

the faculty are feeling a sense of responsibility and agency and, I think, a sense of urgency to get this right.”

And as the world has changed, so too, he says, have the obstacles that stand in the way of getting it right: “The challenges of our society don’t stop at the gates of Harvard.” The College is more racially, ethnically, and socioeconomically diverse than ever. Long gone, for good reason, are the days when the liberal arts meant teaching a curriculum of white, male prep-school graduates a curriculum of white, male writers. Khurana sees himself as someone who likes to “discuss what I think is undiscussable”—including how issues of class, access, and success manifest themselves on Harvard’s campus. One growing problem, he says, is that students often arrive with a K-12 education that, because of high-stakes testing, has focused on teaching *skills*—not necessarily *how to think*.

For Khurana, a key part of fostering personal and intellectual transformations, therefore, is opening spaces for students to stop, take a step back, and think about the changes happening around and within them. He has joined with other College administrators in strengthening and expanding programs to encourage reflection among undergraduates. In an experiment last fall, he helped develop a curriculum of readings and conversations for freshman orientation that centered on the value of a liberal arts and sciences education. “Sometimes students are—obviously, in a good way—so taken by the name *Harvard*, they may not know as much as we would like about the undergraduate program itself, and what its purpose and its construction are,” he explains. “We have to do a better job on communicating that.”

This year, he and dean of freshmen Thomas A. Dingman helped initiate a mid-

year gathering that brought together the entire freshman class. Following a comedy show, a spoken-word performance, and other entertainment, Khurana took the stage last at January’s “ReFRESHMENT” event. He began, he explained to the crowd in Sanders Theatre, “where I start every discussion, which is the mission of the College.” He spoke of “citizens and citizen leaders,” as well as the liberal arts’ “transformative power”—reiterating the mission he’d first shared with the Class of 2018 at September’s Convocation. But Khurana also added new advice, the kind that anxious college freshmen most need to allow transformation to take hold. “There’s no one best way to do Harvard,” he reminded them. Ending the evening, the dean—halfway through his own freshman year—dismissed the class with “Thank you. See you guys in the dining hall.”

