be named to the council. He practices in the Charleston, S.C., office of Womble Carlyle and has more than two decades of experience in the personal injury, commercial dispute, products liability, and environmental permits fields.

**David Downie** '83 published a new book, *Global Environmental Politics*, 6th edition, which he cowrote with Pamela Chasek. He is director of environmental studies and a professor of politics at Fairfield University.

**Suzanne Rich Folsom** '83 was recognized by Ethisphere Institute as one of the Top General Counsels and a 2013 Attorney Who Matters. She is the executive vice president, general counsel, and chief compliance officer of ACADEMI. *Inside Counsel* magazine also recognized her as a leading In-House Female Attorney and one of the Next Generation of General Counsel. ACADEMI provides innovative security solutions and is a key supporter of U.S. national security.

**Philip G. Schwalb** '83 was named director of development and philanthropy at Kids House Wayne Densch Children's Advocacy Center in Sanford, Fla. He will help bring in community-supported dollars to fund necessary programs and services to support victims of child abuse in Seminole County.

### '84 30th Reunion April 11-13, 2014

**Carolyn J. Brown** Ph.D. '84 won the 2013 award for nonfiction from the Mississippi Library Association for her 2012 book, *A Daring Life: A Biography of Eudora Welty*.

**William Burke** '84 was named a dean at Ohio University College of Osteopathic Medicine in Dublin, Ohio. Previously, he was vice president of medical education at OhioHealth Corp. He will help start a brand-new medical-school campus, focusing on primary care.

**Scott N. Schools** '84 joined the Charleston, S.C., office of Moore & Van Allen. He will focus on the areas of white-collar criminal defense, government investigations, and health-care and financial-fraud defense.

**Michael S. Stein** '84 was selected for inclusion in *The Best Lawyers in America 2014*. He is co-founder and managing partner of Pashman Stein in Hackensack, N.J., and co-chair of the firm's litigation practice.

**Martee Hensley** '85 was named attending physician, gynecologic medical-oncology service, at Memorial Sloan-Kettering Cancer Center and professor of medicine at Weill Cornell Medical College.

**Jonathan C. Santore** '85 won the American Prize in Composition 2013 in the category of professional composers of choral music. His composition, "Front Porch Poems," for mezzo, viola, and piano, is featured on the Chiaroscuro Trio's new

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## Call for Nominations for DAA Board

To nominate someone for the Duke Alumni Association's board of directors, go to [www.board-om.dukealumni.com/about-daa/board-directors](http://www.board-om.dukealumni.com/about-daa/board-directors) and complete the online form. Or you can send names and qualifications (no self-nominations, please) to Sterly Wilder '83, associate vice president, alumni affairs, Box 90572, Durham, N.C. 27708 or [sterly.wilder@daa.duke.edu](mailto:sterly.wilder@daa.duke.edu). **The deadline is March 1.**

CD, *New People*. He is chair of the department of music, theatre, and dance at Plymouth State University in New Hampshire and composer in residence for the New Hampshire Master Chorale.

**Lauren Mitchell Sveen** '85 was named a finalist in the *Denver Business Journal's* nominations for Outstanding Businesswomen of the Year in the small business category. She is president of Mom Corps Denver, a talent acquisition firm.

**Patrick T. Collins** B.S.E. '86 was named to the 2013 *New York Metro Super Lawyers* list. He is a bankruptcy lawyer and partner in the Uniondale, N.Y., office of Farrell Fritz Attorneys.

**John Morris** '86 was promoted to industrial services leader, Americas, at Cushman & Wakefield in Chicago.

**Jonathan Ragals** '86 was named global chief operating officer at IgnitionOne in New York. He

previously was chief of network development at Dentsu Network.

**Elanna Kaplan** '88 published *Something Extraordinary: An Inspirational Journal Sparked by Cancer*. Available on Amazon and Kindle, this book encourages people to live a positive joyful life in any circumstance.

**Jeffrey Siminoff** '88 was appointed to lead worldwide inclusion and diversity at Apple Inc. in Cupertino, Calif. He previously was managing director in legal and human resources diversity at Morgan Stanley.

**'89 25th Reunion** April 11-13, 2014

## 1990s

**Bruce Banderick** '90 is president and chief scientist at Thunder Basin Environmental Consulting, which he formed after serving with the

Department of Energy and the National Park Service. TBEC Inc. continues productive licensing of the patented CleanSweepBarium process in Wyoming's Powder River Basin and provides air, water, and soil regulatory compliance support to Rocky Mountain Oil & Gas recovery entities.

**Paul A. Lewis** Ph.D. '91 cowrote *Toward Human Flourishing: Character, Practical Wisdom, and Professional Formation*. The book consists of a collection of essays and material from a five-year set of interdisciplinary initiatives at Mercer University, where he is an associate professor in the Roberts Department of Christianity.

**Pravene Nath** B.S.E. '93 was named chief information officer at Stanford Hospital & Clinics. He previously served as chief medical information officer and interim chief information officer. He also is a clinical assistant professor of emergency medicine at the Stanford University School of Medicine.

**'94 20th Reunion** April 11-13, 2014

**Christopher Vaughn** J.D. '94 was selected for inclusion in *The Best Lawyers in America 2014*. He is a director in the Greensboro firm of Carruthers & Roth, focusing on real-estate law.

**Kimberli Cary Withrow** '94 was named of counsel with Boyd Collar Nolen & Tuggle in Atlanta. She serves clients with family-law issues.

**Robin Hamilton** '95 won a regional Emmy for a historical documentary about the contributions African Americans made in the creation of the nation's capital. She is also the creator and principal of A Round Robin Production Co.

**Sharad "Bobby" Sharma** '95, J.D. '98 was promoted to senior vice president of global basketball and strategic initiatives at IMG, an international sports, media, and entertainment company based in New York.

**Tonya Matthews** B.S.E. '96 has been named president and CEO of the Michigan Science Center, which provides educational opportunities to youth. Previously, she was vice president of museums at Cincinnati Museum Center.

**Ryan D. Clinton** '97 was named a member of Hankinson LLP and joins as the firm's only lawyer in Austin, Texas. He brings experience as assistant solicitor general in the Texas Attorney General's office and has handled cases in the Texas Supreme Court and the U.S. Supreme Court. He has been named to the Texas Rising Stars list for nine consecutive years.

**Andrea Caro** '98 was selected for inclusion in *Florida Super Lawyers 2013*. She specializes in personal injury defense at the law firm of Zimmerman Kiser Sutcliffe in Orlando, Fla.

**Benjamin Torbert** '98, Ph.D. '04 was tenured and promoted to associate professor of linguistics in the English department at the University of Missouri-St. Louis.

**'99 15th Reunion** April 11-13, 2014

**David J. Hart** '99 cofounded Abyrx Inc. and acquired the assets of two privately held medical therapeutics companies.



**'94**

## Michael W. Savicki

**M.B.A. '94** won the Spirit of the Games Award at the 2013 National Wheelchair Veterans Games held in July in Tampa, Fla. He has won 79 gold medals at the games since 1991. A Navy veteran and multisport wheelchair athlete, he has finished more than

75 national and international marathons and half-marathons, and has served as the 2012 and 2013 spokesman for National Mobility Awareness Month.



Courtesy Mike Savicki

Courtesy Justin Truesdale



'06

## Justin G. Truesdale

'06 was named to the 2013 Lawyers of Color Inaugural "Hot List," which honors minority attorneys under the age of 40 who are excelling within the legal profession.

He is an associate at Smith Anderson in Raleigh, where he works with clients ranging from private start-up and growth companies to larger public companies in the areas of corporate law, mergers and acquisitions, and securities. He also serves on the firm's diversity and recruiting committees.

### Marriages & Commitments

**Tara Smith** '97 to Greg Pierman on July 20, 2013. Residence: Philadelphia... **Ken Inouye** B.S.E. '98 to Aya Kinui on Nov. 13, 2011. Residence: Tokyo, Japan... **Christopher James Lenox** '99 to Karyn Cherwinski on May 4, 2013. Residence: Newton, Mass... **Katherine Papastephanou** '99 to Daniel Mayeri on June 15, 2013. Residence: Berkeley, Calif.

### Births & Adoptions

Twins Roma Sabine and Harlow Angelina to **Ryan Henriquez** '96 and Jennifer Slovak on July 24, 2013... Kate Alexandra to **Lisa Jacobs Blau** '97 and Jeffrey Blau on July 13, 2013... Penelope Noorjehan to **Husein Cumber** '97 and LeAnna G. Cumber on Aug. 15, 2013... Colton John to **Benjamin Applestein** '98 and **Erica Applestein** '99 on July 13, 2013... Genevieve Marie to **Amanda Hallet Gelber** '98 and **Nicholas Gelber** '98 on Feb. 13, 2013... Taisei to **Ken Inouye** '98 and Aya Inouye on Oct. 2, 2012... Cameron George to **Kip Morris** B.S.E. '98 and **Lindsay Schneider Morris** '98 on May 7, 2013... Molly Jane to **Hilary Puskar Prokop** '98 and Jeff Prokop on April 22, 2013... Alexis Taylor to **Jason Solganick** '98 and Erin Norris on Aug. 5, 2013...

Charles Cameron to **Christopher Winland** '98 and **Lori Fixley Winland** '99 on April 19, 2013... Twins Emerson Parker and Ansley Renee to **Stacey Austell** '99 and Jason Austell on April 2, 2013... Maxwell Stewart to **Andrew Kapp** '99 and **Elizabeth Jacobs Kapp** '01 on March 6, 2013... Lila Kate to **Lauren Kahner Panagiotis** '99 and Greg Panagiotis on Jan. 1, 2013... Twins Lucy Shea and Charlotte Rose to **Amanda Segal** '99 and Bruce Bernstein on June 25, 2013... Seth Gabriel to **Joanna Cohn Weiss** '99 and **Matthew Weiss** '00 on June 10, 2013.

## 2000s

**Azim Barodawala** '00 was promoted to CEO at Adioso Inc., a travel search engine in Melbourne, Australia. Previously, he served as head of strategy with Jetstar Airways.

**Whitney Novak** B.S.E. '00 and her husband, Joe, opened a toy store in Atlanta called Kazoo Toys.

**Matthew Olender** M.S. '01 was promoted to vice president in the Fort Lauderdale, Fla., office of Thornton Tomasetti, an international engineering firm.

**Philip Tinari** '01 was named director of the Ullens Center for Contemporary Art in the 798 Art District in Beijing, China.

**Kevin Raketich** M.B.A. '02 was promoted to director of international business for steel at The Timken Co. Previously, he served as managing director of steel for Asia, Europe, Africa, and the Middle East.

**Esther Han** '03 was recognized by the American Medical Association and awarded a \$10,000 Physicians of Tomorrow scholarship. She is a fourth-year medical student at Boston University School of Medicine.

'04 **10th Reunion** April 11-13, 2014

**Jessica Thomas** M.B.A. '04 was named the inaugural director of the N.C. State Poole College of Management's sustainability initiative. Previously, she was managing director of the Center for Sustainable Enterprise at UNC-CH's Kenan-Flagler Business School.

**Amy M. Lazarus** '05 was named one of the 99 Most Influential Foreign Policy Leaders Under the Age of 33 by *The Diplomatic Courier*. She is executive director of the International Institute for Sustained Dialogue, formed to promote resolutions of racial, ethnic, and other conflicts, both domestically and internationally.

**Charles R. Salmen** '06 was named a 2013 Pisacano Scholar by the American Board of Family Medicine. He is a fourth-year medical student at the University of California-San Francisco.

**Joiselle Cunningham** '07 was selected a Teaching Ambassador Fellow for the 2013-14 school year. A fifth-grade reading teacher in Harlem in New York, she will work on teacher-quality issues in the Office of the Secretary of Education.

**Kirstin Fowler** '07 launched KEFTutoring LLC, expanding a tutoring practice she developed in the Pittsburgh area.

**Suleen Lee** '07 was named general counsel for Barre Bee Fit, a fitness company seeking to change the way health and fitness are viewed through group fitness classes.

