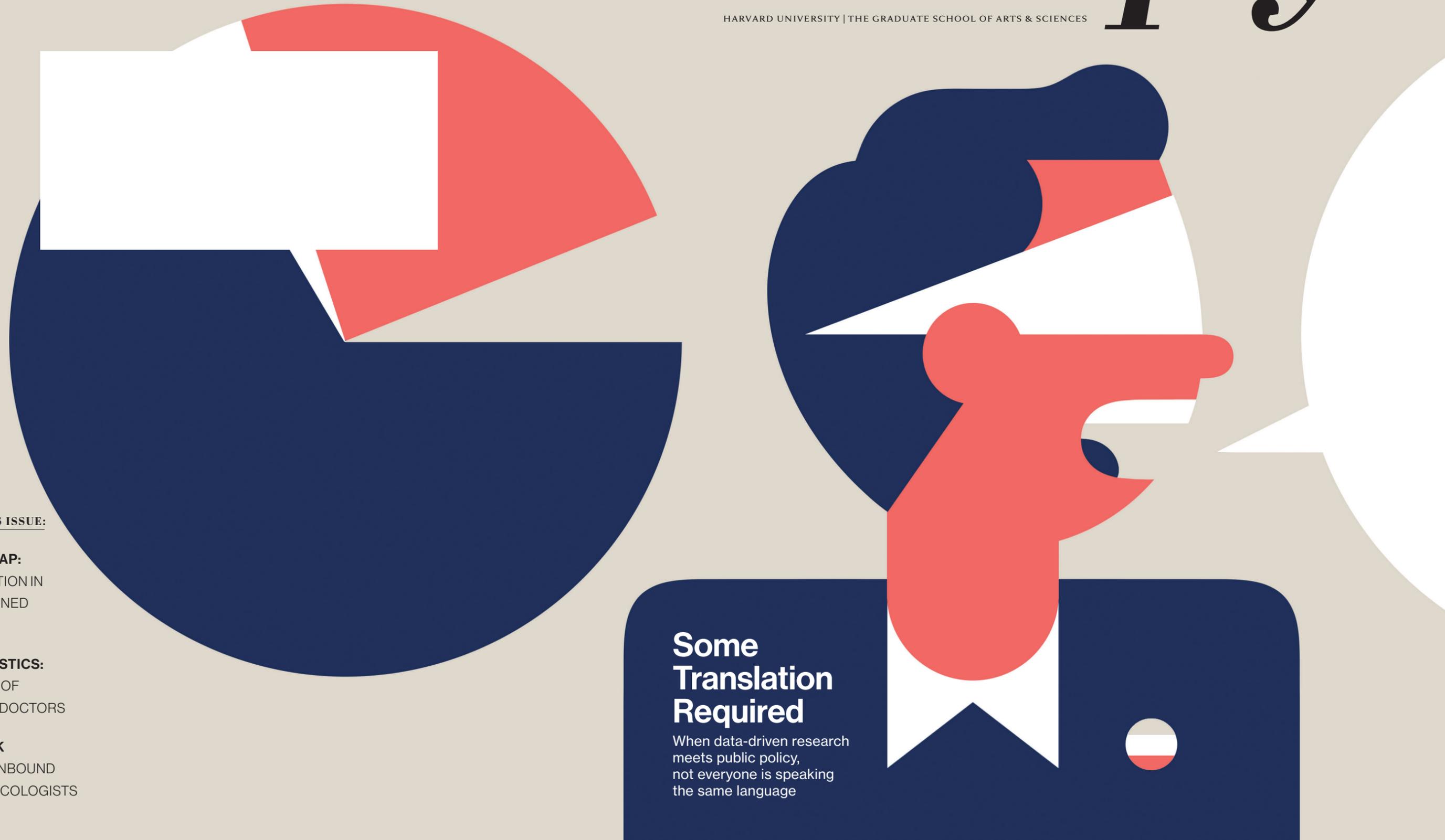




**HARVARD UNIVERSITY**  
The Graduate School of Arts and Sciences  
GRADUATE SCHOOL ALUMNI ASSOCIATION  
1350 Massachusetts Avenue, Suite 350  
Cambridge, MA, 02138-3846 USA

# colloquy

HARVARD UNIVERSITY | THE GRADUATE SCHOOL OF ARTS & SCIENCES



ALSO IN THIS ISSUE:

**MIND THE GAP:**  
COMPENSATION IN  
WOMEN-OWNED  
COMPANIES

**VITAL STATISTICS:**  
THE IMPACT OF  
IMMIGRANT DOCTORS

**FIELD WORK**  
**REMIXED:** UNBOUND  
ETHNOMUSICOLOGISTS

## Some Translation Required

When data-driven research meets public policy, not everyone is speaking the same language



to note

# Expand Your Network

**CERTIFY YOUR HIGH ACADEMIC ACHIEVEMENTS** and join the ancient and universal company of scholars by adding the new Harvard University Graduate School of Arts and Sciences page to the education section of your LinkedIn profile. Stay connected with Harvard, interact with other GSAS alumni, and discover what your peers are doing.

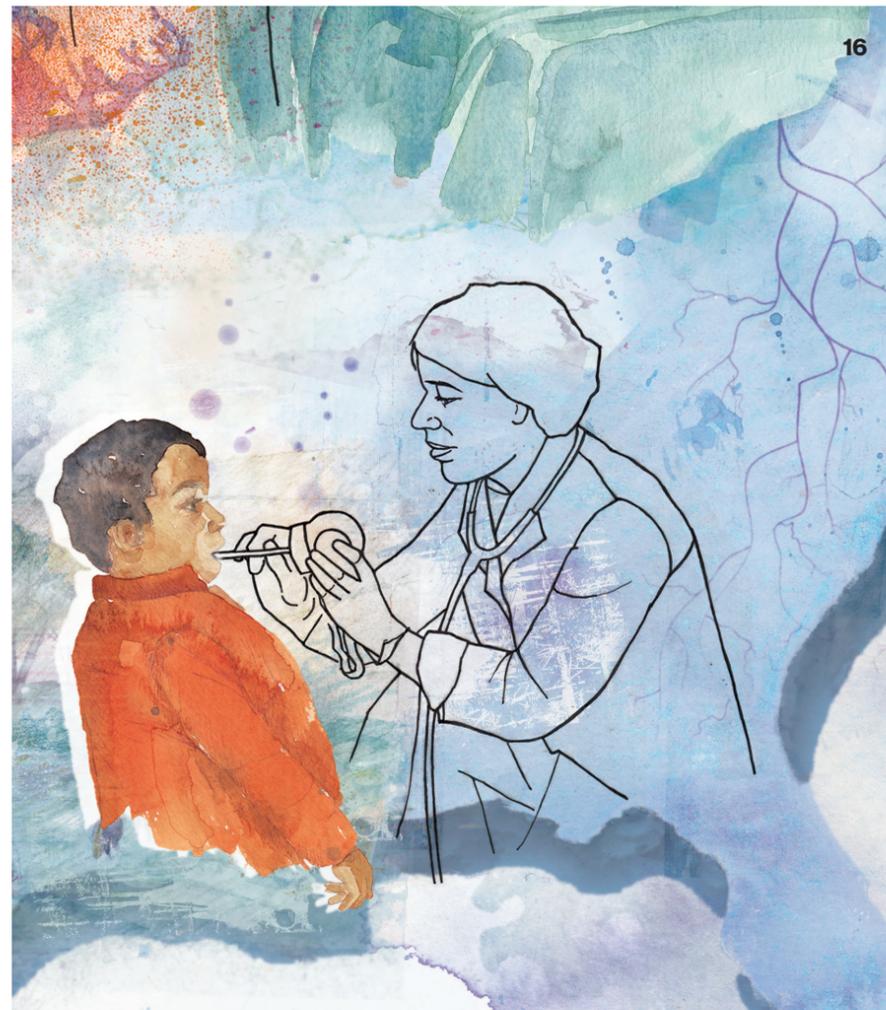
••• Add GSAS to your LinkedIn profile by visiting [linkedin.com/school/harvardgsas](https://www.linkedin.com/school/harvardgsas).

PHOTOGRAPHER: CHRISTOPHER HARTING

# colloquy

WINTER 2018

- 10** **Some Translation Required**  
When data-driven research meets public policy
- 16** **Vital Statistics**  
Measuring the impact of immigrant doctors
- 22** **Field Work: Remixed**  
The new ethnomusicologists



COVER ARTIST: ANGUS GREIG



- 4** **Talking Points**  
Alumni Day, new student benefits, V-J Day
- 6** **Noteworthy**  
Natural selection in action, Canary Islanders in Louisiana
- 8** **Conversation**  
Linda Bell, PhD '86, on the gender pay gap
- 26** **Reading List**  
Recent publications by alumni authors
- 28** **Valediction**  
The "new" Perkins Hall



**AS A SCHOLAR** of the Roman Empire, I'm often asked what the point is in studying a long-dead society so remote from our own. This question often comes from parents whose child has expressed an interest in studying Rome, or philosophy, or some other humanities field: "What will she do with that?" they ask. I understand and appreciate their concern, but, as a humanist myself, and an advisor of several generations of humanists now in the workplace, I have abundant evidence of the importance and usefulness of study in the humanities. Not just for its own sake, but because the humanities are an incredible complement to any field.

I greatly admire the applied sciences and engineering, for example, for their excellence at creating and improving systems, at responding to problems. Training in the humanities complements such fields, offering exposure to the kind of intellectual risk-taking that begins with the question "What if?" which is good for considering novel ideas. Those in more technical fields may work on a device shaped like a box, but a humanist asks WHY is it shaped like a box? Does it have to be shaped like a box? Should it be shaped like a box? Such scrutiny goes beyond solution, it asks whether the right problem is being addressed, or if the problem being considered exists to begin with.

