



Compact Fulfilled

As Amy Gutmann enters the final months of her presidency—fresh off her second record-setting fundraising campaign and having steered the University through an unprecedented pandemic—we offer a look at some of the ways Penn has grown and changed as a result of her leadership and the vision she expressed 17 years ago in the Penn Compact.

By the *Gazette* Editors

When the news came back in July that President Joe Biden Hon'13 had nominated her to be the next US Ambassador to the Federal Republic of Germany, Amy Gutmann issued a statement in which she promised to “continue to avidly work as Penn President” until she was confirmed by the Senate or completed her term in office on June 30, 2022.

She was certainly as good as her word—especially the *avidly* part—while welcoming students during move-in and student orientation, from Lauder College House to the east to New College House West, and presiding over the first in-person Convocation since 2019 [“Gazetteer,” this issue].

“I just have this great joy of being on campus with others. It was very lonely during COVID,” Gutmann said in a late September interview with *Gazette* editor John Prendergast (see page 29). “And I do feel this kind of pang every time I think about not being here. But right now I’m just enjoying the pleasure of being at Penn with the whole community, with all of our people.”

As the semester got under way, Gutmann’s calendar also included a celebration of the *Power of Penn* fundraising campaign, which raised more than \$5.4 billion for University priorities from student aid to sustainable energy; speaking at *Momentum 2021: The Power of Penn Women*, a two-day virtual conference that took place over the first weekend in October; and leading the groundbreaking for a new data science building (where it was announced that the building would be named Amy Gutmann Hall). In recent weeks she also announced plans for a new student performing arts center and a \$100 million commitment to establish a new Center for Precision Engineering for Health, so she’s definitely continued to keep busy.

“She doesn’t take a day off,” says Robert M. Levy WG’74, the emeritus trustee who chaired the *Power of Penn* campaign. “And when you consider the strength of our University, you know, someone at

some point could say, ‘I just want to be a caretaker; everything’s fine,’ but [with her], it’s unrelenting.”

As this issue went to press, confirmation hearings had yet to be scheduled. But whether Gutmann leaves College Hall by way of Congressional action or the calendar, her impact on the University has been vast and will continue to be felt long after her departure—as will the guiding principles she first described at her inauguration as Penn president in October 2004.

Succeeding Judith Rodin CW’66 Hon’04, who had called her strategic vision the *Agenda for Excellence*, the former Princeton provost promised to use her time in office to move Penn from *excellence to eminence* through a “Penn Compact” built around increasing access to a Penn education, integrating knowledge across disciplines, and engaging with society’s needs from the local to the global level. Recast as the Penn Compact 2020 (and then 2022) as Gutmann’s term as president was extended, the watchwords shifted to *inclusion, innovation, and impact*, but the goals remained the same.

Along the way, Gutmann has raised about \$10 billion for the University and overseen a quintupling of Penn’s endowment, from \$4 billion to \$20.5 billion; made Penn both more selective in admissions (acceptance rates have hit the single digits) and much more diverse, with one in seven students in the incoming class the first in their family to reach college and a majority identifying as people of color; and fostered a spirit of innovation and entrepreneurship through initiatives like the Pennovation Center startup incubator and high-profile student prizes like the \$100,000 President’s Engagement and Innovation Awards. Two of the most significant recent advances in medicine—Carl June’s work on CAR T-cells, the first FDA-approved gene therapy for cancer; and Drew Weissman and Katalin Kariko’s research breakthrough that led to the mRNA vaccines against SARS-CoV-2—have happened at Penn on her watch.

There have been challenges along the way. Under Gutmann’s leadership, Penn has weathered the Great Recession and what seems likely to be the worst of the COVID-19 virus. In 2016, to support undocumented students she declared Penn’s campus to be a “sanctuary,” a controversial move to some. After a series of student suicides over several years raised the alarm on campus mental health, she launched the University’s Campaign for Wellness, leading to an expansion of counseling staff and services and the appointment of the Ivy League’s first chief wellness officer.

Throughout her administration, Penn has continued and expanded outreach efforts pioneered by Rodin in West Philadelphia, and while the University has resisted calls to make payments in lieu of taxes (PILOTs), in 2020 Gutmann committed \$100 million over 10 years to the School District of Philadelphia to address environmental hazards in school buildings.

But the key accomplishments of Gutmann’s administration revolve around the basic core of higher education: finding and admitting class after class of diverse, talented students; attracting and retaining distinguished faculty; and providing the best facilities to advance learning, research, and benefits to society.

A New Generation of Students

“**What is the difference** between a scrap metal dealer and the president of the University of Pennsylvania?” Gutmann asked during a virtual acceptance speech for an Inclusive Leader Award she won from GlobalMindED last December. “The answer: a single generation.”

Gutmann, whose father was a scrap metal dealer who fled Nazi Germany to build a better life in the United States, where his only daughter would become Penn’s eighth president, continued: “My story can and should be possible for countless other students from all backgrounds. Our work must endure.”