**Patricia Simon** '07 received a Ph.D. in clinical psychology from Rutgers, The State University of New Jersey in July. She accepted a postdoctoral fellowship at Yale University in the prevention of substance abuse.

**George T. Lam** A.M. '08, Ph.D. '11 was appointed assistant professor of music at York College, City University of New York. He is a composer based in New York, where he cofounded the new opera ensemble Rhymes With Opera.

'09 **5th Reunion** April 11-13, 2014

**Adam Cooper** J.D. '09 was named a business affairs executive at William Morris Endeavor Entertainment, a talent agency in Beverly Hills, Calif. Previously, he practiced in the Century City office of O'Melveny & Myers.

### Marriages & Commitments

**Heather Swagart** '00 to Norman Rancourt on

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# HOW DO MOVE THE



Junior Stephanie Egeler; sophomore Anny Ning;  
junior Nick Strelke; junior Jonathan Hill-Rorie

# YOU

DUKE  
*/forward*

# WORLD FORWARD?

## You Move Duke Forward.

**She's mentored neglected children in Egypt through DukeEngage, served as a college tour guide and admissions ambassador, and researched speech pattern in the rural Appalachians. She leads the Duke University Marching Band as a drum major and aspires to work for the U.S. Foreign Service. But without our financial aid program, junior Stephanie Egeler wouldn't be keeping the beat for Duke. That's why financial aid is a priority of the Duke Forward campaign.**

**Nearly half of Duke undergrads,** including Stephanie, receive financial aid. But sustaining our commitment to keep a Duke education accessible comes at a significant cost. Duke Forward seeks to raise \$3.25 billion for

strategic university priorities, including more than \$400 million for endowed scholarships and fellowships. We'll also focus on areas where Duke can make a difference through research and experiential learning

opportunities for students, and on core priorities such as faculty support. Every donation to Duke, including gifts to the Annual Fund, will help us reach our goal.

Find out more and explore the campaign: [dukeforward.duke.edu](https://dukeforward.duke.edu)



## Beyond Duke Service and Leadership Award

The Duke Alumni Association has created a new award to recognize alumni who have distinguished themselves through service to their local community or the global community. Nominations are being solicited in three categories: Young Alumni, Local Community, and Global Community. To learn more, or to nominate a candidate, please visit [www.dukealumni.com/about-daa/awards-scholarships/awards](http://www.dukealumni.com/about-daa/awards-scholarships/awards). **The deadline for nominations is March 1.**

Oct. 20, 2012. Residence: Monroe, Conn....  
**Philip A. Tinari** '01 to Lulac Huang on Dec. 17, 2012. Residence: Beijing, China...**Gwynne Rogers** M.B.A. '02, M.E.M. '02 to William Vil-lota on Sept. 22, 2012. Residence: Washington, D.C....**Suzanne Lieb** '03 to Mark Tilley on Aug. 10, 2013. Residence: Montclair, N.J....**Margot Langoon Hill** '04 to **Colin J. Kirby** LL.M. '11 on Aug. 17, 2013. Residence: New York...**Emily Nolan** '06 to David Vavrichuk on Sept. 7, 2013. Residence: New York...**Polly Bendush** '07 to Scott Erickson on March 9, 2013. Residence: Hermosa Beach, Calif....  
**Rachel E. Brown** '08 to Noah R. Mink on Sept. 15, 2013. Residence: Washington, D.C....  
**Rachel Carolyn Wang** B.S.E. '08 to Jeffrey M. Hoffman on March 23, 2013. Residence: Acworth, Ga....**Shyam R. Joshi** '09 to **Ami Ashit Sameba** B.S.E. '09, M.S. '10 on April 27, 2013. Residence: Providence, R.I....**Daniel C. Wolf** '09, A.M. '10 to **Mattie Elaine Feasel** '10 on June 22, 2013. Residence: Atlanta.

### Births & Adoptions

Judith Margaret to **Paschal Brooks** '00 and **Susan Donahue Brooks** '02 on Aug. 16, 2013...Isabel Brady to **Adam Cooper**

**DuPree** '00 and **Isabel Arana DuPree** '00 on March 21, 2013...Twins Leo Francis and Wesley Kemble to **Katherine Fiori** '00 and **Stephen Perret** '01 on May 29, 2013...Amelia Sage to **Paola Gomez-Birenbaum** '00 and Steven Birenbaum on Aug. 27, 2013...Truth Ann to **Gladys Mitchell-Walthour** '00 and Anthony Walthour on Sept. 14, 2013...Edward Alexander to **Laura Barron Ryan** '00 and Stephen Ryan on July 22, 2013...Elizabeth Leighton to **Albert B. Stieglitz Jr.** '00 and **Amanda J. Scovil Stieglitz** '00, M.H.S. '04 on July 29, 2013...Lily Davis to **Rahul Vinakota** '00 and Kim D. Vinnakota on July 18, 2013...Seth Gabriel to **Matthew Weiss** '00 and **Joanna Cohn Weiss** '99 on June 10, 2013...Maxwell Stewart **Elizabeth Jacobs Kapp** '01 and **Andrew Kapp** '99 on March 6, 2013...Jameson Edward to **Cassandra Marshall Creekman** '02 and **David Creekman** '02 on July 19, 2013...Theodore Glenn to **Andrew Gladstone-Highland** '02 and Mary Gladstone-Highland on Dec. 28, 2012...Avery to **Tomoharu Uchiyama** '02 and **Shu Kwan-Uchiyama** '03 on Sept. 28, 2012...Imogen Bega to **Elizabeth Sullivan Windram** '02 and Anthony Windram on April 19, 2013...Kendall

Thomas to **Thomas Cass** '03 and Christa Cass on Aug. 15, 2013...Dylan Russel to **Nicholas Coder** '03 and Emily Coder on Aug. 8, 2013...Maxine Caroline to **Julia Wilhelm** '03 and Tim Kazul on June 28, 2013...Jane Elizabeth to **Sean M. Kedrowski** '05 and **Emma Bourdillon Kedrowski** '07 on Feb. 21, 2013...Troy Wass to **Julianna Tabor Rozycki** '06 and **Stefan W. Rozycki** '06 on July 17, 2013...Twins Emma Grace and Charlotte Elizabeth to **Matthew Baldwin** '07 and **Megan Bode Baldwin** '07 on June 14, 2013.

## 2010s

**Michael Freedman** '10, along with his sister **Katie Freedman** '14, his father, **Bruce Freedman** '79, M.D. '83, and **Jessica Sutton** '10, summited Mount Kilimanjaro in Tanzania. At 19,340 feet, it is the highest point in Africa and the tallest freestanding mountain in the world.

**Steven Lee** J.D. '12 is co-chair of the new Duke Law Club of Northern California.

**Katherine Unruhe** '12 was named a 2013 Teaching Fellow at the Knowles Science Teaching Foundation, which seeks to increase the number of high-quality high-school science and mathematics teachers and improve math and science education in the U.S.

### Marriages & Commitments

**Mattie Elaine Feasel** '10 to **Daniel C. Wolf** '09, A.M. '10 on June 22, 2013. Residence: Atlanta...**Colin J. Kirby** LL.M. '11 to Margot Langoon Hill '04 on Aug. 17, 2013...**Jeffrey Palmer** A.M. '11 to Sarah Nelson on June 22, 2013. Residence: Durham...**Andrew David Jones** B.S.E. '13 to **Meghan Elizabeth Whelan** '13 on July 6, 2013. Residence: Durham.

## IN MEMORIAM

**Virginia Cox Adams** '35 of Core, W.Va., on July 5, 2013. She taught high school in Winston-Salem for several years before returning to Durham to work in Duke's chemistry library. She later served as a special-education teacher in West Virginia. She is survived by four children, including **Dorothy Adams Darsie** B.S.N. '66; a son-in-law, **James Darsie** H.S. '71; a sister; 12 grandchildren; and seven great-grandchildren.

**Fraser "Bob" Drew** A.M. '35 of Buffalo, N.Y., on June 24, 2013. He was a professor of English and Irish literature at Buffalo State College for 38 years. In 1973, he was named a State University of New York Distinguished Teaching Professor. Over his lifetime, he corresponded and met with many famous authors and poets, including Ernest Hemingway and Robert Frost. After retirement, he continued to lecture at St. Brendan's College, an Irish-American institution in Buenos Aires, Argentina. Survivors include his partner, James Brophy.

**John C. Watson Jr.** '36 of Southern Pines, N.C., on June 16, 2013. After serving in the Navy during World War II, he attended the New England Conservatory of Music in Boston. He later worked as a hospital administrator in several towns in North Carolina. He is survived by his



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Alexis honed her techniques for effectively bridging the gap between science and its practical applications at **THE NICHOLAS SCHOOL OF THE ENVIRONMENT AT DUKE UNIVERSITY**.

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wife, Libba; two sons, **Lawrence F. Watson** '70 and **Wayne E. Watson** '72; a daughter; a brother; and three grandchildren.

**Marion E. Reade Thompson** '37 on Sept. 7, 2012. Survivors include a niece, **Patricia R. Price Maxwell** '63.

**Jean Richards Bushell** '38 of Laguna Woods, Calif., on Feb. 11, 2012. She is survived by two sons, two daughters, three grandchildren, and five great-grandchildren.

**Wardell H. Mills** M.D. '40 of Greensboro, on June 6, 2013. After serving in the military during World War II, he moved to Greensboro and practiced ear, nose, and throat medicine until his retirement in 1983. He is survived by his wife, Grace; a son; a daughter; and four grandchildren.

**Frances Babb Andrews** B.S.N. '41 of Lake Junaluska, N.C., on June 20, 2013. She is survived by three daughters; two sisters; six grandchildren; and six great-grandchildren.

**Marjorie LaMont McGee** '41 of Sun City West, Ariz., on June 11, 2013. She served as a physician for the public-health department in Marin County, Calif., and as a member of the Ross, Calif., school board. She is survived by two daughters, two sons, six grandchildren, and two great-grandchildren.

**Ruth Geckler Anderson** '42 of Asheville, N.C., on May 14, 2013. She is survived by a son, **David E. Anderson** '72; a daughter, **Nancy R. Anderson Goodridge** '68; and a son-in-law, **David R. Goodridge** '67.

**Mary A. Deshon Berg** '42 of Mobile, Ala., on June 21, 2013. She married a naval officer and spent time living at the largest naval base in Europe. After returning to the U.S., she established Senior Citizen Services of Mobile in 1970 through the United Way, one of the first programs for the aging in Alabama. For her dedication to seniors, she was inducted into the Alabama Hall of Fame and attended the White House Council on Aging. Survivors include two daughters, **Sarah H. Berg** '70 and **Mary H. Berg** '76, B.H.S. '78.

**R. Thomas Hobbs** '42 of Burlington, N.C., on June 1, 2013. He served in World War II as a sonar officer in the Navy and reached the rank of lieutenant. When he returned to civilian life, he earned an engineering degree from N.C. State and became an assistant city manager in Raleigh in 1948. In 1951, he was called back into duty for the Korean War, serving on the USS *Sturtevant* as an executive officer. Later, he began a career as a manufacturing engineer with Western Electric and spent 33 year working on programs such as the Nike Hercules Missile Systems, the Safeguard Ballistic Missile Defense, and the Strategic Defense Initiative. Survivors include his wife, Alice; four daughters; a sister, **Nancy M. Hobbs Banks** '53; and six grandchildren.

**Daniel W. Maddox** '42 of Greensboro, on July 9, 2013. He served in the Army during World War II and obtained the rank of captain of field artillery. He then worked at Burlington Industries in Greensboro, retiring in 1982 as assistant accounting department head. He is survived by two daughters, two sons, two grandchildren, and three great-grandchildren.

**George W. Warren Jr.** '42 of Spring Hope, N.C., on June 14, 2013. He served in the Navy as a captain during World War II, escorting merchant ships in the Atlantic. At war's end he decommissioned Navy ships on the West Coast. He spent the entirety of his civilian career as a purchasing agent for various employers, including Duke University, the University of Maryland, and Sisters of Charity hospitals. He was president of the National Association of Educational Buyers from 1958 to 1959. He is survived by a daughter; a brother, **Julian M. Warren** B.S.M.E. '49; and two granddaughters.