Right now, the humanities are an even more pressing necessity because they enable us to look with empathy at other ways of thinking and doing, to take that leap of logic that helps us understand how people so different from us can get from point A to point B. We are better equipped to apply the humanities to our lives and work because they provide a set of alternate possibilities that can stop us from being too fixed on one path or falling prey to polarization.

But more than that, studying the humanities gives us insight into and understanding of the human condition, its possibilities and limitations, and the big questions of civics and ethics with which we grapple every day.

—EMMA DENCH  
INTERIM DEAN

—EMMA DENCH  
INTERIM DEAN

## colloquy WINTER 2018

**Emma Dench** interim dean  
**Jon Pettitt** director of alumni relations and events  
**Ann Hall** editor  
**James Clyde Sellman**, PhD '93, alumni books editor  
**Christina Tucker** alumni notes editor  
**2COMMUNIQUE** creative direction & design

*Colloquy* is published two times a year by the Graduate School Alumni Association (GSAA). Governed by its Alumni Council, the GSAA represents and advances the interests of alumni of the Graduate School of Arts and Sciences through alumni events and publications.

**CONTACT**  
The Graduate School Alumni Association  
1350 Massachusetts Avenue, Suite 350  
Cambridge, MA 02138-3846  
617-495-5591, gsaa@fas.harvard.edu  
gsas.harvard.edu/alumni

Access current and back issues of *Colloquy*, as well as a range of other alumni services and information, at [gsas.harvard.edu/alumni](http://gsas.harvard.edu/alumni).

### LETTERS TO THE EDITOR

We welcome your feedback and ideas. Write to: *Colloquy*, Harvard University Graduate School of Arts and Sciences, 1350 Massachusetts Avenue, Suite 350, Cambridge, MA 02138-3846; or e-mail [gsaa@fas.harvard.edu](mailto:gsaa@fas.harvard.edu).

**GRADUATE SCHOOL ALUMNI ASSOCIATION (GSAA) COUNCIL**  
**Alexandra Amati-Camperi**, PhD '95, music  
**G. "Anand" Anandalingam**, PhD '81, applied sciences  
**Reinier Beeuwkes**, COL '62, PhD '70, medical sciences  
**Lisette Cooper**, PhD '84, geology  
**Mia de Kuijper**, MPA '83, PhD '83, economics; chair  
**Stacy Dick**, AB '78, PhD '83, business economics  
**A. Barr Dolan**, AM '74, applied sciences  
**Richard Ekman**, AB '66, PhD '72, history of American civilization  
**Yonatan Eyal**, PhD '05, history  
**John C. C. Fan**, SM '67, PhD '72, applied sciences  
**Kenneth Froewiss**, AB '67, PhD '77, economics  
**Homer Hagedorn**, PhD '55, history  
**R. Stanton Hales**, PhD '70, mathematics  
**LaVaughn Henry**, PhD '91, economics  
**Fiona Hill**, AM '91, regional studies-USSR, PhD '98, history  
**Karen J. Hladik**, PhD '84, business economics  
**Daniel R. Johnson**, AM '82, regional studies-East Asia, GSA '85, business economics  
**Gopal Kadagathur**, PhD '69, applied sciences  
**Gyuri Karady**, PhD '80, applied sciences  
**Imad Kordab**, PhD '09, applied mathematics  
**Felipe Larrain**, PhD '85, economics  
**Jill Levenson**, PhD '67, English and American literature and language  
**Edlyn Levine**, PhD '16, applied physics  
**See-Yan Lin**, MPA '70, PhD '77, economics  
**Jean Liu**, SM '02, computer science  
**Abraham Lowenthal**, AB '61, MPA '64, PhD '71, government  
**Suzanne Folds McCullagh**, PhD '81, fine arts  
**John J. Moon**, AB '89, PhD '94, business economics  
**Sandra O. Moose**, PhD '68, economics  
**Betsy M. Ohlsson-Wilhelm**, AB '63, PhD '69, medical sciences  
**Maury Peiperl**, MBA '86, PhD '94, organizational behavior  
**Nancy Ramage**, PhD '69, classical archaeology  
**John E. Rielly**, PhD '61, government  
**David Staines**, PhD '73, English and American literature and language  
**Marianne Steiner**, MEng '78, SM '78, applied mathematics  
**Dennis E. Vaccaro**, PhD '78, medical sciences  
**Cammi Valdez**, PhD '14, medical sciences  
**Donald van Deventer**, PhD '77, business economics  
**Nancy Wilker**, PhD '97, medical sciences  
**Jin Cheng (George) Ye**, PhD '14, applied sciences  
**Sean Yu**, SM '95, engineering sciences, AM '03, urban planning  
**Gustavus Zimmerman**, PhD '80, physics

**Moving?** Please e-mail your new address to [ads@harvard.edu](mailto:ads@harvard.edu) or send your *Colloquy* mailing label and your new address to Alumni & Development Services, 124 Mount Auburn Street, 4th Floor, Cambridge, MA 02138-3654.

*Colloquy* is printed by PrintResource/DS Graphics.



PHOTOGRAPHER: KATHLEEN DOOHER

### LETTERS

The article in the Summer 2017 issue of *Colloquy* about data privacy seems slanted. The researchers are seeking to restrict big data, but don't give the argument for not restricting it so it can be used in epidemiology, for medical purposes, environmental issues, and social justice issues, including arrests and consequences. Aggregating huge amounts of data can be carried out with individuals' anonymity protected, although there should also be means of contacting individuals, with their permission, not only to obtain more information but, crucially, to provide information that may help them, and even save lives.

—ALICE BECK KEHOE, PHD '64, ANTHROPOLOGY

It seems likely that the author and contributors to "Reflecting the Past, Reflecting the Present" in the Summer 2017 issue of *Colloquy* are familiar with comments by G. M. Trevelyan on the usefulness of historical inquiry despite its uncertainty.

—BOB GARNER, GSA '64, GOVERNMENT

### REMARKS

What is your most vivid memory from your first year of graduate school? —COLLOQUY, SPRING 2017

The most vivid memory from my first year of graduate school at Harvard is of an insight that hit me while walking through the Yard on my way back to the Littauer Center where I was participating in a yearlong seminar in land use and conservation. That insight told me that Harvard was the first place I had been in my 27 years where there were no limits on what was expected of one.

My education had begun in a small Midwestern town and had culminated in two degrees at one of the better land-grant colleges where I also held a faculty position at the time. My first experiences with the Harvard faculty made me aware that up to

this point I had been aware of subtle and not so subtle penalties imposed on anyone standing too far above the academic average.

By now I have two Harvard degrees and a productive career behind me. I have taught in some first rate colleges and universities, served as a senior executive in the federal government and have worked in a half dozen African countries. All in all, some of the most satisfying and enjoyable years of my life were spent at Harvard, and I have collected the benefits of those years ever since. I am fortunate indeed that Harvard and I discovered each other.

—R. K. DAVIS, PHD '63, ECONOMICS



### ENGAGE

What is your favorite memory of field research?

●●● Share your story with us! E-mail [gsaa@fas.harvard.edu](mailto:gsaa@fas.harvard.edu). Or write *Colloquy*, Graduate School of Arts and Sciences, Harvard University, 1350 Massachusetts Avenue, Suite 350, Cambridge, MA 02138-3846.

ILLUSTRATOR: ERIC HANSON



Marv Levy in Washington, DC

**REMEMBERING V-J DAY**

In September 2017, Marv Levy, AM '51 in history, delivered the keynote address for the annual V-J Day ceremony at the World War II Memorial in Washington, DC. During his remarks, he said: "And even now, with the passage of all these years since that halcyon day in September of 1945, when most of you in this audience and throughout our nation were not yet born, we remain aware of what an impact this day has on the proud history of our country."

For nearly 50 years, Levy coached football beginning at his undergraduate alma mater Coe College. After several other collegiate coaching jobs, he joined the NFL as a special teams coach for the Philadelphia Eagles and eventually took the Buffalo Bills to four consecutive Super Bowls. Since his retirement from the game, he has written several books of fiction, nonfiction, and poetry, most recently publishing a children's book titled *Go Cubs Go*, a celebration of the Chicago Cubs first World Series win in 108 years.

**TRACKING DISEASE**

Shihao Yang, a PhD student in the Department of Statistics, is lead author on a paper in *PLOS Computational Biology* that reports how studying Google search terms can predict outbreaks of dengue, a mosquito-borne disease that affects a large percentage of the world's population. The article notes: "The global spread of the internet has opened up the opportunity to investigate whether users' activity patterns on internet search-engines and social media platforms may lead to reasonable estimates of dengue infection levels." Yang and his coauthors were able to confirm that coupling historical dengue outbreak information with dengue-related Google search data can estimate near real-time dengue activity better than methodologies used in the past.



**MORE SUPPORT FOR FAMILIES**

In fall 2017, GSAS launched a new program to provide PhD students with free Care.com premium membership and subsidized access to back up care for children and adult family members. This new benefit came about after a member of the executive board of the Graduate Student Council asked GSAS to investigate the feasibility of providing Care.com access to graduate students.



**ALUMNI DAY SAVE-THE-DATE**

Join hundreds of your fellow alumni in Cambridge at Alumni Day, April 14, 2018! With keynote speaker, Michael Puett, Walter C. Klein Professor of Chinese History and Anthropology.

Puett is the coauthor, with GSAS alumna Christine Gross-Loh, PhD '01 in East Asian languages and civilizations, of *The Path: What Chinese Philosophers Can Teach Us about the Good Life*. The book is based on his popular course on classical Chinese philosophy that introduced undergraduates to how ancient ideas can guide them on the path to a good life today.

