

intending to study astrophysics, says she appreciates the course's almost accidentally interdisciplinary nature. She speaks enthusiastically about working in groups with a student from applied math: "He has this other language that, when applied to architecture, produces something really beautiful and unexpected." His professors say they hope influence can also flow in reverse: that the spatial awareness of architecture will give this student new tools with which he can better understand math.

For Hays, that kind of cross-disciplinary connection is an exemplar of what his dream of linking the GSD and the College could spark. Though the program currently focuses on architecture, he hopes it will be expanded to a stand-alone concentration, still jointly administered with the art history department, that could encompass the different kinds of design that play significant roles in today's world, including graphic and industrial design and urban studies (already, FAS's 2013-4 annual report hints at the possible creation of an interdisciplinary secondary field in urban studies). Several GSD professors noted

that, in their ideal world, the track would attract students beyond those headed for design school—just as literature concentrators don't all become professors, and engineering concentrators don't all become licensed engineers. Instead, the program's graduates could become poli-

cymakers with an informed understanding of the built environment, or engineers with a sense for the aesthetic choices inherent in all their decisions. As Hong puts it, "Design has no boundaries. It permeates through any kind of profession."

~STEPHANIE GARLOCK

The Campaign Computes

AS IT PROCEEDED during the fall semester, The Harvard Campaign featured a penultimate school's launch (medicine); another galvanizing gift (computer sciences); and interesting evidence of the effects of smaller-scale philanthropy across the University, from undergraduate teacher-preparation training to a prospective College performing-arts program.

"The World Is Waiting"

HARVARD MEDICAL SCHOOL (HMS) unveiled its \$750-million campaign under that theme during a dinner in Boston on Novem-

ber 13. Dean Jeffrey Flier, the keynote speaker, recounted his own progress as a young researcher probing diabetes—his talk neatly encompassing school goals of educating leaders in science and medicine, discovering the causes of disease, and fostering change to improve human health.

In an earlier interview, Flier fleshed out those items on the wish list:

- **Education:** \$150 million to effect curriculum reform (an overhaul is to be introduced next year, with changes in pedagogy and accompanying physical renovations over time) and underwrite financial aid and fellowships.

- **Research:** \$500 million. "If you look at the budget of Harvard Medical School and what the people we employ do," the dean

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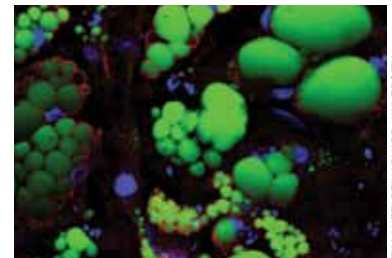
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TIM A. FELD/HARVARD UNIVERSITY

Anti-obesity Drugs?

Using a supply of human fat that was created by using stem cells, Chad Cowan, associate professor of stem cell and regenerative biology, has identified two compounds that convert white fat of the kind that accumulates around waistlines into metabolically active brown fat, which burns calories by releasing them as heat. The research could lead to a pill to fight obesity.

harvardmag.com/brownfat-15

said, “the largest number of them are doing research.” But it “never fully pays for itself,” and is now under sharp pressure, as federally sponsored research funds become scarcer. Hence the emphasis on securing the research enterprise through the campaign.



HARVARD MEDICAL SCHOOL

Jeffrey Flier

● *Innovation*: \$50 million. Under this umbrella phrase deans are employing in the campaign to cover discretionary funds and annual giving, which can then be deployed to emerging priorities, Flier highlighted “facilitating and seeding translational research,” like that conducted by the school’s new program in therapeutic science (see “Systematic Drug Discovery,” July-August 2013, page 54).

A final goal, *service*, encompasses enhancing health equity, improving health systems, health policy, and primary care—extending from work with partners in underserved areas (Rwanda, Haiti) to frontier research on diagnostic strategies and vaccines, should they be developed, for crises such as the Ebola outbreak in western Africa. (The \$50-million goal has been met, spurring Flier on to seek additional resources.)