**Mary S. Webster Parker** '43 of Cherry Hill, N.J., on July 3, 2013. She taught Sunday school for more than 40 years, sang in the church choir, and served as a church elder while living in New Mexico and New Jersey. She is survived by her husband, Joseph; two sons; a daughter; a sister; and four granddaughters.

**Evelyn LaUna Coggins Ross** B.S.N. '43, R.N. '43 of Fairfax, Va., on May 10, 2013. She served in Durham and Boston hospitals before settling with her husband, Ira, in New Jersey. She is survived by three sons and six grandchildren.

**Mary E. Mackall Walters** '43 of Easton, Md., on May 17, 2013. She earned a master's in journalism from Columbia University in 1946. She had an editing career with the federal government, including serving as an editor for the Federal Reserve Board in Washington. She retired in 1984. Survivors include her husband, James; two sons; a stepdaughter; two grandchildren; and two step-grandchildren.

**Janet Moran Tyer** '44 of Greensboro, on June 11, 2013. Active in her community, she served as head of the Red Cross Gray Ladies at Wesley Long Hospital and as an elder at her church. She is survived by a son and a daughter.

**James A. Budd** '45 of Canton, Ga., on May 14, 2013. Before attending Duke, he served in the Navy during World War II, fighting in Guadalcanal and other Pacific theater battles. He was a United Methodist minister in the North Georgia Conference for more than 60 years. Survivors include his wife, **Marlene Ledford Budd** '54; two daughters; a son; seven grandchildren; and two great-grandchildren.

**Miriam P. Hickman Hutson** '45 of Miami, on July 12, 2013. She became president of the Junior League in Miami, helped create the Everglades exhibit at the Miami Museum of Science, and ran for Miami City Commission in the early 1960s. She is survived by her husband, **James J. Hutson** '42, M.D. '44; three daughters; and two sons.

**Ephraim S. "Rick" S. Siker** '45 of Pittsburgh, on June 21, 2013. A Navy hospital corpsman, he served in a MASH unit during the Korean War. In 1960, he was appointed chair of the department of anesthesiology at Mercy Hospital in Pittsburgh, a position he held for 34 years. He was elected president of the American Society of Anesthesiologists in 1973. That same year, he participated in a physician exchange program to the People's Republic of China, becoming one of the first Americans to visit the country after its

opening to the West. Among other leadership roles, he served as chair of the World Federation of Anesthesiologists and as executive director of the Anesthesia Patient Safety Foundation. In recognition of his lifetime contributions, the University of Pittsburgh's department of anesthesiology established a chair in his name. He is survived by his wife, Eileen; five children; eight grandchildren; and a great-grandchild.

**Virginia H. Davis Warlick** R.N. '45 of Kingston, Tenn., on May 17, 2013. She held a nursing position at Harriman Hospital in various administrative assignments from 1968 to 1985. She served on the board of directors of Oak Ridge Mental Health and the Family Medical Associates of Kingston. She is survived by her husband, George; two sons; a daughter; seven grandchildren; and a great-grandson.

**Kale E. Rogers** '46 of Billings, Mont., on May 24, 2013. After moving around during the Dust Bowl and the Great Depression, he served in the Navy, obtaining the rank of lieutenant. He graduated from Duke between tours of duty, the second of which concluded in 1954. He went on to a career with Shell Oil Co. as a safety engineer. He is survived by his wife, Ethel; two daughters; a sister; and 10 grandchildren.

**M. Robert Zellmer** '46, Ph.D. '75 of Haddonfield, N.J., on Dec. 27, 2011. After serving in the Naval Air Corps, he began a civilian career as a corporate executive with several organizations, including Firestone and Olin-Matheson. Upon retirement, he taught as an adjunct professor in

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business and economics at Rutgers, The State University of New Jersey, Glassboro State College, and Camden County Community College. He is survived by his wife, Nancy; two children; three stepchildren; five grandchildren; and a great-grandson.

**Warren G. Evans** '48 of Laurinburg, N.C., on June 13, 2013. He won a high-school state football title before enlisting in the Army during World War II. He was awarded the American Campaign Medal and the Europe-Africa-Middle East Theater Campaign Medal with five Bronze Stars for his service. He received a football scholarship to Duke and returned to Laurinburg to serve in the police force. Later, he worked for Luter (now Smithfield) Packing Co., retiring in 1984 as the company's vice president. He is survived by his wife, Betty; a daughter; and a brother.

**John Perry Spillman Jr.** '48, B.Div. '58 of Greensboro, on May 18, 2013. He began a career in banking with City Savings Bank in Charlotte before entering the ministry in 1955. He became an ordained deacon in 1956 and an ordained elder in 1958. He served many United Methodist churches in North Carolina, ultimately serving as a minister of visitation. He is survived by his wife, Ouida; two sons, including **John M. Spillman** '77; two daughters; four grandchildren; a great-granddaughter; and a nephew, **William R. Capel** '70.

**Lois E. James Tharnish** '48 of Elma, N.Y., on June 18, 2013. She served as the secretary of the Elma planning and zoning boards for many years. Along with her husband, Winfield, she was

a founding member of the Western New York Quarter Horse Association. She is survived by four children, 11 grandchildren, and 13 great-grandchildren.

**Richard E. Corthell** M.F. '49 of St. Simons Island, Ga., on May 20, 2013. He served in the Navy during World War II, then spent time as a forestry ranger with the U.S. Fish and Wildlife Service. He is survived by his wife, Vonice; a daughter; and a granddaughter.

**Marion L. Davis Wright** '49 of Toledo, Ohio, on May 16, 2013. She volunteered at the Dayton Art Institute and was a Girl Scout leader. She held board positions at the Wright State University Library, the Dayton Literary Club, the Aviation Hall of Fame, and the San Francisco International Airport Museum. She is survived by three daughters, a stepdaughter, a stepson, and 10 grandchildren.

**Alexander J. Bitker** '50 of Peachtree City, Ga., on June 20, 2013. At Duke, he was captain of the men's soccer team. He spent his career as a financial executive and CPA. He is survived by his wife, Ouida; two sons; a daughter; and five grandchildren.

**William R. Roberts Jr.** B.S.E.E. '50 of Harahan, La., on June 2, 2013. He served in the Army during World War II and was twice awarded the Purple Heart. Survivors include two sons, two daughters, and nine grandchildren.

**Benjamin L. Susman III** '50 of Tazewell, Va., on July 1, 2013. After serving in the Navy during

World War II, he managed an optometry practice in Tazewell for more than 50 years. An active member of his community, he served on the Tazewell County board of education and the Tazewell County board of supervisors, among other organizations. He is survived by his wife, Shirley; three sons; and a granddaughter.

**Robert S. Wynn Jr.** '50 of Smithville, Texas, on May 12, 2013. During the Korean War, he served in the Army as a first lieutenant. He spent the majority of his civilian career teaching at Northwestern State University in Natchitoches, La. He was also a CPA. He is survived by his wife, Martha; two sons; a daughter; and four grandchildren.

**Leslie Marshall Hall Jr.** '51, M.A.T. '56 of Farmville, Va., on March 26, 2013. He was honorably discharged from the Navy before attending Duke and UNC-CH. He taught for 37 years at Longwood University in Farmville as a professor of history. For much of that time, he served as chair of the university's department of history, political science, and philosophy. He is survived by his wife, **Janet Harrington Hall** M.A.T. '56; two sons; and three grandsons.

**Dorothy M. Steinmetz Newell** '51 of Boston, on June 16, 2013. She worked in development for Massachusetts General Hospital, Harvard Medical School, and Boston University Medical School. She is survived by three daughters and two grandchildren.

**Ernest Gene Reeves** '51, J.D. '56 of Bonita Springs, Fla., on Dec. 19, 2012. He joined the

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Archibald J. Motley, Jr., *Gettin' Religion* (detail), 1948. Oil on canvas, 40 x 48.75 inches (101.6 x 123.825 cm). Collection of Mara Motley, MD, and Valerie Gerrard Browne. Image courtesy of the Chicago History Museum, Illinois. © Valerie Gerrard Browne.

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Army early in World War II and trained to be a pilot. Following his service, he attended Duke on the G.I. Bill and had a career as a diplomat, judge, teacher, and international lawyer. Survivors include his wife, **Marian Lunger Reeves '51**, and a daughter, **Carolyn Reeves Keenan '84**.

**James L. Hamrick A.M. '52** of Raleigh, on May 23, 2013. He entered the Army in 1943 and saw extensive action in Europe during World War II, including fighting in the Battle of the Bulge. He attended Duke on a Rockefeller Scholarship before finding work with Deering Milliken, now Milliken & Co., retiring as vice president of corporate financial planning. Following his retirement, he worked as a consultant with Milliken, retiring for a second time in 2011 at age 87 after nine years as executive director. He was a consultant to the Greenville Spartanburg International Airport Commission and served for nearly 30 years on the board of trustees of Furman University, including two terms as board chair. Survivors include a daughter, four grandchildren, and three great-grandchildren.

**Wright Hugus Jr. '52** of Fairfield, Conn., on June 20, 2013. He was commissioned as an ensign in the Navy during the Korean War. He later graduated from the University of Virginia law school and practiced law throughout the U.S. and abroad with a specialty in sports law and sports management. He went on to found Hugus Enterprises, and in his retirement he owned and operated an ice-cream truck. Survivors include his wife, **Elizabeth Woods Hugus '54**; two daughters; a son; and four grandchildren.

**Edward N. Swanson '52, J.D. '55** of Pilot Mountain, N.C., on May 21, 2013. He served in the Navy aboard the USS *Intrepid* before attending law school. He went on to have a 56-year career in law as the longest-serving lawyer in Surry County. He served as board chair of the Gilmer-Smith Foundation and helped start the Mayfest and Community Bank in Pilot Mountain. Survivors include two children, a brother, and five grandchildren.

**James C. Armstrong '53** of Cape May Court House, N.J., on June 16, 2013. He served in the Navy for three years, entering active duty as navigator of the USS *Soley* during the Korean War, completing an around-the-world cruise. Later he earned a doctorate in nuclear physics at the University of Pittsburgh and taught physics at the University of Maryland. He worked for the Defense Intelligence Agency, the U.S. Postal Service, and AT&T. He is survived by his wife, Valentine; a son, **James C. Armstrong Jr. '82, M.B.A. '06**; a daughter, **Lillian B. Armstrong '84, M.B.A. '86**; and a brother.

**William Mozingo '53** of Spring Hill, Fla., on June 19, 2013. After graduating from Duke, he joined the Air Force and became a pilot. Following his 20 years of service, he retired to Hawaii and opened an import business. Survivors include a brother.

**J. Ralph Seaton Jr. '53** of Chicago, on July 4, 2013. After receiving his medical degree, he served as a base radiologist in the Navy Medical Corps for two years. He later held a number of academic appointments, including at the University of Illinois, the University of Chicago, and Cincinnati General Hospital. He managed his own plastic-



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surgery practice in Illinois until his retirement in 2000. He is survived by a daughter, **Marilynn Seaton Williams** '79; a son, **Joseph M. Seaton** '82; a daughter-in-law, **Karen Gipson Coates** '83; and three grandchildren.

**Richard L. Sykes** '53 of Englewood, Fla., on June 5, 2013. After graduating from Duke, he moved to Vermont, where he became a developer and partner of Brattleboro Shopping Plaza. In 1969, he began a six-year stint as an appointee to the Vermont Development Commission. He then moved to New Hampshire and cofounded Sykes & Flanders Antiquarian Booksellers, a business he managed until his retirement in 2000. He is survived by his wife, **Mary Flanders Sykes** '52; two daughters; a son; three grandchildren; and two great-grandsons.

**Jack Williams** B.Div. '53 of Corinth, Miss., on April 20, 2013. He served in the Army Air Corps during World War II. Upon returning to civilian life, he owned and operated an electrical appliance business before turning to ministry. He served many United Methodist churches in the Mississippi Conference and volunteered in alcohol and drug rehabilitation, working with hundreds of men and women. He was a member of the first board of directors of the American Family Association and served eight years as chair of the Conference Board of Pensions. He is survived by his wife, Vetrica; two daughters; a son; three grandchildren; eight great-grandchildren; and a great-great-grandchild.