●●● Learn more about Alumni Day and registration at [gsas.harvard.edu/events/alumni-day-2018](https://gsas.harvard.edu/events/alumni-day-2018)

ILLUSTRATOR: KEN ORVIDAS, PHOTOGRAPHER: KRIS QUA (TIKU MAJUMDER)

**ALUMNI UPDATES**



**Jean Berko Gleason, PhD '58**, linguistics and social psychology, was awarded the Roger Brown Award at the 14th International Congress of the International Association for the Study of Child Language, held in Lyon, France. Established in 2011, the Roger Brown Award celebrates outstanding contributions to the international child language community. Gleason is a professor emerita in the Department of Psychological and Brain Sciences at Boston University.



**Edward S. Grew, PhD '71**, geology, has been elected as a Foreign Honorary Member of the Russian Mineralogical Society (RMS), the 18th Honorary Member from the United States since 1817. As the oldest national mineralogical society in the world, the RMS is incredibly selective in designating this honor. The honor recognizes Grew's many contributions to the field of mineralogy and his longstanding partnerships with Russian mineralogists.



**Michael McNally, PhD '96**, study of religion, was recently appointed to the John M. and Elizabeth W. Musser Professor of Religious Studies at Carleton College. The chair was established in 1997 to spread the Musser's support of religious studies and the breadth of liberal arts education at Carleton. McNally studies American culture and Native American religious traditions, and has held fellowships from the National Endowment for the Humanities and the John Simon Guggenheim Memorial Foundation.

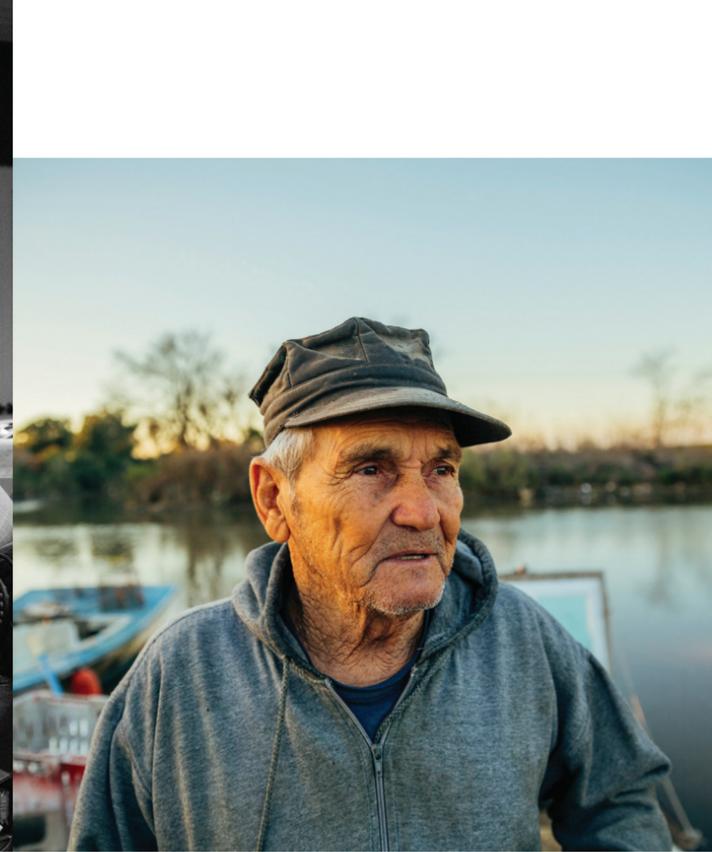


Williams College has named **Protik (Tiku) Majumder, PhD '89**, physics, as their interim president, while the search for a new president is underway. Majumder is the Barclay Jermain Professor of Natural Philosophy at Williams, where he has taught since 1994. This year, the American Physical Society awarded Majumder the 2017 Prize for a Faculty Member for Research in an Undergraduate Institution, citing his contributions to the measurement of atomic properties and inspirational mentorship of undergraduate researchers.



**"I felt in order to write about the impact of literature on the world, I couldn't just sit in my armchair. Travel...made me realize how much we experience the world through stories."**

— MARTIN PUCHNER, PHD '98 IN COMPARATIVE LITERATURE, ABOUT WRITING HIS NEW BOOK, *THE WRITTEN WORLD: THE POWER OF STORIES TO SHAPE PEOPLE, HISTORY, CIVILIZATION*. PUCHNER IS THE BYRON AND ANITA WIEN PROFESSOR OF DRAMA AND OF ENGLISH AND COMPARATIVE LITERATURE AT HARVARD UNIVERSITY.



# A Chilling Discovery

HOW AN UNUSUAL WEATHER EVENT LED TO A BREAKTHROUGH IN RAPID NATURAL SELECTION

THE EXTREME “POLAR VORTEX” winter of 2013–2014 did more than set records across the United States; it created conditions for Shane Campbell-Staton, PhD '15, then a GSAS student, to explore something rarely observed by biologists: natural selection in action.

Campbell-Staton was investigating the genetics of cold tolerance using green anoles, a type of lizard whose range extends from the Caribbean and Central and South America to areas in the Southern US. After spending six weeks gathering green anoles from the Mexican border into Oklahoma, an area covering much of the species' variation in cold tolerance, he thought he was close to finishing his degree.

But then an anomaly occurred in the polar vortex, a system of low pressure that traps the Arctic's bitter cold over the pole. A weakening in the vortex allowed that chill to spill out, causing conditions in the South that made headlines. When one newscast showed a green anole dead in the snow, Campbell-Staton realized that he could study surviving anoles and determine whether they now had a greater ability to stand

the cold. On collecting trips in April and July 2014, he found a strong shift in cold tolerance in the two southernmost populations and later used genomic techniques to document changes in gene expression: The southernmost lizards now had patterns that more closely mirrored northern populations.

“Survivors of the storm [at the southernmost site] seem to have expression profiles more similar to animals that naturally occur farther north,” says Campbell-Staton, now a postdoctoral fellow at the University of Illinois and the University of Montana who will start as an assistant professor at UCLA this year. “It was very exciting to me because it's not something we've been able to document very often.”

*This article is adapted from the Harvard Gazette story “Making the Most of a Dead Lizard in the Snow.” Read it at [news.harvard.edu/gazette/story/2017/08/research-explores-natural-selection-in-action](https://news.harvard.edu/gazette/story/2017/08/research-explores-natural-selection-in-action) and watch Campbell-Staton talk about his results during the Harvard Horizons Symposium at [gsas.harvard.edu/profiles/shane-campbell-stanton](https://gsas.harvard.edu/profiles/shane-campbell-stanton).*

The journal *Science* published Campbell-Staton's results.



Top left: Martín with a Canarian descendant

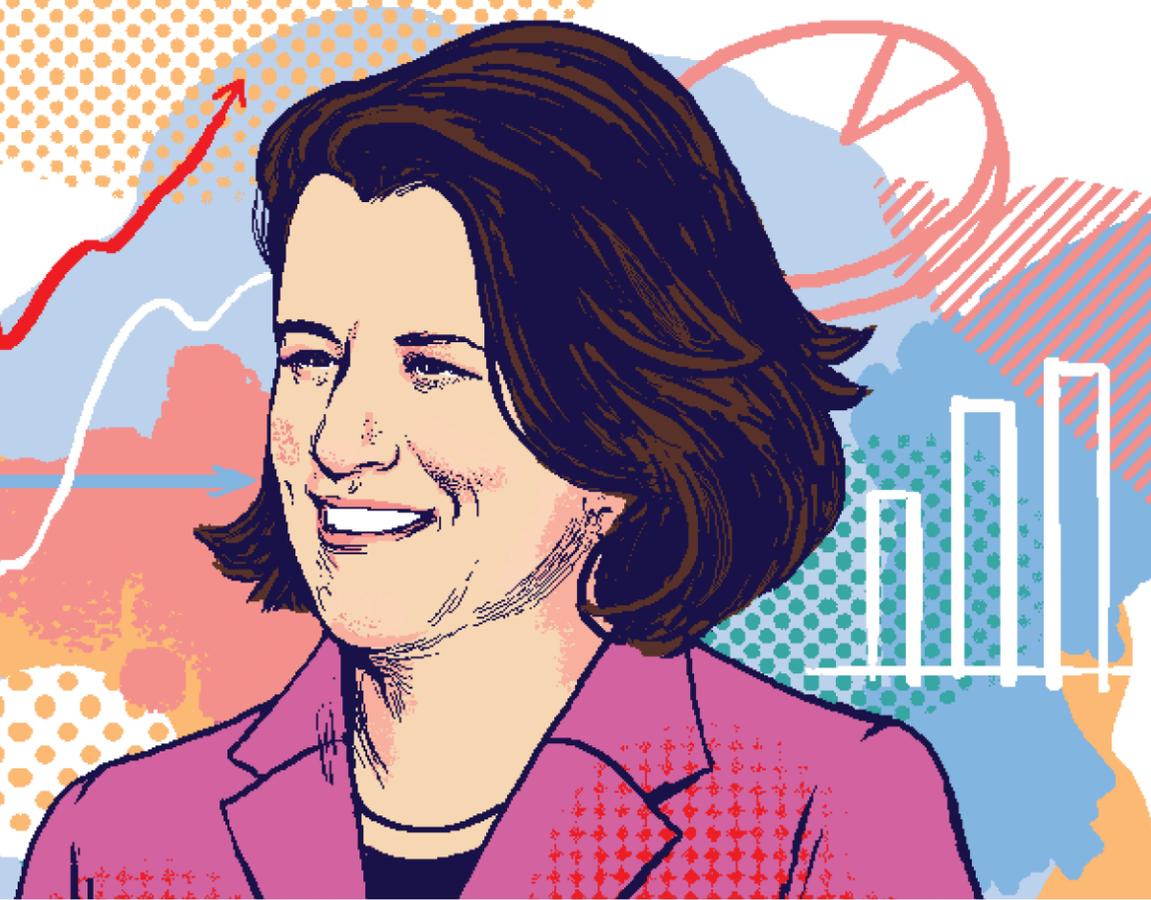
# ECHOES OF THE PAST

Thenesoya V. Martín De la Nuez, a PhD student in Romance languages and literatures, is documenting descendants of Canary Islanders who settled in the bayous of Louisiana in the 18th century. Her CISLANDERUS project, curated with her husband, the documentary photographer and photojournalist Anibal Martel, gives new life to a fading culture. “I wanted to understand how their cultural legacy developed over three centuries,” she says. “I wanted to understand how successive waves of immigration and migration from the Spanish Peninsula and the Caribbean, as well as marriages into the Cajun community, shaped and affected that legacy.”

