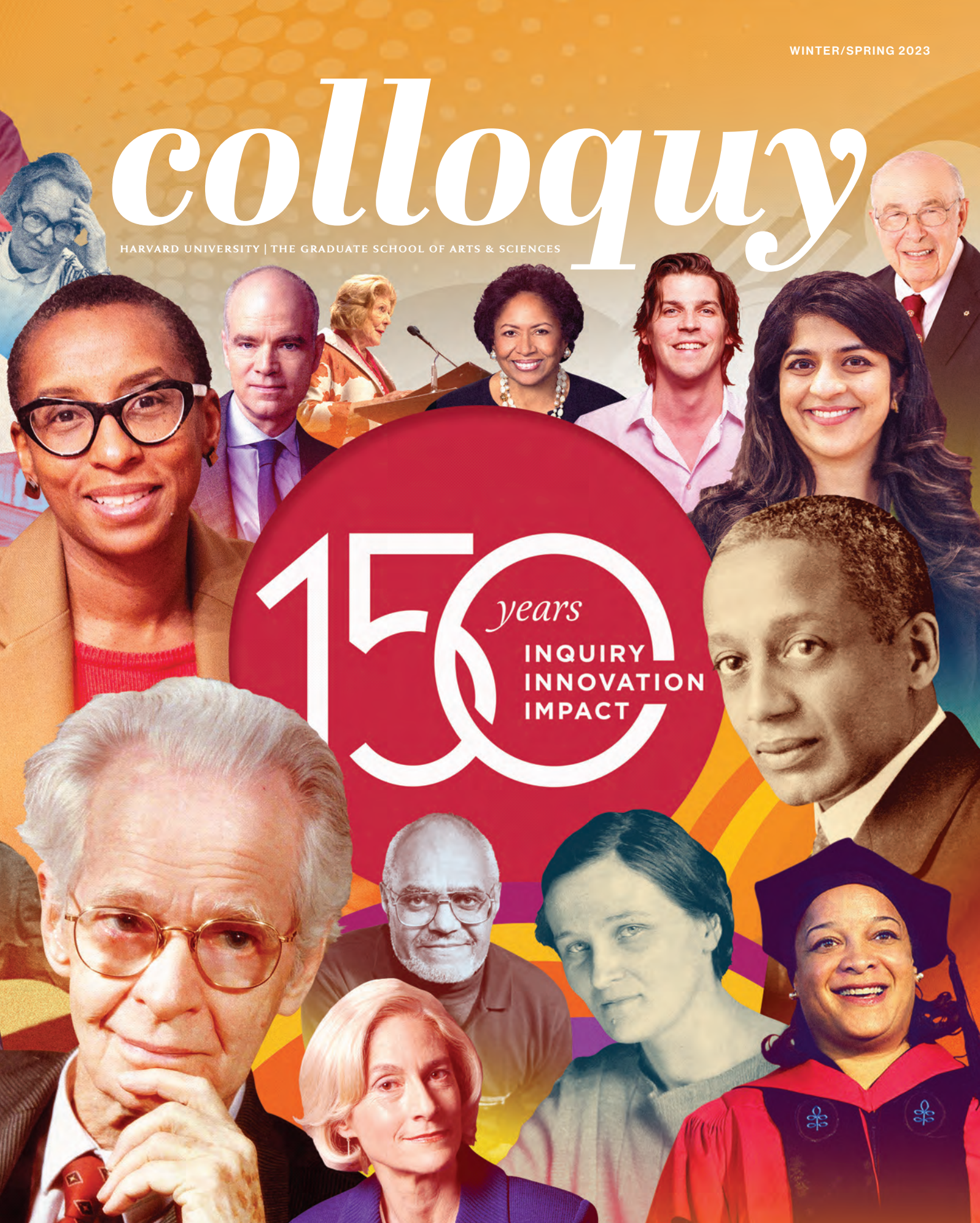


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to note



Check out the 150th-anniversary website!

gsas.harvard.edu/150

GSAS's 150th-anniversary website is the place to find engaging content related to the School's sesquicentennial year. Learn about GSAS's origins and chart key points in the School's history on the interactive timeline. Hear from alumni leaders – from Nobel Prize winners to President-elect Claudine Gay – speaking in their own voices about their research, its impact, and their GSAS experience. Read stories and watch videos about current students advancing the frontiers of knowledge. Visit the site today!

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WINTER/SPRING 2023

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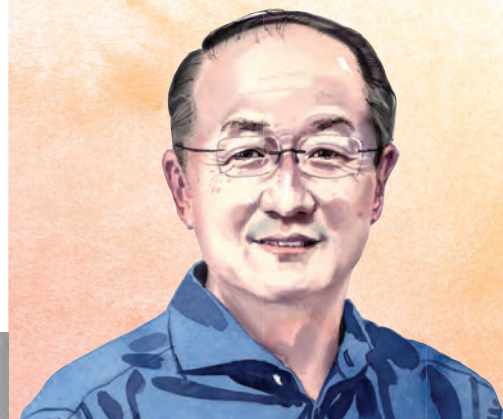
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Join the 150th celebration on Alumni Days!



DURING GSAS'S 150TH ANNIVERSARY, we have featured many remarkable alumni and student achievements through our events, podcast, YouTube channel, and in this magazine. This issue of *Colloquy* provides just a sample of the countless achievements attained to date and hints at all to come in our next 150 years and

beyond. Throughout this year, I hope you will also consider traveling to Cambridge to hear from our excellent Harvard Horizons scholars, reminisce with fellow alumni during Alumni Days, or celebrate the extraordinary achievements of our Centennial Medalists (see more on page 32).

Our anniversary celebration gives us the opportunity not only to illuminate the past and present accomplishments of alumni but also to reimagine boldly what excellence in graduate education at GSAS means. To assure that strength for the future, I established the GSAS Admissions and Graduate Education (GAGE) working group, a committee of faculty from the Faculty of Arts and Sciences that met regularly through the spring and fall terms of 2022. GAGE considered the current state of PhD education at Harvard, and our conversations emphasized the importance of supporting students across several key dimensions—advising relationships, expectations around appropriate time to degree, financial support, and employment outcomes—necessary for them to realize a highly successful graduate experience. GAGE discussions also highlighted the necessity of taking a more student-centered approach to admissions and academic training. During spring 2023, we are developing a report that will detail actionable steps designed to foster our students' talent and potential and inform how GSAS will work with academic departments on admissions.

As our anniversary highlights, GSAS honors its past while continuing to look forward, whether we are celebrating alumni achievements, rethinking excellences in graduate education, or supporting students as they prepare to make their mark on the world. I hope you will continue to celebrate—and look forward—with us.

—EMMA DENCH
DEAN

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WINTER/
SPRING 2023

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Access current and back issues of *Colloquy*, as well as a range of other alumni services and information, at gsaa.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 email gsaa@fas.harvard.edu.

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Throughout its 150th anniversary year, GSAS is foregrounding the voices of some of its most remarkable alumni and students as they speak about their work, its impact, and their experiences at the School.

●●● **Read the full articles** from which these excerpts are lifted—and find others—at gsas.harvard.edu/about/150th-anniversary/voices.

THE STRENGTH OF NEW PERSPECTIVES

Many of the colleagues that I work with and have great respect for spent time doing other things before they came to GSAS. Maybe they worked as teachers or in the nonprofit sector. Maybe they traveled and worked in other countries. And when they came into the economics program and started to do research, they brought different perspectives, insights, and puzzles than others. Some of the best research in any field comes from the introduction of new perspectives and opinions.

BRIDGET TERRY LONG, PhD '00,
Dean, Harvard Graduate School of Education



TEACHING INTEGRITY

[My PhD advisor] John Edsall took the courageous stance [during the McCarthy era of the 1950s] of writing an article in *Science* in which he resolved neither to ask for nor accept funds from any government agency that denied support to others for unclassified research for reasons unconnected with scientific competence or personal integrity. Subsequently, and certainly in part because of John's leadership, the Eisenhower administration called on all government agencies to stop the abuses and to follow accepted procedures. ... I consider myself most fortunate to have had a long-lasting friendship with such a great human being from whom science, humanism, and society were always inseparable.

CYRIL KAY, PhD '56,
Professor Emeritus of Biochemistry,
University of Alberta



MODEL MENTORING

I came into graduate school believing that there was a particular set of questions that I wanted to pursue. It turned out that what really got me out of bed in the morning was this other set of questions that a faculty member put to me. They inspired in me an excitement that sustained me not only through my dissertation but also through my entire career. I would not be where I am today if not for the mentors I encountered while at GSAS.

CLAUDINE GAY, PhD '98,
President-elect, Harvard University

LEARNING TO DREAM

I was taught at GSAS to dream big and that there was no limit to what we could do except our own vision and desire. I was supported meaningfully by everybody there. I thought it was fantastic that one of the biggest resources was the creative and committed and brilliant people around me. They're usually at the top of the field, but they're also approachable and down to earth. You can go up to any person who is an expert, and they will give you a moment of their time.

JB MICHEL, PhD '10,
Founder of Patch Biosciences



MEETING A NOBEL-TO-BE WAS NICE, BUT...

I enrolled at GSAS in 1989. I lived in Perkins Hall. Just down the hall was someone who turned out to be another Nobel Laureate—the economist Michael Kremer. But probably the most important connection I made was meeting my wife, Jennifer Gordon, PhD '93, who lived on the second floor!