Half the total goal had been raised by the time of the launch event, according to campaign chair Joshua Boger, Ph.D. ’79, founder and former CEO of Vertex Pharmaceuticals Inc. He noted that HMS has an unusual philanthropic challenge: its student body is one-tenth the size of the College’s, and so—lacking a large alumni pool—it relies on external donors: foundations, corporations, and individuals engaged in supporting biomedical research. They are attracted to Longwood, he said, because HMS is a “nexus for research that extends all over the world.”

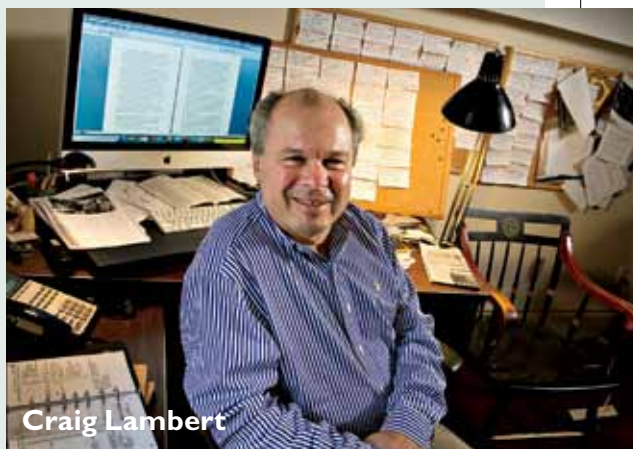
For further detail, see harvardmag.com/hms-15.

HMS’s goal is the third-largest within the campaign, after the Faculty of Arts and Sciences’ (FAS) \$2.5-billion and Harvard Business School’s \$1-billion targets. With the medical campaign made public, some \$5.7 billion of The Harvard Campaign’s

And Having Written...

Deputy editor Craig Lambert tiptoed on to *Harvard Magazine*’s masthead formally in the November-December 1988 issue, the ninetieth-anniversary edition, as a “copy editor.” (He had previously been listed among the contributing editors, having written about rowing, tennis, and Harvardians in Hollywood—all enduring passions.) By the following spring, he was among the associate editors, and he hasn’t looked back, until now: effective December 1, he has retired. Lambert’s feature on academic publishing, beginning on page 56, is his last as a full-time member of the staff. Fittingly, he also writes this time for Right Now, the section on engaging, thought-provoking research by the University’s scholars: for many years, as editor, he assembled its lively contents.

Lambert liked telling stories through people. His profile subjects included Doug Kenney (of the *Harvard Lampoon*, and co-founder of the *National Lampoon*); playwright Christopher Durang and drama critic Frank Rich; writers as diverse as Mark Helprin and Hendrik Hertzberg; and scholars from applied physicist Eric Mazur (a pioneer in moving teaching beyond the lecture format) to sociologist Orlando Patterson. He covered emerging ideas (behavioral economics) and shed new light on old ones (the “beauty” in intellectual insights and discoveries). He directed and wrote much of the magazine’s sports coverage, explaining how to compete at bicycle racing and how to set up a winning volleyball shot. And playing to a particular strength, he founded *Montage*, the magazine’s expanded coverage of arts, performance, crafts, creativity, and design, in all spheres (and appears there in this issue, too). Lambert also developed and encouraged a number of the magazine’s most productive freelance contributors.



Craig Lambert

His will be an active retirement: he is completing his second book, *Shadow Work: The Unpaid, Unseen Jobs That Jam Your Day* (forthcoming from Counterpoint Press this May). We celebrate his quarter-century-plus of service, congratulate him for his myriad contributions, and look forward to further work in these pages as his new schedule permits.

Beginning in August, two new colleagues joined the staff: Stephanie Garlock ’13, a veteran of *The Harvard Crimson* who wrote for *The Atlantic’s CityLab* in Washington, D.C., after graduation; and Sophia Nguyen, who graduated from Yale in May, after working with the strong writing faculty there and editing *The New Journal*. Both have contributed extensively already, covering schools’ campaign launches, museum openings, scholarship on sustainability, and more. You will find excellent



Sophia Nguyen

examples of their reporting and writing in Right Now, *Montage*, the profile of an undergraduate wrestler, and *John Harvard’s Journal* in this issue—and their astute editing has improved virtually every other article, too. We look forward to their first full-length features, now under way. Their fresh perspective, energy, and craftsmanship will continue to strengthen our work on readers’ behalf, in print and online, in this new year and beyond.