**Donald A. Calleson** B.S.M.E. '54 of Raleigh, on May 31, 2013. He worked in the tobacco industry, first for Liggett & Myers in Durham as a mechanical engineer and later at R.J. Reynolds in Winston-Salem. Over the course of his career, he acquired several patents for his inventions. He is survived by his wife, Sarah Lynn; three daughters; two stepchildren; and three grandchildren.

**Richard L. Christopher** M.Div. '54 of Franklin, Ind., on June 22, 2013. He became a United Methodist minister and served in many cities, including Indianapolis. He helped establish mission projects in Haiti and represented the Indiana United Methodist Conference at the annual world conference in Nairobi, Kenya, in 1986. He is survived by his wife, Alice; three daughters; three stepdaughters; a stepson; two brothers; 16 grandchildren; and 12 great-grandchildren.

**Albert C. Jackson Jr.** '54 of Roanoke, Va., on May 29, 2013. He served for four years in the Air Force, then began a career as a programmer for the Bank of America. He is survived by his wife, Betty; a son; two grandchildren; and three step-grandchildren.

**Carolyn Patrick Stenstrom** '55 of Sanford, Fla., on May 14, 2013. She and her husband opened Stenstrom Realty Inc., for which she was an owner and real-estate agent for more than 45 years. She served as chair of the board of trustees for Seminole Community College for 20 years. Survivors include a daughter, a son, four granddaughters, and six great-grandchildren.

**Earl L. Wiener** '55 of Menlo Park, Calif., on June 14, 2013. He served as a pilot in the Air Force and the Army, flying medical transport aircraft. He later became a professor at the University of Miami and worked for NASA. His research in the field of cockpit safety has been widely credited for improv-

ing pilot preparedness. He is survived by two children; a brother; five grandchildren; and a cousin, **Elisabeth Harper Wiener** M.B.A. '91.

**Donald E. Boswell** '56 of Wilmington, N.C., on June 19, 2013. He received a master's degree and Ph.D. from Virginia Polytechnic Institute and had careers at Quaker Chemical and in real estate. He is survived by his wife, Wilma; three sons; a brother; and two grandchildren.

**Katie Lou Jones** A.M. '56 of Normangee, Texas, on May 7, 2013. An active member of the community, she was a Sunday school teacher and church treasurer for 30 years. Survivors include her husband, Bill.

**Elton H. Underwood** M.F. '56 of Warrenton, Va., on April 25, 2013. He was drafted into the Air Force in 1952. After discharge, he spent most of his career as a civilian working for the Army Corps of Engineers and served five years with the Defense Intelligence Agency. For the last 16 years of his career, he worked for the Engineer Studies Center as project manager, a position that required him to fly to Vietnam and South Korea in the 1970s and 1980s. He is survived by his wife, Alice; two sons; a daughter; a sister; three grandchildren; and three great-grandchildren.

**Gene L. Wyke** '56 of Charlotte, on June 5, 2013. He received both ROTC and football scholarships to attend Duke, where he participated in a

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zero-gravity testing program for early astronauts. He spent his career with Southern Bell Telephone/BellSouth, retiring as division manager of network operations. He also served in the National Guard. Survivors include his wife, Johnnye, and a brother.

**Dorothy A. Felson Levy** '57 of New York, on July 8, 2013. She was a member of Alpha Phi and graduated magna cum laude from Duke before moving to New York and beginning a career as a model. She posed for many fashion magazines and the Marines' national recruiting poster in 1960. She is survived by her husband, John; two sons; and four grandchildren.

**Wilbur C. Stewart** B.S.E.E. '58, M.S. '61, Ph.D. '64 of Windsor, N.J., on May 5, 2013. He had a four-decade career at the David Sarnoff Research Center as part of RCA and SRI International. As a fellow of the technical staff with a specialty in optics, he wrote or cowrote dozens of technical publications and helped create numerous patented innovations. In 1974, he spent time as a visiting scientist at Laboratories RCA Ltd. in Zurich. He is survived by his wife, Mary; a son; a daughter; three grandchildren; and a cousin, **Evelyn L. Crumpacker Lewarch** '77.

**Heath E. Valentine** B.S.M.E. '58 of Vero Beach, Fla., on April 26, 2013. After graduating from Duke, he joined the Air Force as a second lieutenant and was stationed in Paris as a meteorologist. In 1961, he began his civilian career as an engineer in the aluminum highway products industry. Most recently, he owned and operated an

engineering design and manufacturing company, Valentine & Co. The company completed several highway, bridge, and railroad projects throughout the country. He is survived by two daughters, including **Crista Valentine Clancy** B.S.E. '83; a sister; and four grandsons.

**Richard J. George Jr.** '59 of Palm Beach Gardens, Fla., on June 30, 2013. He was a three-year member of the men's golf team at Duke. After graduating from Cumberland law school, he became legal counsel for McCormick, a manufacturer of spices and seasonings. He later worked as a stockbroker for Merrill Lynch and Prudential Bache. Survivors include a daughter and a grandson.

**Constance Brown Lewis** '59 of McLean, Va., on April 5, 2013. At Duke, she was a member of Pi Beta Phi. While her husband was in law school, she worked in the Duke Rule of Law Center and later served in administrative capacities with private-sector employers in the Washington area. She is survived by her husband, **F. Sherwood Lewis** B.S.E.E. '58, J.D. '66; a son; a daughter; a sister; two grandsons; and a cousin, **John Lodmell** B.S. '56, M.D. '60.

**A. Davis Mullholand Jr.** B.S.M.E. '59 of Jackson, Mich., on June 29, 2013. He worked for Knolls Atomic Power Laboratory in Schenectady, N.Y., and for Consumers Energy in Jackson. He is survived by his wife, Carol; two children; and two grandchildren.

**John W. Phoenix** '59 of Leesburg, Fla., on March 18, 2013. He served in the Marines.

**Sheldon Pinnell** '59 of Durham, on July 4, 2013. He led Duke's Division of Dermatology from 1982 to 1997, helping generate the strategic initiatives that led to the establishment of the Department of Dermatology in 2009. He performed research on skin biology, revealing the importance of vitamin C, as well as the leading antioxidants for prevention of sun damage to the skin. The Pinnell Center for Investigative Dermatology is named in his honor. He is survived by his wife, Doren; three sons; and five grandchildren.

**Jacob K. Higgs** B.S.E.E. '61 of Thomasville, Ga., on July 13, 2013. He served in the Air Force from 1953 to 1957 and was stationed in England and North Africa. He worked for Hazelton Corp. for five years before beginning a 35-year career at Sprague Electric Co. He is survived by his wife, Mary Ann; three daughters; a son; and three grandchildren.

**Ernest Tilghman Poole** M.D. '61 of Wilmington, N.C., on July 8, 2013. He served as a physician in the Army before opening an ophthalmology practice in Wilmington. He is survived by his wife, Shirley; two sons; two daughters, including **Susan Poole Negron** '91; son-in-law **Hector R. Negron Jr.** '91; two brothers; a sister; and four grandchildren.

**Cynthia Hodgin Willson** '61 of Woodville, Va., on April 25, 2013. She is survived by her husband, **David R. Willson** J.D. '61.

**Nancy Gray Powell** B.S.N. '62 of Durham, on April 25, 2013. She was a registered nurse at Duke Medical Center. She is survived by her husband, **Earl D. Powell** M.H.A. '67; three daughters; and three grandchildren.

**Edgar J. Sanford** '62, M.D. '65, of Tampa, Fla., on June 26, 2013. He served in the Navy for two years and then returned to Duke for four additional years of training in urology. He later served as a faculty member at Penn State University's Hershey Medical Center, leaving to enter private urology practice in Elmira, N.Y. He finished his career in academic medicine at the University of South Florida Medical Center in Tampa. He is survived by his wife, Barbara; three children, including **Stephanie L. Sanford-Colby** '88; and six grandchildren.

**Alice Betts Slater** B.S.N. '63 of New Market, Md., on July 7, 2013. She was an assistant professor of psychiatric nursing at the University of Maryland-Baltimore. She later worked as an antiques dealer, specializing in 18th- and 19th-century American furniture and accessories. She is survived by her husband, **Marcus B. Slater Jr.** '61, and her brother, **Raymond L. Betts** B.S.E.E. '61.

**Dorothy Cox Sterling** M.R.E. '63 of Gainesville, Fla., on Dec. 9, 2012. She taught at Littlewood Elementary and P.K. Yonge Laboratory School in Gainesville. A potter, she also taught clay work at the University of Florida. Survivors include two sons and a granddaughter.

**Carlotta "Cotty" Satterfield Kale** '64 of Chattanooga, Tenn., on June 5, 2013. She was a Sunday school teacher and a member of the Altar Guild at St. Paul's Episcopal Church. She is survived by her husband, **Thomas S. Kale** '61,

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LL.B. '64; two sons, including **Thomas S. Kale Jr.** '89; and two grandchildren.

**William F. Kinard** '64 of Charleston, S.C., on June 11, 2013. He was secretary of the American Chemical Society Nuclear Chemistry and Technology Division and professor at the College of Charleston. He was also director of the Summer School in Nuclear and Radiochemistry at San Jose State University. He wrote more than 35 technical publications and had recently received a grant from the Nuclear Regulatory Commission to support his efforts to keep lab courses at the College of Charleston relevant. Survivors include his mother and a brother.

**Lee E. Knott Jr.** J.D. '64 of Washington Park, N.C., on July 1, 2013. He served as a pilot in the Air Force before attending Duke's law school. He practiced law for 40 years. He is survived by his wife, Patty, and two brothers.

**John R. Moroney Jr.** Ph.D. '64 of Bryan, Texas, on June 13, 2013. He had a 48-year career as an economics professor, beginning with stints at Florida State University and Michigan State University. He served as the department chair at Tulane University from 1969 to 1981 and then taught for 30 years at Texas A&M. He spent many summers teaching at the Economics Institute in Boulder, Colo., and wrote more than a dozen books, primarily focusing on the economics of natural resources and energy, economic theory, and international economic trends. He is survived by his wife, Carmen; three sons, including **Stephen K. Moroney** '84, Ph.D. '95; a daughter; two brothers; and seven grandchildren.

**Ingeborg Hildebrand Talton** H.S. '65 of Durham, on July 4, 2013. After attending medical schools in Germany and Canada, she became a fellow at Duke's Center for the Study of Aging and Human Development. She later served as a faculty member in Duke Medical Center's department of anesthesiology, retiring as an associate professor emerita after 17 years. Survivors include a sister and several nieces.

**Burton L. Albert** J.D. '66 of Roanoke, Va., on June 19, 2013. He worked as a lawyer in Roanoke for 43 years. He is survived by his wife, Melinda; a son; two brothers; and a grandson.

**John E. Baxter Jr.** Ph.D. '66 of Memphis, Tenn., on June 5, 2013. He received his doctorate in physical chemistry and took a position teaching at North Carolina Wesleyan College. In 1972, he moved to Memphis, where he began a 37-year career of teaching, research, and information technology at the University of Tennessee Health Science Center. Survivors include his wife, Polly; two daughters; two sons; two brothers; and four grandchildren.

**Judith E. Alford Ezzes** '67 of Great Falls, Va., on March 16, 2013. She was a member of Kappa Kappa Delta.

**John L. Choate** '68 of Atlanta, on June 28, 2013. He served in the Army during the Vietnam War and was awarded the Bronze Star. He then attended the University of South Carolina law school, where he was executive editor of the *Law Review*. Over the course of his legal career, he was an assistant attorney general for South Carolina; a partner with Nelson Mullins Riley & Scarborough

in Columbia, S.C.; and a partner with Cozen O'Connor in Atlanta. Survivors include a son and a sister.

