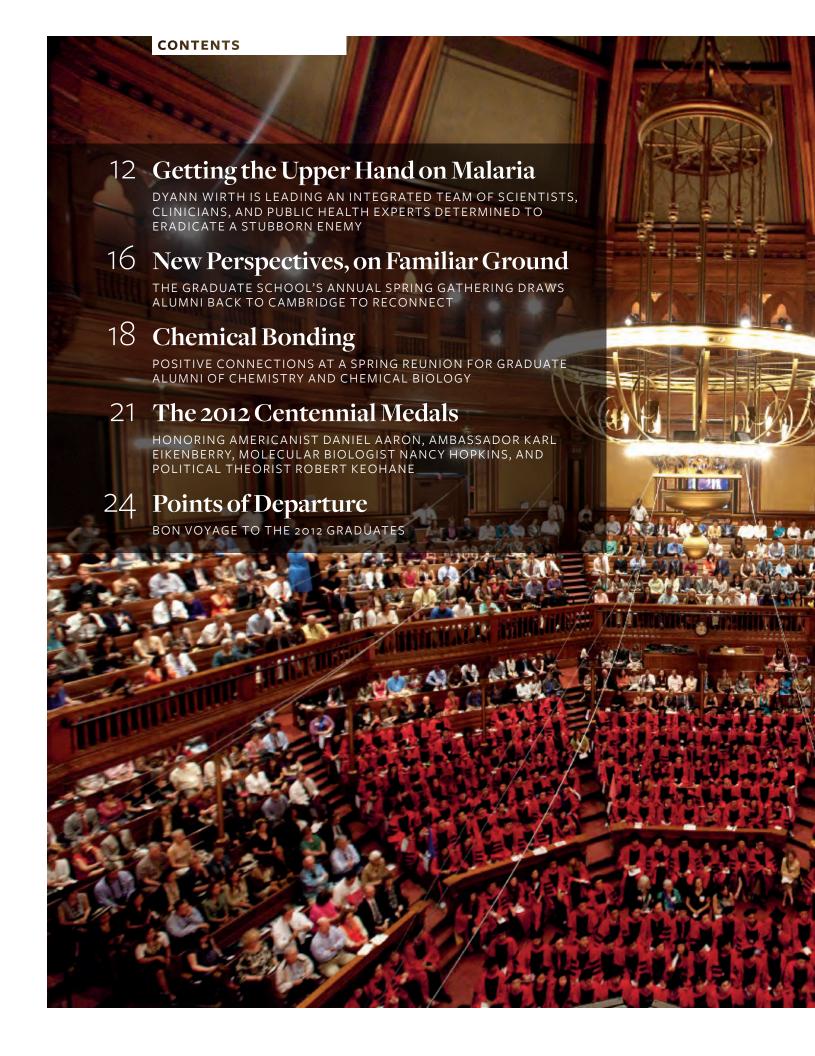
# Collocuy

The GRADUATE SCHOOL of ARTS AND SCIENCES | HARVARD UNIVERSITY -







# Colloquy

An alumni publication of Harvard's Graduate School of Arts and Sciences

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Cover illustration: Jason Holley Facing image: Martha Stewart

# Colloquy

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Jason Holley, the illustrator who created the cover image for this issue, makes work for a wide variety of commercial, editorial, and educational clients, including the New Yorker, the New York Times, Outside magazine, Rolling Stone, Newsweek, Time, the Southern Poverty Law Center, Dell, Stanford, and MIT, among many others. He is on the faculty of the Art Center College of Design in Pasadena, CA.



**Nicholas Nardini**, a writer and editorial assistant for this issue, is a third-year PhD candidate in English, currently planning a dissertation on post–World War II American literary culture. He spent the year as a proctor in the freshman dorms, serving as a mentor and academic advisor for an entryway of 41 students.



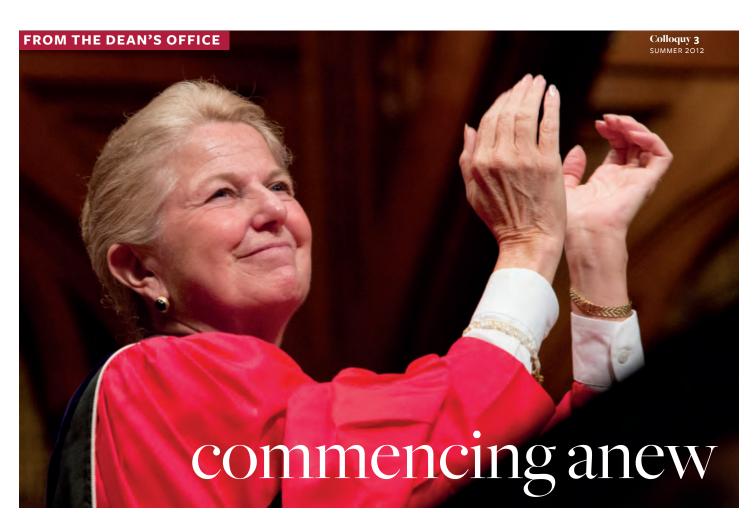
The Berlin-based illustrator **Tina Berning**, who drew Cecilia Rouse for our conversation feature, studied graphic design and illustration in Nürnberg. In 1999, after designing album covers and band posters for a record company and working for the magazine of the German daily *Die Süddeutsche Zeitung*, she decided to quit pushing letters and pictures around and start focusing on her illustration.



**Kent Dayton**, who took pictures at Alumni Day and the reunion of the Department of Chemistry and Chemical Biology, has a wide-ranging style and a broad portfolio of work, for clients including the Boston Ballet, the *Boston Globe*, Fidelity Investments, the Isabella Stewart Gardner Museum, Ford Motor Company, IDEO, Reebok, and Tufts University.



**Kenrick Vezina**, who wrote "Getting the Upper Hand on Malaria," is a self-described amateur naturalist who earned a master's degree in 2011 from MIT's Graduate Program in Science Writing. Among other projects, he is working as the content manager for MIT's forthcoming web portal Oceans at MIT.



As is appropriate in this season, when Commencement brings all manner of endings and new beginnings, we are marking a transition at the Graduate School. In February, we were saddened to learn that our own Allan Brandt, the Dean of the Graduate School, was facing a health crisis and would need to step down to receive treatment. I am glad to report that Allan is doing just that, recovering at home and looking forward to being back at Harvard when his health permits.

Allan's departure was cushioned considerably by the arrival of Richard Tarrant, who came forward to serve as Interim Dean. As you will read on page 7 of this issue, this is not the first time that Richard has been willing to take the helm at the Graduate School. He was Acting Dean in 1995, and he has been a consistent supporter of our programs, our students, and our community of alumni in the years since.

Richard understands the central role of the Graduate School at Harvard — how a vibrant graduate community serves our undergraduates, on the one hand, and our excellent faculty on the other. Richard led a full agenda this spring, providing wise stewardship as new secondary fields and PhD programs were proposed and developed by our faculty. I am happy to say that he also had many occasions to publicly support the accomplishments of our Graduate School community, presiding at ceremonies that recognized award-winning faculty mentors and teaching fellows and commemorated the winners of the Fulbright and other leading graduate fellowships.

As you will note when you look at the admissions numbers we share with you on page 5, the Harvard PhD holds a remarkable appeal to students from around the world. The

Margot N. Gill, PhD, Administrative Dean of the Graduate School of Arts and Sciences

"The value of the Harvard PhD, and the qualifications of those who seek it, continues to rise." value of the degree, and the qualifications of those who seek it, continues to rise; we received a record number of applications, many from candidates whose portfolios resembled those of junior faculty members. Richard was an essential participant in admissions meetings held to select our incoming class, taking particular interest in the ongoing effort to recruit more underrepresented US minorities to the PhD ranks.

Over the last two years, as regular readers will know, we instituted a series of reforms to our application review process, reforms that accompanied new recruitment initiatives to strengthen our minority applicant pool. Those efforts yielded success last year, and our results this year validated their effectiveness. Although we — and our peer institutions — will have much more work to do over the coming years to expand the candidate pool and to achieve real diversity in research education, I am pleased to say that applications from underrepresented minorities hit a new record — 676, which is a 25 percent increase over 2011.

This fall, we will welcome our new students with optimism and excitement, confident in their ability to sustain our high expectations. We will also welcome a new dean — and begin to write a new chapter in the history of the Graduate School of Arts and Sciences.

Marget : Sin



# The Postindustrial Gaze many's Ruhr Valley, and the structure was one of several works of public art

Exploring the aesthetics of urban decay, anthropologists embrace new tools

Abroad a few years ago on dissertation research, anthropology PhD student Cynthia Browne came across a bizarre wooden structure standing alone in an overgrown waste. It looked like a bridge, but a bridge that had been fractured and set at odd angles to itself. There were people gazing out of it, claiming they were waiting for a river that would soon run through the very spot.