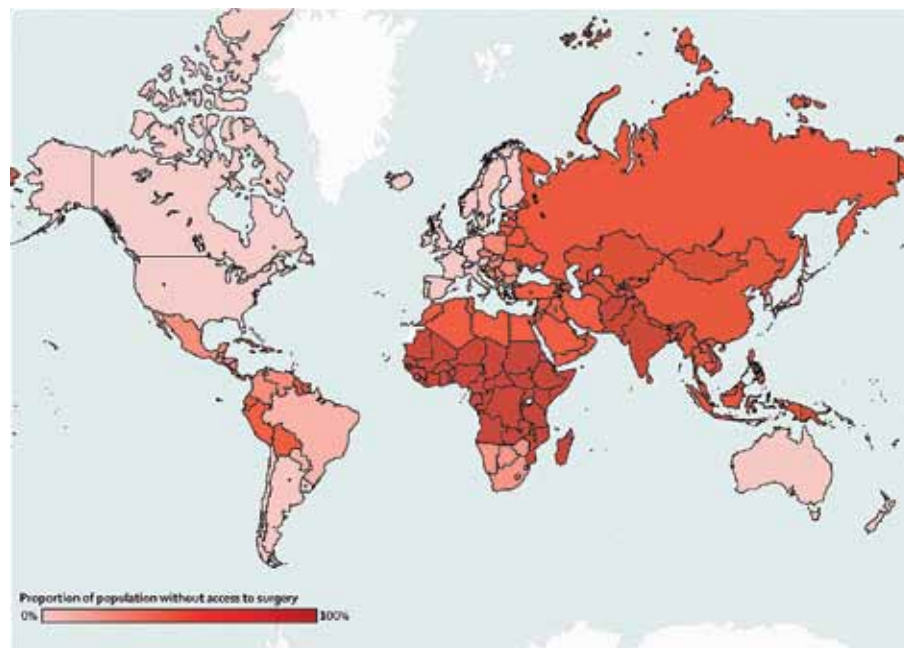
—STEPHANIE GARLOCK

## Surgery for All

“GLOBAL HEALTH” typically brings to mind issues such as vaccination, maternal care, sanitation, and malaria control. It’s not usually associated with surgery. But consider the woman who dies in childbirth because she can’t reach a clinic that performs cesarean sections, or the man out of work because he can’t afford cataract surgery to restore his vision, or the child whose life is cut short by an injury that local healthcare workers don’t have the training to repair.

A landmark report published by the Lancet Commission on Global Surgery argues that a lack of access to safe surgical care has a major impact on the health and well-being of people around the world. A public conference at Harvard Medical School (HMS) on May 6 marked the report’s launch, following a similar meeting in London. “We want surgery to be part of the discourse on global health, and we want surgery integrated into the discussions about how you build health systems,” says John Meara, Kletjian professor of global surgery at HMS, one of three commission co-chairs.

The problem is vast. “Five billion people cannot access safe, affordable surgery,” Meara said during his opening address in Boston. That number includes people who can’t afford expensive procedures as well



**The unserved world: the proportion of the population lacking access to safe, affordable surgery and anesthesia—the subject of the Lancet commission’s work**

as those who live far from an operating room. Closing the gap would require 143 million additional procedures each year. But the commission laid out an ambitious plan to achieve 80 percent coverage of essential surgical and anesthesia service per country by 2030, and outlined specific recommendations, goals, and indicators of progress that can be used to realize it.

*The Lancet*, a preeminent medical journal based in London, formed the commission in 2013 when a small group of surgeons joined with Justine Davies, editor-in-chief of *Lancet Diabetes & Endocrinology*, to champion an in-depth look at surgery around the world. The commissioners worked with collaborators from more than 110 countries to produce the report, focus-

ing on surgery and anesthesia in low- and middle-income countries. Meara, who became the inaugural Kletjian professor this April, has been a leading advocate for putting surgery on the international agenda; his newly endowed chair is among the first global surgery professorships established at an academic institution.

Surgery has a role across the entire spectrum of human disease, and conditions that can be surgically treated represent about 30 percent of the global burden of illness. But high out-of-pocket surgical costs push 33 million people into financial catastrophe each year (and 48 million more when indirect costs like transportation are included). Achieving the commission's 2030 goals would require a \$420-billion investment. This staggering cost could yield major returns, though: the report projects that the lack of surgery and anesthesia would cost low- and middle-income countries \$12.3 trillion in that span, a 2 percent drag on growth each year. During a talk at the conference, Gavin Yamey, a biostatistician at the University of California San Francisco

School of Medicine, said, "Many surgeries are equally [as] cost-effective as other public-health measures."

"To achieve our vision, we need people on the ground," said commission co-chair Lars Hagander of the World Health Organization in a talk on workforce education: not only surgeons, but anesthesiologists, nurses, radiologists, pathologists, technicians, and rehabilitation specialists. That means providing medical training, as well as incentives for health professionals to stay in their local communities rather than move to high-income areas. In some cases, it may also require shifting some surgical duties to people with less training.

Equipment, supplies, and facilities are



also needed. Yet a panel discussion on the role of industry in global surgery pointed out that in resource-poor areas, well-meaning donations can overwhelm clinics and nongovernmental organizations with old, faulty equipment and useless items they then must struggle to dispose of. "Equipment donation alone is not going to fix the problem," said Asha Varghese, director of global health programs at the GE Foundation; it's also necessary to train technicians who can operate and repair equipment to keep it running.

Another problem is data collection. "We have no idea how much the world is spending on surgery," said Meara in his address. (The commission found that only two countries, Georgia and Kyrgyzstan, track those totals.) He and his fellow commissioners identified three "bellwether procedures" that can be used to assess the basic surgical-capability level of a nation's healthcare facilities: cesarean section, abdominal surgery, and orthopedic surgery for bone fractures. Facilities that can handle those three interventions can easily manage a wide range of procedures.