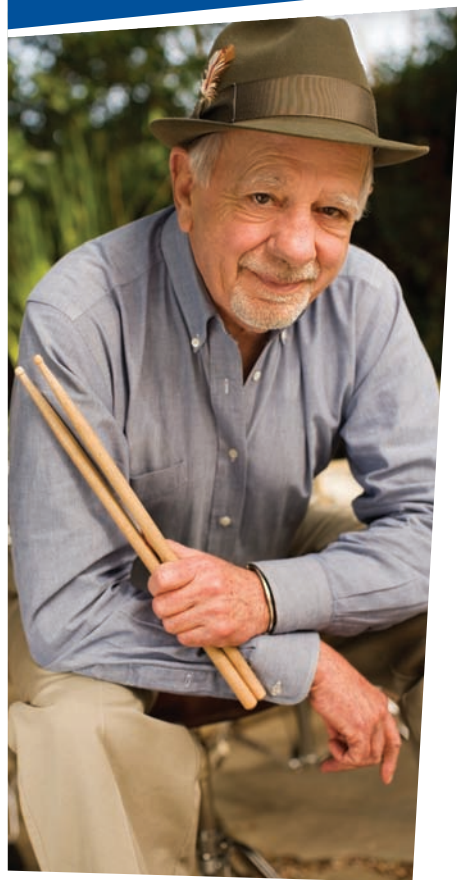
**Allen B. Frankel** A.M. '68 of Portland, Ore., on April 24, 2010. He worked at the Federal Reserve Board of Governors and lived and worked in Switzerland for a number of years. He is survived by his wife, Jeanie, and two daughters.

**Christine Keller** J.D. '69 of Galveston, Texas, on June 21, 2013. She worked for the health and life insurance company Great Southern, eventually becoming vice president, general counsel, and secretary. She later became a partner with Greer, Herz & Adams. An active member of the Galveston community, she volunteered with Meals on Wheels and was the first woman to join the local Kiwanis club. Survivors include a sister.

**Mark S. Dunn Jr.** A.M. '70 of Meriden, Conn., on April 6, 2013. He attended Davidson College and was awarded a Woodrow Wilson Fellowship for graduate study at Duke. He managed an oil refinery in Korea while serving as an Army officer. Later, he did computer research work for United Technologies and spent time volunteering at the Meriden Public Library. He is survived by a son, a daughter, two sisters, and a brother.

**Steven H. Boswell** H.S. '72, H.S. '73 of San Antonio, on July 8, 2013. He followed his residency at Duke by serving as a lieutenant commander in the Navy, overseeing the training of residents at Bethesda Naval Hospital. In 1976, he moved to San Antonio to begin a career as a radiologist. He is survived by his wife, Janet; two sons; two daughters; his mother; two sisters; and six grandchildren.

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**Elizabeth A. Connor Baker** '73 of Tampa, Fla., on May 22, 2013. She earned a master's at the University of Florida and began Ph.D. studies in film theory at Emory University. While pursuing film as a career path, she also excelled as a writer and poet. She is survived by her husband, **Peter Baker** '73; her mother; and two daughters.

**Robert L. Schweitzer** Ph.D. '75 of Newark, Del., on July 7, 2013. He worked as a senior financial economist at the U.S. Office of the Comptroller of the Currency. In 1980, he became a faculty member at the University of Delaware, where he held a joint appointment in the departments of finance and economics at the Lerner College of Business and Economics. He served as chair of the finance department from 1990 to 1997 and received the Student Choice Teaching Award in 2006. Most recently, he was the Donald J. Puglisi Professor of finance. He was also an NCCA men's lacrosse referee, officiating college and high-school games for more than 40 years. He is survived by his wife, **Mary McKinney Schweitzer** '75; a son; a daughter; a sister, **Ruth A. McKinney** '73; and two grandchildren.

**George M. Semeniuk** Ph.D. '75 of Madison, Wis., on May 24, 2013. He spent his entire career working in the Chemical Control Division of the Environmental Protection Agency, advocating for the control of toxic substances. He is survived by his mother and two sisters.

**Marshall R. Vidrine** Ph.D. '75 of Winston-Salem, on May 4, 2013. After teaching philosophy

at the University of the Americas in Puebla, Mexico, he returned to his hometown of Baton Rouge, La., and became a computer programmer for the State of Louisiana. He is survived by two sons and his mother.

**Gerald "Steve" Sallee** M.Div. '76 of Knoxville, Tenn., on May 2, 2013. For 10 years he served on the National Leadership Team of the Board of Discipleship for the training of new church pastors throughout the U.S. He cowrote a book, *Growing New Churches*. He was the founding pastor of Christ United Methodist Church in Chattanooga, Tenn., serving there for 14 years before coming to Cokesbury UMC in Knoxville. Following his 16 years of service, Cokesbury is now the 13th most-attended United Methodist Church in the U.S. He is survived by his wife, Lynda; a son; a brother; and a granddaughter.

**Earl "Mike" Jones** M.Div. '78 of Mount Vernon, Ill., on June 22, 2013. He served for 35 years as a United Methodist pastor in the Illinois Great Rivers Conference. He is survived by his wife, **Cynthia A. Jones** M.Div. '78; two daughters; and a sister.

**Dennis E. Ose** Ph.D. '78, M.D. '79 of Cary, N.C., on June 26, 2013. He was a pathologist with Wake Medical Center in Raleigh and former Wake County medical examiner. He is survived by his wife, **Wendy E. Ose** M.D. '75; a son; a daughter; his parents; two brothers; and four grandchildren.

**Jacqueline M. Stanislaw Zinn** '79 of Chapel Hill, on July 16, 2013. She became a clinical research associate at Burroughs Wellcome, a biomedical research foundation in Research Triangle Park. She then joined the R&D project management department at the pharmaceutical company Glaxo Wellcome, where she contributed to the development of several successful prescription drugs. Most recently, she headed the Research Triangle Park-based project management group of Glaxo-SmithKline. An avid dancer, she was a member of several ballet companies and a participant in Durham's American Dance Festival every year since the inaugural festival in 1978. She is survived by her husband, **Douglas C. Zinn** '79; four children; her mother; two sisters; and two brothers.

**Barbara Clark Ziko** M.D. '80 of Raleigh, on July 5, 2013. After completing her medical studies at Duke, she remained in the Triangle to practice emergency medicine at several regional hospitals, including Raleigh Community Hospital. Most recently, she was a staff physician with N.C. State University Student Health. She is survived by her husband, **Thomas J. Ziko** J.D. '78; a daughter; her parents; and a brother.

**Trudy N. Small** H.S. '81 of New York, on June 14, 2013. After completing her medical training in pediatric hematology, she joined the faculty at the Memorial Sloan-Kettering Cancer Center in New York. Her work focused on improving transplantation approaches for the treatment of patients with advanced leukemia and children with life-threatening immune disorders. She also served as an associate professor of pediatrics at Weill Cornell Medical College. Her research there examined how best to vaccinate cancer patients after transplants or treatments. She is survived by her husband, Robert, and two children.

**Kelly Gene Anderson** '82, M.B.A. '84 of St. Simons Island, Ga., on June 28, 2013. She was executive director of Fairhaven Assisted Living Residence in Brunswick, Ga. Survivors include two daughters, a son, her parents, and a brother.

**Charles E. Boyer** Ph.D. '83 of Elkins, W.Va., on May 21, 2013. He worked for Burroughs Wellcome Pharmaceuticals and later taught science in the North Carolina community college system. He was also a member of the board of directors of the Randolph County Community Arts Center. Survivors include a daughter, two sisters, a brother, and two grandchildren.

**Joseph J. Pfister III** A.H.C. '88 of Durham on July 6, 2013. He interrupted his education to spend two years on intensive voter registration and community organizing in Georgia during the civil rights era. He began a career as a healer in 1987, first as a chaplain at Duke Medical Center and later as the operator of an acupuncture practice. He is survived by his wife, Jenovefa; a daughter; a son; a sister; a brother; and a grandson.

**Ulrik K. Larsen** M.B.A. '92 of Vancouver, Wash., on May 25, 2013. He enlisted in the Army after graduating from the University of Wisconsin-Milwaukee and was honorably discharged after nine years of service. After receiving his M.B.A., he worked for Bonneville Power Administration as a property disposal officer for 11 years. He is survived by his wife, Eileen; four stepchildren; his mother; and three brothers.



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**Stewart M. Campbell** '94 of Fort Worth, Texas, on June 30, 2013. He was able to graduate a semester early from Duke while working two jobs. He was an American MENSA member and fluent in Japanese.

**Patrick S. Daley** '06 of Boston, on May 24, 2013. Survivors include his mother, **Barbara K. Sabin Daley** B.S.N. '72; his father; and his fiancée, Kathryn O'Connor.

**Donald A. Oberholzer-Landolt** M.P.P. '11 of Zurich, Switzerland, on Sept. 6, 2012. Survivors include his wife, **Marina P. Frangopol Oberholzer** M.P.P. '09.

#### Director of Duke News Service

**Al Rossiter Jr.** of Washington, N.C., on Sept. 23, 2013. For 10 years he served as director of the Duke News Service and assistant vice president for Duke's public affairs office. As director of the news service, he spearheaded efforts to publicize the work of Duke faculty and updated communications programs to reflect the university's broader mission. In establishing campus-wide news policies at Duke, Rossiter helped set news and media standards for universities across the country. After retiring from his directorship in 2001, he worked part time as an associate dean for Duke's Pratt School of Engineering. The university's award for outstanding higher education reporting, the Green-Rossiter Award, was named to honor Rossiter and William Green, Duke's former director of university relations and vice president. Before coming to Duke in 1992, Rossiter had a 32-year career as a writer and executive editor for United Press International. He reported on Apollo moon flights, other space mis-

sions, and disease outbreaks, earning several awards, including the Grady-Stack Medal, the American Chemical Society's award for outstanding science reporting. He is survived by his wife, Sylvia; two children; and a grandchild.

#### Professor Emeritus Holley

**Irving Brinton "Bill" Holley Jr.** of Torrington, Conn., on Aug. 12, 2013. He was a history professor at Duke and one of the nation's preeminent military historians. After graduating from Amherst College in 1940, Holley served in the military. He received his Ph.D. from Yale in 1947, joining the faculty at Duke shortly after. A popular teacher, Holley received the Alumni Distinguished Undergraduate Teaching Award when he retired in 1989. Holley was an associate fellow of the American Institute of Aeronautics and Astronautics. He also was awarded the Army's Outstanding Civilian Service Medal, the Air Force's Exceptional Service Medal and Distinguished Service Medal, and the Air Force Legion of Merit. Holley remained in the Air Force until retiring as a major general in 1981. He wrote numerous books and monographs, including *The Transfer of Ideas: Historical Essays* (1968); *Ideas and Weapons* (1983); and most recently, *The Highway Revolution, 1895-1925: How the United States Got Out of the Mud* (2008). In 2008, the Air Force honored him with an award for "decades of assistance, support, and encouragement to military historians." The Major General I.B. Holley Award goes to an individual who contributes significantly to the documentation of Air Force history. Holley also initiated an effort among Duke scholars to donate scholarly books, textbooks, and journal articles to Iraqi university and college libraries, which suf-

fered damage during the second Gulf War. He is survived by his wife, Janet; three daughters; eight grandchildren; and two great-grandsons.

#### Professor Goodwyn

**Lawrence Goodwyn** of Durham, on Sept. 29, 2013. He was a history professor at Duke from 1971 until 2003. In the 1960s, he covered progressive politics in Texas as a writer for the *Texas Observer*. He helped build the civil rights coalition in Texas that pushed for the passing of the Civil Rights Act of 1964 and the Voting Rights Act of 1965. While in graduate school at the University of Texas, he researched grassroots politics and populism, culminating in the publication of his book, *Democratic Promise: The Populist Movement in America*. At Duke, he worked with history professor Bill Chafe to establish the department's oral-history program. Graduate students in the program have published nearly 20 books on America's civil rights history, with a particular emphasis on the role black activists played in advancing the movement. He is survived by his wife, Nell, and two children.