Stephanie Garlock

~The Editors

nominal \$6.5-billion goal has now been disclosed. That raises all sorts of development guessing games. Will Harvard Law School, which unveils its fund drive next spring, be content to announce a lower target than, say, Harvard Kennedy School's \$500 million? If the Law School seeks as

little as \$400 million, can the central administration's aspirations (which include at least hundreds of millions of dollars to build the new Allston facility for most of the School of Engineering and Applied Sciences) actually be accommodated by the remaining \$400 million nominally to

be raised? Or is the \$6.5-billion figure an artifice intended to top Stanford's last campaign total—and a sum the fundraisers hoped to exceed comfortably, to accommodate known needs (not to mention those farther down on decanal wish lists)? If the latter, the bet appears to have been a good one, given the torrid pace of fundraising. Gifts received and pledged are well beyond the \$4.3 billion announced as of last June 30 (see "Capitalizing," November-December 2014, page 26), long since augmented by the \$350-million endowment gift for public health and other benefactions. Whether or not the goal is formally raised, the arithmetic suggests additional aspirations.

Honor Roll

We recognize four outstanding contributors to *Harvard Magazine* for their work on readers' behalf in 2014, and happily confer on each a \$1,000 honorarium.

Contributing editor Adam Kirsch '97—critic, essayist, poet—has long crafted beautifully written articles for the magazine. It is fitting to honor him again for "Extracting the Woodchuck" (January-February, page 44), a penetrating, fresh assessment of Robert Frost. We take genuine pleasure in awarding him the McCord Writing Prize, named for David T.W. McCord '21, A.M. '22, L.H.D. '56, in recognition of his legendary prose and verse composed for these pages and for the Harvard College Fund.

The talented Michael Zuckerman '10 (a writer, Lowell House resident tutor, and first-year Harvard Law student) took readers inside undergraduate life today in "The Lowell Speeches Project" (September-October, page 37), a model of warmth and clarity. He also reported in print in the same issue ("Citizen Scholars," page 24) and has written astutely online, on Teach for America and other topics. It is fitting to celebrate his contributions with the Smith-Weld Prize which honors thought-provoking writing about Harvard in memory of A. Calvert Smith '14, a former secretary to the Governing Boards and executive assistant to President James Bryant Conant, and of Philip S. Weld '36, a former president of the magazine.

In a society divided by widening inequality—a fissure too easily overlooked from the comfortable confines of Harvard's campus—sociologist Matthew Desmond has opened eyes by examining the effects of eviction on the nation's poor. Photojournalist Michael Kienitz documented the phenomenon in the indelible images that appeared on the cover and accompanied "Disrupted Lives" (January-February, page 38), a feature on Desmond's work by contributing editor Elizabeth Gudrais '01. It was essential that the photographs treat their subjects with the dignity and respect that Desmond brings to his work; it was a privilege to publish this portfolio.

How to illustrate an idea? That was the challenge art director Jennifer Carling put to Taylor Callery as she reviewed "Disruptive Genius" (July-August, page 38), a profile of Clayton Christensen by deputy editor Craig Lambert '69, Ph.D. '78 (see also page 27, this issue). Callery responded with a vivid cover, depicting the displacement of lumbering automobiles from Detroit by nimbler Japanese imports, and in the article itself, with imaginative renderings such as an animated herd of mini disk drives chucking a bigger, earlier model over a cliff: disruptive innovation personified.

We warmly thank all four.



Adam Kirsch



Michael Zuckerman



Michael Kienitz



Taylor Callery

~The Editors

"The Next Era of Computing"

HAPPILY for the recording secretary, sprinting to keep up with such large numbers, there may soon be a homemade app for that. A gift from former Microsoft CEO Steve Ballmer '77, announced the same day as the HMS dinner, will underwrite a 50 percent expansion of SEAS's computer-science faculty, now with 24 ladder-track positions (tenured, associate, and assistant professors), plus associated lecturers and other teachers.