BRIAN SCHMIDT, PhD '93,
Co-winner of the 2011 Nobel Prize for Physics



An Inspired Choice

On December 15, 2022, Harvard's Presidential Search Committee announced that Edgerley Family Dean of the Faculty of Arts and Sciences (FAS) Claudine Gay, PhD '98, had been elected the University's 30th president. Gay will begin her new role on July 1, 2023. "The search committee has made an inspired choice for our 30th president," said current President Larry Bacow, PhD '78. "Under Claudine Gay's leadership, Harvard's future is very bright."

Dean Gay, who was elected by the members of the Harvard Corporation, will be the first African American and only the second woman president of Harvard. She joins James Bryant Conant, Nathan Marsh Pusey, Neil Rudenstine, Lawrence Summers, and Bacow as the most recent in a long line of GSAS graduates to lead the University.

In the wake of her election, GSAS Dean Emma Dench congratulated her friend and colleague and praised the Corporation's bold choice. "As president, Claudine Gay will enable new voices, new ideas, and new knowledge to flourish at the University," she said. "I'm excited to be a part of her vision for Harvard."

••• For complete coverage—including a video address from President-elect Gay—visit the *Harvard Gazette* website: news.harvard.edu/gazette/story/2022/12/harvard-names-claudine-gay-30th-president.

Claudine Gay

FROM THE COLLOQUY PODCAST



"We should do something about mental health in the United States. We don't have a very good system for treating most people who have mental health problems. But it's not going to have much effect, if any, on our gun violence problem." — DAVID HEMENWAY, PHD '74, on GSAS's *Colloquy* podcast gsas.harvard.edu/colloquy-podcast



TREATING HUMAN REMAINS WITH DIGNITY AND RESPECT

Last September, Harvard President **Larry Bacow**, PhD '78, released to the community the report of the Steering Committee on Human Remains in University Museum Collections. The report offers guidelines for the ethical handling of remains held by the University, which include those of 19 people of African descent who were or were likely to have been enslaved, as well as one of the largest collections of Native American ancestors in the country. The report also envisions a new mechanism to direct the process of returning remains in Harvard's collections, recommending the use of high-quality replicas, anatomical models, and other methods to serve the needs of researchers. "We have to think about [research] ... in a way that we have not done so in the past by having it reviewed systematically and increasingly with concerns about ethical stewardship and the possibility for repatriation," said Evelyn Hammonds, PhD '93, chair of the committee and the Barbara Gutmann Rosenkrantz Professor of the History of Science and of African and African American Studies. "If there is an opportunity for new knowledge, we need to think carefully about whether these individuals' remains should be used to provide it."

●●● **Read the report of the Steering Committee on Human Remains in University Museum Collections** at provost.harvard.edu/steering-committee-human-remains-university-museum-collections.

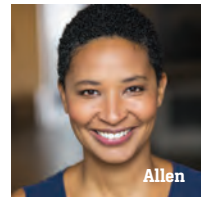
Gund Receives Du Bois Medal



Harvard awarded its 2022 W. E. B. Du Bois Medal in Sanders Theatre last October to GSAS alumna **Agnes Gund**, AM '80. Gund, one of the world's foremost philanthropists, joined NBA Hall of Famer Kareem Abdul-Jabbar, former Massachusetts Governor Deval Patrick, and actress and LGBTQ+ activist Laverne Cox, among other luminaries honored with the award. Named after Harvard's first Black student to receive the PhD, the Du Bois Medal recognizes those "who embody the values of commitment and resolve that are fundamental to the Black experience in America." In 2003, GSAS awarded Gund the Centennial Medal, which honors distinguished graduates who have made fundamental and lasting contributions to knowledge, to their disciplines, to their colleagues, and to society.

JOURNALISM AND ITS DISCONTENTS

As part of the GSAS's 150th event series, *New York Times* Executive Editor **Joe Kahn**, AM '90, and **Danielle Allen**, PhD '01, Harvard's James Bryant Conant University Professor, surveyed the state of journalism in an age of misinformation and political polarization. Led in conversation by Columbia University School of Journalism Professor **Michael Schudson**, PhD '76, Kahn and Allen wrestled with the question of objectivity, offered thoughts of how news organizations could cut through the noise of the digital age to get citizens the information they need to be responsible participants in democracy, and discussed ways that journalists could build trust with disenchanted readers on both the right and the left of the political spectrum. Listen to highlights of the conversation on GSAS's *Colloquy* podcast: gsas.harvard.edu/news/stories/colloquy-podcast-nyt.



"ORIGINALITY AND HIGH LITERARY MERIT"

A pair of PhD students in the history of art and architecture and one in the history of science were last fall named winners of the 2022 Bowdoin Prizes, some of Harvard's oldest and most prestigious awards. **Max Boersma** ("How to Make Like a Scientist."), **Trevor Menders** ("Dancing with Genji: Performance, Depiction, and Allegory"), and **Jiemin Tina Wei** ("Amazon Mechanical Turk: Methodological Innovation in an Evolving Labor Market") each won for their graduate essays in the English language, joining an impressive group of past winners that includes essayist Ralph Waldo Emerson, novelist John Updike, and the writer and philosopher Alain LeRoy Locke. Established in 1791, the Bowdoin Prizes recognize essays of originality and high literary merit, written in a way that engages both specialists and nonspecialists. Each winner of a Bowdoin Prize receives \$3,500, a medal and a certificate, and their name in the Commencement program.





KEEPING HBCUs IN VIEW

WHEN SHE LEFT SMITH COLLEGE TO BECOME PRESIDENT OF BROWN UNIVERSITY, GSAS CENTENNIAL MEDALIST **RUTH SIMMONS**, PHD '73, BECAME THE FIRST AFRICAN AMERICAN TO LEAD AN IVY LEAGUE INSTITUTION. NOW THE HEAD OF THE HISTORICALLY BLACK PRAIRIE VIEW A&M UNIVERSITY—A POST FROM WHICH SHE WILL STEP DOWN UPON THE APPOINTMENT OF A SUCCESSOR—SHE DEVOTES HERSELF TO CREATING AN ENVIRONMENT IN WHICH STUDENTS OF COLOR CAN FLOURISH, JUST AS SHE DID WHEN SHE LEFT HOME AT 17 TO ATTEND HER UNDERGRADUATE ALMA MATER.

You'd already had a long and prestigious career as a leader in higher education when you agreed to serve as president of Prairie View A&M University. Why did you decide to take the job?

I grew up partly in rural East Texas, thinking that the world was built for somebody other than me. It seemed that the most that I and my family could expect was to be tolerated, to be quiet, to do our work in the service of others, and to be content with the barest essentials in terms of education.

When I went off to Dillard, a historically Black university, as a 17-year-old, I saw that these institutions provided a means for African Americans to become

educated and to do so with no barriers to what they could study. That meant a lot to me. It resulted in my majoring in a very unlikely field—French. People kept saying, “Are you crazy? What is a Black girl doing studying French?” But I always felt that I had the capacity, thanks to this African American institution, to study to the height of my ability and pursue whatever I wanted to pursue.

That freedom was such a gift. So, when I looked at the students at Prairie View in today's world, and thought about the struggles they are still having to be the people they need to be and want to be, I thought, “How could I deny serving

“Our historic mission to serve the Black community informs the way we organize our efforts, but it doesn’t inhibit our embracing others.” —RUTH SIMMONS, PHD '73

them when others served me so well?” That’s why I accepted the offer to lead the university.

At a time when many institutions of higher education are trying to become more diverse and inclusive, what is the ongoing value of historically Black colleges and universities?

Well, first of all, historically Black colleges and universities (HBCUs) are no longer just for African Americans. At Prairie View, we have Hispanic students, we have white students, we have international students, and those from all kinds of backgrounds. Our historic mission to serve the Black community informs the way we organize our efforts, but it doesn’t inhibit our embracing others.

HBCUs were founded to address a very particular issue: the segregation of the races and the discrimination against Blacks. They’ve become much more than that because the students who went to these institutions learned in an environment that made them more secure, more confident, and able to move forward in the face of very challenging circumstances without giving up. How was it that Dr. Martin Luther King, Jr., given what he was called to do, could persist all the way to his death and never be deterred? Morehouse College.

That’s the gift of HBCUs still today. There are those who need that environment. That’s what we hear all the time from parents and students. They choose this option because for some it’s the first time they are in an environment that is free of the discrimination that they have lived with for all of their lives.

As president of Brown University, you appointed in 2003 a committee of faculty, students, and staff to investigate the school’s relationship with slavery and the slave trade. Why do you think it’s important for colleges and universities to grapple with that history today?

The reason I came to university life in the first place is that I grew up with lies. Universities seemed to be the one area of the nation that was courageous enough to take on difficult subjects and to tell the truth about them. I think that’s the most important thing for us to do.

At Brown, I tried to make the process transparent and to involve all sorts of people in an honest and open conversation. I wanted no role in it other than to receive findings from an objective group, review them, and then share them with the public and with the university’s stakeholders.

That sort of endeavor can be distressing for many people. We were castigated for opening up a can of worms that would divide the community. But the Brown family was still involved at the university and the whole story of their ancestors’ relationship to slave trading was laid out in the records and artifacts they gave us. So we had that advantage.

Despite the pushback, the process ultimately turned out to be positive and even joyful. I went on tour as president after the report was published and alumni said to me that they were thankful and relieved to know the truth about the history of the university. And it helped Brown immensely by elevating its profile for students who looked at the way we reckoned with our past and thought, “That’s the kind of place where I want to be.”