●●● Read the story at [gsas.harvard.edu/news/stories/echoes-past](https://gsas.harvard.edu/news/stories/echoes-past)



conversation



## “I am drawn to challenges that relate specifically to women.”

—LINDA BELL, PHD '86

# MIND THE GAP

APPLIED LABOR ECONOMIST **LINDA BELL, PHD '86**, DISCOVERED THAT THE GENDER GAP IN PAY SEEN AMONG TOP EXECUTIVES DISAPPEARED IN COMPANIES RUN BY WOMEN. AS PROVOST OF BARNARD COLLEGE, SHE CONTINUES TO DELVE INTO THE REASONS BEHIND THIS FINDING WHILE CONTRIBUTING TO A DIALOGUE ABOUT WOMEN'S EMPOWERMENT.

### Why study economics?

I was young and quite impressionable during the late 1960s, moved by the Vietnam War, the Civil Rights Movement, and the passion of Martin Luther King, Jr. Early on, I knew that I wanted to do applied policy work because I believed that the analytical and technical skills that I would learn would give me the economic reasoning tools necessary to solve real world problems. In addition, I chose to study economics because it was different from what everyone else was doing, plus I was one of few women pursuing it. From the very beginning, I was trained to think in an applied analytical way, and that's been the flavor of my research ever since.

### How did your research on compensation for women come about?

In 1998, my husband Lior and I moved to

California with our sons who were three and six at the time. My husband worked for a venture capital firm in Silicon Valley, and I had an appointment in the economics department at Stanford University.

When I joined Lior at several high-powered conferences in the Silicon Valley, I observed that there were few women speaking or participating. Even though venture capital was a relatively new and fast growing sector, and even though business school and higher education demographics had already shifted in favor of women, I became intrigued that there were so few women leaders. I began to study women leaders in technology firms and, after interviewing top executives in Silicon Valley, decided to conduct a more robust analysis of what discouraged and prevented women from reaching the top of organizations.

### What did you discover?

Through those interviews, it became clear that companies run by women, or in which women have power, function differently. I then decided to access publicly available data on US public companies and update some existing research; I found a persistent and significant gender gap in pay among the top executives in public companies. And I began to think, well, what might explain this and how might these companies be further differentiated? I took a look at companies run by women and characterized as having women CEOs who were also members or the chair of their boards, and I noticed that the gender pay gap disappeared in these companies. I tested the results in a number of ways and updated the data several times, and found the impact and effect to be persistent and strong.

### How do women-led companies operate differently?

What I have in my analysis is two measures of difference—the compensation of top men and women executives and the probability that they will be promoted—as well as the observation that the gender pay and promotion gap differs in companies run by women from that seen in companies run by men. In a world with no discrimination, we would expect top executives to be paid the same regardless of gender once we control for individual and firm-level factors, especially in a data set of top executives in public companies where unmeasured differences are likely to be small. But in fact, my research showed that in the vast majority of public firms, male executives earn more than women, except in the women-led firms, where the gap goes away. This result is important because it goes against common convention about how the labor market should work.

I know that women-led companies produce better outcomes for women executives, but I don't yet know why because I don't have access to the information about what happens inside these companies to really explore this important question.

### Is your next step to determine what makes women-led companies different?

In some ways, my research began small and grew larger in terms of the population of companies I was examining. What I'd like to do as a next step is to go small again so that I can understand what's happening inside those companies run by women and what the dynamics of change are that produce these interesting results.

### Have you applied your research to your work as provost?

I was compelled to come to Barnard as Provost because I felt that much of my professional work had centered on issues relevant to women. Whether I'm looking at workplace policies or dealing with issues of discriminatory difference, I am drawn to challenges that relate specifically to women. I've worked in places that were male-dominated, beginning from when I was one of a few women in my Harvard PhD program, so I was intrigued about coming to an institution as iconic and important as Barnard and contributing to a dialogue about women's empowerment.

I have long believed in the power of women's mentorship to promote and advance the careers of other women, and my research (and that of others) confirms that. And I see it every day at Barnard. Our students realize that there is no limit to what they can achieve—with faculty to guide them, outstanding alumnae who inspire by their example, and administrative leaders with vision and a passion for change. 🌸

### CURRICULUM VITAE

Barnard College  
Provost and Dean  
of the Faculty  
Claire Tow Professor  
of Economics

Harvard University  
PhD in Economics, 1986

University of  
Pennsylvania  
BA in Economics,  
Magna cum Laude,  
University Scholar, 1981



BY ANNA FISHER-PINKERT  
ILLUSTRATION BY ANGUS GREIG

SOME

WHEN DATA-DRIVEN RESEARCH  
MEETS PUBLIC POLICY,  
NOT EVERYONE IS SPEAKING  
THE SAME LANGUAGE

TRANSLATION

REQUIRED

The new age of big data was supposed to make decisions easier, and in some ways it has. Data tells you how much you're going to like a new film on Netflix. Data lets you know when you can stop running on that treadmill. Data helps predict hurricanes, financial markets, and the impact of policies on the health and prosperity of entire nations. But new research indicates that while policymakers may have more data than ever at their fingertips, they may not know how best to use it to make sound decisions.

Asad Liaqat, a PhD candidate in public policy, first saw this in action as a research associate at the Center for Economic Research in Pakistan (CERP).

"Pakistan is very concerned about the population growth rate and contraception," says Liaqat. "You can look at the numbers showing how much access there is to contraception, and say 'OK, access is a problem; if we provide more access then things will figure themselves out.'"

**“In the countries where we work—particularly Pakistan, India, and Indonesia—members of our team have worked alongside government officials so long that they have, in effect, become part of the ‘furniture’ of the ministry.”**

—ASIM KHWAJA, SUMITOMO-FASID PROFESSOR OF INTERNATIONAL FINANCE AND DEVELOPMENT AT HARVARD KENNEDY SCHOOL

Liaquat knew that the data told a more complicated story, and one beyond simple access. Research showed that even in areas with high access to contraception, a power differential between men and women in Pakistani households prevented many families from using, or even talking about, contraception. Despite this finding, many NGOs and policymakers held on to the simple—but wrong—idea that they could solve the problem by increasing access.

“That’s very lazy thinking—but precisely the kind of thinking that happens in the policy world,” says Liaquat.

#### THE COMMUNICATIONS GAP

Asim Khwaja, Sumitomo-FASID Professor of International Finance and Development at Harvard Kennedy School, co-director of Evidence for Policy Design (EPoD), and co-founder of CERP, says that poorer countries, like Pakistan, lack the appropriate infrastructure to translate data into policy that will improve the lives of citizens.

“In rich, Western countries this happens without people even noticing: Governments use large-scale studies to optimize their welfare programs, health ministries use data to anticipate the paths of disease, tax departments use behavioral insights to increase compliance so the government can pay for social programs,” says Khwaja.

As a PhD student, Liaquat wanted to address the gap he’d seen at CERP between the data that scientists had produced and the information that policymakers could easily understand, so he joined research directed by EPoD. Khwaja, Liaquat, and their collaborators set out to learn how bureaucrats use quantitative data to make decisions.

The team surveyed more than 1,500 early and mid-career civil servants in Pakistan and India to assess how they use data. The respondents struggled to analyze quantitative data. When asked

to interpret a 2 x 2 table, their answers were no more accurate than if they had guessed randomly. All civil servants in Pakistan must take a competitive exam to get their first job in civil service, but the exam doesn’t focus on mathematical literacy.

“These people are highly educated, but they’re not necessarily trained in the tools you need to make decisions based on data,” said Liaquat. “Without statistical training, you are more affected by behavioral biases.”

These biases were the next crucial barrier for the civil servants surveyed by EPoD. The bureaucrats were presented with two sets of data, one from a survey with a large sample size, and one with a small sample size. Scientists rely on the law of large numbers: The greater the sample size of an experiment, the more likely it is that the results from that experiment provide an accurate prediction. The civil servants in the EPoD survey believed the data from the large sample size, but they also believed the data from the small sample size almost as much.

Equally worrisome, the civil servants didn’t believe that data applied to their policymaking decisions if it came from districts other than the ones they were making decisions about. In other words, a health department official making decisions about Lahore was less likely to believe data if it had come from a study conducted in Islamabad or Karachi.

“That speaks directly to the way we do development economics,” Liaquat says. “We run very sophisticated experiments in specific areas, and we’ll find other areas that are of interest as well. But this says they don’t believe our large sample size as much as a few stories from their own area.” Half-joking, he adds, “If our objective is to convince policymakers, we should be sending people to collect stories to share with policymakers instead of showing them the data.”

#### BUILDING BRIDGES

Liaquat believes that if academics and policymakers want to work together, they have to step outside their comfort zones and turn their backs on some of their deepest-held biases. Academics also need to engage with policymakers to help them build their capacity for understanding complex, data-driven research.

Khwaja’s work to educate and train bureaucrats in Pakistan through the Building Capacity to Use Research Evidence, or BCURE program, is already following this model. Funded by UK Aid, BCURE is a collaborative program that conducts trainings to help civil servants learn to analyze data. Khwaja is also working to change the way data is presented to civil servants.

“We invest a lot in communications and data visualizations in our countries of focus, because we want to influence the entire policy environment and advance a ‘culture of evidence,’” says Khwaja. “We’re starting to see how government officials there are using the language of data and evidence with each other.”