#### Professor Emeritus Langlois

**Alphonse J. Langlois** A.M. '63, Ph.D. '66 of Durham, on July 2, 2013. He served in the Air Force before attending the University of New Hampshire and Duke. After finishing his doctorate, he became an assistant professor at Duke and had a long career teaching on campus and performing research on cancer and HIV. He is survived by his wife, Marilyn; three daughters; three sons; eight grandchildren; and nine great-grandchildren.

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# Retro

## Acting Like a Lady

Pamphlet offered advice on being a 'duchess' at Duke | By Valerie Gillispie

In 1942, the incoming freshmen arriving at the Woman's College were offered a simple stapled pamphlet titled *Social Standards*. This document, produced by the Social Standards Committee of the Woman's College Student Government, offered advice on how to behave, dress, and act at Duke. It included regulations—including four involving when and where it was appropriate to wear socks or stockings—and set penalties for violations. It also forbade female students from sitting on the wall around East Campus. For other behavior, the pamphlet ominously stated, “We have no intention of imposing a set penalty for indiscreet conduct, but, on the other hand, we shall make it known to you if we feel that you are not living up to our general standard of good taste in such matters.”

The Social Standards Committee was formed in the late 1920s by female students to provide codified guidance to their peers and to determine punishment for violations. The committee produced several pamphlets like the one described, one of which included sections called “Tut-Tut, Duchess!” and “Thank you, Duchess!”—illustrating do's and don'ts for behavior. Finally, from 1954 to 1962, the committee published a serial called *Design for a Duchess*.

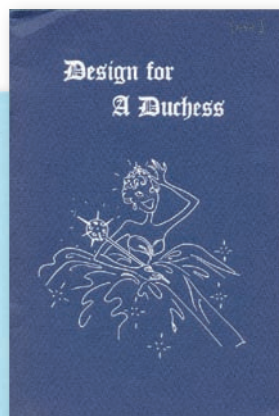
Latching onto the theme of royalty, the pamphlet was sent during the summer to incoming female freshmen. “In this little booklet,” it began, “are some hints [about] how to acquire the

know-how for wearing the crown of a Duchess. With your own individuality and personality, you will wear it with an air quite your own. Yet the crown mustn't be all askew, but as befitting a true Duchess. . . . Everything she does is in good taste and up to the highest standard.”

*Design for a Duchess* offered specific recommendations on what to wear, how to decorate one's room, and what locations were appropriate for dining, dancing, and dating. Some advice was comfortingly friendly: “Fran Freshman realizes that Duke life does not demand a new, expensive, or large wardrobe. She can utilize her high school clothes . . . they're new at Duke!”

Other advice was dauntingly specific. Two sections of the booklet outlined what a woman should and should not do. The first section, “Popularity Plus,” lauds those who (among many other virtues): always wear a skirt or coat over gym shorts when walking on campus; choose a few favorite activities, do more than is expected of them, and run for office; speak up in class—“the prof respects your opinions, and he wants to hear them—but don't monopolize the discussion”; take a peek in their compact mirrors before coming in at night.

The second section, “Frowns Unlimited,” castigates those who: make paths on the grass in the main quad; wear très bare sunback dresses to classes; take showers and baths in the middle of the night; do their dream-teaming on the campus and especially in front of the house at closing hours—“remember that love may be



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## THEN&NOW

### POLITICS

Many Duke faculty, administrators, and alumni have served in political office. Here is a glimpse at just a few of them.

# 1961

**Terry Sanford:** Sanford—later president of

Duke—serves as governor of North Carolina until 1965; becomes a U.S. senator from the state, 1986-92.



# 1969



**Richard Nixon LL.B. '37:** Nixon is elected president, after serving as vice president under Eisenhower from 1953 to 1961. He resigns the presidency in 1974 rather than face impeachment.

# 1976

**Ron Paul M.D. '61:** Begins his representation of the 22nd District in Texas, a seat he'll hold through 1977 and 1979-85; later he is elected to the state's 14th District from 1997 to 2013. His son, **Rand Paul M.D. '88**, has served as U.S. senator from Kentucky since 2011.

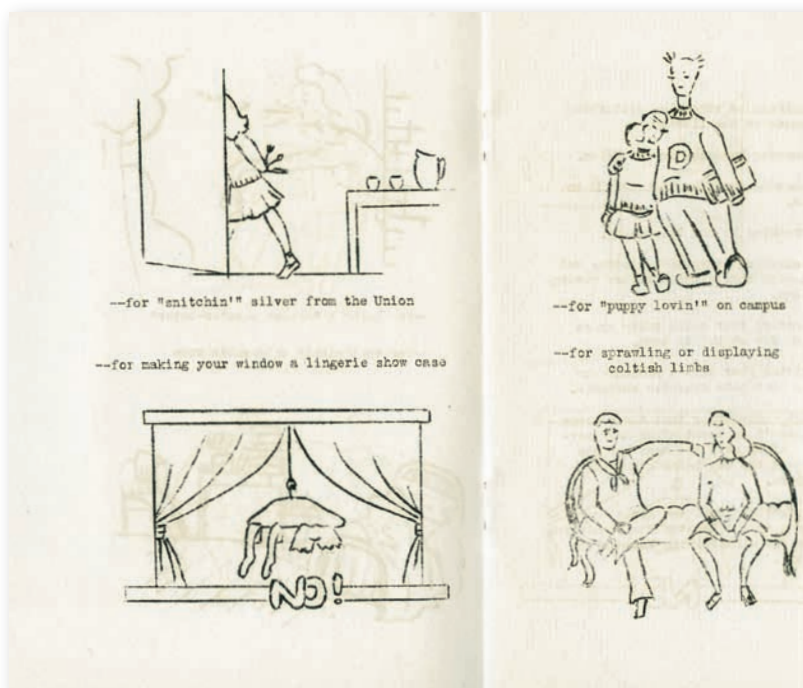
blind, but your friends aren't!"

Again, these were just a few of many behaviors that could draw frowns (unlimited!) from one's peers. The booklet concludes that Duke is "a way of thinking, of acting, of doing things. It's a way of individuality and originality and freedom of choice; yet it's also a way of conforming to standards of discrimination, courtesy, and discretion."

The booklet remained essentially the same through 1962.

During the early 1960s, however, the student body began to change its outlook on such prescriptive advice. At the end of the 1962-63 school year, O'Hara Boswell '64, chair of the Social Standards Committee, told *The Chronicle* that *Design for a Duchess* would be "reduced in size and changed in the outdated tempo of its advice." The new publication, *It's Not in the Handbook*, was smaller, more modern looking, and had no social dictates. The concluding paragraph offers a more open-minded and inclusive vision of what a female Duke student could be:

*These are only a few suggestions to help give you an idea of what your first year at Duke may be like. Do not feel, however, that you have to accept and follow all of them. There is no outlined plan which every member of the Class of 1967 must*



**"Fran Freshman realizes that Duke life does not demand a new, expensive, or large wardrobe. She can utilize her high school clothes . . . they're new at Duke!"**

**It's** not in the handbook

Duke University Archives

*adopt. When you reach the campus, you will find that the Duke way of life is an adaptable one, and that every person responds to each new situation according to her own ideas and values. This spirit of independence and the responsibility that goes with it have long been a tradition of our University. To keep it this way, every member of the Duke community is carefully selected, and each person is thought of as someone special, someone who deserves to be called a Duchess.*

No more "Tut-Tuts," no more "Frowns Unlimited"—the 1963 Duke woman began to carve out her own social norms and expectations, rather than following codified rules. Not insignificantly, 1963 was also the year Duke desegregated its undergraduate body and began to truly broaden the definition of who belonged at Duke.

*-Gillispie is the university archivist.*

# 1987

**David Price:** While a Duke professor of political science, Price begins representing North Carolina's 4th Congressional District in the House of Representatives.



**Elizabeth Hanford Dole '58:**

Dole begins service as the first female senator to represent North Carolina, an office she holds until 2009. At Duke, she was elected president of the Women's Student Government Association and May Queen (among many other honors) and graduated with distinction with a major in political science.

# 2003



**Edward "Ted" Kaufman B.S.M.E. '60:** Kaufman assumes the Senate seat vacated by Vice President Joe Biden. Four years later, **William Maurice "Mo" Cowan '91** is chosen to fill the Senate seat John Kerry leaves to serve as Secretary of State.

# 2009



# Devil's Own

**T**here's an eerie elegance to the old bones of the *Palaeopropithecus* sloth lemur. Perhaps 8,000 years ago, the (then-living) lemur hung upside down in Madagascar. Nowadays, its skeleton rests like a hidden treasure at Duke's Division of Fossil Primates on Broad Street, among more than 25,000 other fossils of the earliest primates and animals.

Elwyn Simons, the former director of the Primate Center (now the Lemur Center), started the collection by gathering fossils in Fayum in Egypt, essentially going every fall for nearly fifty years, says Gregg Gunnell, the division's current director.

Simons' work broadened in the early 1980s to include the fossils of lemurs and their relatives in India and Madagascar. He also spent many years collecting fossils in Wyoming. Gunnell is continuing that work—adding other mammal groups and expanding field efforts into southeastern Asian countries.

In the now-extinct sloth lemur, Gunnell sees echoes of the predicament of today's critically endangered lemurs. "They are fascinating, and to know they were here on Madagascar only a few hundred years ago makes me angry that we humans have wiped them out—they could have been saved, but weren't."





# Inside

FUQUA SCHOOL OF BUSINESS

## Keeping it Local

This fall Fuqua's Fox Student Center played host to a biweekly farmers market featuring fresh fruits and veggies from Lyon Farms. Based in Creedmoor, N.C., twenty miles from Durham, Lyon Farms is one of several businesses that supply Fuqua's cafe through operator Bon Appetit's Farm to Fork program. The program encourages chefs to use ingredients sourced from small, local, owner-operated businesses.



# NEWSRoundup

HAPPENINGS | INNOVATION | RESEARCH



## Going With His Gut

Apple CEO Talks Intuition

**B**ack on campus for his twenty-fifth reunion this spring, Tim Cook, CEO of Apple and a 1988 graduate of Fuqua's Evening Executive M.B.A. program, spoke with Bill Boulding at an invitation-only event for students and fellow alumni. Topics of conversation included intuition, collaboration, and ethical leadership. Discussing the former, Cook described the thought process behind his decision, in 1998, to leave Compaq for a floundering Apple Inc.: "I remember, actually, forming my list of pluses and minuses, and I could not get the chart to work out the way I wanted it to. Because I wanted something to say, 'This says I should go to Apple,' but it would not. Nothing financially would do that. I talked to people I trusted [who] knew me, and they said, 'This is not what you should do.' ... People said, 'You're just crazy. You're working for the top PC company in the world. How could you even think of doing this? You've lost your mind.' And yet, that voice said, 'Go West, young man, go West.' And sometimes you just have to go for it."

Jared Lazarus

## The Smartest Leaders Make Their Own Opportunities

By Dorie Clark

The following is adapted from a piece originally published by the *Harvard Business Review*.

**W**e all know no one posts the best jobs. The really juicy positions usually get handed around like a treasured prize within social networks. Maybe you'll see a notice on LinkedIn, or a posting on your alumni listserv—but probably not. The most exciting jobs have an infinite number of aspirants, so unless you've been personally recommended by someone close to the action, it's difficult to get noticed.

But what I learned during the course of researching my new book, *Reinventing You: Define Your Brand, Imagine Your Future*, is that the smartest, savviest professionals don't wait for a posting to appear. They make their own opportunities and get rewarded handsomely for it.

In the early 1990s, Joanne Chang took a management consulting job out of college—and hated it. When she decided to follow her passion and become a chef,

she had no experience, so she didn't bother scouring help-wanted ads: She made her own opportunity. "I sent a bunch of letters to chefs in town that I didn't know, but I knew their reputation," she says. "I said, 'I have no formal training, but I love cooking, and I'm interested in getting into the restaurant world, and I'll take any position.'" The very next day, one of Boston's top chefs called her back; two decades later, Chang is one of Boston's



Courtesy Dorie Clark

Clark's advice: Go for it.

most celebrated restaurateurs.

Chang was at the start of her career when she took a chance and reached out to those luminaries. But creating your own opportunities is something you can do at any stage of your career. Too many senior leaders are held back by concerns that they might lose face by trying something different or stepping outside of their comfort zone.