CURRICULUM VITAE

Prairie View A&M University

President, 2017–present

Brown University

President Emerita and Professor of Comparative Literature and Africana Studies, 2012–2014

President, 2001–2012

Smith College

President, 1995–2001

Princeton University

Vice Provost, 1992–1995

Spelman College

Provost, 1990–1991

Harvard University

PhD in Romance Languages and Literatures, 1973

Dillard University

BA in French, 1967





Since 1872, Harvard's Graduate School of Arts and Sciences has welcomed into its community those who question long-standing assumptions and ways of thinking and who devote themselves to the deliberate, exacting, and careful search for new knowledge. During this anniversary year, *Colloquy* is featuring stories of some of the visionary scholars,

innovative educators, and creative leaders from the School's past, present, and future. All embody the spirit of inquiry, passion for innovation, and commitment to positive impact that have defined the School's mission since its founding and which will expand in the years to come in ways we can only now imagine.



• INNOVATION • INQUIRY • IMPACT



FIRST AMONG MANY
The first woman tenured by Harvard's Department of Biology, Ruth Hubbard was a teacher, mentor, and friend to a new generation of female scientists, scholars, and leaders.



VISIONARY

RUTH HUBBARD CHANGED OUR UNDERSTANDING OF HOW WE SEE—AND HOW WE SEE SCIENCE **By Paul Massari**

IN 1974, RUTH HUBBARD was at the pinnacle of a brilliant career as a biochemist. Her research on the way that the eye's visual pigment interacts with light earned her a share of the prestigious Paul Karrer Gold Medal, awarded by the University of Zurich to outstanding researchers in the field of chemistry. It—and her many other contributions to science—also made her the first female tenured professor in the history of Harvard's Department of Biology. But, at a time when she might have basked in her achievements and buried herself in the lab, she decided instead to level a blistering feminist critique at the field in which she had labored for most of her life.

"I began to see that science and technology are disciplines invented by men to dominate nature, defined as female," she remembered in 1987. "I also began to notice the male-biased ways scientists describe female animals and women.... The structure of the profession and its intellectual content do not reflect necessities imposed by nature, but the historical fact that scientists have been men, and economically and socially privileged men at that."

As a pathbreaking scientist, Hubbard, PhD '50, changed the way scientists understood how humans see. As a social critic and ethicist, she changed the way scholars saw how science was done. And as a teacher and mentor, Hubbard gave a generation of feminist leaders, both inside and outside of the sciences, a new perspective on their bodies, themselves, and the world in which they lived.

A SUPERB SCIENTIST

Hubbard, who earned her PhD from Radcliffe, studied phototransduction—the process by which photons of light are converted into electrical signals that can be understood by the rest of the nervous system. Specifically, she focused on rhodopsin, a light-sensitive molecule commonly referred to as a visual pigment, found in photoreceptors.

“Phototransduction begins when photons hit the retina, a piece of neural tissue that lines the back of the eye,” explains Gordon and Llura Gund Research Professor of Neurosciences John Dowling, a student, colleague, and collaborator

of Hubbard’s. “Within this tissue, farthest from the front of the eye, are millions of elongated photoreceptor cells. The outer segment of these cells consists of many layers of membranes embedded with thousands of light-sensitive molecules—visual pigment.”

Hubbard’s husband, George Wald, won a share of the Nobel Prize in Physiology or Medicine in 1967 for discovering that visual pigment is made up of the protein opsin coupled to a slightly modified form of vitamin A called retinal. When this complex interacts with light, Wald showed, the retinal

“Y

OU KNOW, THE LION [IS] KING OF THE BEASTS

UNTIL YOU FIND OUT IT’S THE LIONESS THAT DOES ALL THE DOING.” –RUTH HUBBARD



splits off from opsin, resulting in the activation of retinal cells that send electrical signals to the brain. But the details of this process were not completely understood.

In their landmark 1958 paper, “The Action of Light on Rhodopsin,” Hubbard and colleague Allen Kropf reported that a specific shape of retinal—11-cis retinal—is bound to opsin. When a photon of light is captured, the retinal changes shape, enabling the opsin protein to change its shape as well, setting off a cascade of electrochemical reactions in the retina that initiate seeing.

“Ruth and Allen Kropf showed that all light does in the visual process is to change the shape of retinal,” Dowling says. “But she contributed much more to science than that. For instance, she also showed how vitamin A is converted to retinal. I eventually wrote several papers with her. She was a superb scientist.”

As chair of Harvard’s Department of Biology in 1974, Dowling pushed to make his colleague the department’s first female tenured professor. By that time, however, Hubbard’s consciousness had been reshaped by the role of science in the Vietnam War and by the burgeoning feminist movement. In 1976, she stopped working in the laboratory, much to the disappointment of colleagues like Dowling, to focus on the way that social structures shaped science—especially the questions that its mostly male practitioners asked.

DECONSTRUCTING DARWIN

Hubbard began by asking her own questions of one of the foundational works of modern life science: Charles Darwin’s *On the Origins of Species*. As she did, she saw in Darwin’s portrayal of the animal world as a “kingdom” marked by cutthroat competition for scarce resources, not objective science but a reflection of the society in which the English naturalist lived. Looked at from a different perspective, Hubbard thought, one could just as easily see the centrality of cooperation in species survival and flourishing, as the Russian zoologist, geologist, and revolutionary Peter Kropotkin had in his 1902 book, *Mutual Aid*. Increasingly, she saw supposedly objective scientists “reading their social arrangements” into nature.

“If you look at animal models, you can find animal examples of all kinds of behavior,” she said in 2007. “Where the females are bigger and the males are smaller, where the females are more competitive and the males are less competitive.... You know, the lion [is] king of the beasts until you find out it’s the lioness that does all the doing.”

A member of a Jewish family that escaped Austria after the Anschluss with Nazi Germany, Hubbard railed against



IN THE ROOM WHERE IT HAPPENED

Nancy Krieger, now a professor of epidemiology at the Harvard T.H. Chan School of Public Health, was a both a student and teaching fellow in Hubbard’s legendary Radcliffe College seminar, *Biology and Women’s Issues*.

anything she saw as biological essentialism—especially the notion that genes determined human traits and behavior and therefore justified social hierarchies. “The idea was that there were people who—whether in slaveholding republics or the kind of democracy that existed in the United States at the time she was teaching—would try to justify their superiority based on biology,” says Nancy Krieger, professor of social epidemiology at the Harvard T.H. Chan School of Public Health and a student, colleague, and longtime friend of Hubbard. “Those elites tended to restrict the study of science to support their essentialist interpretations. That’s what she was critiquing.”

Not surprisingly, Hubbard’s rejection of determinism fueled a deep skepticism of genetic research and testing. She strongly opposed recombinant DNA, for instance, which involves combining the genetic material of one organism with that of another. “[I found recombinant DNA research] offensive in the way it was being pursued, not offensive in and of itself,” she said. “Acting as though we could foretell how changing or exchanging genes that had in nature never been exchanged before ... doing it now in colonies, in laboratories on a large scale ... [believing] that one could predict what the outcome would be, whether it would be beneficial or not.”



A CRITICAL LEGACY

When she retired in 1990, Harvard evolutionary biologist Stephen Jay Gould spoke of Hubbard as “a beacon and a support for radical and feminist perspectives—a focus and a gadfly for a view of life that needs constant defending and nurturing.”

In the proliferation of genetic testing and screening for pregnant women, Hubbard saw a profit-driven attempt by the medical establishment to maintain control of the birthing experience while promoting a new eugenics.

“In the course of the ’60s and ’70s ... there was a real effort ... to try to get the doctors out of the birthing room [in favor of midwives and other health professionals],” she said in 2007. “You then began to get the development of all kinds of technologies and theories trying to predict...the health of embryos and fetuses before they were born. So, at that point you got...the takeover [of the birthing process by the medical establishment] again and also you got this eugenic pressure; that is that, if you aren’t careful, the species is going to deteriorate because you’re going to have all these babies that could be avoided and prevented.”

While Hubbard was certainly a feminist, the complexity and breadth of her social analysis stood in opposition to simplistic male–female binaries and took into account race and class as well as gender. (“Women and nonwhite, working-class and poor men have largely been outside the process of science-making,” she told *The New York Times* in 1981.) According to Krieger, her former mentor’s critique of science was rooted in history and a deep understanding of material conditions, racism, and settler colonialism.

“She was clear that she was speaking of elite European men predominantly, who were wealthy and had the means and legal permissions to do the kinds of science that they did,” Krieger says. “She was also very clear that there were very privileged and elite women who were, for instance, completely complicit in systems of racism in the United States.”

Krieger says that Hubbard always understood humans as biological organisms. In fact, it was that understanding that enabled her to be so aware of the influence on science of forces outside the laboratory. “Ruth was very clear that humans are biological beings, not just ideas falling out of thin air,” Krieger says. “But the human imagination is pretty powerful. It can interpret the world in which we find ourselves living and shape it. She was clear on that as well.”

WOMEN’S CENTER

Although critique was important to Hubbard, so was having a direct impact on her community. By the time she was granted tenure, her son Elijah Wald remembers, Hubbard had “spent a year or two volunteering at a school in Roxbury, an inner-city neighborhood in Boston. She also did pregnancy counseling.” Hubbard befriended members of the Boston Women’s Health Book Collective as well, collaborating with the group in the early 1980s on a revision of their groundbreaking feminist book *Our Bodies, Ourselves*. “She was always looking for ways to engage,” Wald says.

That passion for engagement made its way back to campus in the form of a groundbreaking new course that would change how scores of young women at Harvard understood their own biology and the way that social constructs of gender shaped supposedly objective science. First offered in 1975 as a Radcliffe College seminar, *Biology and Women’s Issues* grew to around 80 participants only four years later. The course attracted a very lively mix of students—some in the life sciences, others in the humanities and social sciences, but all learning to think about biology in a new way.