Discussing the gift (its size was not disclosed; endowing a new full professorship at SEAS costs \$6 million), Ballmer talked about readying the faculty for "the next era of computing" in fields such as machine learning and computational theory, which he saw as propelling "the next wave of innovation and research." More broadly, he characterized computer science as "the operating system for innovation," with applications not only in information technology but in humanities and social-science research, medicine, and elsewhere.

David Parkes, Colony professor of computer science and SEAS's area dean for computer science, who joined Ballmer in the conversation, sketched the potential for both fundamental and applied advances in virtually every other field of inquiry. When a several-year process of recruiting and hiring is complete, and the enlarged computer-sciences cohort is rehoused across the Charles River, Ballmer said, Harvard should have ascended from the ranks of a "very good department" to top-tier status alongside such institutions as MIT, Stanford, and Carnegie Mellon. A comprehensive report on Ballmer's gift

and its implications for Harvard appears at harvardmag.com/ballmer-15.

The computer-science and other campaign-fueled SEAS growth; expansive claims for computational and applied-scientific analytics in pursuit of research in virtually every other area; and expanding ambitions for what FAS dean Michael D. Smith has called an “emerging research innovation campus” in Allston come at a potential moment of anxiety among the experts in those other fields Parkes referred to.

As Smith’s annual report for the 2013-2014 academic year discloses, the number of undergraduates concentrating in engineering and applied sciences (775) now exceeds those concentrating in arts and humanities (746)—a first for the College (see graph, page 30). Those SEAS concentrators, and burgeoning enrollment in the school’s classes by students pursuing other major fields of study, are taught by 82 ladder faculty at the beginning of the current academic year (up from 77 in 2013-2014), while there are 196 arts and humanities professors. The student shift to

engineering and applied sciences has been swift and profound; that demand for instruction, and perceived opportunities in research, underlie SEAS’s campaign plan for significant faculty growth, much of which Ballmer has now supported.

By comparison, investment in other areas, welcomed by faculty members and students alike, is on a different scale (see below). In late November, the Association of American Universities (Harvard was a founding member, in 1900) joined academic groups from around the world to sign the Leiden Statement, the latest in a series prompted by the seemingly imperiled status of the humanities and other fields. Pledging support for the humanities and social sciences, the statement of purpose asserts, almost defensively, “Every challenge the world faces has a human dimension, and no solution can be achieved with-

out enlisting the support and efforts of individuals, communities, and societies”—with nary a mention of apps or algorithms.

A discussion of the changes in enrollment, faculty expansion, and related issues appears at harvardmag.com/fas-15.

Presidential Priorities

HARVARD has long been known for operating with “every tub on its own bottom”: a system that has empowered deans to steer their schools toward excellence in their fields, with control over endowments to match—but has also left successive presidents with relatively scant resources. Under Neil L. Rudenstine, the University Campaign sought funds for central academic priorities, including several multischool interfaculty initiatives. The current Harvard Campaign, without spelling out such goals, has apparently bolstered President Drew



JULIETTE LYNCH/HARVARD UNIVERSITY

Steve Ballmer

More Harvard Magazine

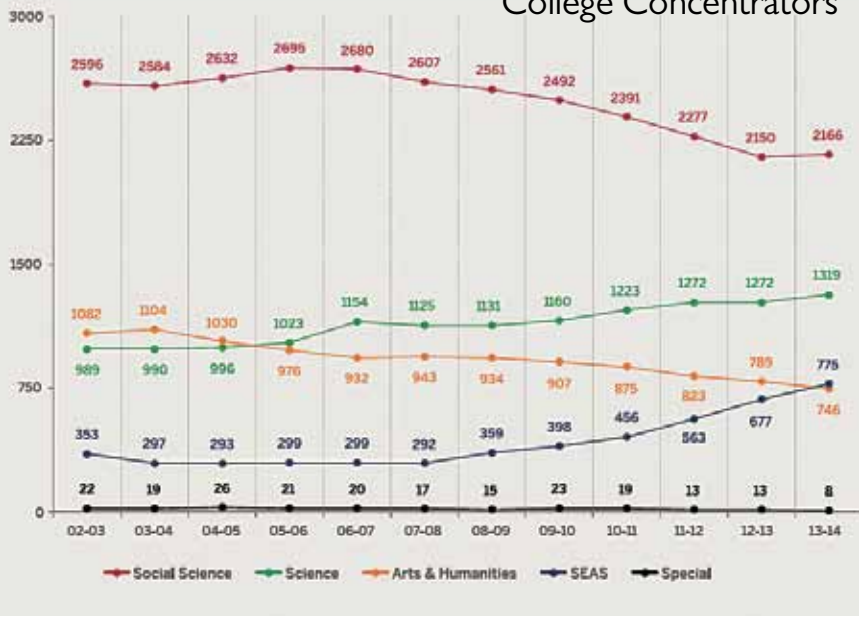
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College Concentrators