Liaquat’s research has led him to believe that academics, particularly those working in the developing world, need to establish long-term, mutual relationships with the NGOs and government agencies that rely on their research. “One thing we shouldn’t be doing is producing our research papers and not contributing back.”

Khwaja says that his work in Pakistan has been successful because he and

his team are committed to forging those long-lasting relationships with bureaucrats.

“In the countries where we work—particularly Pakistan, India, and Indonesia—members of our team have worked alongside government officials so long that they have, in effect, become part of the ‘furniture’ of the ministry,” says Khwaja. “That is the way to create change.”

#### A GLOBAL PROBLEM

The gap between data and decision-making is not exclusive to the developing world. Allan Brandt, the Amalie Moses Kass Professor of the History of Medicine, says that in the US, there is an increasing divide between the kind of information put out by academics, and the kind of information that is digestible by the average policymaker.

“When we get to a certain level of quantitative skill in math, it’s very difficult to translate that work into its most important policy and social implications,” says Brandt. “Those of us in universities and colleges have very scrupulous requirements for convincing our immediate colleagues about the importance of our work, and we find ourselves writing for smaller groups of people who think like us. That creates a big problem in terms of communicating the implications of our work to a wider audience.”

If academics wish to reach out to the wider community, then it’s important to

do so in language that they can understand. Liaquat thinks that one way to get past academic jargon is to meld data with a good story.

“When I started working as a CERP research associate, I thought a large part of my job was to write long field notes, very detailed stories of engagement with individuals,” says Liaquat. But the stories didn’t make it into the CERP publications. Liaquat knows that no economic journal will publish an anecdote, but he thinks that there is room for storytelling within the discipline.

Brandt sees the same problem in his own work: “When we dichotomize ‘quantitative and qualitative’ or ‘stories versus numbers,’ we’re really not reflecting the reality of problems.”

“There’s bias against qualitative research because we don’t understand its value,” Liaquat explains. “But it is important not only because it adds to our research, but also because people believe stories.”

No matter how well-versed they are in data science, policymakers are, first and foremost, people. People who might trust a movie reviewer more than a Netflix star rating. People who might trust a trainer to pick their workout routine rather than an app. In a culture flooded with data, human connections stand out. Finding the human story in all those numbers might be the best way to bridge the gap between research and policy. 🍷



# THE LAST PHYSICIST

## IN CONGRESS



*Bill Foster didn't plan on a career in politics. He founded and ran a successful business for several years before returning to his first love: physics. After earning his PhD from Harvard, he started yet another career: as a US Congressman representing the 14th, and later the 11th district of Illinois. Colloquy magazine sat down with Congressman Foster to talk about the intersection of science and politics.*

**CM:** How would you say your background in science influences the way that you make decisions in Congress?

**BF:** I try to start out with facts and logic. That doesn't always provide the complete answer, but it's always the best starting point. Scientists start with all of the known facts, describe their experiments, the results of those experiments, and then at the end come to the conclusion. In politics, it's almost the exact opposite of that. In politics, most people are only interested in the headline. You have to get that out first if you intend to communicate at all.

**CM:** What is the best route to reach the people who are making decisions in our government, particularly at the federal level?

**BF:** Very often the best point of contact are the staff who provide advice to members of Congress on specific technical areas. Unless of course the member of Congress happens to have a PhD in physics!

**CM:** Right! When you were first elected to office, there were several more PhD scientists in Congress.

**BF:** When I first entered office, I was actually the third PhD physicist, but I believe we had a chemist or two. One by one they've all retired, and now I'm the

only PhD scientist, hard scientist, that remains. We have some political scientists and a PhD mathematician.

**CM:** Why are there fewer PhDs in Congress today?

**BF:** Well, I think part of it is the reality of running for office today. You have to change the way you talk in politics. There's a long list of neurons that you have to deaden to turn a scientist's brain into a politician's. It's necessary to repeat your fundamental message again, and again, and again. In the course of a campaign, only a small fraction of the people who might vote for you will get a chance to listen to you, and likely only for a few seconds. And during those few seconds that had better be your fundamental message. For me it was: "I'm Bill Foster, I'm a scientist and a businessman. I'll bring the kind of change we need to Washington, DC." And you say that again and again until it makes you queasy.

**CM:** Whereas as a scientist you want to be saying something novel, and get your message across concisely.

**BF:** Yes, exactly. Like the old joke about a professor who gets a question in class and says, "Well, like I told you last year..."

**CM:** What is it like working in Congress and being a scientist among people who more frequently have a background in law or economics?

**BF:** I often serve as a lightning rod for technical questions, like cybersecurity, or the Iran nuclear deal. If you actually read the text of the Iran nuclear deal it's very technical. There is an entire page devoted to a table of reactor core specifications,

changes the Iranians had to make to their heavy water reactor to make sure it could never be used to make large amounts of weapons-grade plutonium. I was asked to explain these requirements by members on both sides of the aisle.

One of the toughest things is explaining scientific uncertainty to people who are not trained to think in probabilistic terms. When you're talking about issues like climate change, where there is some statistical uncertainty around the exact fraction of climate change that can be attributed to manmade activities, people looking for quick answers say, "Oh, therefore you don't know anything at all." And that's not the case.

I think you have to be careful to separate things that are scientifically knowable, and things that are judgment calls. There is no scientific answer to the question of how you weigh the positive or negative effects of any policy change.

**CM:** Do you hope that more and more scientists come into Congress?

**BF:** I've spent a lot of my time trying to recruit scientists to get into this business. It

is, to my mind, a very high-payoff activity. Not only would I like to recruit scientists, but engineers. A theoretical physicist can explore speculative universes that may or may not exist. Engineers have to build bridges that don't fall down in the real world. That's a very useful skill.

**CM:** Anger and emotion seem very central to the political sphere right now. What is the way forward for someone who is driven by logical thinking?

**BF:** I have come to appreciate that there is a big difference between my two careers. If you're a scientist and you stand up and say something that you know is not true, it is pretty much a career-ending thing. It used to be that way in politics. But apparently, not anymore. It's been hard for me to understand that there's a big difference between a scientific fact, and a historical fact, and a political fact. If you look at the stock market, household net worth, even the rate of layoffs that were going on after the 2008 economic crisis—they all just turned on a dime when we passed the stimulus. Republicans were able to establish the political fact that the stimu-

lus failed by repeating that message over and over again. It's disconnected from economic reality, but I have to accept it as a political fact. It's one of the challenges of this business.

**CM:** Are you concerned that if political facts differ so radically from scientific facts, then that's driving an increase in skepticism about science?

**BF:** You see a very deliberate attempt to discredit science, for example among climate change deniers. It's similar to the deliberate attempt to discredit newspapers and the so-called mainstream reporting that America used to depend on. It's very destructive.

**CM:** If you could send a message to your colleagues in the scientific community, what would it be?

**BF:** Get involved with the public. Volunteer at a science fair, serve in elected office. It's equally valuable to have a PhD scientist on a school board or city council or serving as a local mayor as it is to have one serving in the US Congress or the Senate. 🍀

**“Scientists start with all of the known facts, describe their experiments, the results of those experiments, and then at the end come to the conclusion. In politics, it's almost the exact opposite of that. In politics, most people are only interested in the headline. You have to get that out first if you intend to communicate at all.”**

—BILL FOSTER, PHD '83, ILLINOIS CONGRESSMAN

# Vital Statistics



**How Immigrant Doctors Contribute  
to Health Care in the United States**

BY ANN HALL ILLUSTRATION BY JANICE KUN



As a child, Mitra Akhtari and her family immigrated to the United States. Back in Iran, her mother had practiced medicine, but in the US, she needed to pass three board exams and complete a residency before she could continue her career. Akhtari remembers her mother working hard to relearn in English the principles of biochemistry, a subject she hadn't studied since medical school, and to save the money necessary to take the tests. "It took her eight years to be matched into a residency," recalls Akhtari, who graduated in 2017 with a PhD in economics. "Now she's a practicing child psychiatrist in El Paso, Texas."

Akhtari's mother is among the approximately 25 percent of doctors in the United States categorized as international medical graduates (IMGs). IMGs come to the US from all over the world, often on J-1 visas. They are able to remain in the country if they participate in the government's Conrad 30 program, which waives the return to home country requirement in exchange for a three-year commitment to serve populations in medically underserved areas. El Paso is considered one of these areas.

When newly inaugurated President Donald Trump released an executive order targeting the emigration of individuals from certain countries, including Iran, Akhtari knew from personal experience that the resulting ban could have an unintended consequence—one that would increase barriers to health care access for the country's most vulnerable populations.

### ASSEMBLING A TEAM

A number of graduate students in economics from Harvard and MIT met after the 2016 presidential election to discuss how they could effect change at a national level. In addition to attending local rallies and protests, they began to consider how, as economists, they could add context to the ongoing debate. "We know how to work with data, we know how to look for data sources," recalls Akhtari. "We should use our skills to make a difference."

The students knew that they wanted to work on a relevant and important project, one that would be feasible and utilize available data. After the first executive order on immigration was released, they examined how the policy would impact the sectors immigrants worked in. In part because of Akhtari's experience, they made the decision to focus on immigrant doctors, and the Immigrant Doctors Project was born.

## The Team



**Mitra Akhtari,**  
PhD '17, economics



**Matthew Basilico,**  
MD/PhD candidate  
in economics



**Valentin Bolotnyy,**  
PhD candidate  
in economics



**John Coglianesse,** PhD  
candidate in political  
economy and government



**Peter Ganong,**  
PhD '16, economics



**Otis Reid,** PhD candidate  
in economics, MIT



**Jonathan Roth,** PhD  
candidate in economics



**Adrienne Sabety,**  
PhD candidate in  
health policy



**Heather Sarsons,** PhD  
candidate in economics



**Michael Stepaner,**  
PhD candidate in  
economics, MIT

### MAPPING THE DATA

After the group decided on a topic, they needed to find the relevant quantitative information. And that's when team member Jonathan Roth remembered a ready-made data source.