“Ruth’s class was fundamentally about bringing incisive ideas to critique the science that people had learned—what science said about our bodies and other people’s bodies, what these bodies did, and what different bodies do with each other,” says Krieger, who participated in the seminar both as a student and a teaching fellow. “Then, it was about coming up with a much clearer way of having a critical agenda for doing better critique and better science.”

As an example, Hubbard would discuss the human skeleton, pointing out that bone mass is largely a function of activity rather than gender. “If only some people get to take up sports, or are trained to do some kinds of work, it’s going to show up in the

bones,” Krieger says. “It’s not because it was biologically determined. It’s what happens when you have certain people doing certain kinds of physical engagement and others not.”

Evelynn Hammonds, PhD ’98, Harvard’s Barbara Gutmann Rosenkrantz Professor of the History of Science and of African and African American Studies, was also a teaching fellow for Biology and Women’s Issues. She says the class was well-loved in part because of its focus on the embodied experience of women—and the attention Hubbard paid to her students. As part of their classwork, for instance, the mostly female participants were asked to keep a journal and write reactions to the topics covered each week. They were remarkably candid—sometimes painfully so. Hubbard responded with care and concern.

“Some of the young women would write about alcohol use, for instance,” Hammonds says. “Ruth addressed drinking and women’s biology in class, but she also asked us to get in touch with Health Services or the resident dean to let them know that we had identified a student that might need help. It was the first time I ever worked with a professor who reached out in such a caring way.”

Hubbard’s class—along with the new Radcliffe Women’s Center and *Seventh Sister* student newspaper—was at the center of the burgeoning feminist movement at Harvard in the 1970s and 1980s. Elijah Wald says that Biology and Women’s Issues was formative for many Harvard undergraduates who went on to become prominent feminist thinkers and leaders.

“The course was not simply a matter of Ruth’s ideas and influence; it was a place where young women met and heard each other,” he says. “The people who went through her women’s biology class at Harvard included the journalists Amy Goodman and Susan Faludi. Paula Johnson, the president of Wellesley College, ... the former prime minister of Pakistan, Benazir Bhutto, went through that class. If you were a

feminist at Harvard, that was an important part of your community.”

A BEACON

Even as they endeared her to a new generation of students and scholars, Hubbard’s positions on genetic research and testing alienated her from some in the scientific community. But not everyone. When she retired in 1990, Harvard evolutionary biologist Stephen Jay Gould spoke of Hubbard as “a beacon and a support for radical and feminist perspectives—a focus and a gadfly for a view of life that needs constant defending and nurturing.” In a 1994 overview of Hubbard’s career as a writer and thinker, the Harvard geneticist Richard Lewontin wrote, “No one has been a more tireless and influential critic of the biological theory of women’s inequality than Ruth Hubbard.”

Hubbard died in 2016 at the age of 92. In addition to *Exploding the Gene Myth*, co-authored with Wald, her hugely influential writings included the 1979 essay, “Have Only Men Evolved?” published in her co-edited volume *Women Look at Biology Looking at Women*, and *The Politics of Women’s Biology*, as well as scores of scientific papers.

Elijah Wald says that his mother would want to be remembered for those she taught, mentored, and counseled. Krieger, one of the many whose career and mind were shaped by their relationship with Hubbard, recalls her old friend’s curiosity, the incisiveness of her thought, and her commitment to social change and better science. Perhaps most of all, though, she remembers Hubbard for the questions she taught Krieger to ask.

“Why are there even sexes?” she says. “What’s the point of sexual reproduction? What are ways of framing that? Ruth asked basic questions. She believed that there was always the possibility to learn, to change ideas, and to become exposed to new information. Yes, life experience, the law, and privilege absolutely affect how people think, but she had an expansive critique that didn’t simplify or rigidify. She always knew that the world was more wondrous and amazing than that.” 🍷

“**N** O ONE HAS BEEN A MORE TIRELESS AND INFLUENTIAL CRITIC OF THE BIOLOGICAL THEORY OF WOMEN’S INEQUALITY THAN RUTH HUBBARD.”

— HARVARD GENETICIST RICHARD LEWONTIN



A RESPONSIBILITY TO THE WORLD

JIM YONG KIM'S LIFELONG QUEST TO END POVERTY

By Deni Ellis Béchard | Illustration By Matthew Cook

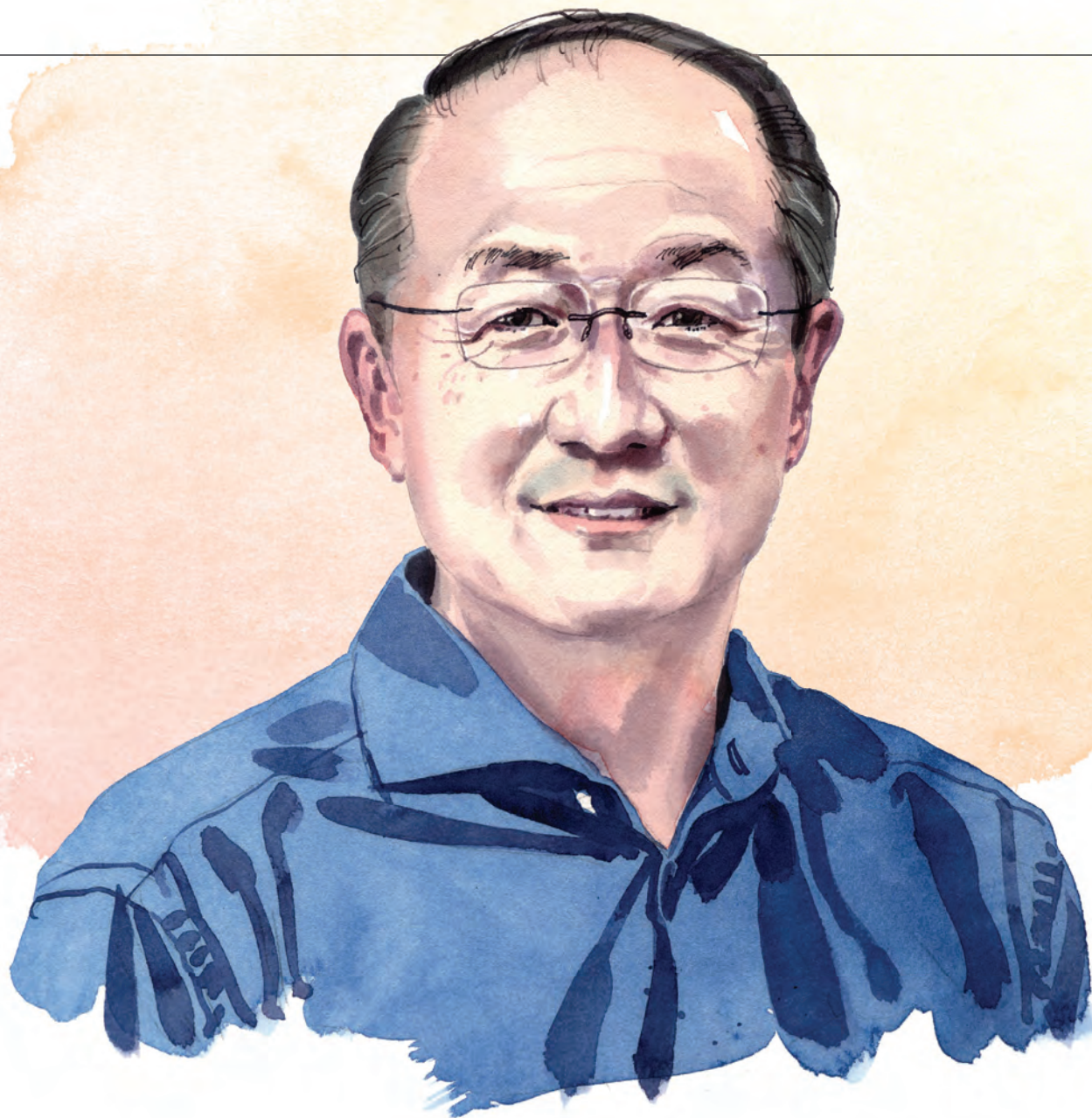
SITTING IN THE OVAL OFFICE, Jim Yong Kim considered a question from President Barack Obama: Why should the White House nominate Kim, a physician and anthropologist, for the presidency of the World Bank rather than an economist? In response, Kim referenced the doctoral dissertation on Indonesian artisans written by Obama's mother, Ann Dunham. Years before, fascinated by Obama's political rise, he'd sought out an archived copy. Though economists had predicted that globalization would destroy Indonesia's artisanal industries, Dunham, an anthropologist, documented that the artists she studied were flourishing because their work could reach new markets. "I won't be able to tell you how the world looks from 30,000 feet like a macroeconomist," Kim told the president, "but I've been on the ground doing development work my whole life. I'm going to be able to tell you if these programs are actually working."

Jim Yong Kim's wide-ranging career has in many ways been shaped by the PhD in anthropology that he completed at GSAS in 1993 after earning his MD from Harvard Medical School. His anthropological approach helped shape Partners in Health (PIH), the nonprofit he cofounded with his friend Paul Farmer, PhD '90, which now delivers care to millions in the world's poorest places. He went on to work at the World Health Organization on

the HIV/AIDS pandemic in Africa, as a professor in public health at Harvard, and as the 17th president of Dartmouth College. More recently, his anthropological training informed his leadership of the World Bank, a role in which he once chewed coca leaves, danced, and played soccer at 12,000 feet before discussing development finance with Bolivia's president, Evo Morales, a vocal critic of the institution.