Inflection point: undergraduate engineering and applied sciences concentrators outnumber those in arts and humanities.

and humanities ladder faculty. For a full report, see harvardmag.com/tdm-15.

Two weeks later, the Harvard Graduate School of Education announced a \$10-million anonymous lead gift toward the creation of a Harvard Teacher Fellows Program, a reconceived, expanded pathway for undergraduates to enter the teaching profession. That gift, additional financial support, and unspecified funds from Faust, summed to \$14.5 million—sufficient progress toward the program’s \$20-million goal for education dean James Ryan to proceed, beginning with seniors in the College class of 2016. Capacity will eventually rise to 100 fellows annually. The program will provide extensive training before fellows enter a classroom—more than they might receive, for example, through Teach For America—and, more notably, mentoring and support during their first developmental years as teachers.

Talking about the venture, Faust said, “I’ve been excited about this for a really long time”—as it both accommodates student interests and joins larger efforts to offer more public-service opportunities to College graduates. Read a comprehensive report at harvardmag.com/tfp-15.

Faust’s coffers. A gift unveiled at Radcliffe Day last May, for example, allotted \$5 million for the arts, to be used at the president’s discretion (see Brevia, September-October 2014, page 30).

Deploying the Massachusetts Hall balance sheet, Faust supported two initiatives in the days before the Ballmer announcement and HMS launch. The first, announced in late October, is \$5 million in presidential seed funding for an undergraduate concentration in theater, dance,

and media—an initiative envisioned in the Faust-commissioned task force on the arts, which reported in late 2008, after the financial crisis largely forced its recommendations to be shelved. The new FAS concentration (put in context by the Undergraduate columnist in this issue; see page 33) may start up in the coming academic year. More details will be forthcoming, but it appears that the program will operate *without* creating a formal department or augmenting the ranks of arts

Taking Attendance

AT THE Faculty of Arts and Sciences (FAS) meeting on November 4, Harry R. Lewis, Gordon McKay professor of computer science, posed a question. He had learned from two colleagues, he said, that students in their spring lecture courses had been photographed without prior notification or consent of either professors or students, to gather data for a Harvard Initiative for Learning and Teaching (HILT) study on attendance. This “surveillance,” he observed, appeared at odds with professors’ usual control over their classrooms—and with the lessons purportedly learned, painfully, during the 2012-2013 academic year: the news that resident deans’ e-mail accounts had been examined during an investigation of academic misconduct led to the drafting of new University policies on electronic privacy. He embraced the principle of “more peer feedback on our

teaching,” Lewis said, but colleagues and students did not wish to go about their academic work “never knowing for sure whether we are being or have been under scrutiny.” He asked for assurance that all the subjects of “this nonconsensual study” be informed that they were photographed.

The study had come to light obliquely during a September conference, when Samuel Moulton, HILT’s director of educational research and assessment, discussed attendance in 10 unidentified lecture courses. His exhibits showed that attendance declined from the beginning to the end of most weeks, and during the

semester. The main reason for showing up or not, he reported, involved a student’s reason for taking a course; pre-medical requirements were correlated with high attendance. Moulton added that attendance is a measure of student engagement: “People vote with their feet.”

Lewis’s remarks made clear what no one had noted at the time: the data were collected photographically. FAS does not routinely take attendance or assign seats.

Lewis’s query brought to the microphone vice provost for advances in learning Peter K. Bol, who oversees HILT



Peter Bol

STEPHANIE MITCHELL/HFAC