It may sound like an apocalyptic cult, but this particular cult was funded by government endowment, and its only prophecy was of municipal revitalization. Browne's dissertation is on the deindustrialization of Ger-

was one of several works of public art commissioned by the region in recent years. Once the vital heart of the preglobalization German economy, a few years ago the Ruhr was mainly famous for catastrophic pollution and high unemployment. Recently, though, it has restyled itself as a global exemplar of postindustrial innovation, and a centerpiece of the endeavor is the rehabilitation of the canalized and biologically dead Emscher river. "Warten auf den Fluss" (Waiting for the River) was built on ground over which the river used to flow, and to which it will be returned by 2020.

"You sit, basically. And you wait," Browne explains. "There's this sort of hope for the future, but it's really uncertain and tenuous."

In April, Browne and eleven others were awarded 2012–2013 Harvard Film Study Center Fellowships, which will support the production of independent cinematic projects on subjects as diverse as seasonal labor cycles and a young Tibetan's first days of monastic life. Three of these projects, though, are united by the common theme of waiting for what follows industrial decline.

It's a theme as relevant to recession-era America as to Germany, and Benny Shaffer's project focuses on Braddock, Pennsylvania, whose municipal website declares "REIN-VENTION IS THE ONLY OPTION." A formerly bustling steel town that has lost ninety percent of its peak population, Braddock became the object of national media attention when its charismatic mayor (John Fetterman, MPP '99) began a campaign to remake the town through militantly artistic community organization. A native of the Pittsburgh suburbs himself, and now a media anthropology PhD student, Shaffer took notice, especially after a college friend moved with his wife and child to Braddock in search of cheap real estate. Shaffer is weighing two alternate approaches to his film: either an experimental meditation on the aesthetics of the town's decay, or a documentation of his friend's efforts

to rehabilitate his new \$4,000 home and join in the town's revitalization.

The same tension between the allure of decay and hope for improvement animates the work of a third Harvard-FSC Fellow, media anthropology student Julia Yezbick, who will shoot her film in Detroit. "There's this pressure on artists to come in and 'save' the dying city," says Yezbick, who plans to examine how artists respond to this pressure while retaining creative independence. She resists the facile optimism of filmmakers cheering for the "new Detroit," but is equally wary of what she calls "ruin pornographers" - fashionable photographers who exploit the city as a beautiful corpse. While living there last summer, Yezbick became especially interested in the work of Olayami Dabls, a sculptor who assembles elaborate scenes out of objects retrieved from city ruins. For her, Dabls's work represents what is most interesting about Detroit: "the palpable energy of a city looking both forwards and backwards."

Yezbick thinks it's hardly a coincidence that she, Browne, and Shaffer are working on such similar projects. "This is a moment when the nation is looking to ruins. We're wondering, is the whole country going to become Detroit?" For addressing the difficult questions of postindustrialism, all three agree that visual media are invaluable, and all say they chose the Anthropology Department at Harvard for its unique encouragement of innovative ethnographic methods. "These are subjects that are hard to do verbal justice to, and so haven't been addressed in the anthropological literature," Yezbick says. As Harvard-FSC Fellows, all three are working to change that, bringing new scholarly perspectives to places with deeply uncertain outlooks. As Browne recalls the experience of waiting for the river in the Ruhr, "You're looking out on the future, but the viewpoint is thrown back on you. There's a wonderful tension between the desire to forget and the desire to remember."

# **Admissions by the Numbers**

Applications to GSAS arrived in record numbers last winter: 12,397. That's a 3.9 percent increase over 2011's previous record high.

Admissions committees were selective: Offers of admission went to only 9.4 percent of the applicant pool.

Overall yield on offers of admission: about 60 percent

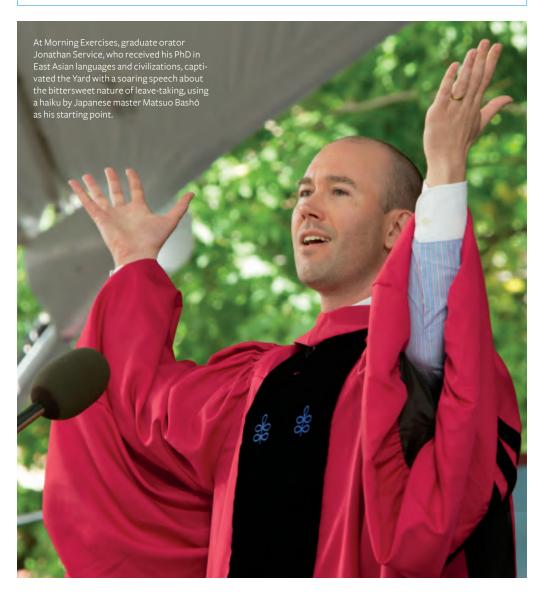
Underrepresented minorities will make up 7 percent of the incoming class, up from 4 percent in 2010.

GSAS received a record number of applications from underrepresented minorities: 676. That's 5.5 percent of the applicant pool, a 25 percent increase over 2011.

The number of underrepresented minorities offered admission increased by 19 percent.

36 percent of incoming students are from countries outside the US. International applications made up roughly 46 percent of the overall pool.

Based on April 2012 data.





Even as a young child, growing up in Guanajuato, Mexico, Edgar Barroso was fascinated by the possibility of making meaning out of sound. Over the years, this gifted composer and Harvard PhD candidate has created a vast array of music and seen it performed by groups around the world, collecting accolades and prizes all along the way.

Now he has drawn his widest — certainly most global — audience, as composer of the score for *The Compass Is Carried by the Dead Man*, which premiered as a juried selection at the Tokyo International Film Festival last October and was screened at the Los Angeles Film Festival in June. Barroso recorded the score at Harvard's own state-of-the-art Studio for Electroacoustic Composition.

The film, directed by Arturo Pons, is an allegorical odyssey, in parts poetic and darkly comedic, focused on a young boy who, at the start, is lost in the desert along the US-Mexico border.

"We decided to have the music play an important role by making it a part of the narrative," Barroso says. Understanding the precise rhythm and tempo of a film, so that the music can integrate coherently and set the appropriate tone, is tricky, but Barroso is no stranger to writing for visual media, having composed for documentaries and art installations. "Music gives an image weight; you can make a scene heavy or light, and I enjoy adding an extra dimension to something that is visual and outside of my field."

Barroso is collaborative and interdisciplinary by nature. In January, he started a project called "60 Minutos por Mexico" that encourages people to donate one hour a week to a social cause. "In a country like Mexico, sometimes just blankets or a

little bit of food can make a big difference in the life of a child," he says. "60 Minutos por Mexico" has already received considerable media attention, and in April Barroso gave a TEDx talk in Mexico City about the group's mission.

In the last year, amid performances of his work in Germany, the UK, and at Harvard, he received one of his most significant commissions, from the International Cervantino Festival in Mexico — the country's leading arts festival and the biggest festival of music, dance, and theater in Latin America. The new piece, "Ensamble Nuevo de México," will premiere at the festival in October.

For Barroso, who will spend next year in Zurich on a Frederick Sheldon Fellowship at the Institute for Computer Music and Sound Technology, contemporary music is an art form that exists outside of fashion or proprietary culture, and so it travels well among various audiences. "It doesn't necessarily have so much weight of history or such a tremendously strong aesthetic," he says. "Contemporary music is often naturalistic and focuses more on the pureness of sound."

It's a kind of freedom that he's been trying to get his Harvard undergraduates to embrace. Although many of his composition students learned to play in the classical canon, Barroso encourages them to create art that speaks to their own era. Just as his own Harvard advisors, Hans Tutschku and Chaya Czernowin, "have helped me infinitely in the search for my own voice as a composer," he says he wants his own students to be forever mindful of how their work will reflect their ideas, rather than the voices of composers past. ♥

# Tarrant Terrific

# Embracing his role as interim dean, a consummate Harvard citizen steadies the ship

During a season of transition at the Graduate School, there was one comforting constant: the familiar presence of Richard J. Tarrant, Pope Professor of the Latin Language and Literature, who in February agreed to serve as interim dean of GSAS.

It was a time of unease, as Dean Allan Brandt, a much-admired figure in the Harvard community, had announced that an illness would require him to step down in order to begin treatment. And it was a time when there was significant business on the table: GSAS had yet to conclude its 2012 admissions season, it was implementing an electronic dissertation submission system, and it was preparing for its major spring alumni events. A steady hand was needed, and there is none steadier than Tarrant, a scholar of deep commitment, long experience, and a thorough understanding of the needs of the moment.

Tarrant served as acting dean in 1995–1996 and has been a friend to GSAS in many capacities in the years since. In one of his most notable roles, Tarrant helps to host the Graduate School's annual Centennial Medals ceremony, reading the award citations in his rich baritone and lending the appropriate weight to this significant alumni honor. Tarrant presided again this year, seamlessly filling the roles of dean and chief orator.

Tarrant's oratorical skills have become part of Harvard legend. As Chair of the Committee on Commencement Parts, he helps to select and prepare the three students who deliver Commencement speeches each year. He works most closely with the Latin Salutatory orator (this year, Michael Velchik), smoothing out grammar and pronunciation to ensure a flawless execution of this centuries-old tradition. In a series of intensive rehearsals in Tercentenary Theatre during the week before Commencement, he also coaches the other two speakers, the Senior English orator (Anthony Hernandez) and the Graduate English orator, who this year was Jonathan Service, a PhD candidate in East Asian languages and civilizations.