A DOCTOR SOMETIMES. AN ANTHROPOLOGIST EVERY DAY

It was another question, years before his meeting with President Obama, that helped set Kim, the son of two Korean immigrants who arrived in the United



States in 1964, on a career path working with some of the world's poorest people. A student at Harvard in the late 1980s, Farmer, also on the MD/PhD track, once asked him: "So, Jim, given our ridiculously elaborate educations, what is the nature of our responsibility to the world?" By then, Farmer was already doing volunteer medical work in Haiti, and in 1989 Kim made his first trip there. The poverty he witnessed shook him to

his foundations, he says, and compelled him to ask, "How is it possible that 45 minutes from Miami, the world has allowed this situation to exist?"

Kim had long been interested in social justice. Among his earliest memories after moving to Dallas, Texas, were children there shouting racist epithets at him. Two years later, his family settled in Iowa, where he became class president, valedictorian, quarterback of the football

team, and point guard in basketball. But despite his achievements, he was never fully accepted as American. "I struggled with the identity question so much that I ended up getting a PhD in anthropology," he says. "It was exactly what I needed." His dissertation was on the role of pharmacists in providing healthcare in South Korea, since many people there couldn't afford doctors. During his research, from 1985 to 1988, he learned not only

to speak Korean and understand better his parents' cultural roots but also that South Korean living standards were rising. "I realized it was fine to turn my attention to other problems in other countries."

Not long after his return, Farmer introduced him to liberation theology, which had taken root among progressive Catholic priests in Latin America in the 1960s and emphasized a "preferential option for the poor."

Over the years following Kim's first trip to Haiti, he and Farmer worked to establish Partners in Health and battled ideas prevalent in medicine that little could be done to help poor people. "The most important thing is that we did not divert our gaze," Kim says.

Ophelia Dahl, a PIH cofounder, former executive director, and the chair of its board of directors, says Kim not only cared deeply about the organiza-

tion's philosophy but could also translate it into immediate action in difficult situations. "He has never tried to look for anything that is tidy," she says. PIH's successes with complicated conditions were met with incredulity in the American medical community, especially after a campaign treating drug-resistant tuberculosis in Peru, for which Kim found ways to dramatically lower drug prices. "A good number of [public health professionals] were saying, 'Who in the hell do you think you are telling us this is possible? Because if it were possible, we would already have done it.'"

Though no longer working in the field of anthropology, Kim used ethnographic skills to understand what people wanted and what was at stake. "What I learned about empathic listening, what I learned about keeping your mouth shut, what I learned about being comfortable in situations where at first you have no idea

what people are talking about—all of those lessons proved invaluable in public health," he says.

The same held true after 2003, when he joined the WHO. Esther and Sidney Rabb Professor of Anthropology Arthur Kleinman, AM '74, Kim's PhD advisor at Harvard, says, "Jim used his anthropological knowledge to critique virtually every aspect of public health. He used it to get the WHO to run against what was the public health approach at that time"—the belief that prevention rather than care should be emphasized for poor people. By learning from various national and institutional cultures, Kim set ambitious goals for HIV treatment in Africa and found ways to dramatically lower medication costs to treat millions. "I'm a doctor sometimes," he says, "but I'm an anthropologist every single day."

Starting in 1993, Kim taught at Harvard Medical School, and later became department chair of global health and social medicine, chief of global health equity at Brigham and Women's Hospital, and director of the François-Xavier Bagnoud Center for Health and Human Rights at the Harvard School of Public Health. Anne Becker, PhD '90, a professor in the Department of Global Health and Social Medicine and dean for clinical and academic affairs at Harvard Medical School, recalls Kim as a "visionary chair" who encouraged collaboration beyond the department while catalyzing change within it. "He really worked to bring global health and social medicine into the medical school curriculum. Introduction to Social Medicine became a required course that has inspired a new generation of medical students." He was also attentive to gender equity, scheduling department meetings so primary caregivers of children could easily attend, she says. "It was the kind of leadership that was very thoughtful, and it made people feel seen and understood and supported."



PARTNERS IN HEALTH
Kim cofounded the
global health NGO with
Paul Farmer, PhD '90.

HE MOST IMPORTANT THING [ABOUT PARTNERS IN HEALTH] IS THAT WE DID NOT AVERT OUR GAZE.”

—JIM YONG KIM

Kim’s next leap was in 2009, when he became president of Dartmouth College. He was the first Asian American president of an Ivy League university. At Dartmouth, Kim established the Center for Health Care Delivery Science to focus on graduate studies in healthcare, and mobilized students to support relief work in Haiti after the earthquake in that country in 2010. He also launched the National College Health Improvement Project to address student health, especially binge drinking.

In 2012, Tim Geithner, a Dartmouth graduate and then the United States Secretary of the Treasury, called about the World Bank presidency. Kim told him that he’d been part of Fifty Years Is Enough, an organization demanding the World Bank’s closure on its 50th anniversary in 1994, and had also, in 2000, published a book critiquing it, *Dying for Growth: Global Inequality and the Health of the Poor*. When Geithner said he knew, Kim added, “I’m not an economist. I’m not a finance guy. I’m not a politician.” But he went to D.C. anyway. “If the president of the United States asks you to interview for an important job,” Kim says, “that’s what you do.”

A WORLD FREE OF POVERTY

In 2012, Kim took the helm of a World Bank which was very different from the organization he once wanted to shutter.

On his first day, at its D.C. headquarters, he saw, written on its wall, the words, “Our dream is a world free of poverty.” He asked his team, “Why are we just dreaming about it? Can we set a deadline for the end of poverty?” He was taking to heart the lessons of one of his mentors, former Harvard Professor Don Berwick, who told him, “If you don’t have a plan and a deadline, it’s just a slogan.”

Kim’s team developed a framework that would monitor the number of people living in absolute poverty and also track inequality. The World Bank then set a target date of 2030 to dramatically reduce global poverty—a goal that COVID-19 has likely made unattainable.

Kim’s team also launched the Human Capital Project in 2018, which published an index that ranked each country based on measurable health and education outcomes and showed that the countries whose outcomes improved the most also had more robust economic growth. “We made it clear that investments in health and education are absolutely critical for development,” Kim says. He also spearheaded work on climate change, an area previously neglected at the World Bank. Among the first visitors to his office was former Vice President Al Gore who gave Kim “an intense tutorial.” Kim pushed for \$30 billion annually for climate-related projects. “We went from being the pariah in the climate change world to leading the discussion around financing climate

change-related activities,” he says.

Of Kim’s successes at the World Bank, the most unexpected—especially at a time of great skepticism about multilateral organizations in the US government—was a capital increase of \$13 billion. The bank’s shareholders are its 189 member countries, and many ministers of finance were reluctant to transfer funds from their treasuries. “Literally, everyone I knew, from board members to my senior team, said, ‘Jim, you cannot go for this capital increase. You will fail,’” Kim recalls. He pointed out, however, that the proportion of the bank’s contribution to development had shrunk relative to the rest of global development funding. “I believed that the World Bank had to remain at the center of the development discussion, but if there are not enough resources to participate in some of the most important development projects, then you quickly become irrelevant,” he says.

Kim also worked to improve trust in the World Bank. When his team asked to meet with Morales, the first Indigenous president of Bolivia and the president of that country’s coca growers union, he received a message that the Bolivian leader would only meet him in a mountaintop village that he had to get to by helicopter. “He hated the World Bank,” Kim recalls. The reasons were similar to those Kim once had for opposing it, but now that the bank was the largest provider of



MOUNTAIN ENERGY

Kim's meeting with Bolivian President—and World Bank skeptic—Evo Morales in the Andes yielded new partnerships with the South American nation.

funding for health and education in the developing world, Kim wanted to repair that relationship. During their meeting in Uru-Chipaya, high in the Andes, Morales gave him coca leaves to chew to help with the altitude, as well as soccer clothes and shoes, inviting him to play. Kim barely knew the game but did his best. “There was no soccer in Iowa in the 1960s,” he says. “But that’s what anthropologists do. When you’re in someone else’s country, you have to be open to everything.”

Later, Kim was invited to join in a traditional dance that was similar to one he’d learned while working in Peru. He recalls Morales watching him with grudging respect. Then, at a political rally in Cochabamba, Kim gave a speech in Spanish where he referred to Morales as the “best soccer player in the world

among heads of state,” receiving applause and laughter. “I’m a physician,” he went on to tell them, “but the World Bank doesn’t give prescriptions anymore for economies in Latin America.” In the years since the meeting between Kim and Morales, the World Bank and Bolivia have partnered on a number of projects.

THINKING BIG

In 2019, Kim left the World Bank to work with Global Infrastructure Partners (GIP), a private equity fund working on projects around the world related to energy, roads, airports, and more. At the World Bank, he’d struggled to find private financing for developing country infrastructure. “Nearly every country in the world wants more private-sector investment,” he says. Already successful

in developed countries, GIP opened a division in emerging markets and asked Kim to lead it.

Not long after accepting the new position, however, COVID-19 swept the planet. Dahl recalls how Kim encouraged PIH to use its knowledge of community health to help states respond and himself led the pandemic response team that supported Texas, Florida, Ohio, Illinois, New Jersey, New Mexico, and Massachusetts. Charlie Baker, then the governor of Massachusetts, describes in his recent book, *Results: Getting Beyond Politics to Get Important Work Done*, how Kim advised him on “prevention, testing, care, and isolation efforts,” as well as “a virtual, remote phone-bank operation of contact tracers.” Dahl, in reflecting on Kim’s role in the pandemic, says, “The first thing he did was to think big, which is what he does.”