"Jonathan knew I had data from another project I was working on," says Adrienne Sabety, a health economist studying toward a PhD in health policy. The fact that an existing data set could be used for the project was huge. "Data can often take a long time to acquire, but because I already had it, I obtained permission to use it for a new purpose relatively quickly and started analyzing it."

The data came from Doximity, an online networking site for doctors that includes information about where they attended medical school. Focusing on doctors who had received their medical degrees in the countries mentioned in the executive order, they looked at where they worked. The results were

astonishing. More than 7,000 doctors from the targeted countries work in the US, and 94 percent of Americans live in a community with at least one of these doctors.

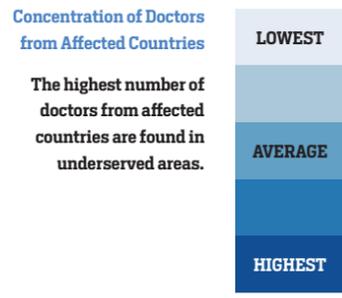
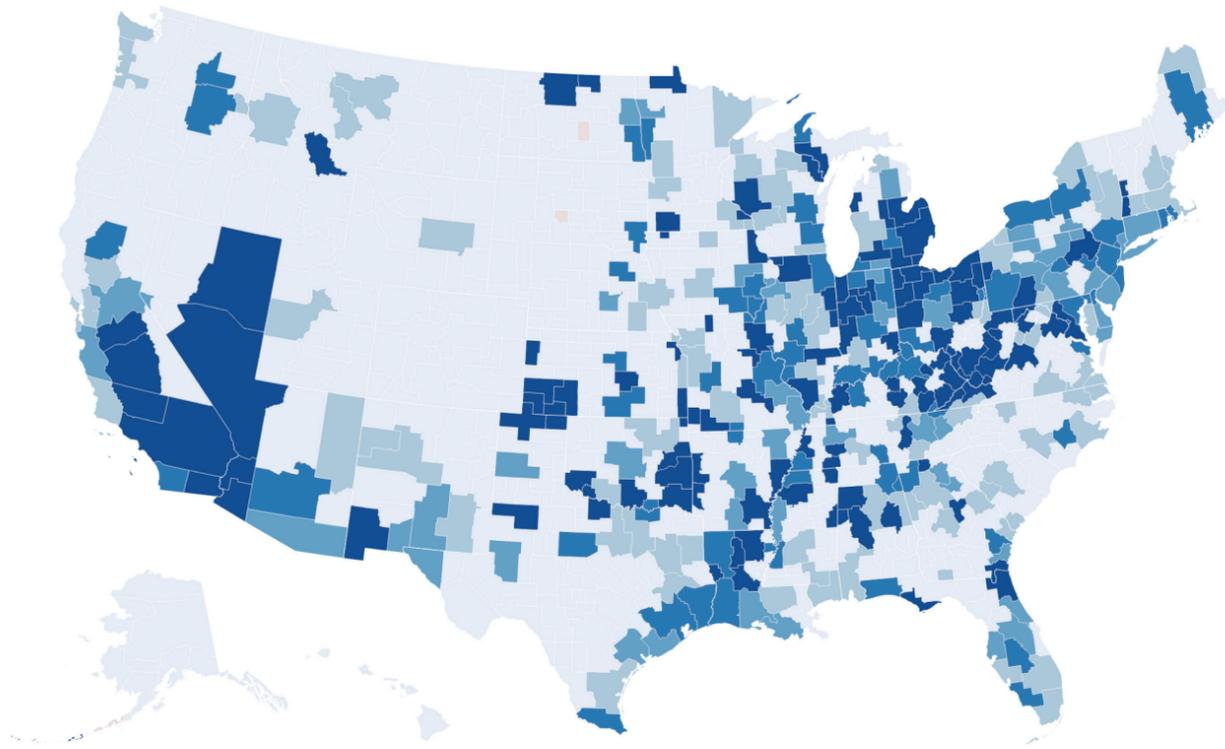
But when a map was created from the data, an even more significant pattern emerged. "We hypothesized that many would be working in rural areas," says Akhtari. "From personal experience, I knew that people like my mother compete with those trained in the US, who are more likely to get a residency match in more urban cities." What they didn't expect, and what the map showed, was that these doctors worked in remote areas and underserved urban areas as well. "We didn't expect the patterns to be this striking," she says.

Taking the data a step further, they theorized that a doctor offering 40 appointments a week would offer 2,000 appointments a year and added that information to the map. The highest

concentrations, shown in dark blue (see page 20), are in the Rust Belt and certain urban areas: Los Angeles, Jacksonville, Florida, West Virginia. For example, in Los Angeles, the more than 500 doctors from banned countries provided more than 1,000,000 patient appointments each year. All told, 14 million appointments could be lost if these doctors were not allowed to practice in the US.

Matthew Basilico, an MD/PhD student in economics, brought his knowledge of the medical system and his training in economics to the project. Through work with Jim Kim, PhD '93, at the World Bank and at other institutions such as Boston Healthcare for the Homeless and Partners in Health, he also was involved in efforts to push health care institutions to be more responsive to the needs of low-income people. He believes that the United States, similarly to poorer regions of the world, suffers from massive health inequalities and injustices.

# The Data



“Poverty, limited resources, and racial and other forms of discrimination determine unequal access to health care in the United States just as they do globally,” he says. “Even though the belief that health care is a right and that every human should have access to health care is a somewhat universal human aspiration, unfortunately, health care inequities remain stark.”

**CHALLENGING PERCEPTIONS**  
To effect the kind of change they hoped for when the project began, they knew they had to add to the conversation about how the policy changes could affect Americans. “What contribution do medical graduates from the affected countries make to the US health care workforce?” asks Basilico. “That is an important question for the public to consider if the

country decides to go forward with these policies.” When word came that a second executive order on immigration was imminent, the team worked against the clock to finalize their results. As the second order was announced, ImmigrantDoctors.org and its Twitter account went live. The team started fielding messages from CNN, *The Boston Globe*, *US News*, and *Time* magazine. While the attention was welcome, the group also wanted coverage in areas most likely to be impacted. “We wanted coverage in areas where immigrants might not be seen as an important part of society,” says Akhtari. “We, of course, welcomed interest by the national press but also wanted our results to appear in local newspapers.” Media from across the country covered the story, from Buffalo, New York, to Los Angeles County, from Utah to North Carolina.

“The fact that we influenced beliefs about how immigrants contribute to society, that was much more powerful for me.”

—MITRA AKHTARI, PHD '17



Akhtari was especially pleased by the engagement on social media, which showed that individuals outside of policy circles were connecting with the topic. “People on Twitter commented ‘I had no idea that these doctors were working in underserved areas, thank you for this analysis’;” she says. “The fact that we influenced beliefs about how immigrants contribute to society, that was much more powerful for me.” The project attracted the attention of the New York Attorney General’s Office, which reached out to ask for assistance in preparing a declaration about the analysis, focusing on the number of doctors in the state, the areas they serve, how many appointments would be lost, and more. After pulling the statistics, Akhtari helped write the brief and the declaration. The group also provided statistics

for the amicus briefs filed by the state of Hawaii seeking a temporary restraining order on the executive orders. While the multiple iterations of the executive orders only seek to restrict immigration from a small number of countries, Basilico has already seen a shift in attitude among the international medical students he works with at Massachusetts General Hospital—many of whom would have moved onto residencies and sometimes careers in the US. “I am concerned that there is already a change in perception about what it is like to train in the United States,” he shares. “I and my colleagues emphasize how welcoming medicine is to individuals who’ve done their initial training in foreign countries; however, I do wonder whether we will see a reduction in interest for training in this country.”

**THE BIG PICTURE**  
In 2016, the Association of Medical Colleges reported that the demand for physicians in the United States was growing faster than the supply and projected a shortfall of between 61,700 and 94,700 physicians by 2025. One of the most vulnerable populations affected by this deficit are people in the Rust Belt, those living in rural and remote areas who have limited access to medical services. The data analyzed by the Immigrant Doctors Project demonstrated how those people, and those in underserved urban areas, could lose what care currently exists. The project also provided an opportunity for a group of students trained in econometrics and in medicine to use their skills to produce a rigorous analysis of a situation with the potential to affect millions of Americans—while contributing to the public conversation about proposed policies. “There’s a reason that we work hard to get the skills we have,” says Basilico. “We believe that one day our efforts can have a positive social impact, and possibly an impact on policy.” Akhtari agrees. “In graduate school, I tried to work on research that was important and that applied to the real world,” she says. “This project was by far the most impactful and relevant thing that I did in graduate school.” Sabety, too, found the opportunity to use data to effect change inspiring. “Working with disadvantaged populations is really important to me; it’s part of my research agenda,” she shares. “The Immigrant Doctors Project is very powerful. The more we can work on real-world issues, the more change we can effect.”

FROM THE LIVING ROOM TO THE CUBAN DRAG SCENE, TODAY'S ETHNOMUSICOLOGISTS SEE NO BORDERS

# FIELD WORK: REMIXED

*Ewedihalew, yene konjo, ewedihalew  
yene fikir fikir fikir, yene fikir fikir fikir*

That lilting verse, though written in Amharic, would be familiar to the millions of American fans of the Canadian Grammy-winning R&B artist The Weeknd. Sung by a female chorus woven into the ending of his hit “The Hills,” The Weeknd (né Abel Makkonen Tesfaye) echoes a song inherited from his Ethiopian grandmother, who raised him. The Weeknd’s music also piques the scholarly interest of Kay Kaufman Shelemay, G. Gordon Watts Professor of Music and professor of African and African American studies at Harvard University, who is a strong voice for the ever-growing timeliness and vast potential of her field, ethnomusicology. For ethnomusicologists like Shelemay, who conducted fieldwork in Ethiopia for decades and now studies the Ethiopian diaspora, this poignant, globally spiced song is part of a vast musical lexicon reflecting the reach of contemporary ethnomusicology.