After his speech, Service credited Tarrant not just for the solid preparation — thematic and rhetorical — but for keeping him on track throughout. At a key moment, when Service said he nearly blanked on an upcoming line, Tarrant mouthed the words from his nearby perch on stage. Service didn't skip a beat, and the crowd was enthralled (see page 5).

Keeping things on track is just what Tarrant did this spring, as the ongoing search for a permanent successor to Brandt proceeded under Faculty of Arts and Sciences Dean Michael Smith. Tarrant oversaw the completion of a record admissions season and provided leadership on substantial issues like parental accommodations for graduate students,

Internet access to dissertations, and student governance. He welcomed more than 400 alumni back to campus for Alumni Day and a chemistry department reunion. And he shook the hands of more than 500 GSAS students as they received diplomas on stage at Sanders Theatre.

"It has been a privilege and a joy to be a part of this community," said Tarrant at an end-of-year GSAS staff meeting. The feeling is mutual. ₩

Richard Tarrant
coached this year's
Commencement
orators — from
left, Michael Velchik,
Jonathan Service, and
Anthony Hernandez
— and then donned
his Oxford robes to
preside over the GSAS
diploma ceremony.







A labor economist measures the real costs of a poor education in today's global marketplace

When a student's journey through the educational system ends without a high school diploma, the costs are heavy, says Princeton economist Cecilia Rouse, PhD '92, and not just for the student who doesn't graduate. The economic burden of America's relatively high dropout rate is felt by the country as a whole, threatening long-term economic prospects at a time when innovation is a global commodity. Rouse, the Lawrence and Shirley Katzman and Lewis and Anna Ernst Professor in the Economics of Education, argued in the *New York Times* earlier this year that President Barack Obama's proposal to make high school graduation compulsory in every state (only 21 require it now) won't do enough to turn the tide; interventions need to start early, and reforms must target not only the students but their parents, teachers, and school systems.

Rouse is accustomed to weighing in on presidential policy: She served as a member of Obama's Council of Economic Advisers from 2009 to 2011, and she served on the National Economic Council under President Bill Clinton from 1998 to 1999. A past editor of the *Journal of Labor Economics* and current senior editor of *The Future of Children*, she is the founding director of the Princeton University Education Research Section, a member of the National Academy of Education, and a research associate of the National Bureau of Economic Research. She's currently looking at the efficacy of performance-based scholarships among post-secondary students, an incentive that attempts to make the rewards of educational achievement more immediate to students at risk of dropping out. She spoke to *Colloquy* about the economics of education.

# How big is the dropout problem in the US?

In 1970, the United States had the highest rate of high school and college graduation in the world. Today, the data show us slipping to number 21 in high school completion and number 15 in college completion. While educated workers are key for economic growth, today only about 70 percent of ninth graders in the US will obtain even a high school diploma. The figures are even more sobering among blacks and Hispanics, where only about 55 percent receive a diploma. We're falling behind other industrialized nations.

# What are the costs?

The biggest cost of dropping out is to the individual, as over a lifetime a typical high school graduate will earn 50 to 100 percent more than a nongraduate. People who don't complete high school lack many of the skills that are in demand in the labor market today. As a result, they're less likely to be employed — their rates of unemployment are two to three times higher than those for individuals with a college degree. And when they are employed, they're not earning as much money.

The importance of education has increased with changes in our economy. As our economy has become more global, employers demand workers who do things that unskilled workers in other countries can't do and, with technological change, things that machines can't do either. Many of the skills that employers demand are obtained in school — in high school and, increasingly, in a post-secondary

Q+A ID

NAME:
Cecilia Rouse,
PhD '92
FIELD OF STUDY:
Economics
TODAY:
Princeton
University's
Woodrow
Wilson School

institution. That said, we have a big economy, and the labor market needs a lot of different kinds of people. There will always be a role for some less-skilled workers, but the plentiful jobs once accessible for less-educated workers are disappearing.

# Talk about the societal costs of high dropout rates.

With no income or lower income, dropouts contribute less in terms of tax revenue and are more likely to need public assistance. And when job opportunities are not great, the criminal sector looks a lot more appealing, so there are additional social costs arising from the criminal justice system.

High school dropouts are less healthy, less likely to have health insurance, and more likely to draw on emergency care. And there's an intergenerational component: Their kids will have lower levels of educational attainment, which means that we will have another generation carrying some of the same burdens.



# What do we need to do to tackle this?

I think we are learning more every day about what kinds of interventions are successful. We know earlier interventions, far earlier than high school, can be quite effective. That's why high-quality preschool is so important, as is having excellent teachers in those early foundational grades, and smaller class sizes in the early grades. We are also seeing that students may learn more in smaller schools; there is recent evidence that suggests the smaller-school experiment in New York City resulted in higher graduation rates.

# Don't these interventions demand fiscal resources that are in short supply these days?

Proven measures to increase graduation rates do require an investment, but the return to the individual and society would outweigh the costs.

Working with Hank Levin and other colleagues at Teacher's College [Columbia University], we estimated that for some of these effective interventions, there would be a return of about \$1.45 to \$3.55 for every dollar of investment, depending on the intervention

With this return on investment, over a lifetime each new graduate would confer a net return to taxpayers of nearly \$130,000. So wise educational investments are actually much more economical than doing nothing.

# Many are questioning the value of higher education these days, with tuition and student loan debt levels at record highs.

I think some of that is a natural reaction to the economic downturn, which affected college graduates to a greater degree than prior recessions. And yet even with the downturn, the economic value of college remained high. College graduates were still much less likely to become unemployed than those without a degree.

My research into the economic benefits of going to college often

focuses on labor market outcomes such as income and wages. Even beyond that, there is additional value of higher education not captured in terms of income. As a society we need writers and teachers and people who curate museums. There are social benefits to higher education that go beyond the income level that these individuals achieve.

And the value can't be fully captured in terms of immediate outcomes. For individuals who go on to college, their earnings right out of college can be lower than the earnings of high school graduates of the same age, but then they grow faster with time.

# After working in Washington for President Clinton, how did you decide to take the plunge and return?

I wasn't sure I wanted to go back, because my family was very settled, and I

One of the things I'm quite proud of is that during the fall of 2009, I started working on policies to address long-term unemployment, because we could see it was already becoming an issue. Some of those policies have now come to fruition: a broadening of work-sharing programs, self-employment assistance, linkages between community colleges and employers, federal investment to strengthen community colleges. I'm proud of the work we did on those issues.

# As a labor economist, what workplace trends are you watching?

Workplace flexibility is a huge issue in the labor market, especially for working parents.

One of the challenges in thinking about it is that it's not one size fits all. The way you build in flexibility in a manufacturing plant, where people

"It was heartbreaking to be there during the first few months as we were watching the numbers: 800,000 jobs lost in a month — it was jaw dropping."

was very happy at Princeton. I wanted to support the President, but especially with a family, it's a big sacrifice to go down to Washington. But a colleague of mine advised me that the beginning of an administration is like no other time — it's when an administration is figuring out who it wants to be. There's a lot of policy development, a lot of thinking about what we ought to be doing as a country. It was an opportunity to think creatively.

And then of course we were in the midst of a huge economic crisis. It was heartbreaking to be there during the first few months as we were watching the jobs numbers: 800,000 jobs lost in a month — it was jaw dropping. So we spent a lot of time trying to diagnose the problem to find appropriate solutions and also anticipate the issues that would be coming down the road.

need to be on site, may be very different from how you build in flexibility in a call center, where people can work from home.

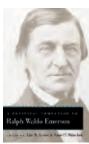
But some of the more forwardlooking manufacturing employers have nonetheless found ways to have a group of retirees or former employees who are available to step in if somebody suddenly has a sick child or needs to take care of an elderly parent. Or employers are developing ways to train workers not only on their one task but upstream and downstream so that workers can help one another and be more flexible in the kind of jobs they do. There are ways to make the workplace more flexible for workers, for those employers who are motivated to do so. And there's growing evidence that these measures can be cost-effective. 🛡

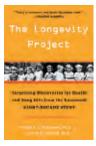
# Shelf Life











MARK WARREN (AB '77, PhD '95, sociology) and KAREN MAPP (EdD '99) are scholar-activists troubled by the inequities in American education, which contribute to a system in which roughly half of all blacks and Latinos don't graduate from high school with their peers, and only 13% of Latinos earn college degrees, among other alarming statistics. In

A Match on Dry Grass (Oxford University, 2011), they hold out community organizing as the remedy. After a review of community organizing history and strategies, the authors (and their doctoral students at the Graduate School of Education) present six team-written, chapter-length case studies reporting on the experiences of local community organizations from the Bronx to San Jose. Particularly evocative is Kenneth Russell and Mara Casey Tieken's chapter on Southern Echo, a social-action group deep in the Mississippi Delta.