Now, with the pandemic receding, Kim is focusing on mental health. “The mental healthcare system in the United States and all over the world is incredibly broken,” he says. This moment, he believes, is similar to 1999, when people with HIV were stigmatized and rapidly dying, despite the availability of highly effective treatments. While not as effective as those for HIV, treatments for mental health could decrease epidemic levels of suicides and depression. “If we use for mental health the lessons we learned from efforts to combat tuberculosis, HIV, cholera, Ebola, and also COVID, we may be able to start something that looks like a movement,” he says.

Recently, Kim was named chancellor of Rwanda’s University of Global Health Equity, the role held by his friend Farmer, who died in February 2022. As a founding director, he also continues work with PIH, now an NGO with an annual budget of over \$150 million. He is heartened to see so many people trained at PIH doing important work worldwide

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**HY ARE WE JUST DREAMING ABOUT IT?
CAN WE SET A DEADLINE FOR THE END OF
POVERTY?”** —JIM YONG KIM



HOPE FOR THE FUTURE
“I told [students] to never
let anyone tell them they
can't reach their dreams.”

and is currently writing a memoir to tell his remarkable story—not just all that he accomplished with the simple yet revolutionary principle of never diverting his gaze from those in need, but also that he, the child of two war refugees born in a South Korea too impoverished to qualify for World Bank loans, became the organization's president.

He recalls once visiting a fifth-grade class in Tanzania and asking students what they wanted to be. When two of the children responded, “president of the World Bank,” everyone laughed but Kim stopped them and said, “When I was in preschool in Korea, the president of the World Bank, George David Woods, could very well have walked into my

classroom on a visit to Korea,” he says. “And I seriously doubt that he could have imagined that one of his successors was sitting in that classroom.” His story may be improbable, Kim says, but the point of telling it is to remind those kids in Tanzania that they too should think big. “I told them to never let anyone tell them they can't reach their dreams.” 🍀



FOR EVERY MOTHER, A GOOD CHILDBIRTH

JANHAVI NILEKANI'S MISSION TO TRANSFORM MATERNAL CARE IN INDIA **By Paul Massari**



JANHAVI NILEKANI WANTED THE CHILDBIRTH OF HER DREAMS. That meant returning in 2016 to her home country of India where the then-fifth-year PhD student in public policy at Harvard's Graduate School of Arts and Sciences (GSAS) could be closer to family, ensure her forthcoming baby's citizenship, and get away from the darkness and cold of the New England winter. It also meant finding a healthcare provider committed to evidence-based medicine—and to treating expectant mothers with respect. Nilekani particularly wanted to avoid delivery by cesarean section, which is performed in India much more frequently than in high-income countries. She was frustrated in her search until she connected with a US-trained midwife and a local Indian obstetrician dedicated to giving her the birthing experience she was determined to have. To get it, however, Nilekani says she needed to leverage all of the research and analytical skills she acquired as a PhD student at GSAS.



Janhavi Nilekani, PhD '18

“My work at Harvard gave me the training I needed to study childbirth in an evidence-based way,” she says. “It gave me the ability to do a cost-benefit analysis and make decisions. And, maybe above all, the concept of smart policy design and implementation that I learned while a student at GSAS taught me that if I wanted a respectful, evidence-based childbirth, the incentives of all the actors had to be aligned.”

Today, as the founder and chairperson of the Bangalore-based Aastrika Foundation, Nilekani, PhD '18, leverages her graduate education and personal experience to advance an audacious vision: “a future in which every woman is treated with respect and dignity during childbirth, and the right treatment is provided at the right time.” If she’s successful, Indian mothers won’t need a Harvard PhD to receive the same high-quality maternal care that she did.

THE BIRTH OF A SOCIAL ENTREPRENEUR

By the time Nilekani graduated from GSAS in 2018, she knew her path would lead her not to academia but back to Karnataka, a state in India, where she

could have a direct impact on her home community. She turned down a raft of offers from prospective employers and started the Aastrika Foundation one year after she accepted her GSAS degree in Harvard Yard.

“Aastar’ is the Sanskrit word for expansion,” she says. “Urmika’ means wave. So, the contraction ‘Aastrika’ represents the foundation’s mission to create a sea change in maternal care that will ripple out and transform the birthing experience for mothers across India.”

Rema Hanna, the Jeffrey Cheah Professor of South-East Asia Studies and one of Nilekani’s mentors, says that she’s not surprised that her former student decided to use her PhD skills and knowledge for the common good.

“Harvard doctoral students gain frameworks that help them use evidence in the policy space, statistical skills that help them use data and information to generate that evidence, and mentoring that helps them translate the statistics to knowledge that policymakers can understand,” she says. “But even as we use data, we don’t lose sight of the fact that the goal is ultimately to improve people’s lives.”

In India and many middle-income countries, Nilekani says, physical and verbal abuse of birthing mothers and a disregard for patient privacy are common. “Shouting at people, slapping,

pinching, breaches of confidentiality, women being half-naked in rooms just waiting to give birth—it’s all standard,” she says. Many Indian women and babies also have insufficient access to care, what Nilekani calls the problem of “too little, too late”: no hospital near their home, a shortage of nurses and supplies, a lack of training for health professionals, or other obstacles to care. At the same time, Nilekani says Indians also suffer from over-intervention in childbirth, excessive medicalization, and excessive treatment—particularly excessive surgery.

“The cesarean rate in the United States is about 32 percent,” she says. “There are three states in India with private sector c-section rates of more than 80 percent. For most of these women, it’s unnecessary. The morbidity and side effects—along with the downstream health consequences for the next child and the costs for the health system—make it a very suboptimal deployment of resources.”

The Aastrika Foundation tries to address the crisis in Indian maternal care by tackling these three challenges. At the center of its effort is midwifery. Nilekani points to a report from the United Nations Population Fund asserting that midwives trained to international standards can provide up to 87 percent of essential birth care to women and infants. Dr. Nachiket Mor, a visiting scientist at the Banyan Academy of Leadership in

“**M**Y WORK AT HARVARD GAVE ME THE TRAINING I NEEDED TO STUDY CHILDBIRTH IN AN EVIDENCE-BASED WAY. IT GAVE ME THE ABILITY TO DO A COST-BENEFIT ANALYSIS AND MAKE DECISIONS.

— JANHAVI NILEKANI



DIRECT IMPACT

The Aastrika Midwifery Centre provides high-quality maternal care to women in Bangalore.



Mental Health in Chennai, India, who works at the intersection of healthcare and finance, says midwifery is critical if middle-income countries like India, are to improve rates of infant and maternal mortality—and do so affordably.

“The current approach in India either attempts to deliver babies at primary care centers that have low volumes, lower skill levels, are less well-equipped, are far away from hospitals, or at hospitals where the first preference of obstetricians is to intervene surgically to deliver babies,” he says. “These approaches are responsible for the poor outcomes and waste observed in the Indian health system. There is a need to move all births to well-equipped high-volume midwife-run centers at which high-quality routine births are the norm and from which mothers can be moved quickly to hospitals should more advanced interventions—including c-sections—be required.”

UPSKILLING AT SCALE

Aastrika’s strategy is two-pronged. On the supply side, the foundation seeks to

dramatically upskill nurses and midwives to meet the need for those providers across the country. At the same time, it looks to create demand for high-quality care among expectant mothers.

To achieve its upskilling goals, Nilekani’s foundation has collaborated with the government of Karnataka to establish a national midwifery training institute in Vanivilas Hospital, the state’s largest facility for women and children. Aastrika is also developing high-quality resources that use the latest adult pedagogy to provide skills training to both aspiring and active nurses and midwives. Finally, the foundation hosts the Aastrika Sphere, a digital learning site recognized by the Indian Nursing Council for continuing education credits. Aastrika Sphere is free to use and includes courses on pain management, breastfeeding, normal labor and delivery, mental health, and many other aspects of the birthing experience. Aastrika partners with public health organizations across the globe, including the Fernandez Foundation, the United Nations Fund for Population Activities (UNFPA), the Denmark-based Maternity Foundation, and others to

populate the platform with high-quality content.

“Both WRA India and Aastrika Foundation believe that respectful maternity care (RMC) is a universal human right for all childbearing women and their newborns,” says Dr. Aparajita Gogoi, national coordinator for the White Ribbon Alliance for Safe Motherhood India, one of Aastrika’s institutional partners. “To ensure that the healthcare system in India is strengthened to provide respectful care, we collaborated to create an e-learning program for healthcare providers aimed at institutionalizing RMC as a standard of care. We believe that Aastrika’s commitment to upskilling will go a long way in improving the childbirth experience.”

Aastrika has its most direct impact on maternal care by providing it to pregnant women in Bangalore at the Aastrika Midwifery Centre (AMC). Nilekani says that women who cross AMC’s threshold have a radically different experience than those at virtually any other hospital or health center in India. They are treated by a staff trained in and committed to ethical, evidence-based, patient-centric

“A

FUTURE IN WHICH EVERY WOMAN IS TREATED WITH RESPECT AND DIGNITY DURING CHILDBIRTH, AND THE RIGHT TREATMENT IS PROVIDED AT THE RIGHT TIME.”

—AASTRIKA FOUNDATION MISSION STATEMENT



healthcare. That care takes place in the context of operational protocols that were recently recognized by the International Childbirth Initiative—and in a space that won the 2022 Healthcare Environment Award from the Center for Health Design and *Healthcare Design* magazine. Finally, the performance of AMC’s staff and the validity of its protocols are constantly evaluated through a rigorous process of data collection, audit, and quality improvement, informed by Nilekani’s work in economics and public policy at GSAS.