The truth is, because so many people limit themselves, there's often not a lot of competition at the top. If there's a senior executive at your firm you really admire, reach out and see if he'll agree to be shadowed for a day. Unless you're writing to the worldwide CEO, there's probably little demand, and he'll be flattered. If there's an initiative you'd like to see at your company, offer to head it up. And if there's a skill set you'd like to cultivate, don't be afraid to make a lateral move (or even go backward temporarily) if you know it will serve your long-term career interests. We're entering an era where the rules of business are both opaque and fast-changing. There's not one single playbook you can follow and expect to succeed. The only alternative is to be nimble and create your own opportunities and your own success.

*Dorie Clark, adjunct professor of business, is a marketing strategist who teaches in Fuqua's executive M.B.A. programs. She is a frequent contributor to Forbes and Harvard Business Review and the author of Reinventing You: Define Your Brand, Imagine Your Future (Harvard Business Review Press). You can follow her on Twitter at @dorieclark.* ■

## FINANCE

### Activism Works in the Long Run

Corporate leaders have long been suspicious of activist hedge funds. Activists buy into target companies to intervene in firm policy and, according to critics, reap short-term rewards at the expense of the company's long-term health. But Fuqua professor Alon Brav and colleagues from Harvard Law School and Columbia Business School have published a paper that calls this view into question. Their research, which examined roughly 2,000 cases of activism between 1994 and 2007, showed that resulting adjustments to corporate policy created a substantial stock price increase (averaging 6 percent) in cases where the activist interventions were reported publicly. Even to critics, this initial, short-term bump might not be surprising. However, after examining each company's performance over the five years immediately following the activist event, and three years after activists' exit, Brav and his colleagues found no correlation between activism and a decrease in long-term performance or a negative impact on long-term stockholders.

## STRATEGY

### Grow News is Good News

Publicity and name recognition—they are good for developing tourism, and they are apparently good for attracting other business as well. New research published by Elena Kulchina, assistant professor of strategy, in the *Strategic Management Journal* suggests that foreign firms choose international cities in which to open operations based at least partly on media coverage of those cities. Using 113 cities in Russia as her data set, Kulchina analyzed the decisions of more than 7,000 foreign firms with no prior business development in the country. Kulchina, who also studies foreign entrepreneurship, discovered that a 1 percent increase in the number of media articles about a city corresponded with a 0.26 percent increase in foreign entries in that city. Her research suggests that investments in positive media coverage may be more successful in attracting businesses to cities seeking economic growth than other forms of government spending.



## MARKETING

### How Much Is That Retweet Worth?

In the age of digital media, companies have taken to Facebook, Twitter, and other social-media outlets to attract customers. But evaluating the effectiveness of these new marketing tools has proven difficult for most marketing executives, according to Christine Moorman, T. Austin Finch Sr. Professor of business administration and director of Fuqua's CMO survey. Just 15 percent of the 410 chief marketing executives polled in the latest survey could point to data showing the quantitative impact of their social-media marketing campaigns, while nearly half were unable to prove that social-media has made any sort of difference at all for their companies. The survey's results illustrate the difficulty of interpreting marketing analytics and serve as a warning to companies that investments in social-media marketing (an area Fuqua researchers project will grow from 6.6 percent of the average firm's marketing budget to 15.8 percent over the next five years) may not be as fruitful as they think—or at least need some rethinking.



# Energized

Responding to Industry Trends, Fuqua Ramps Up Its Energy Curriculum.

Last year, Nancy Fechnay, Aaron Gress, Lisa Huber, and Mark McDonald, all members of the Class of 2014, slipped beyond the confines of Fuqua's Durham campus to explore the world of "cleantech" through a mentored study program hosted by California-based venture capital firm Claremont Creek Ventures (CCV).

Working with Paul Straub M.B.A. '05, a director at CCV, the team analyzed the business and prospects of a startup in CCV's portfolio called Blue Pillar. Blue Pillar offers software that helps facilities that generate their own solar or wind power to manage their relationship with the public power grid.

Over the course of the year, the team visited with Straub in California, checked out Blue Pillar's operation in Indiana, and took a tour of Duke University Medical Center, one of Blue Pillar's largest clients. Taking into consideration what they learned, they helped develop growth strategies for the startup.

A decade ago, it would have been hard to conceive of this mentored study opportunity for a number of reasons. But the energy sector is in a period of rapid change. Hydraulic fracturing (fracking) and the resulting overhaul of U.S. drilling operations known to industry players as the Shale Gas Revolution have drastically reduced the price of natural gas in the U.S.; cheap gas fracking has made traditional fuels like oil and coal look relatively undesirable. Distributed generation is on the rise, with individuals and large companies alike installing solar panels and wind turbines; this has led to challenges for utility providers, now faced with countless competitors, but also to opportunities for sustainable growth. Private equity and a

shifting regulatory landscape have changed the types of projects pursued in a world that once was directed by a handful of large oil and gas companies.

Against this backdrop, Fuqua has shifted its programming in an effort to better prepare students for the changing demands of the energy industry. This fall, for example, the school launched a new concentration in energy finance as well as two new courses focused on sustainability. These will supplement existing opportunities, like seminars and presentations hosted by

students to explore the intersection of sustainability issues and corporate strategy in a variety of different business settings. Vermeer, who came to Duke from Coca-Cola, where he headed up the company's clean-water initiatives as well as a sustainability program, is well-versed in the challenges of incorporating sustainability into business practices. Vermeer says Fuqua's new offerings are "partly driven by student demand, but also driven by the school's priorities."

The increasing interest in energy is not limited to Fuqua. In 2011, Duke launched its Energy Initiative, led by director Richard Newell, Gendell Professor of energy and environmental economics at the Nicholas School of the Environment, and a former head of the U.S. Energy Information Administration. The Energy Initiative is an interdisciplinary effort that promotes research and collaboration among the different schools at Duke.

This summer, Duke announced that trustee Ralph Eads, who graduated from Duke in 1981 and chairs the global energy section at investment bank Jefferies & Co., committed \$5.5 million to the university, including \$4.25 million to support the Energy Initiative. Among other things, the gift will be used to fund a professorship in energy finance.

This fall, the Energy Initiative co-hosted Fuqua's Energy Conference, which historically has been hosted by Fuqua's Energy Club. Urosh Tomovich, a joint-degree student at Fuqua and the Nicholas School and the co-president of the Energy Club, says the Energy Initiative has made "a huge difference." Tomovich says the Initiative represents "greater institutional support, which supplements all the things we do at Fuqua." ■



**Private equity and a shifting regulatory landscape have changed the types of projects pursued in a world that once was directed by a handful of large oil and gas companies.**

Fuqua's Center for Energy, Development, and the Global Environment (EDGE) and the Energy Club, as well as the Net Impact club's annual Conference on Sustainable Business and Social Impact.

Dan Vermeer, professor and executive director of EDGE, now in its fifth year, is leading a course in business strategies for sustainability. Vermeer's course encourages

## Five alumni making interesting contributions to the world of energy and sustainability:

### Patrick Reaves M.E.M./M.B.A. '12 Energy Analyst | Facebook | Menlo Park, Calif.

"Coming out of Fuqua, I wasn't necessarily targeting the data-center industry," says Patrick Reaves, who graduated last year with a dual degree from Fuqua and Duke's Nicholas School of the Environment.

But when he interviewed for a job as an energy analyst at Facebook, he liked what he heard. Data centers—massive facilities housing massive rows and rows of servers—are major energy users. Experts say they account for between 1 and 2



Phil Schmeisler

percent of the country's total energy use. And much of that energy goes simply to cooling overworked machines.

Several years ago, engineers at Facebook decided to redesign their data centers from the ground up. The resulting design, the first of which was completed in 2011, offered huge savings as measured by power usage effectiveness (PUE). Typical data centers had a PUE of about 1.8, meaning that for every megawatt the data center uses for processing, an additional .8 of a megawatt is required for cooling. Facebook's new model hovers around 1.07.

Reaves' job is to negotiate with local power providers in order to get the cleanest power possible to run the servers while also driving down Facebook's energy costs. The company's

goal is to get 25 percent of its power from renewable sources by 2015.

One of his biggest challenges is navigating the fragmented web of regulations on power producers. "Every state or country that we work in has a different set of rules and constraints," he says. "Trying to map out what those are and figuring out what the rules are and what the opportunities are is a big part of our challenge in the future."

Reaves first entered the energy industry in 2007, when he took a job with Current, a startup offering a suite of "smart grid" technologies. He says he has been amazed to see the changes that have taken place since then.

"Just in the three years I was in school, you saw both the wind and the solar industries take off. Then you have this whole thing with the Shale Gas Revolution. In the U.S. in particular, it basically flipped the electric power industry on its head. Before, natural gas was seen as an expensive fuel that you would only use when demand was the highest. Now you're seeing utilities either retiring coal plants or converting them into natural gas plants due to one technological breakthrough. It's fascinating to live through something like that."

At Duke, Reaves immersed himself in the subject matter. He took courses in forecasting and decision sciences and heard from guest speakers that included industry giants. He recalls a trip to Oklahoma to visit Chesapeake Energy at the invitation of Aubrey McClendon, a Duke alumnus who was then CEO. "We went on a behind-the-scenes tour. We went to natural gas wells being actively fracked. It really gave us the opportunity to have an informed opinion. Experiences like that made the program invaluable."



### Paula Alexander M.B.A. '98 Director of Sustainable Business | Burt's Bees | Durham

After leaving Fuqua fifteen years ago, Paula Alexander took a job as a brand manager at Unilever. For eight years, she shepherded a variety of products in the Suave, Lever 2000, and Dove lines.

But in 2006, she jumped at the chance to return to Durham to take a marketing job with Burt's Bees. The company, founded in 1984, had developed a strong reputation for its natural products, as well as its embrace of sustainability. "It meshed with my own values and beliefs," says Alexander, who is now the company's director of sustainable business.

In her current role, Alexander is responsible for balancing the "triple bottom line" of profit, people, and planet. "You have to look at how you can drive costs out of the system through efficiencies that are also sustainable," she says.

"Sustainability can't just be this separate department. It's

got to be integrated into all of the functions and the way the business thinks."

In the early years, Burt's Bees focused on large-scale improvements in its operational footprint, optimizing its production line, retrofitting its lighting system, and upgrading its HVAC system. The company also operates as a zero-waste facility.

Because the company leases its facilities, making additional capital improvements harder to justify, Alexander focused, in a set of goals included in the company's 2012 sustainability report, on downstream improvements—reducing waste created by product packaging—and upstream improvements to the supply chain. Along with larger companies like Hershey's, Burt's Bees is a member of the Global Shea Alliance, which is developing international standards for shea-butter sourcing. Through such partnerships,



Courtesy Burt's Bees

Alexander says, "we are able to fight way above our weight class."

Alexander also has collaborated with large retailers like Walmart and Target on those companies' product standards as they seek to drive sustainability in their products. Her old company, Unilever, has become a leader in sustainability. On his first day on the job, in 2009, CEO Paul Polman announced that the company would no longer be releasing quarterly reports, a move, Alexander says, intended to "get away from short-term thinking." On a large scale, she says, these changes begin to drive consumer behavior.

"More and more companies are taking that longer view," she says. "They are realizing that if we stay on the trajectory we're on now, we're not going to have the resources twenty years from now to have a healthy planet or healthy businesses."

### Will Latta, W.E.M.B.A. '02 Founder and Managing Director | LP Amina | Beijing, China

In the U.S., coal has lost market share among sources of power generation, and experts predict that coal use will continue to diminish relative to other sources of energy. In China, the picture is very different. According to the U.S. Energy Information Administration, over the next twenty-five years, China will remain largely dependent on coal for electricity, as its economy—and therefore

its energy needs—continue to grow.

Clean energy initiatives often seek alternatives to fossil fuels. But Will Latta, who founded clean energy company LP Amina in 2007, has focused his efforts on cleaning up coal. "Coal is abundant, low cost, and reliable," he explains. "It represents the best option for billions of people around the world, especially those in



developing economies."