# Violence, Nonviolence, and the Palestinian National Movement

(Cambridge University, 2011) analyzes how internal dynamics affect a protest movement's proclivity to violence. WENDY PEARLMAN (PhD '07, political science) contrasts the First Intifada (1987-1993), which involved little deadly violence, with the far bloodier Second Intifada (2000-ca. 2005). Pearlman reviews conventional explanations for movement tactics (and recourse to violence), including rational calculation, reactive response to events, and cultural proclivities. But she emphasizes the effect of movement cohesion or fragmentation on tactical choices. The Palestinians' organizational weakness under the British Mandate ultimately encouraged violence. In 1988, a strong leadership coalition helped restrain the First Intifada. By 2000, internecine rivalries undermined unity and helped catalyze violent protests.

In an era when historians prefer microdissection, **New York at War** (Basic Books, 2012) — a four-century account of New York City — is one bold undertaking. The idea came to STEVEN JAFFE (PhD '89, history) after 9/11. He unfolds his story — from the 1609 killing of John Colman (a sailor with explorer Henry Hudson) by Lenape Indians to contemporary terrorism — in clear, no-nonsense prose. Though he says little about the Mexican and Spanish-American Wars, his accounts of the Revolution, the Civil War, and 20th-century New York are nuanced and richly detailed — as in the story of Mary Sharmat and Janice Smith, young mothers who refused to enter fallout shelters with their children during a city-wide 1959 civil defense drill and helped spark a movement against the arms race.

Not so long ago, pairing "Emerson" and "political" would have seemed more like an oxymoron than a research topic. But A Political Companion to Ralph Waldo Emerson (University of Kentucky, 2011) makes a compelling case for reassessing Emerson's political thought. Rejecting the long-prevalent view that his individualism effectively precluded political action, these essays — edited by Alan M. Levine (PhD'94, government) and Daniel S. Malachuk — depict an activist Emerson who even took the stump for Free Soil and Republican candidates. Drawing on addresses that were kick-started by the Fugitive Slave Act of 1850 (which, in Emerson's words, "forced us all into politics"), these essays explore his responses to slavery, sectionalism, and war — as well as his efforts to reconcile individual self-reliance with larger, impersonal forces.

In 1921, psychologist Lewis Terman began studying roughly 1,500 California schoolchildren. Incredibly, research continued for eight decades, following participants throughout their lives. Howard Friedman (PhD '76, social psychology) and Leslie Martin draw on this data for **The Longevity Project** (Hudson Street, 2011). They conclude that there is no single key to long life not "broccoli, medical tests, vitamins, or jogging." Far more significant are "certain constellations of habits and patterns of living." Conscientiousness is strongly associated with longevity; impulsiveness, much less so. Surprisingly, they report that happiness doesn't predict longevity, challenging much psychological and medical research. The book is thought-provoking. But the underlying study may be limited by its subjective selection criteria (teachers were asked to choose their "brightest" students), small size, and composition (virtually all white).

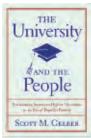
Mount Everest continues to entice - and exact its toll. (As I write, CNN reports three more Everest fatalities.) So why climb it? Adventure? Hubris? Jon Krakauer's *Into Thin Air* highlighted rivalries among commercial mountain guides. Climber George Mallory, who in the 1920s spearheaded the first three British expeditions, famously answered a New York Times reporter, "Because it's there." WADE DAVIS (PhD '86, organismic and evolutionary biology) thinks differently. He tells Mallory's story in Into the Silence: The Great War, Mallory, and the Conquest of Everest (Knopf, 2011), a superb and sweeping narrative that explains the early Everest expeditions — and Mallory's 1924 death — in terms of a "grand imperial gesture" and as a response to the chastening carnage of the First World War.

Hide and Seek (Zone Books, 2012) explores the cat-and-mouse realm of reconnaissance (especially photographic reconnaissance) and the various camouflage techniques meant to outwit it. Hanna Rose Shell (AB'99, PhD'07, history of science) focuses on World Wars I and II, discussing the ideas of American painter Abbott Thayer, the

Alumni authors: Would you like your book (general interest, published within the past year) considered for inclusion? Send it to *Colloquy*, Harvard Graduate School of Arts and Sciences, Holyoke Center 350, 1350 Massachusetts Avenue, Cambridge, MA 02138. Questions? E-mail gsaa@fas.harvard.edu.













role of camouflage netting, and the shift from a static model of camouflage to what Shell terms "dynamic camouflage" — extending the principles of concealment, for example, to movements of individuals or larger units. In addition, the author locates her subject in popular culture, citing Monty Python's 1971 parody "How Not to Be Seen," the 1987 Arnold Schwarzenegger film *Predator*, and first-person-shooter video games. She also addresses epistemological issues, demonstrating the special efficacy of semiotic theory to camouflage studies.

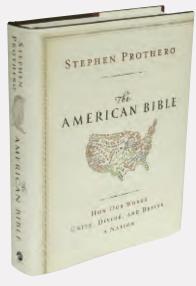
Late-19th-century Populism has enjoyed a historical redemption. Long ridiculed (cue "Sockless" Jerry Simpson and Mary Lease, exhorting farmers to "raise less corn and more hell") or condemned (as in Richard Hofstadter's anti-intellectuals), it has won a new respectability. *The* **University and the People** (University of Wisconsin, 2011) is an insightful and balanced contribution to this reassessment. Scott Gelber (PhD '08, history of American civilization) challenges the view that Populists were anti-intellectual bigots opposed to education. He tells the story of land-grant colleges (such as the future Kansas State University) reorganized by short-lived Populist state governments and recounts Populist concerns that college education be accessible (through low tuition, extensive scholarships, and remedial programs for rural students with less academic preparation). O Populists! where are you now?

Shattering Culture: American Medicine Responds to Cultural Diversity (Russell Sage, 2011) examines the impact of culture on clinical practice and in treatment outcomes for patients of different racial, ethnic, and religious backgrounds. This volume takes a detailed, ethnographic approach to its subject matter, interviewing and analyzing the experiences of providers, medical interpreters, chaplains, and patients. According to editors Mary-Jo Delvecchio Good (PhD'77, sociology), Sarah Willen, Seth Donal

Hannah (PhD '11), Ken Vickery, and Lawrence Taeseng Park, culture-based disparities in care are complicated by a new development: *hyperdiversity*. Culture isn't a simple category or checklist. But now, the authors stress, it's even murkier: A patient can be multiracial, polyethnic, or bi- (even *tri-*) religious.

When he died in 2007 at age 57, Roy Rosenzweig (PhD '78, history) was a respected historian of American labor, society, and culture — as exemplified by Eight Hours for What We Will: Workers and Leisure in an Industrial City, 1870-1920 (1978), his study of working-class Worcester, Massachusetts. Rosenzweig also made important contributions to newer fields like public history. But arguably his greatest legacy will be his work at the nexus of history and information technology. Clio Wired (Columbia University, 2011) collects some of the best of these pieces, written between 1994 and 2006. They range from the reflective and programmatic (for example, a fascinating critique of history à la Wikipedia) to the practical, instructive, and do-it-yourself (such as "Collecting History Online," cowritten with **DANIEL** COHEN, MTS'92).

Being There: Learning to Live Cross-Culturally (Harvard University, 2011) is a fine collection of essays, edited by Sara H. Davis and MELVIN KONNER (PhD '73, anthropology; MD '85), that explore the encounters between academics (anthropologists, mainly) and their subjects. Such encounters are complex and reciprocal, involving intricate emotional cross-shadings and the occasional misstep or pratfall. (Melissa Fay Greene recounts one embarrassing incident in East Africa in which she set herself up to be bitten by a vervet monkey.) Yet the essays emphasize profoundly human connections, as when Lila Abu-Lughod, who lived with a Bedouin-Egyptian family, recalls the kinship she felt with the family patriarch.



The American Bible (HarperOne, 2012) is a provocative, brilliantly realized illumination of American values by means of excerpted historical documents. STEPHEN PROTHERO (PhD'90, sociology and study of religion) organizes the book into sections evoking the Bible — "Genesis" (which includes the Declaration of Independence), "Psalms" (with "The Star-Spangled Banner" and Woody Guthrie's "This Land Is Your Land"), "Prophets" (Thoreau's "Civil Disobedience" is here), and so on. Yet Prothero's vision of our secular faith is no unitary "American creed." These documents matter, he says, because we believe they're worth arguing about. Some selections are predictable: John Winthrop's "city upon a hill," the Constitution, and Martin Luther King's "I Have a Dream" speech. Others are edgier: Roe v. Wade, Eisenhower on the "military-industrial complex," and Ayn Rand's Atlas Shrugged.

Of course, it's hard not to secondguess the choices (as Prothero must have expected). Longfellow's "Paul Revere" is here but not Emerson's "Self-Reliance." Eighteenth-century women are represented by one line from Abigail Adams ("Remember the ladies"), but not by Judith Sargent Murray's 1790 essay "On the Equality of the Sexes." But these are quibbles. Particularly impressive are the excerpted, chronological commentaries that invoke, critique, or tussle over each text. (For the Biblical Exodus story, commentators range from Benjamin Franklin to W.E.B. Du Bois, Cecil B. DeMille, and feminist theologian Mary Daly.)