Historically, global surgery has been most identified with medical missions—teams of surgeons who travel to resource-poor areas to perform procedures like cleft lip and palate repair or cataract surgery, which local people can't otherwise afford. Such intermittent missions have saved lives and improved the health of many patients, but they have also been critiqued for not offering a lasting solution to the larger problems of healthcare delivery in those areas. As a result, the field has in-

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FROM TOP LEFT: ROSE LINGOLN/HPAC; KRIS SNIBB/HPAC



creasingly focused on building local capabilities.

Many talks at the conference focused on the respective roles of students, residents, surgeons, and academic researchers from high-income countries in improving surgical care internationally. Speakers said that young medical students and surgeons want to get involved in global health but need more opportunities to do so. HMS, for example, offers a one- to two-year global surgery fellowship that enables surgeons to provide surgical care or conduct research in low-income countries, and a one-year research associate position that allows medical students to participate in existing faculty-led programs abroad. Similar fellowships, and exchange programs that let surgeons spend extended time in needy areas, are becoming more common at medical schools and hospitals generally. The American College of Surgeons in 2004 launched Operation Giving Back to help connect surgeons to volunteer opportunities around the world.

But speakers cautioned that programs to improve care in other countries must respond to local needs. "We need to get away from surgical colonialism," said Ainhoa Costas-Chavarri, a hand surgeon at Boston Children's Hospital. Instead, many participants used the word "accompaniment," an approach advocated by Paul Farmer, co-founder of Partners In Health. Robert Riviello, director of global-surgery programs at the Center for Surgery and Public Health at Brigham and Women's Hospital, discussed one example, launched in 2012: a seven-year partnership between several U.S. academic medical centers and the Ministry of Health in Rwanda, that aims to boost training for healthcare workers in that country and transfer all clinical and teaching duties to local Rwandans by the program's end. It's important, Riviello said, not to arrive in another country with a set curriculum, but to plan together instead: "We shouldn't assume we want the same things until we actually talk about them."

In a keynote address, Farmer, now Kotontrones University Professor of global health and social medicine, said that fixing the "grotesque disparities" in surgical capabilities requires strengthening health systems as a whole. "Building local capacity is critical to the advancement of this agenda," he said. He also cautioned that a culture of safety in high-in-

## Yesterday's News

From the pages of the *Harvard Alumni Bulletin* and *Harvard Magazine*

**1930** The Peabody Museum has sponsored two summer expeditions: the first will make a thorough archaeological survey of a large portion of Utah; the second will continue archaeological explorations in Czechoslovakia and the Balkans.

**1930** Dunster and Lowell, the first two Houses to be built with funds provided by Edward Harkness, are under construction, as are new biology and physics labs, a faculty club, and Dillon Field House.

**1935** Two Alumni Association representatives travel to the Wedgwood Potteries in England to oversee the final stage in the production of commemorative Harvard Tercentenary chinaware.

**1935** Massachusetts governor James Michael Curley, addressing the Alumni Association on Commencement Day afternoon, stresses the obligation of universities to solve pressing economic problems; their failure to answer the question of work and wages, he declares, "constitute[s] an indictment of our educational system."

**1945** World War II ends on August 14 with more than 2,800 undergraduates on leave of absence for war service and only 400 attending a special summer session in Cambridge.

**1950** The "nation's oldest summer school" proudly reports a first: students in attendance from all 48 states and the District of Columbia, as well as representatives of 46 foreign countries, from Austria to Venezuela.

**1960** Three cooperative houses, "the first units of contemporary design to be built at Radcliffe," are under construction, thanks in large part to a gift from Susan Morse Hilles.

**1970** The University switches to a Centrex telephone system, installed during a two-year period at a cost of \$10.5 million, that allows incoming and outgoing calls to be dialed direct.