BY SUSAN SELIGSON  
ILLUSTRATION BY GINA & MATT



## ALL OVER THE MAP

The dictionary definition of ethnomusicology is sparse: The study of the music of different cultures, especially non-Western ones. But that description, and a persistent stereotype that the discipline exists at the margins of music scholarship, is overdue for a dusting-off. With its marriage of both quantitative and qualitative research, it has gained gravitas far beyond its predecessor comparative musicology, the study of indigenous music that gave way to ethnomusicology in the 1950s. According to the Society of Ethnomusicology, the field embraces the study of music in its cultural context, and in that sense the possibilities are limitless. “Ethnomusicologists,” its definition reads, “approach music as a social process in order to understand not only what music is but why it is: what music means to its practitioners and audiences, and how those meanings are conveyed.”

Talk to Shelemay about her current and former graduate students, and it becomes clear that the highly interdisciplinary, far-reaching scholarly pursuits of her students and colleagues are in many ways an examination, through the lens of music, of today’s shrinking, wired world. Roam the seminar rooms of a major conference on ethnomusicology and, yes, one is likely to encounter fascinating scholarly considerations of Bulgaria’s Koprivshitsa Festival or the marginalization of Manganiyar troubadours in Rajasthan. But these days one is just as likely to happen on presentations exploring the digital soundtrack of Grand Theft Auto, air guitar competitions, or the confluence of music, dance, and politics in Cuban drag shows. A sampling of papers published in the last few years by the Society’s *Journal of Ethnomusicology* are, in every sense, all over the map: “Street Queens: New Orleans Brass Bands and the Problem of Intersectionality,” “Violence and Martyrdom in Modern Irish Republican Ballads,”



and “Listening to the World but Hearing Ourselves: Hybridity and Perceptions of Authenticity in World Music.”

“Ethnomusicologists today study everything, everywhere,” says Shelemay, a scholar of a range of cultural migrations. “We do everything from hip-hop to art music, we study music at home and abroad, we study the urban and the rural. We’ve blurred the boundaries between ethnomusicology and disciplines from anthropology to sociology to performance studies, but also increasingly the sciences.” Ethnomusicology, to Shelemay, is a scholarly examination of lives—of life itself—through the lens of music and often dance.

#### FROM THE SACRED HARP TO GUITAR HERO

Globalization and the ubiquity of digital media have transformed the making and consumption of music. And even as many of its researchers fan out to the world’s far-flung corners, there are those, like Kiri M. Miller, PhD ’05, who stay closer to home. Now a professor at Brown University, Miller has published studies of the video game phenomenon Guitar Hero, the base of her rigorous fieldwork confined largely to her living room. A former student of Shelemay, she learned in her Harvard studies that creativity among ethnomusicologists is boundless, as is their desire to cross disciplines beyond the field’s natural connections with anthropology and history. Ethnomusicology now entails an ever-widening range of seemingly unlikely academic bedfellows, interweaving everything from medicine to economics to neuroscience. Musicology was thought “to represent non-Western music and to some extent that’s true,” says Miller. “It’s been representative of diversity and has served to check a box in the curriculum.”

No longer. Who are ethnomusicologists? They are musicians, cultural anthropologists, folklorists, scholars of

## “WHEN YOU STUDY COMMUNITIES, YOU HONOR THEM.”

—KAY KAUFMAN SHELEMAI

dance, performance, social scientists, and those specializing in gender, race, or ethnic studies. Their shared foundation is, as the Society’s website says, to “understand music as a social practice, they explore historical context, and they do fieldwork that often comprises performance and theory as well as traditional observation.”

For Miller, studying video games was a natural progression from her thesis on communities of participatory sacred harp singing. “I was always interested in participatory amateur music-making and that can span a huge gamut, including folk revival and singing practice,” says Miller, author of several books including *Playing Along: Digital Games, YouTube, and Virtual Performance*. “It’s not such a huge gap between that and Guitar Hero. I think that there are these stereotypes, that you have to study something in a faraway location. But at the core, we are studying living people in the practice of music making, and in that sense there’s nothing new about what I do; it’s that media formats have changed,” she explains. “It is somewhat uncommon in the field to do web-based ethnography. But what I do in terms of popular music topics is not very new at all.” Fieldwork is the heart of ethnomusicology, but

Miller’s “field” is a virtual one. “I try to get access to as many different points in the circulation chain, from the designer end to players, audience members, and people posting comments,” she says. “It’s a challenge when there are 100 million people doing those things.” To get what she needs, she posts links to her surveys on player forums and sometimes follows up with online interviews.

She came to Guitar Hero without having ever played conventional guitar. “It gave me a different relationship to the music,” especially the drum and guitar parts in popular music, she says. “It changed the way I listened.” One of the things that might seem counterintuitive to people, says Miller, is how much her Guitar Hero research had in common with her work on singing traditions where participants across the country sing from the same book of songs. Guitar Hero, too, is “a common visceral experience offering a sense of connection, with people that they haven’t met before.”

#### UNEXPECTED PRESERVATION

In recent years, one compelling realm to ethnomusicologists is the political sphere. Civil wars, popular protest movements, forced and voluntary migrations, and ter-

rorism affect and reshape the lives of millions whether in their native countries or among the diaspora. And music, so fundamental to culture and its perpetuation, reflects these pressures, Shelemay notes. “These are tough times,” for music as well as for the people whose lives it pervades. At a recent conference, for example, a keynote lecture focused on the destruction of music in Baghdad. “The dimensions of loss are huge, with archives totally pulverized by our bombs,” says Shelemay. “So not all of our work is celebratory.”

Echoing Miller, Shelemay speaks of ethnomusicology as being about social engagement. “All of our projects run the gamut,” she says. What she calls “salvage ethnomusicology” is not really a goal. “But I must tell you there are moments where most of us find we have preserved something we haven’t set out to preserve, and I surely didn’t do it as preservation.” To illustrate her point, Shelemay describes her work with a Syrian Jewish community in New York that transmits (and keeps alive) Arab musical tradition. “They came from Aleppo, and now Aleppo is gone,” she says. “All of a sudden the music has a whole other dimension that I never considered.”

#### BLURRING THE LINES OF INQUIRY

For Matthew Leslie Santana, whose PhD dissertation in progress is titled “Transformismo: Race, Drag Performance, and Sexual Revolution in Contemporary Cuba,” ethnomusicology enfolds urgent issues of race, politics, and gender identity. Santana arrived in Cuba in May 2017 and will remain there through June. His fieldwork involves interviews with drag performers and audience members, participant observation in queer nightlife, as well as historical research. Santana says he has always been interested in “racial, economic, and sexual justice, and invested in putting these front and center” in his work as an ethnomusicolo-

gist. “After several short preliminary trips to Cuba,” says Santana, “I felt that the drag performance scene was an ideal site within which to consider the questions that were most important to me.”

Santana is a concert violinist and this, he says, also informs his work. “I often feel that the only thing that really connects music scholars is that most of us were at one point or another performers,” he explains. “As a violinist, I am sensitive to and aware of the music of the event, the affective content of the performance, and the utility of a performer’s movements.” And his own performance background helps him empathize with his interlocutors, he says, “when they underscore that for them performance is, in the end, a job.”

Santana meets most of his interview subjects at shows where they are performing, and performers have generally been very open to being interviewed. He is also a participant observer, which means going to shows and having conversations with other audience members. And his research inevitably entails living in Cuba and dealing with, he says, “the usual challenges—shortages, vexing transportation, bureaucracy.” This blurring of lines of inquiry, and focusing on his own experience, is a compelling example of what ethnomusicology means. Unlike disciplines that strain to keep observers at a clinical distance, participation is an important element of ethnomusicological inquiry.

In fact, Santana’s research is as enlightening to Cubans as it is to his fellow scholars at home. “One scene my work focuses on is Cuba’s nascent drag king movement. While drag queen performance is widely practiced in Cuba, and most people I speak to understand what it is, drag king performance is still novel, and many are not aware of its existence,” he shares. “The people at the helm of this movement in Havana are working-class, Afro-descendant, lesbian women, and they have been working hard to over-

come the obstacles preventing them from participating in the art world of drag performance. Their struggles illuminate drag performance as a male-dominated sphere, and they are trying to redress this.”

And, like Miller’s powerful connection to the gamers in online forums and Shelemay’s immersion into immigrant communities, Santana’s work has led him in unexpected directions. Where it leads, he follows: “One recent Friday, my partner and I were getting ready to head to an afternoon performance of two drag king friends who are a couple,” he explains. “Before we could leave, we received a call from one of them telling us that her partner’s father—whom they had been taking care of as he suffered from dementia—had passed away.” Santana and his partner made the long journey to the funeral home to pay their respects. The next morning, he played a short piece on the violin while his friend’s father was buried. “I learned a ton that night and the following morning about Cuban culture around, and state management of, death,” he says. “These kinds of quotidian experiences that fill in the social lives of performers are central to my work.”

#### HONORING COMMUNITY

Though Santana says his project is very much a traditional ethnomusicological one in that he’s spending a year immersed in a culture of performers, what is relatively new for the field is its growing focus on social justice and activism, a central theme in Shelemay’s work as well. “What I love most about my work,” adds Santana, “is the opportunity it gives me to sit and listen to marginalized people who are trying to survive in an unjust global order.”

“When you study communities, you honor them,” says Shelemay. And more and more, that entails studying trauma, environmental destruction, and conflict. “Music,” she says, “opens a window on just about anything you want to study.”