The result of all these efforts, according to AMC mother Dr. Shreya Upadhyay, is respectful maternity care and a woman-centric experience. An assistant professor at Christ University, Bangalore, Dr. Upadhyay delivered her first child via c-section and came to the Aastrika Midwifery Centre intending a vaginal birth for her second. She ended up choosing to undergo another c-section after 36 hours in labor, but she says that was the difference between a hospital and AMC; she chose the treatment that was right for her.

“There is a very high priority on mother-centric caregiving that I have not seen elsewhere in India,” Dr. Upadhyay says. “I was conscious and living the moment, my husband was in the operating theater, and just after birth, my baby was nursing contentedly at my breast. My experience at Aastrika was one of mindful caregiving. It is something that women in India need.”

A VISION OF CARE

Aastrika is well-positioned to meet that need in the years ahead, says Dr. Evita Fernandez, chairperson of the Fernandez Foundation, an NGO that works to “humanize childbirth” in India.

“Aastrika’s approach, like that of the Fernandez Foundation, is long-term and sustainable,” she says. “The midwife-to-patient ratio in India remains too

low compared to the World Health Organization’s (WHO) recommendations. By 2030, WHO predicts that it will fall even more. In the coming years, Aastrika must keep working towards their vision of promoting midwifery, providing training and education, and respectful maternal care.”

Fulfilling a vision of better maternal care is exactly what Nilekani intends to do in the near future. Her goal in the next five years is for Aastrika to upskill around 200,000 health professionals in evidence-based care and to train 1,000 new midwives. “We have so far had 8,000 learners after only three and a half years, and we are on a pathway to much more,” Nilekani says. “We want our programs to touch thousands of existing professionals to make them better at their work. We also want our efforts to lead to scores of new midwives in India, either by training them directly or by training faculty who teach others.”

In the 18 months since its founding, AMC has established a culture of high-quality care, delivered in the right amount at the right time. In fact, at 21.2 percent, the rate of Nulliparous Term Singleton Vertex c-sections at Aastrika—defined by the California Maternal Quality Care Collaborative as “live babies born at or beyond 37.0 weeks gestation to women in their first pregnancy, that are singleton,” and not in the breech or transverse positions—is lower than the current US average of 25.9 percent. Now the challenge is to fill the facility with new and expectant mothers. Midwifery is not new to India—or in many middle-income countries. So far, though, Nilekani says it has not received much attention either from the Indian nonprofit community or from mothers-to-be. That’s why Aastrika works on the demand side to make people aware of midwifery—and also of the crisis in maternal care.

“Increasingly, much of my time is spent speaking at conferences, giving interviews, and pulling together key



NILEKANI: “We want our programs to touch thousands of existing professionals to make them better at their work.”

statistics to inform media coverage,” she says. “We’re also hosting more conversations about the issue, like our recent event at the Bangalore International Centre, which is a hub of intellectual life in Karnataka. Currently, there isn’t even a shared understanding in India that it’s a good thing to get better healthcare, that women having better health is a reasonable thing for our society to work towards, or that it’s worth the time and the money. That’s part of the demand-side challenge that we’re looking to address with our advocacy.”

Changing minds is always the greatest challenge a leader can face. On the other side of that transformation, though, is a more humane world—for mothers, their children, and for nearly 1.4 billion of the world’s people.

“Imagine a world where no woman is disrespected during birth or is plied with unnecessary medical interventions,” says Dr. Evita Fernandez. “She has a birth of her choice with her preferred partner. What Aastrika is doing will change the face of maternity care in India. Isn’t that going to improve everybody’s lives?” 🌸

GSAS AT 150: ALUMNI WHO MADE A DIFFERENCE

TO MARK THE SCHOOL'S 150TH ANNIVERSARY, COLLOQUY IS RECOGNIZING GSAS GRADUATES PAST AND PRESENT WHOSE WORK HAS HAD AN OUTSTANDING INFLUENCE ON THE WORLD. THE ALUMNI UPDATES SECTION WILL RETURN IN ACADEMIC YEAR 2023–2024.



Robert Moses, AM '57, philosophy, helped organize the Freedom Summer Project of 1964, which prepared volunteers to support Black voter registration in Mississippi and teach literacy and civics in Freedom Schools. His efforts – along with those of other prominent civil rights leaders – led in 1965 to the passage of the landmark federal Voting Rights Act, which restored the franchise to hundreds of thousands of Black citizens in

the United States. In the 1980s, after receiving a MacArthur Fellowship, Moses founded the Algebra Project, which brought mathematics literacy to underserved and minority students across the country. In 2002, Moses received the James Bryant Conant Award from Education Commission of the States, which recognizes outstanding individual contributions to American education.



Alain Locke, PhD 1918, philosophy, was the first Black student to receive a PhD in philosophy from Harvard, as well as the first Black Rhodes scholar, studying at Oxford University and the University of Berlin. One of the leading Black intellectuals of the 20th century, Locke was the “dean” of the landmark 1920s artistic and cultural movement known as the Harlem Renaissance and was a pillar of the Howard University faculty for almost 40 years.



Madhav Gadgil, PhD '69, biology, is a professor at the Indian Institute of Science (IIS), a pioneer in bringing quantitative methods to the study of ecology, and a leading voice on environmental issues in India. The founder of IIS's Centre for Ecological Sciences, Gadgil's work was central to the crafting of India's National Biodiversity Act of 2002. In 2015, he and fellow GSAS alumna Jane Lubchenco, PhD '75, shared the prestigious Tyler Prize for Environmental Achievement.



Martha Nussbaum, PhD '75, classical philology, is internationally renowned for her work in Ancient Greek and Roman philosophy, feminist philosophy, political philosophy, and philosophy and the arts. Her 24 books and 509 papers address topics ranging from reform in liberal education to sex and social justice, emotional intelligence, sexual orientation, and constitutional law. Nussbaum's many honors include the Henry M. Phillips Prize in Jurisprudence.



Marjorie Grene, PhD '35, philosophy, was one of the founders of the field of the philosophy of biology. Her work explored the role of chance in evolution, life and nonlife, and human freedom and considered new questions in genetics and molecular biology. A devotee of Aristotle and scourge of Descartes, Grene studied with the philosophers Martin Heidegger, Karl Jaspers, and Alfred North Whitehead. In 2002, Grene became the first woman to have an edition of the *Library of Living Philosophers* devoted to her.



B. F. Skinner, PhD '31, philosophy, helped revolutionize understanding of how behaviors are shaped through encounter with rewarding or aversive stimuli. His bestselling books *Walden Two* and *Beyond Freedom and Dignity* brought to the forefront of popular culture the power of environment to influence human behavior. In 2002, Skinner was ranked the most eminent psychologist of the 20th century by the members of the American Psychological Society.



Howard Aiken, PhD '39, physics, helped launch the digital age by designing the first programmable computer – the Harvard Mark I – built by IBM in 1944. Aiken also developed the nation's first master's (1947) and doctoral (1949) programs in computer science, and, as a professor of applied mathematics, directed Harvard's Computation Laboratory until 1961. In 1970, he received the Edison Medal from the Institute of Electrical and Electronics Engineers.



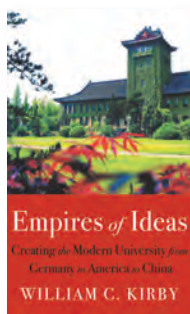
Cecilia Payne-Gaposchkin, PhD '25, astronomy, was the first woman in Harvard's history to receive a PhD in astronomy. Astronomers Otto Struve and Velta Zeberge called Payne-Gaposchkin's work “the most brilliant PhD thesis ever written in astronomy.” In 1956, after years of teaching, she also became the first woman in the University's history promoted to a full professorship at Harvard.



Jeffrey Sachs, PhD '80, economics, is an internationally recognized development economist who has proposed bold strategies to address extreme poverty, global climate change, financial crises, and the control of pandemics. He has advised several UN secretaries-general and is the president of the UN Sustainable Development Solutions Network and the director of the Center for Sustainable Development at Columbia University.

AUTHOR PROFILE

THE ASCENT OF CHINESE EDUCATION



*Will Chinese universities threaten the global preeminence of those in the United States? In his new book, *Empires of Ideas: Creating the Modern University from Germany to America to China*, William Kirby, PhD '81, Harvard's T. M. Chang Professor of China Studies and Spangler Family Professor of Business Administration, turns to history for answers. Looking at the trajectory of German universities, the world's best until they were supplanted by those in the United States, Kirby says that China's internationalism and passion for higher education could similarly propel its schools past great American institutions—including Harvard.*

You've been a China scholar for most of your academic career. How does this new book on the future of global higher education follow from that work?

My research has largely centered on the study of China, specifically China's return to a position of global power and the importance of internationalization in its ascent.

Chinese history is inextricably bound up with global economic, cultural, intellectual, technological, and political systems. I remember being told by an elder scholar at the Central Party School of the Chinese Communist Party, "You Westerners don't understand China." I said to him, "Thank you for this education because I had always thought that Marx

was German and Lenin was Russian, but now I know they were actually Chinese!"

Along those lines, China's rise should be top of mind for anyone thinking about the future of higher education. German universities, specifically the University of Berlin—today's Humboldt University—were the models for all modern research universities, including Harvard. Eight of the top 10 universities in the world as late as the 1920s were German. Now, it's rare that any German university cracks the top 50 worldwide. This is the crux of *Empires of Ideas*, which traces the modern university from Germany to America to China and poses the question that, if German universities defined the research university in the 19th century, and if American universities, without question, did so in the 20th, what are the prospects now of Chinese universities setting global standards?