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Five hardy and hearty members of the College class of 1900—the "Naughty-naughts"—celebrate the first seven-tieth reunion.

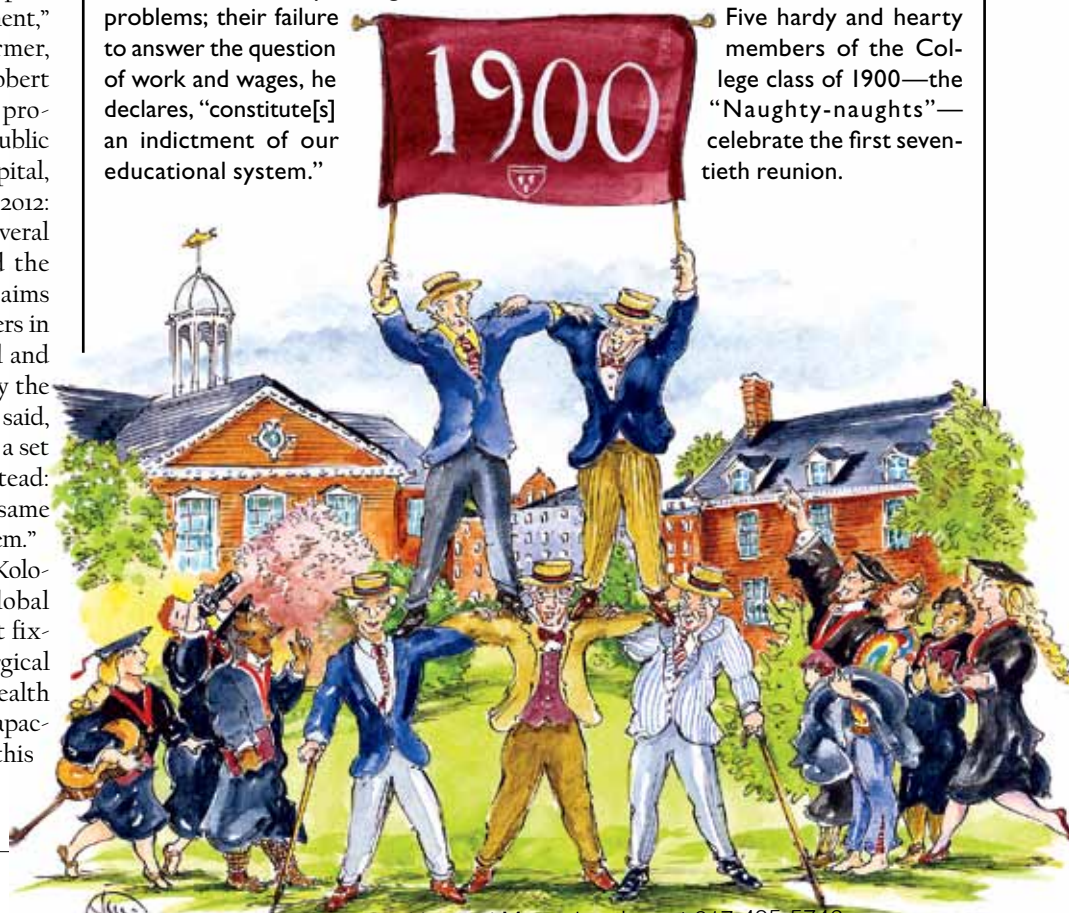


Illustration by Mark Steele

come countries should not become an excuse to avoid engaging with and practicing medicine in low-income countries. "It is not safe to perform surgery in most of the places we're talking about," he said, and yet there is ample need for surgical treatment, so turning away because of safety concerns is not a solution.

The Lancet report also included success stories about partnerships that have improved surgical care in Haiti, Mongolia, Uganda, and elsewhere. The commission is now working with the Republic of Zambia to begin assessing that nation's surgical capabilities, based on the approach outlined in the report. Commissioners have

also met with several other nations' ministers of health and finance to make the case for investing in surgery. Meara emphasized that the real work is just beginning. "We're not celebrating the completion of the project," he said at the end of the meeting. "We've got a long way to go."