# GETTING THE UPPER HAND ON

DYANN WIRTH IS LEADING AN INTEGRATED TEAM OF SCIENTISTS, CLINICIANS, AND PUBLIC HEALTH EXPERTS

DETERMINED TO ERADICATE A STUBBORN ENEMY

BY KENRICK VEZINA | ILLUSTRATION BY JASON HOLLEY

Daria Van Tyne bends over a crimson disc, her gloved hand swinging the tip of a pipette in circles to agitate a mixture of substrate and human blood that fills the petri dish. It's not apparent, but she's a foot soldier in a war that has been raging for decades. With the press of a trigger, the red mixture is drawn up, and with it thousands of single-celled parasites. These are Plasmodium *falciparum*, the deadliest of several Plasmodium species that cause malaria.



Van Tyne is a GSAS PhD student in the Wirth Lab at the Harvard School of Public Health, part of a large team of graduate students, postdocs, faculty, and clinicians led by Dyann Wirth, chair of the Department of Immunology and Infectious Diseases. The lab is the epicenter of the global fight against malaria, conducting groundbreaking explorations of the Plasmodium genome and developing technologies to identify the mechanisms responsible for the parasite's wily adaptability. It is at the scientific vanguard of a new push to eliminate those Plasmodium species that cause 216 million cases of malaria and an estimated 655,000 deaths each year, according to the World Health Organization. An old disease, less headline-grabbing than Ebola or bird flu, malaria nonetheless places a dramatic burden on the health and economies of countries — some of the poorest in the world — where it is ingrained.

Wirth and her students stand out among their peers for having a strongly integrative understanding of malaria. Their collaborators — from Harvard, the Broad Institute, and labs and treatment centers around the world — include molecular biologists, geneticists, computational biologists, chemists, statisticians, and epidemiologists. Wirth knows it's not simply a parasite she and her colleagues must contend with. On the genetic side of things, there are human host, parasite, and mosquito vector genomes in play. At the political level, there is a parasite that ignores country borders and demands cooperation among neighbors. And then there are the technical, economic, and logistical concerns: how to get what is needed (bed nets, medications, vaccines) where it needs to be when it needs to be there. "Realisti-

The only lasting effect of the carpet-bombing was widespread drug resistance in the parasites and insecticide resistance in their hosts.

Dyann Wirth in her lab at the Harvard School of Public Health



cally," says Wirth, "this is a 50-year project."

The previous push to eradicate malaria worldwide — after World War II, spurred by the discovery of the game-changing drug chloroquine, and on the heels of successful eradication in the American Southeast — can best be described as carpet-bombing. (Military metaphors seem de rigueur in any discussion of the malaria problem.) Drugs were distributed liberally, swamps were doused in pesticides, and no heed was paid to a fundamental facet of evolution. "We were putting a tremendous amount of pressure on malaria," Wirth says - on the parasites that cause it and the mosquitoes that deliver it. But the harder you try to eradicate a species, the more evolutionary impetus there is for it to evolve and develop ways to survive. The only lasting effect of the carpet-bombing, it turned out, was widespread drug resistance in the malaria parasites and insecticide resistance in their hosts. As Wirth puts it, we were in a battle with the disease and suddenly found that "the bullets no longer worked."

At present, there is only one bullet left that is fully effective: artemesinin, introduced in 2005. There are no fallbacks should resistance to this drug become widespread. Plasmodium, we now know, has tremendous variability in its genome and in its capacity to reproduce and recombine genetic material very quickly, both of which lend it an evolutionary nimbleness that makes brute medicinal force highly ineffective.

"We still have the same two tools [antimalarial drugs and insecticides] that we had in the 1950s," explains Wirth. So what do we do? "Understanding the parasite and its biology is critical," she says. Her lab has identified areas of the Plasmodium falciparum genome with markedly lower variability than the rest. These areas are likely to have been subjected to some very powerful evolutionary force — such as that instigated by the previous eradication effort. Indeed, lab members have already identified the gene responsible for the chloroquine resistance that rendered previous efforts moot, and they are using this method to suss out more of the secrets of the parasite's resistance.

Now the team hopes to identify burgeoning resistance early enough to give clinicians time to change their approach. Rachel Daniels, another PhD student in the lab, uses the genomic data to study the population structure of the parasite. Scientists can get an idea of transmission rates, for example, by looking at the rate of recombination of genetic material in a given population. Knowing where transmission is especially high could yield policies to coordinate limited resources and prevent the rapid spread of resistant populations.

This work is very much a team effort. Van Tyne spends a large part of her time tending to the needs of these cultured parasites — a process she describes with cheerful irony as "pampering." If she leaves the petri dishes alone, even for a weekend, the cultured parasites could outstrip

the available resources in the dish and kill themselves via overpopulation.

In a chamber downstairs, an insectary is breeding mosquitoes for use in experiments to better study malaria transmission. Inside, the air is thick: warm and humid. Cloth cages teem with mosquitoes, and rack upon rack of shallow dishes hold their fidgety, comma-shaped aquatic larvae.

Meanwhile, other members of the Wirth Lab are picking apart the genetic identity of Van Tyne's charges, sequencing the DNA of numerous individual parasites and pulling together a picture of the entire Plasmodium *falciparum* genome. The lab takes samples each year from the field, from a clinic in Senegal, so that the malaria parasites they work with are as close to their natural state as possible.

In nature, the parasites spend their lives inside one of two hosts: human or Anopheles mosquito. When an infected mosquito draws blood, a spore-like form of the parasite hitches a ride in the mosquito's saliva. Inside the human body, those parasites move straight to the liver, where they set up shop safe from the human immune system. They multiply asexually, and once this liver population reaches critical mass — days or weeks or months later, depending on the parasite species and the individual infection — a new crop of parasite cells, merozoites, enters the bloodstream and begins to invade red blood cells. One parasite to a cell, they clone themselves again and again, until a terrible act of coordination brings them all bursting out of their red blood cells to begin another cycle of infection. This time, a much larger number of parasites infects a much larger number of red blood cells.

In humans, the Plasmodium cells reproduce only clonally. A given infection is essentially the same individual parasite reproduced to the size of population. Eventually, some of these individuals break out of the asexual loop, transforming into male and female gametocytes (sex cells) and entering the bloodstream to wait for the lucky bite of a mosquito. It's only once they're in a mosquito's gut that the parasites reproduce sexually, gaining the potential to reshuffle their own genetic material or combine it with that of another individual-population.

This complicated life cycle is both a boon and a burden to the war effort. It makes rearing malaria in the lab particularly tricky, but it offers numerous targets for intervention. The problem is coordinating these efforts. For instance, "if we bottleneck the parasite at transmission, what if the parasite becomes much more effective at being transmitted?" asks Wirth. At this point, she explains, many of the challenges are civil and societal ones. We have the tools to kill the parasite and control its vector. What we haven't had is an integrated approach.

For example, Sri Lanka went from a handful of cases in 1963 to a million in 1985, says Wirth. Governments and policymakers don't necessarily understand malaria's potential for explosive growth and don't have a grasp of its biology.



PhD students in the Wirth Lab, from left, Rachel Daniels, Daria Van Tyne, and Jon Herman

"The current state is hopeful. We are at a very important time — we can now demonstrate that this is a curable, treatable disease."

When a country has all of a half-dozen cases, she explains, it's easy to see why its leaders might decide there are more pressing problems than malaria. Funds dry up.

"For people in malarial regions, it is a fact of life. The notion of eradication is radical," says Wirth. (As Van Tyne puts it: "Malaria's been around forever and a half.") A big part of the challenge is convincing people that this is a disease that can be conquered, not a permanent feature of their landscape. As such, Wirth's lab frequently hosts visitors from other countries and collaborators who can shed light on the local realities of trying to implement new methods of malaria control. Daniels cites, for instance, the challenge of convincing Buddhist populations in malarial regions that killing mosquitoes en masse might be permissible for the sake of public health.

This fall, Wirth will begin a tenure as chair of the Harvard Integrated Life Sciences program, a consortium of PhD programs in the life sciences meant to foster collaboration across departments. This seems a natural progression for a woman who has a singular talent for bringing together people from all walks of science and life to wage war on one of humankind's oldest epidemics. "If you were to sit down and draw a tree of malaria researchers, it's amazing how many of them come back to Dyann," says Daniels. But Wirth rejects the spotlight: "Graduate students are critical to any scientific endeavor, but particularly in this area where there's still so much unknown, and the technology is changing very rapidly."







# Climate Change: The Next 100-Year War

A sobering assessment — and a path forward — from one of Harvard's leading climatologists

When it comes to thorny contemporary problems, no other selection from the day's stimulating roster of faculty topics fits that description more aptly than the keynote address by **Sturgis Hooper Professor of Geology Daniel P. Schrag**, the director of the Harvard University Center for the Environment. Schrag knew that a discussion of climate change would seem particularly topical, with broad swaths of the country in the midst of the warmest stretch of early-spring weather on record. "We've never seen a weather pattern like this before," he said bluntly, describing his six-week-early roses. "Things are strange." (Truth be told, the weather generated much happiness later in the day, allowing an outdoor reception on the patio at the Faculty Club.)