One of my conclusions is that American educators have much to be proud of and a lot to worry about, especially because of the serial defunding of public higher education and public universities. Another area of concern is that American universities, despite having grown eminent by importing international ideas and scholars, no longer look abroad for new ideas. Isolation is the opposite of what makes great scholarship; it is a death sentence for higher education.

You make the case for the centrality of internationalism in China's ascent over the past 50 years. How does that play out in the country's higher education system?

The dust jacket of *Empires of Ideas* has a picture of a lovely ivy-covered campus building in China. It has a big red star at the top now because it's under the Com-



William Kirby teaching at Harvard Center Shanghai

munist Party, but it was founded as a missionary college in 1919. It was designed by an American architect building in a Chinese style for a Chinese American cooperative project called the University of Nanking. Intellectually and architecturally, every Chinese university is international in origin and orientation.

[Chinese President] Xi Jinping has talked about how Chinese universities should not compare themselves to the rest of the world but should be their own great exemplars, and he's encouraged some universities to withdraw from global rankings. At the end of the day, though, these schools have grown up like other Chinese institutions—business and otherwise. They have matured in an international environment. It is the great universities of Europe and North America from which they have learned and with which they now cooperate and compete. This is the company that they wish to keep and the company that they wish to lead.

The one thing that US politicians on the right and left seem to agree on is that China's rise is a threat to American primacy. How do you make sense of the increase in hostility?

I think the attitude of political leadership in both countries does a lot to shape public opinion. After Nixon went to China, for instance, there was a great wave of what I would call “sinophilia” in this country. Everything China did was wonderful and interesting, particularly compared to the Soviet Union. China was our new friend—and it had been our old friend during World War II against Japan. And yet the China that people admired in the 1970s was one hundred times more repressive, massively more poor, with a truly totalitarian political system compared to the China with which we work today—and in which so many American companies are invested and, indeed, make money.

In an editorial for *The Wire China* magazine, I wrote: “The United States and China each privilege self-interest over common concerns. Mutual paranoia has taken precedence over mutual benefit. Each country imagines a future of greater ‘self-sufficiency’ even if neither has ever gained from it.” There is xenophobia in both countries, but in the United States we're in a little bit of a new red scare with racialist tones in which the Chinese—even Chinese American citizens—are often seen as disloyal or not to be trusted.

What are your concerns about this trend? What might the impact be on higher education—specifically a place like GSAS?

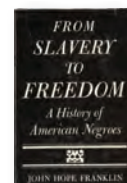
The rise in tensions has potentially very bad consequences for Harvard and all the great universities in the United States. All have benefited extraordinarily over the decades from waves of Chinese students coming to our shores into our universities: in the 1950s fleeing the communists, after the Tiananmen Square incident in 1989, and then increasingly in our graduate schools today.

China is home to more of the best human capital in the world than any other country. It has extraordinary school systems and extraordinary universities. Harvard's graduate schools have been the beneficiary of this talent—GSAS in particular, because the School is entirely meritocratic. We choose our students because they're the best in their field, and they're chosen by the faculty, not by a central admissions committee. When we cease to have the capacity to bring the best and the brightest to a place like the Graduate School of Arts and Sciences, then we will decline. There's no doubt about it.

History shows that a self-isolating China is a danger to itself and a loss to the world. The same may be said about the United States.

FIVE BOOKS THAT CHANGED THE WORLD

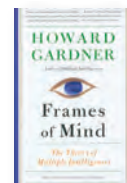
In place of the magazine's usual Recently Published listings, the anniversary-year issues of *Colloquy* draw attention to books authored by GSAS alumni that changed the way human beings understand the world, society, and ourselves. The Recently Published section will return in academic year 2023–2024.



John Hope Franklin, PhD '41, History, *From Slavery to Freedom: A History of American Negroes* (1994 ed., *A History of African Americans*), New York: Alfred A. Knopf, 1947



Michael Porter, PhD '73, Business Economics, *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, New York: Free Press, 1980



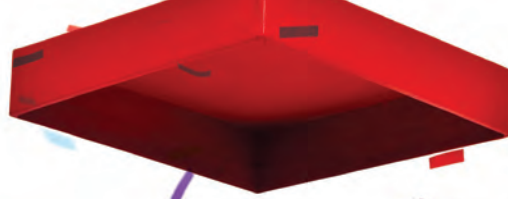
Howard Gardner, PhD '71, Social Psychology, *Frames of Mind: The Theory of Multiple Intelligences*, New York: Basic Books, 1983



Margaret Atwood, AM '62, English & American Literature & Language, *The Handmaid's Tale*, Toronto: McClelland and Stewart, 1985



Sherry Turkle, PhD '76, Sociology, *Alone Together: Why We Expect More from Technology and Less from Each Other*, New York: Basic Books, 2011



150 *years*
INQUIRY
INNOVATION
IMPACT



Celebrate GSAS's 150th Birthday at Alumni Days!

COME TOGETHER WITH ALUMNI, FACULTY, STUDENTS, AND FRIENDS TO CELEBRATE GSAS'S MILESTONE 150TH ANNIVERSARY AT ALUMNI DAYS, APRIL 14 AND 15, 2023!

During this year's expanded program, the School's sesquicentennial themes of inquiry, innovation, and impact will come alive as you engage some of the world's leading scholars in substantive conversations about big ideas, including:

- "Improving Equality of Opportunity in America: New Insights from Big Data" with **Raj Chetty**, PhD '03, and current PhD candidate **Benny Goldman**
- "Psychological Safety and Why It Matters Today More than Ever" with **Amy Edmondson**, PhD '96
- "Empire of Ideas: Will China Surpass America in the World of Universities?" with **William Kirby**, PhD '81
- "Strategies for Addressing Gun Violence" with **David Hemenway**, PhD '74, and **Zirui Song**, PhD '12
- "Rethinking College Admissions in the Wake of SFFA v. Harvard" with **Natasha Warikoo**, PhD '05
- "The Ethics and Politics of Grief" with the **Reverend Matthew Ichihashi Potts**, PhD '13, in conversation with PhD candidate **Mac Loftin**.

At Alumni Days, you will also hear from Dean Emma Dench about the future of graduate education, explore masterpieces in the Harvard Art Museums' print collection with **Elizabeth Rudy**, PhD '07, and delve into GSAS history at a special exhibit curated by the Harvard Archives. In between the talks and activities, network with your fellow alumni as you visit old haunts and see how campus has changed since your time here. Don't miss a celebration that was 150 years in the making! Visit gsas.harvard.edu/AlumniDays today to learn more about the program and claim your place at this once-in-a-lifetime event!

••• [Learn more and follow programming updates at gsas.harvard.edu/150](https://gsas.harvard.edu/150)

SAVE THE DATES!

Reversing the Rise in Inequality

With **Marcella Alsan**, PhD '12, **Claudine Gay**, PhD '98, **Ann Owens**, PhD '12, and **Lee Pelton**, PhD '84
March 8, 2023
San Francisco

Harvard Horizons

April 11, 2023
Cambridge

Alumni Days

April 14 & 15, 2023
Cambridge
gsas.harvard.edu/AlumniDays

Democracy and the Rise of Authoritarianism

With **Fiona Hill**, PhD '98
April 2023
Berlin

Centennial Medalists Ceremony and Luncheon

May 24, 2023

Archival exhibit:

GSAS: 150 years of Inquiry, Innovation, and Impact
April 6 – June 30, 2023

••• Please visit gsas.harvard.edu/ events in the coming months for details on these and other events.



Marybeth and Francesco Pompei, PhD '02, were inspired to establish a fellowship for future GSAS scholars.

GSAS HELPED HIM TRANSFORM HIS INDUSTRY. NOW HE WANTS TO RETURN THE FAVOR.

How did Francesco Pompei, PhD '02, become a mid-career doctoral student, the only one wearing a suit in classrooms filled with 22-year-old graduate students? He credits the guidance of late Harvard faculty Frederick Abernathy, PhD '59, Gordon McKay Professor of Mechanical Engineering and Abbot and James Lawrence Research Professor of Engineering.

Pompei had collaborated with Abernathy as a consultant, tracking down inefficiencies and helping Harvard save money during the energy crisis in 1979. This was in the early days of his company, Exergen Corporation. When he and his wife, Marybeth, began developing new technology with ear thermometry, Pompei realized he needed more background in medical science. He took Abernathy's advice to pursue a PhD in engineering sciences.

"Having the credibility of this PhD was really important," explains Pompei. In gratitude, on the 20th anniversary of earning that degree, he and Marybeth were moved to establish a fellowship to support graduate students interested in climate or the environment.

He did so as a tribute to Abernathy and the late Richard Wilson, Mallinckrodt Professor of Physics, Emeritus, with whom he did cancer research for 30 years. "Harvard gave me so much opportunity," says Pompei. "I wanted to return the favor."

MAKE YOUR OWN ANNIVERSARY GIFT TODAY!

Celebrate 150 years of research and innovation and honor our collective milestone by making your gift to the Graduate School Fund today. Visit alumni.harvard.edu/give-to-gsas or scan the code. ▶



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IN THIS ISSUE:

VISIONARY: CHANGING
OUR UNDERSTANDING
OF HOW WE SEE — AND HOW
WE SEE SCIENCE

**A RESPONSIBILITY TO THE
WORLD:** A LIFELONG QUEST
TO END POVERTY

**FOR EVERY MOTHER, A
GOOD CHILDBIRTH:**
TRANSFORMING MATERNAL
HEALTHCARE IN INDIA