~COURTNEY HUMPHRIES

## University News Briefs

### Endowing Engineering

JOHN A. PAULSON, M.B.A. '80, founder of a prominent hedge fund, has made a \$400-million commitment to the School of Engineering and Applied Sciences (SEAS), the largest gift in University history. The school will bear his name. The unrestricted funds have the effect of bolstering the school's endowment by 40 percent—giving its leaders the flexibility to pursue their plans to ex-

pand the faculty, enhance support for research, and underwrite graduate students, at a time when course enrollment is booming and the school plans to move many of its professors to a huge



John A. Paulson

new facility that will anchor Harvard's academic expansion in Allston. Paulson said he intended the gift to make the school "a twenty-first-century engineering leader," while enabling strong future collaborations between SEAS and Harvard Business School in "a center of innovation in the sciences, engineering, and math." His decision, he said, was driven by his desire "to help Harvard in the area that Harvard needed the help." For a complete report on the gift, unveiled June 3 as this issue went to press, see [harvardmag.com/paulson-15](http://harvardmag.com/paulson-15).

### Tough Grading for Gen Ed

THE COLLEGE'S flagship general-education curriculum came under sharp criticism when a faculty review committee released its report for discussion at the May 5 Faculty of Arts and Sciences (FAS) meeting. The requirement that undergraduates take eight general-education courses (one-quarter of their curriculum) is intended to assure that they acquire some breadth of intellectual exposure and grounding in ethical reasoning and the broader responsibilities of citizenship.

The review committee, led by Martignetti professor of philosophy Sean D. Kelly, found that whatever good intentions accompanied the enactment of general education in 2007 and its implementation in 2009, "in practice our program is a chimera: it has the head of a Gen Ed requirement with the body of a distribution requirement." That is, it purports to be under the guidance of a principle or set of principles, but in practice permits students to adhere to those principles only nominally, with courses that "fail to manifest or even identify that philosophy."

Among the disturbing things the committee heard during its fact-finding: some faculty members did not even know their courses satisfy general-education criteria, and students indicated that their course selections were guided by searching for low workloads and lax grading. Some 574 courses are now permitted to qualify for general-education requirements, meaning that many classes for concentrators have been grandfathered in, undercutting the rationale for distinctive offerings with a unique purpose. (For a student perspective, see *The Undergraduate*, page 36.)

In the ensuing, relatively brief faculty discussion, several professors supported the rationale for general education, and for overhauling the program as it now exists to better meet its aims. A leader of the 2007 effort to create the program, Bass professor of English Louis Menand, observed, "Departments don't normally generate courses for the nonspecialist, or that prepare students for life after college. That's not their mission. But it is the mission of the college as a whole, which is to say of the faculty. A general education curriculum represents what the faculty

believes are the things that every educated person should know, and the skills and habits of mind that every educated person should acquire." At least one colleague, though, advocated replacing the "failed" general-education program with a simple disciplinary distribution requirement.

FAS is expected to return to the subject in the next academic year, but the schedule for debate and the possible courses of action remain unclear. For a full report, see [harvardmag.com/gened-15](http://harvardmag.com/gened-15).

### Surveying Sexual Assault

TWENTY-EIGHT American Association of Universities members, including Harvard, have conducted a survey of their students regarding sexual assault, using a confidential questionnaire available online from April 12 through May 3. Such surveys are being encouraged nationwide in an effort to accurately measure the extent of sexual assault on campuses. The website informed students that "The survey says whatever you say it says," and stressed that it was "Voluntary. Important. Confidential." It was also, necessarily, very specific, asking respondents, for instance, whether they have been on the receiving end of "inappropriate or offensive comments"; "crude or gross



Sean D. Kelly