Latta founded LP Amina with China's unique energy situation in mind, but his company's success has attracted attention back in the U.S. "In the very beginning," Latta re-



members, “the idea was to leverage the team’s experience to support the Chinese power industry to reduce emissions. The technologies required to support China’s reduction in emissions are not identical to existing technologies from the United States. As we developed our portfolio of technologies to support China’s



Courtesy LP Amina

emission reduction, we found interest for these developments in the United States and other markets.”

Today, Latta remains involved with Duke, sitting on Duke’s Regional Advisory Board for Asia. Latta credits his time at Fuqua for helping him develop the skills to succeed in his field and providing him with crucial connections—Latta’s first angel investors for LP Amina were two Fuqua classmates.

In April of this year, Latta delivered a speech at a meeting of the U.S.-China Energy Cooperation Program in Beijing. Also on the roster of speakers was Secretary of State John Kerry, who commented specifically on LP Amina’s contributions to cleaner coal. Latta recognizes that there is more work to be done through global cooperation. “By focusing on solutions that address the problems from a global vantage point,” he explains, “we can achieve a sustainable energy future.”

## Jason Rebrook C.C.M.B.A. '02

**Executive Vice President | Hilcorp Energy Company | Houston, Texas**

There comes a time in the life of the typical oil or gas well when production starts to decline and the technologies employed by traditional drillers no longer make economic sense.

At that point, Houston-based Hilcorp takes over.

“One of our core values here is taking fields that were otherwise on the way to being depleted, and we reinvigorate them,” Jason Rebrook says. “We extend the field’s life, which enables us to deliver low cost energy for a long time period.”

“It’s a very classic strategy of taking assets unloved by others. They are not core to large companies, but we take them over,



Courtesy Hilcorp

and they become very core for us.”

As executive vice president for acquisitions and divestitures, Rebrook evaluates new plays, leases land, and manages deals.

A West Virginia native,

Rebrook grew up thinking about energy. He never wanted to go into coal, but studied petroleum engineering at Marietta College in Ohio. After college, he worked for Chevron as an engineer. The job took him all over the world, to drilling sites in California and Louisiana, Africa and Australia. Over the years, he became interested in the acquisition side of the business; after earning his M.B.A., he moved into business planning at Chevron, and later managed an offshore platform off the coast of New Orleans. After Hurricane Katrina, he served four years at GE Capital before joining Hilcorp.

The Shale Gas Revolution and



the accompanying shift toward domestic energy production have worked in Hilcorp’s favor. The company has grown fast. With 1,200 employees between its Houston headquarters and drilling sites around the country, it produces some 115,000 barrels-of-oil-equivalent per day.

But Rebrook recognizes that in this industry anything can happen. “You have to be disciplined. You have to be ready for any changes. Because they do happen in this business. There’s no doubt about that.”

## Bill Caesar M.B.A. '97

**President of WM Recycle America LLC | President of WM Organic Growth Inc. | Waste Management | Houston, Texas**

Americans generate a lot of trash. In 2011, according to the Environmental Protection Agency, we threw away just over 250 million tons of junk. Of course, not all of that ends up in the landfill. Almost 35 percent of it gets recycled or composted. And increasingly, entrepreneurs and business leaders are seeking economical ways to turn the remainder into a commodity that we can’t do without—energy.

For Bill Caesar, president of WM Organic Growth Inc., a wholly owned subsidiary of leading environmental solutions provider Waste Management Inc., that means making targeted investments in a range of new waste-to-energy technologies, some developed in-house, and others developed by outside companies.

“There are three basic pillars of our corporate strategy,” Caesar says: “One, know our cus-

tomers so we can better serve them. Two, extract as much value as we can out of the materials we control. Three, figure out how to do that as efficiently as possible.”

At the moment, Caesar is particularly high on three projects that are in various stages of testing at the commercial scale. The first is gasification, which converts municipal solid waste into transportation fuel. The second involves applying pyrolysis—essentially heat and pressure—to plastics that otherwise wouldn’t be recycled to



Courtesy Waste Management

melt them down. “In the process of melting, they release hydrocarbons, in gas form, which are then trapped and formed into synthetic crude oil,” Caesar explains. The third involves using specific categories of solid waste to replace coal in coal furnaces.

“Folks are going to want to see them operate, and prove the economics,” he says. “Within the course of the next year or so, they either will or won’t be proven.”

If these technologies do prove efficient and economical,

Caesar predicts that we could see as much as 20 percent of waste recovered and turned into energy in ten to twenty years—up from about 12 percent today. But that depends on a number of factors, not least of which is the price of oil, a competitor in the market. “If crude drops to \$20 a barrel, we won’t see much [innovation in this area]. If it goes to \$200, we’ll see a lot more.”

Caesar, who also oversees Waste Management’s \$1.5 billion recycling business, previously spent 13 years in McKinsey’s Atlanta office, where he was a leader in the firm’s North American energy and materials practice and often recruited other Fuqua alumni. He enrolled in Fuqua in 1995, after spending six years working in government. “For me,” he says, “Fuqua was a great place to get a general grounding in all areas of business.”

# FUQUA People

## PROFILE

### Crossing Continents, Making Connections

Meet Fuqua's New East Asia Regional Director

As a young Chinese professional, Jingqiu (Jodie) Zhu did not know much about Dubai. Images of wealth and luxury gleaned from the Internet and television led her to the conclusion that the emirate was on solid financial footing. But a residency there, undertaken last year as part of Fuqua's Cross Continent M.B.A. program, changed her perceptions: "Dubai's economy is actually suffering at this moment," she says.

The Cross Continent program allowed her to take part in intensive academic residencies in five international cities—New Delhi, St. Petersburg, and Shanghai, in addition to Dubai and Durham—all while working full time.

"By inviting guest speakers to share business insights, to share their experiences about building their companies in each market, you gain a much deeper understanding of each country and its culture and business," says Zhu, a native of Wuxi, in China's Jiangsu Province.

Zhu C.C.M.B.A. '13 will soon have the opportunity to build that type of comprehensive learning experience for others. This past summer, while still enrolled in the Cross Continent program, she was hired as Fuqua's regional director for East Asia, based in Shanghai. She oversees a staff of three.

The regional staff is responsible for planning Global Executive and Cross Continent residencies in the region—lining up speakers and corporate visits—as well as helping with logistics when daytime students visit on Fuqua Client Consulting Practicum or Global Academic Travel Experience trips. The staff will work closely with administrators at the new Duke Kunshan University campus (see sidebar), located nearby; Zhu's predecessor, Luke (Hanguo) Li '06, left the regional office to take a post as director of the chancellor's office at DKU.

Zhu also is responsible for building and maintaining relationships with Fuqua alumni, corporate partners, media partners, and prospective students across the region.

Given her experience in international education—before taking the job at Fuqua, she spent three years working for Dipont, a Chinese education-services com-



Around the globe: Zhu, pictured in Dubai, directs Fuqua's efforts in East Asia.

pany that delivers high-level American and British curricula to Chinese high-school students—she is drawn to the idea of building the Duke and Fuqua brands among Chinese applicants.

During the 2011-12 school year, 194,029 Chinese students studied at universities in the United States, according to the Institute of International Education. Forty-six percent of those were graduate students, and 28.7 percent of them were studying business. (Taiwan, Japan, and Vietnam also sent more than 10,000 students each.) Those numbers are growing.

While some will choose to stay in the U.S., at least for a few years after graduating,

Zhu says that there are a range of companies in China, both foreign-invested and Chinese-owned, that benefit from an increasing pool of American-educated M.B.A.s.

Zhu's new role will have her making these connections and building these networks. In past jobs—at Dipont, as well as in positions with the Swiss Chamber in Shanghai; and an American private equity firm and its portfolio company Risdon International, a cosmetic packaging company—she worked on small teams and pushed fresh approaches. "I'm strongly interested in new projects, in building new teams," she says. "I see myself as an entrepreneur."

## Duke in China

Kunshan-Based MMS Program Moves Forward.

Fuqua's ties with China continue to strengthen. In September, China's Ministry of Education granted formal approval to establish Duke Kunshan University, a joint venture between Duke and China's Wuhan University that has been in development since 2009. The new university, located about thirty miles outside of Shanghai on the Yangtze River Delta, will eventually host a range of academic programs. One of the first is Fuqua's Master of Management Studies: Duke Kunshan University (MMS: DKU), a one-year pre-experience program designed for recent college graduates.

Over the course of the program, which is set to begin July 2014, students will spend three six-week terms in Durham alongside students in the MMS: Foundations of Business program before heading to China for their final two terms. Courses will focus on business fundamentals, including strategy, economics, accounting, and finance. The program is open to students from around the world.



# FUQUAStats

## ADMISSIONS



Admissions and informational events per year held worldwide

**Top 20 companies** represented by students in Duke M.B.A. programs for working professionals (Cross Continent, Global Executive, Weekend Executive) over the last three years

Bank of America  
BASF  
Biogen  
Booz Allen  
Capital One  
Cisco  
Deloitte  
Duke  
Ernst & Young  
GE  
IBM  
John Deere  
Johnson & Johnson  
JP Morgan  
KPMG  
Lockheed Martin  
P&G  
Siemens  
U.S. Armed Forces  
Wells Fargo

# 10,347

Miles between Durham and Jakarta, Indonesia, site of a recent admissions event

# 1,700

Prospective students who visit the Durham campus each year

**Many come for special recruiting events.** Events this year included the Duke M.B.A. Veteran's Day Symposium for U.S. Military Veterans (35 prospective students), Duke M.B.A. Weekend for Women (80), Duke M.B.A. Workshop for Minority Applicants (80), Duke M.B.A. LGBT Preview Weekend (15), and two Duke M.B.A. Blue Devil Weekends (360 total). Some 250 current students volunteers helped staff these events.

# 640-750

Middle 80% range of GMAT scores for Daytime M.B.A. Class of 2015

# 45 minutes to 1 hour

Time it takes a seasoned reader to review a typical application. Most applications are read at least twice.

# 103, 23, 38

Cities, states, and countries, respectively, that hosted events over the past year

## "25 Random Things"

One of Fuqua's standard application essays requires each student to share 25 facts about him- or herself. Some facts are personal, some professional. All give the admissions staff a better sense of the applicant and the class as a whole.

One first-year student led an all-hands conference call with multiple investment banks from a sheep pasture in Greece, in the middle of a seven-hour hike.

One student was a backup singer for a Queen cover band that toured in Italy.

One student earned Bronze Stars from the military in 2010 and 2011.

One student appeared in a coffee commercial—sipping coffee while wearing an ecstatic expression—that ran on national television for three years in Thailand.

One student rode a bike down Bolivia's Yungus Road, known as "the world's most dangerous road."

One student was a contestant on Season 2 of *Indian Idol*.

# Duke Reunions

# 2014

## April 11-13, 2014

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**Duke**  
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### CLASSES

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1984, 1989, 1994, 1999, 2004, 2009**  
and the **Half Century Club**

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planning to attend your reunion,  
and be sure to add your name too!

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[www.DukeReunions.com](http://www.DukeReunions.com)





On my first visit to Duke, I fell in love. The place, the people, and the promise of an opportunity that my family could afford convinced me this was where I wanted to be.

## Financial aid made it a reality.

The opportunities I've had at Duke amaze me. I explored Jerusalem for four weeks through a religion course and discovered how archaeology ties the region's cultures and faiths to their struggles. As an Alice M. Baldwin Scholar, I get to work with other young women, empowering them in leadership and achieving their goals. Experiences like these define Duke.

Gifts to the Duke Annual Fund allow me and thousands of other Duke students to pursue our passions, learn from world-class faculty, and make a difference.

**THANK YOU. -Bailey**



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**Bailey Sincx '14** is an English and Theater Studies double major and a Religion minor. During her freshman year, the class, "When Women Ruled the World," ignited Bailey's passion for the English Renaissance. Three years later, Bailey plans to continue her studies of Elizabethan literature at Oxford University in 2014. She knows that the generous gifts of Duke supporters helped enable her education and shape her path in life.