Schrag's talk, entitled "The Question of Nature: A Geological Perspective on Human-Induced Climate Change," was a straightforward, sobering, and fascinating examination of the impact of fossil-fuel consumption on the environment. Offering a geological perspective on past climate cycles as a way to begin to predict the changes to come, Schrag said it was the pace of change — the speed at which carbon dioxide levels are rising — that makes future impact ominous but difficult to specify. As CO2 continues to rise, and the Earth warms, there will be winners and losers, Schrag said. "What we're actually doing is a geologically profound experiment on the planet."

Controlling that experiment will take a combination of large-scale behavioral change — making it socially unacceptable to advocate for coal as an energy source, for instance — and technological innovation. In neither case will change come quickly. "This is a 100-year war," he said, referring to the mechanics of adapting to a low-carbon economy. "We will be struggling with this for generations."

You can watch Daniel Schrag's keynote address for GSAS Alumni Day 2012 on Harvard's YouTube channel: www.youtube.com/Harvard. ♥

# CHEMICAL BONDING

Positive connections at a spring reunion for graduate chemistry alumni

Alumni, faculty, postdocs, and students mingled at a festive celebration of the Department of Chemistry and Chemical Biology in April, on a day that included a series of talks on the latest topics in physical and organic chemistry.

The event, held the day before the GSAS Alumni Day, began with an informal tour of the department and a chance for alumni to meet current graduate students and postdocs. The official proceedings kicked off with a luncheon at Loeb House, where Professor Matthew Shair, the codirector of graduate studies in CCB, welcomed reunioners and colleagues. The lunch provided an occasion to mark the 75th birthday of beloved Professor Yoshito Kishi, with a toast by colleagues and former students and a gift of flowers from his postdocs.

Following the luncheon, the group made its way back through the Yard to Oxford Street, noting the many new facilities that seemed to spring up in all directions, anchored by at least one unchanging landmark, the facade of the Mallinckrodt building.

An immersive series of TED-style talks followed, under the rubric of "Science in 15 Minutes." With the department's senior leaders on hand, including Elias J. Corey and George Whitesides delivering introductions, faculty working at the vanguard of the field delivered talks that revealed the tremendous energy and spirit of discovery that characterizes CCB today.



# MANY **HAPPY**RETURNS















Faces of Alumni Day, clockwise from top left: 1. Samuel Myers, PhD '49, and Andrea Mickle 2. James L. Poage, PhD '72, and John Fan, PhD '72 3. Rodney Boyum, PhD'97 4. Marilyn J. Harte and Kenneth Harte, PhD '65 5. Andrea Larson, PhD '88, at right, with a fellow guest 6. Scott Kominers, PhD '11 7. Laura Dawes, PhD '10 and Mateo Munoz, PhD student in history of science 8. Cheryl Clark, PhD '83, and Danny Brundage 9. Cammi Valdez, PhD student in biological and biomedical sciences 10. Homer Hagedorn, PhD '55, and Professor James Hogle, Dudley House Master



## **HIGH ACHIEVERS**

The Centennial Medal recognizes the lasting impact, vital contributions of leading alumni

The Centennial Medal is the highest honor awarded by the Graduate School of Arts and Sciences, given annually on the day before Commencement to celebrate the achievements of a select group of Harvard University's most accomplished alumni. The medal was first awarded in June 1989, on the occasion of the 100th anniversary of the founding of GSAS.

The design of the Centennial Medal reflects both the values of the Graduate School and the accomplishments that the medal celebrates. On one side, a figure representing Truth pours water from two bowls, symbolizing the wellspring of knowledge and potential. On the other, palm and laurel branches symbolize victory and enduring productivity.

# The Americanist

**Daniel Aaron**PhD '43, history of American civilization

To win the Centennial Medal in his 100th year seems only fitting for a man who "literally embodies the American Studies century," says Professor Werner Sollors of his long-time friend and colleague, literary historian Daniel Aaron, the Victor S. Thomas Professor of English and American Literature, Emeritus, at Harvard.

Aaron, who still works daily in his Barker Center office, is "a chief founder of the discipline of American Studies in the United States and abroad," says Helen Vendler, the A. Kingsley Porter University Professor in the Department

"for a lifetime of scholarship that interprets America to Americans and to the world..."

of English. He "advocated the scholarly study of American authors at a time when universities still emphasized English and European literature." As the founding president of the Library of America, he recognized, with his friend Edmund Wilson and others, "the need to create a series that would encompass all of our nation's best and most significant writing in handsome, enduring volumes intended for a wide public, a kind of American Pléiade," says Cheryl Hurley, the Library's president. The Library of America has now published more than 200 authoritative editions of American classics, remaining committed — as Hurley says — "to Dan's vision of bringing all the richness, the range, and the variety of American writing to readers everywhere."

Aaron was the first person to earn a Harvard PhD in the history of American civilization. For decades — first at Smith College, and for the last 40 years at Harvard — he has been among the country's foremost scholars of American culture, and his "freshness of spirit, zeal for learning, amazing self-discipline, and generosity of imagination set a daunting standard for all of us," says Andrew Delbanco, AB '73, PhD '80, Columbia University's Mendelson Family Chair of American Studies.

Aaron's 40-plus books include Writers on the Left: Episodes in American Literary Communism (1961), The Unwritten War: American Writers and the Civil War (1973), American Notes: Selected Essays (1994), and his captivating 2007 intellectual memoir The Americanist.

He is a fellow of the American Academy of Arts and Sciences and a member of the American Academy of Arts and Letters. He received the National Humanities Medal in 2010 for his contributions to American literature and culture.



# The Soldier-Statesman

Karl Eikenberry

AM'81, regional studies-East Asia

Karl Eikenberry, who served as US ambassador to Afghanistan from 2009 to 2011, is the "very model of a modern soldier-statesman," says Graham Allison, the Douglas Dillon Professor of Government at the Harvard Kennedy School, with a nod to Gilbert and Sullivan.

Eikenberry, a graduate of the US Military Academy at West Point, is now the Payne Distinguished Lecturer at the Freeman Spogli Institute for International Studies at Stanford. He had a 35-year career in the Army, retiring as lieutenant general in 2009 when President Obama tapped him to lead the diplomatic mission in Afghanistan.

His involvement with that country has been long and deep. Prior to becoming ambassador, he was deputy chairman of the NATO Military Committee in Brussels, where he was heavily involved in the mission in Afghanistan, and regularly traveled there. From 2005 to 2007, he guided military efforts on the ground as commander of US-led coalition forces, and earlier, he served as US security coordinator and chief of the Office of Military Cooperation in Kabul, where he aided efforts to establish and strengthen the Afghan army and police force. "Karl was given extremely difficult assignments in Afghanistan," says his Harvard mentor Ezra Vogel, the Henry Ford II Professor of the Social Sciences, Emeritus. "He has, under trying circumstances, provided assistance to the Afghan government and Afghan people and leadership to Americans in Afghanistan."

Over the course of his career, Eikenberry served in key strategy, policy, and political-military positions, including as director of strategic planning and policy for the US

Pacific Command in Hawaii, as defense attaché at the United States Embassy in Beijing, and as the Defense Department's senior country director for China, Taiwan, Hong Kong, and Mongolia.

"Integrity, service, honor, commitment, decency, intelligence. Karl Eikenberry embodies what it means to be an American patriot," says Stephen Krasner, PhD '72, the Graham H. Stuart Professor of International Relations at Stanford. Indeed, his service and achievements have resulted in a long list of military and diplomatic honors, including the Defense Distinguished Service Medal, the Legion of Merit, and the Bronze Star.

# The Great Equalizer

**Nancy Hopkins** 

AB '64, PhD '71, biochemistry and molecular biology

Nancy Hopkins, the Amgen, Inc. Professor of Biology at the Massachusetts Institute of Technology, can take great satisfaction in the two revolutions she has helped to lead over the course of her career. One is the revolution of molecular biology, which she knew early on would transform our understanding of the world. And the second is the revolution in the roles and aspirations of women in the academy.

Hopkins, a member of the National Academy of Sciences and the American Academy of Arts and Sciences, started her career in unusually rarified circumstances — as a Radcliffe undergraduate in the lab of James D. Watson, who had won the Nobel Prize for discovering the structure of DNA. She worked initially with bacterial viruses, in a successful effort led by former Harvard professor Mark Ptashne, PhD '68, to isolate the lambda phage repressor, a protein that controls gene expression. In a series of significant findings, she went on to demonstrate how the repressor binds to DNA.

She joined the faculty of MIT's Center for Cancer Research in 1973 (now the Koch Institute, where she remains), building a successful program in mouse RNA tumor viruses. Later, she deftly navigated another professional switch, making fundamental discoveries in the genetics of vertebrate behavior, using the newly emerging model of the zebrafish.

But Hopkins is equally known for promoting equality of opportunity for women. She was the prime mover behind the influential "MIT Report on Women in Science," which in the late 1990s prompted the Institute to acknowledge a pattern of bias and begin reforms. Other universities followed suit, and her advocacy led to a prolonged period of reflection at Harvard and around the country.

"She doesn't look like a revolutionary," says her friend and colleague Lotte Bailyn, PhD '56, the T Wilson (1953) Professor of Management at MIT's Sloan School. "Nor was she the first person to document the situation of women

"for wise and brave leadership in enormously challenging times and places..." Call for nominations: GSAS alumni are welcome to nominate candidates for the Centennial Medal. Please send nominations and supporting material to gsaa@fas.harvard.edu.