FEATURED REVIEW

# A CONVERSATION WITH NANCY KOEHN



**Nancy F. Koehn, PhD '90, the James E. Robison Chair of Business Administration at Harvard Business School, is a historian who studies effective leadership and how leaders, past and present, craft lives of purpose, worth, and impact. Colloquy magazine sat down with Professor Koehn to discuss her latest book, *Forged in Crisis: The Power of Courageous Leadership in Turbulent Times*.**

**CM: What inspired you to focus on leadership?**

**Nancy Koehn:** I'd studied entrepreneurs for years and realized that their success didn't reflect something unique to the entrepreneurial pursuit, but instead depended ultimately on leadership. Writing a business school case study on Ernest Shackleton particularly catalyzed my thinking. In so many respects, the Antarctic explorer exemplified crisis leadership, and working on this case helped expand my thinking on how crises can shape the person at the center of the storm as well as external events. The origins of *Forged in Crisis* are also intensely personal because my work on the book coincided with a series of calamities in my own life, beginning with the sudden death of my father. At the time, it felt as if all the big building blocks of life were crashing down around me. One night, unable to sleep, I turned to the writings of Abraham Lincoln and thought, "You think you have problems; Lincoln had problems! How did he navigate that perfect storm of national crisis?" That was the genesis of the book.

**CM: How did you decide whom to feature?**

**NK:** I wanted gripping stories that could reach beyond regular readers of history. I also sought individuals who had left a rich record of their emotional experience as leaders. And I wanted to be inclusive, in terms of nationality, race, gender, and overall familiarity. (Lincoln and Frederick Douglass

are quite well-known; Dietrich Bonhoeffer and Rachel Carson, much less so.)

**CM: What would you suggest to help us in distinguishing real leadership?**

**NK:** Leaders come in many shapes and sizes—a librarian keeping the library open longer, parents raising kind, curious, self-respecting children. Leadership styles vary as well. Lincoln found a refuge from tragedy in humor and public performance; Carson was quiet and retiring, uncomfortable in the spotlight. The common thread? True leaders call us to something bigger, stronger, and more decent than we could find our way to on our own. So it makes sense for all of us to ask: Does a presumptive leader inspire people to be better versions of themselves?

Right now, we've been seduced by what I call "leadership bling"—we are looking at fame, wealth, charisma, number of red-carpet appearances or Twitter followers as qualities that are important in the people we elect or follow as leaders. But if we really stop to think about it, we realize that these things don't reflect courageous or honorable leadership. What does? Resilience. Competence. Character, which includes those basic virtues that societies have recognized across time and place for millennia—honesty, compassion, humility, courage, kindness, perseverance, and empathy for others. We need to get more discerning and discriminating about the individuals we entrust with great responsibility.

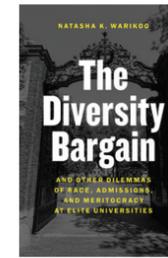
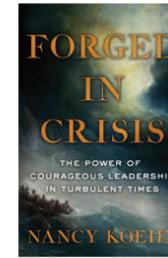
**CM: As for leadership here and now, are you optimistic or pessimistic?**

**NK:** I'm optimistic. In times of crisis, leaders come out of the mist. In 1856, few people outside of Illinois had even heard of Lincoln. Today, I think a new generation of leaders is ready to step onto the stage. We just don't know them yet. Last semester, a number of my second-year business school students came into my office and said, "I want to run for office." In 25 years of teaching at Harvard, that was the first time MBA students had expressed such an interest, and it's a bellwether of things to come.

REVIEWS

***Forged in Crisis: The Power of Courageous Leadership in Turbulent Times*** (Scribner, 2017) focuses on five masters of crisis leadership: British explorer Ernest Shackleton, Abraham Lincoln, Frederick Douglass, German theologian Dietrich Bonhoeffer, and environmentalist Rachel Carson. Each, **Nancy Koehn** (PhD '90, history) maintains, made themselves into courageous individuals in the crucible of unexpected adversity. Shackleton's ship sank late in 1914, but he refused to give up or lose his men. Sailing over 700 miles in a 22-foot lifeboat to seek help, he returned for his men and not one perished. Lincoln faced repeated losses—his mother when he was 9, his only sibling, Sarah, when he was 19, Anne Rutledge (possibly his first love), when he was 26—profoundly deepening his empathy. Carson's *Silent Spring* (1962) sparked the environmental movement, but she wrote knowing that she had metastatic breast cancer and very little time to live. These individuals also remind us that real leadership is self-effacing: Each subordinated personal well-being to larger goals of serving others—goals that demanded empathy, perseverance, and courage.

**Natasha Warikoo** (PhD '05, sociology) explores race- and class-based inequities in admissions to three highly selective universities (Harvard, Brown, and Oxford). Rather than query



administrators about college admission policies, Warikoo probes student perceptions. How do undergraduates make sense of privilege, inequality, and diversity in college life? ***The Diversity Bargain and Other Dilemmas of Race, Admissions, and Meritocracy at Elite Universities*** (University of Chicago Press, 2016), reports that American students make racially insensitive remarks less frequently than their British counterparts. But both groups internalized meritocratic assumptions. Even in conceding that race and class limited access to elite institutions, they still assume that they had been admitted on merit alone. They also embraced a distinctive "diversity bargain." That is, they valued social and racial diversity primarily as a sort of personal enrichment opportunity (a richer educational environment) but discounted the need for more thorough-going steps to address underlying inequities that limit minority access to college education.

***The Unreliable Nation: Hostile Nature and Technological Failure in the Cold War*** (MIT Press, 2017) examines Canadian

scientific research during World War II and the Cold War. **Edward Jones-Imhotep** (PhD '01, history of science) focuses on the ionosphere—an atmospheric layer rich in free electrons that can reflect shortwave radio signals (particularly at higher latitudes). Jones-Imhotep maintains that the ionosphere was the key not just to long-distance radio communication but also to Canada's national identity. He examines a group of researchers led by Frank Davies (1904–81). Beginning as a section within Canadian naval intelligence (1942–46), the group evolved into the Cold War Defense Research Telecommunications Establishment (1950–69), with its work shifting from communications to detecting Russian missiles to satellite research. It also supported Voice of America and BBC propaganda broadcasts. Serving other masters (especially the Americans) stirred the Canadians to work on knitting together their own dispersed inhabitants, particularly through the Canadian Broadcasting Corporation's Northern Service (established in 1958).

***The Purloined Letter*** (Shearsman Books, 2017) is stunning,

luminous, and dark, though not without hope. **Fani Papageorgiou** (AM '98, history of science) employs kaleidoscopic imagery—literary (Flannery O'Connor, D.H. Lawrence, Matthew Arnold), geographic (the English cliffs of Dover, Greece, New York City), personal memories, facts from natural history and archaeology, and cultural boilerplate—that surprisingly resonates ("Objects in mirror are closer than they appear"). She struggles for meaning and recompense, personal, emotional, artistic:

There is no tourniquet,  
cry the seagulls.  
All the king's horses  
and all the king's men  
won't fix the laced bones  
of your spine,  
your derelict heart.  
Connect the dots, we tell them,  
make some sense of all this  
I cannot, I cannot.

Specific phrases return—like a subterranean river or emotional ostinato that challenges the will: "Is the story we tell in our heads the most important one?" "Can one live and write at the same time?" On the evidence here, I would say, absolutely.

••• **Would you like your book considered for inclusion?** Send it to Colloquy, Graduate School of Arts and Sciences, Harvard University, 1350 Massachusetts Avenue, Suite 350, Cambridge, MA 02138. Questions? E-mail [gaa@fas.harvard.edu](mailto:gaa@fas.harvard.edu).



valediction

## Cheerful and Well-Planned

REUNION CELEBRATES PERKINS AND CONANT HALLS

“THE NEW PERKINS HALL IS an enlarged and beautified house of simple outline and stately proportions, and, like Conant, contains most cheerful and well-planned rooms. The shower-baths on each floor, on the system of Walter Hastings Hall, add to the comfort of the buildings; but the stone-paved corridors are severe and prison-like.”

— THE HARVARD GRADUATES MAGAZINE, VOLUME III, DECEMBER 1894

Join a reunion of former residents of Perkins and Conant Halls on April 13, 2018, marking the 125th anniversary of their construction. If you lived in the GSAS residence halls and would like to be involved in event planning or outreach, please contact [GSAA@fas.harvard.edu](mailto:GSAA@fas.harvard.edu).

●●● Learn more at [gsas.harvard.edu/events/reunion-alumni-perkins-and-conant-hall](https://gsas.harvard.edu/events/reunion-alumni-perkins-and-conant-hall).

75 Perkins Hall, 1899,  
Harvard University,  
Harvard University  
Archives, W415034\_1



“What do I remember most about GSAS? The friendships and the sheer joy of intellectual discovery.”

— Jonathan Bruno JD '13, PhD '17

Why do **Jonathan Bruno JD '13, PhD '17** and **Daria Van Tyne PhD '13** support the Graduate School of Arts and Sciences (GSAS)? Gratitude.

She researches antibiotic-resistant bacteria. He studies secrecy and transparency in democratic societies. If it hadn't been for the Dudley House Chorus, the couple may never have met and married.

GSAS was also where they launched their careers. “We discovered what we were passionate about here,” says Daria, who recalls her field work on malaria parasites in Senegal. For Jonathan, it was the interactions he had with his colleagues in the government department that helped him develop as a political theorist.

Now resident tutors in Lowell House, they make a point to give annually to the Graduate School Fund. “It's our way of showing what Harvard means to us,” says Jonathan. “We want to support it in whatever modest way we can.”

Support GSAS students with a gift  
to the Graduate School Fund.

[alumni.harvard.edu/gsasgift](https://alumni.harvard.edu/gsasgift)



HARVARD

Graduate School Fund