"for opening new paths in cancer research and in the academy..."

faculty in science. But she was extraordinarily careful in her research, relentless and fearless, and she was the first to get her report noticed, responded to, reported on the front page of the *New York Times*, and acknowledged at the White House — and so she was the originator of a revolution that continues to this day."

"Her insistence on equal recognition and support of women in science has opened doors for thousands of women to contribute to society," says her longtime colleague, Nobel Prize-winning molecular biologist Phillip Sharp, the Institute Professor at MIT. "Leaders pay a price for blazing a trail, but they live in the success of those who follow. Nancy is a special leader."

The Global Thinker

**Robert Keohane** PhD '66, government

Robert Keohane, professor of public and international affairs at Princeton University's Woodrow Wilson School, is among the most influential and respected theorists of world politics and power.

Keohane, who before Princeton taught at Swarthmore, Duke, Stanford, Brandeis, and Harvard, has been president of the American Political Science Association and the International Studies Association "and is consistently ranked as the most influential scholar of international relations by *Foreign Policy* magazine," says his longtime friend and collaborator Joseph Nye, PhD '64, University Distinguished Service Professor at Harvard. "But even more important is his role as mentor and friend to so many people in the field."

The beneficiaries of that mentoring — who include his former dissertation advisees — say it has been fundamental to their careers. Keohane was "probably the single most important influence on my professional development," says

David B. Yoffie, the Max & Doris Starr Professor of International Business Administration at the Harvard Business School. "His penetrating questions, careful scholarship, counterintuitive insights, unending energy, and keen eye towards great problems are the best combination of attributes for an advisor, a co-author, and a great friend."

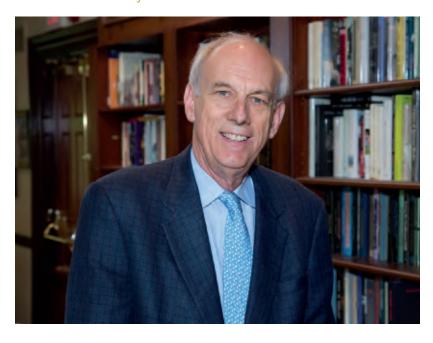
"Working with Bob was not easy," says Fareed Zakaria, PhD '93, foreign affairs specialist for CNN and *Time*. "He was friendly and warm, of course, but he was demanding. He set high standards and didn't discount. He insisted on rigor and research. The result was that I learned to think — systematically and analytically."

Keohane's books include After Hegemony: Cooperation and Discord in the World Political Economy (1984), Power and Governance in a Partially Globalized World (2002), and Anti-Americanisms in World Politics (2006). He has produced articles, book chapters, and edited volumes too numerous to list, and he has won the Grawemeyer Award for Ideas Improving World Order (1989), and the Johan Skytte Prize in Political Science (2005).

He is a fellow of the American Academy of Arts and Sciences and a member of the National Academy of Sciences. His wife, Nannerl O. Keohane, who is also a political scientist — as well as the former president of Wellesley College and Duke University — is a member of the Harvard Corporation.

₩

"for your pioneering contributions to the study of international relations, and your mentorship to so many in the field..."











# Points of Departure

On a warm, clear Commencement Day — the 361st Harvard Commencement — the Graduate School of Arts and Sciences bestowed the PhD on 431 candidates and the master's degree on 79 candidates across 56 departments, programs, and divisions.

The Diploma Awarding Ceremony, whose traditions seem amplified in the august surroundings of Sanders Theatre, blended solemnity, pageantry, and moments of unexpected humor as graduates crossed the stage to receive their diplomas and the congratulations of GSAS deans and their own faculty members.

The day's festive mood was evident in the faces of these 2012 graduates. Before departing — for hooding ceremonies at the School of Engineering and Applied Sciences or at the Division of Medical Sciences, or for more private celebrations elsewhere — they gathered to toast their hard work en masse, at a champagne luncheon for their families and for department colleagues on the Oxford lawns.













































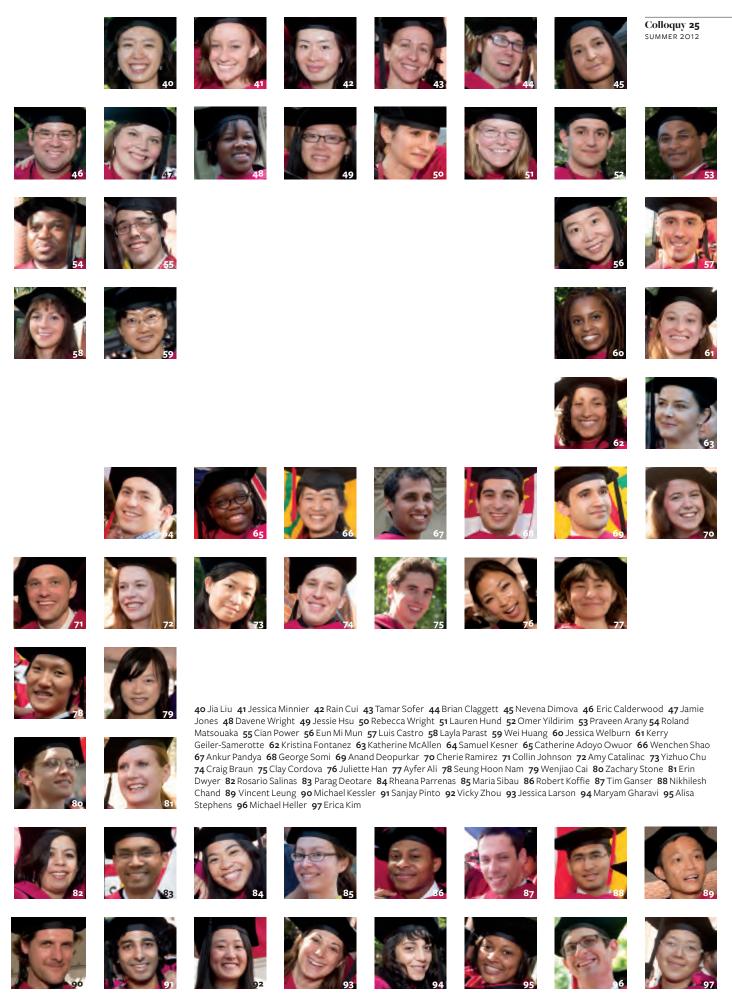


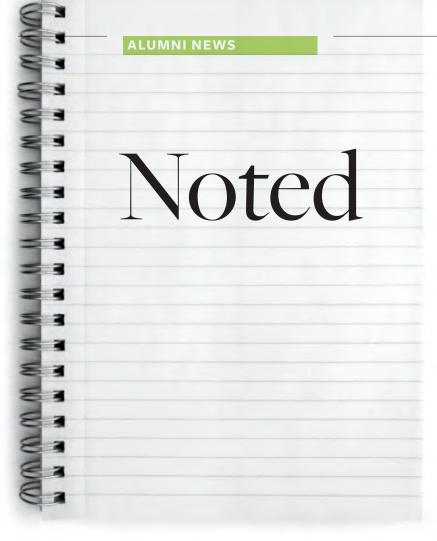














CINNA LOMNITZ, SM '50, recently published Earthquake Disasters in Latin America: A Holistic Approach (with Heriberta Castaños). Lomnitz is professor of seismology, emeritus, at the National Autonomous University of Mexico (UNAM). In 1957 he was appointed first director of the Institute (now Department) of Geophysics at the University of Chile. From 1964 until 1968 he was chief of seismological stations at UC Berkeley. He joined the Institute of Geophysics at UNAM, Mexico City, in 1968. He is editor of the journal Geofisica Internacional and has published three books on earthquake science.

**Anthropology** 

JIM YONG KIM, MD '86, РнD '93, was elected to

being nominated by President Obama in March. Kim has been President of Dartmouth College since 2009, and was formerly chair of the Department of Global Health and Social Medicine at Harvard Medical School.

VASILIKI P. NEOFOTISTOS, РнD '03, published *The Risk* of War: Everyday Sociality in the Republic of Macedonia (University of Pennsylvania Press, 2012). The book focuses on practices and performances of everyday life across ethnonational borders during the sixmonth armed conflict in 2001 between Macedonian government forces and the Albanian National Liberation Army. Neofotistos teaches anthropology at the University at Buffalo, State University of New York.

head the World Bank after



# Astronomy

JOSEPH F. DOLAN, PHD '66, has published The Rules of Evidence as a Kindle book. Seeking to explain how we have come to know so much about the world around us. it looks at the "scientific method" in a new way - as rules of evidence, like those used in courts of law to distinguish fact from perception. The book is illustrated with dozens of stories about scientific personalities and the way they used (and misused) the scientific rules of evidence.

# **Celtic Languages** and Literatures

KATE CHADBOURNE, PHD '99, has published a book of poems entitled Brigit's Woven World. Inspired by the landscape and legends of Ireland, her poems draw on twenty years of scholarly and personal experience of the country to communicate what she identifies as the particularly Irish qualities: vitality, merriment, wit, and beauty. Chadbourne currently teaches Irish language and folklore at Harvard.

# **Decision Sciences** PATRICK S. NOONAN, PHD

'93, has been promoted to professor in the practice of decision and information

analysis at Emory University's Goizueta Business School. Noonan was recently also given an additional role as associate dean for management practice initiatives, in which he will be developing and leading innovative new programs to help students integrate across the management disciplines, as well as integrate classroom learning with real-world practice through field-based project courses. In May he picked up his 12th teaching award since joining Emory in 1993.

# **English**

STEPHEN SANDY, PHD '63, has published his 12th collection of poetry, Overlook (Louisiana State University Press, 2010), which the poet Richard Wilbur praised as "masterly and absorbing." Over a career that included faculty positions at Bennington College, Brown University, and Harvard, Sandy has received, among other honors, a residency at the Bellagio Center, a Lannan Senior Fellowship at the Fine Arts Work Center in Provincetown, a Fulbright Lectureship in Japan, and an award from the American Academy of Arts and Letters.

ROBERT H. BELL, PHD '72,

has published Shakespeare's Great Stage of Fools (Palgrave Macmillan, 2011). From the knockabout clowns of the early comedies, through the wise fools of the mature plays, to disturbing tragic figures who play the fool, Bell examines how Shakespeare dramatizes the pleasures and perils of fooling





### Government

DANIEL P. ALDRICH, PHD '05, won a Fulbright research fellowship to return to Japan for the 2012-2013 academic year to study social networks in the ongoing recovery from the March 2011 disasters. Aldrich received tenure from Purdue University in the spring of 2011, and this year he is an American Association for the Advancement of Science (AAAS) fellow at the United States Agency for International Development (USAID), working on issues of social capital and resilience in vulnerable communities. His first book, Site Fights (Cornell University Press, 2008 and 2010) has just been translated into Japanese, and his second, Building Resilience: Social Capital in Disaster Recov*ery* will be published this August by the University of Chicago Press.

# CASEY A. KLOFSTAD, PHD

'05, is an assistant professor of political science at the University of Miami and recently published Civic Talk: Peers, Politics, and the Future of Democracy (Temple University Press, 2010). The book explores how the simple act of talking about politics and current events with friends, colleagues, and relatives causes us to become more civically active. Klofstad contends that social context plays a central role in maintaining the strength of democracy.



# History

GEORGE H. NASH, PHD '73, is the editor of *Freedom* Betrayed: Herbert Hoover's Secret History of the Second World War and Its Aftermath (Hoover Institution Press, 2011). Although President Hoover completed this history, which he called his Magnum Opus, more than fifty years ago, it had never before been published or made available for research until now. Nash, an independent historian and lecturer, is the author of several books about Herbert Hoover.

# Landscape Architecture

ALLAN W. SHEARER, MLA '94, PhD '03, received the

2012 Excellence in Research and Creative Works Award from the Council of Educators in Landscape Architecture. His recent work includes a study funded by the Department of Defense that examines alternative development patterns for the region of Yuma, Arizona, and the possible implications on military training and testing operations. He is on the faculty of the University of Texas at Austin.

# Romance Languages and Literatures

GENE H. BELL-VILLADA. РнD '74, recently edited a book, Writing Out of Limbo: International Childhoods, Global Nomads, and Third Culture Kids (Cambridge Scholars Publishing, December 2011). It contains thirty essays and a poem, all of which treat the experience of being raised outside of one's passport country, and the ways in which it affects one's development. The articles are a mix of theoretical formulations, personal essays, academic studies, and cultural reflections. Bell-Villada is a professor of romance languages and literatures at Williams College.

# **Social Policy**

JENNIFER SYKES, PHD
'11, recently joined the
faculty of the Sociology
Department at Oregon State
University as assistant professor. Sykes has published
research related to child
and family welfare and is
examining the impacts of
tax policy on parenting.

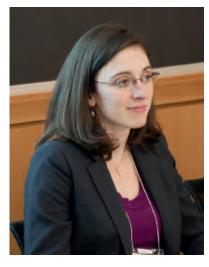


# The Q Dynasty

When GRAZYNA JASIENSKA saw her son Adam presented with a Certificate of Distinction in Teaching from the Derek Bok Center in April, she could have been forgiven for being slightly less impressed than the average mother. After all, she earned the very same award when she was a PhD student at Harvard — and so did her husband, Adam's father MICHAL JASIENSKI.

So when Adam, a third-year PhD student in the history of art and architecture, began teaching sections of HAA 10: The Western Tradition this fall, he carried on the legacy of a Harvard teaching dynasty. "If I got nervous before class, I'd just Skype my parents," Adam says. "They taught me a lot about maintaining a good, friendly, yet professional environment in the classroom. They also taught me to ask a lot of questions, and not to be afraid of silence — you have to let the students do most of the talking."

Adam, a 2008 graduate of the College, was raised in Winthrop House, where his parents served as resident tutors while working toward degrees in biological anthropology. (Michal earned his PhD in 1992, Grazyna in 1996.) The elder Jasienskis have since returned to their native Poland, but Grazyna was able to attend the ceremony because she was in Cambridge to finalize details of her forthcoming book, *The Fragile Genius*, which will be published in January by Harvard University Press. —*Nicholas Nardini* 





Erin Boyd, PhD '11, and Kyle Brown, PhD '09. Photos by Molly Akin

# **VIEW FROM THE FIELD**

The Science Policy Careers Symposium, held on May 2, gave PhD students and postdocs a real-world immersion into a wide range of policy jobs. Panelists, several of whom were GSAS alums, talked about how to transition from research to policy and about day-to-day issues in science, health, education, and environmental policy. Panelists included Erin Boyd, PhD '11, physics, the 2011–2012 AAAS Congressional Science Policy Fellow of the American Physical Society; and Kyle Brown, PhD '09, organismic and evolutionary biology, a legislative assistant advising Sen. Frank Lautenberg on a wide range of health and education issues.

The Graduate School Alumni Association partnered with the FAS Office of Career Services to present the second annual Leveraging Your PhD in the Workplace on April 20. Designed to highlight career options and job-seeking strategies beyond academia, the event drew a large crowd to Dudley House as current students hoped to crib pointers from 2012 GSAS graduates who successfully found jobs this year. The crowd also heard from GSAS alumni, who returned to talk about the twists and turns of their journeys from their PhDs into professional jobs outside the academy.

Howard Wu and Vicky Zhou, who both graduated this May, landed jobs with consulting firms that valued their analytical skills and backgrounds in bioengineering and biomedical sciences, respectively. *Photo by Risa Kawai* 

## A MILESTONE MOMENT

At Alumni Day in April, four attendees who were celebrating the 25th or 50th anniversaries of their GSAS degrees received engraved silver bowls as tokens of congratulations from the Graduate School Alumni Association. The bowls, presented by interim GSAS Dean Richard Tarrant, went to (from left) Elisabeth Langby, MPP '84, PhD '87, government; Lisette Cooper, PhD '87, earth and planetary sciences; Webster Howard, PhD '62, physics; and Rohit Parikh, AB '57, PhD '62, mathematics.







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and by publishing
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### Contact

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### Colloquy on the Web

Access current and back issues of Colloquy, as well as a range of other alumni services and information, at www.gsas. harvard.edu/alumni.

## Letters to the Editor

Colloquy does not print letters, but we welcome your feedback and story ideas. Write to: Colloquy, Harvard University Graduate School of Arts and Sciences, Holyoke Center 350, 1350 Massachusetts Avenue, Cambridge, MA 02138-3846; or e-mail gsaa@fas.harvard.edu.

### Moving

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Elias J. Corey, winner of the 1990 Nobel Prize in Chemistry and Sheldon Emery Professor of Organic Chemistry Emeritus, talks with graduate alumni at Loeb House during a reunion of the Department of Chemistry and Chemical Biology. The event featured leading scientists who discussed promising research developments and industry trends.

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# I Choose Harvard...

"World-class research is what drew me to Harvard — and the generous support that the University provides has allowed me to focus on that without worry," says PhD student Elisabeth "Libby" Hennessy.

Instead of finding part-time work or fretting about tuition bills, Libby can focus exclusively on conducting leading-edge research in a Harvard inorganic chemistry lab.

As the daughter of a chemical engineer, Libby has always had "science in her blood." Today, she is the recipient of a Department of Energy Fellowship and part of a research team that explores the use of iron as a mediator to conduct complex reactions.

"A lot of chemistry has been developed using expensive metals. The cool thing about iron is that it is an Earth-abundant, cheap metal," she explains. "At the lab, we're trying to harness the inexpensive catalysts to do difficult transformations."

One possible application of her research is to convert methane gas to the easier-to-transport methanol in a more cost-effective way and, potentially, to create products for the pharmaceutical industry using iron as a catalyst.

Libby has enjoyed being part of this groundbreaking research project from its early stages. And through a fellowship that includes full tuition and a research allowance to cover the cost of lab equipment and other supplies, she's able to concentrate fully on her studies.

"I'm grateful that Harvard treats its graduate students so well by providing fellowships and stipends to cover living expenses," Libby says. "There's simply no time to have another job. My research is my full-time job."

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ELISABETH HENNESSY
PHD candidate

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