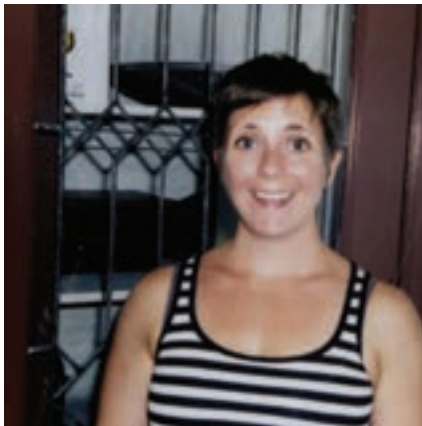
Gutmann greets students (prepandemic) in the dining hall at Hill House. In speeches, she has highlighted first-generation students like Anea Moore C'19 (left) and Jamie-Lee Josselyn C'05.

The first in her family to graduate from college, Gutmann has spoken passionately about her parents at many Penn events, most recently at this year's Convocation ceremony, when she told freshmen and transfer students how her father died suddenly when she was a rising high school senior and how "financial aid made it possible for me to go to college."



That clearly has informed much of her work over the last 17 years. Since Gutmann became Penn's president in 2004, the University has awarded more than \$2.6 billion in undergraduate aid to more than 24,000 students, according to figures from Penn's Student Registration & Financial Services office. And the University's grant-based financial aid program, which began in 2008, has opened doors for a new cohort of first-generation, low-income (FGLI) students to attend Penn, with the University meeting 100 percent of demonstrated financial need with grants and work-study funding.

"Our nation's young scholars should not be deterred from pursuing their dreams for fear of being a financial burden to their families," Gutmann said when the initiative was first announced more than a decade ago ["The Great Aid Race," Mar|Apr 2008]. Two years before that, when the University replaced loans with grants for students from families with annual incomes lower than \$50,000, Gutmann said that Penn was the "first major research university to fund the majority of its financial aid from its operating budget to eliminate loans for low- and middle-income students."



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Since its implementation, the all-grant policy, based on need, has become the largest in the country, providing students and their families with more than \$1.4 billion in undergraduate financial aid, per the president's office, which also states that the cost today of a Penn education for aided students has decreased by 22 percent from its 2005 cost. The undergraduate financial aid budget for the 2021-22 academic year is \$259 million (nearly three times higher than when Gutmann took office) and about 45 percent of Penn's undergraduate students receive grant-based financial aid packages, with an average award of more than \$56,000 in funding (slightly more than the cost of tuition).

Of this year's freshman class, one out of seven identified as first-generation and nearly 60 percent of US citizens in the class identified as a student of color. During Convocation, Gutmann called it "the most diverse, talented, and resilient class ever."

When Gutmann was appointed president, by contrast, only 1 in 20 Penn students identified as the first in their family to go to college. So in her inaugural address, Gutmann announced that the first principle of her Penn Compact vision would be increasing access to a Penn education. "In a democracy and at great universities, diversity and excellence go together," she said at the time.

Barbara Mellers (left), Dorothy Roberts, and Christopher Murray are among Penn's 26 PIK professors.

"Keeping them together requires access based on talent, not income or race."

Declaring that Penn must "build on its commitment to need-blind admission and need-based financial aid," Gutmann then spoke of several first-generation students already at the University when she arrived—including a Sudanese refugee, a Palestinian woman, an All-American wrestler, and the "daughter of an auto mechanic ... [whose] experience here as a writer has transformed her life." That student, Jamie-Lee Josselyn C'05, is currently an associate director of recruitment and instructor for Penn's creative writing program. "Our ongoing commitment to students like these," Gutmann said, "must remain our sacred trust."

Seventeen years after her inaugural address, Gutmann once again shared a story of a student who was the first in her family to go to college thanks to Penn's financial aid program—Anea Moore C'19, a Rhodes Scholar who "helped us implement a new initiative to empower our first-generation and low-income students," Gutmann said during Convocation in August. "From that grew our Penn First Plus program." Today the Penn First Plus program—located in a recently opened office inside College Hall—serves to support and empower currently enrolled first-generation students, working with partners across campus to make things like computers, study abroad programs, internships, and mentoring opportunities more affordable and accessible. Penn First was initially founded in 2015 as a way for first-generation students to find and connect with each other ["First Generation Students Unite," Jan|Feb 2015].

Formal speeches haven't been the only occasions for Gutmann to tout the impacts of a more diverse, inclusive, and close-knit community. From declaring Penn a sanctuary campus to protect undocumented immigrant students from deportation, to hosting a mental health summit with student leaders at her house, to cheering on the Quakers at the



Palestra, Gutmann has been a ubiquitous presence at campus events.

For Gutmann, more than doubling the number of students from first-generation, low-income, and middle-income families during her tenure—and then helping to enrich their lives while at Penn—has always been a deeply personal mission. In a video recorded in 2014, Gutmann said that her own experience at Radcliffe College at Harvard "forever changed" her life and was only made possible through scholarships and a family doctor who told her to think big when applying to college.

"As Penn's president my greatest passion is getting the word out to students," she said. "There are many excellent places like Penn out there with resources to help you succeed. It pays to aim high. ... Work hard. Let nothing deter you. And plan to be first. You will find that this is where you truly belong." —DZ



Faculty Matters

At her inauguration, Gutmann also lamented that US colleges and universities remained "too divided into disciplinary enclaves" to effectively address many complex societal challenges. "The time is ripe," she said, "for Penn to achieve a truly successful partnership between the arts and sciences and the professions."

Interdisciplinary collaboration has been a hallmark of Gutmann's tenure. Her headline initiative focused on the top of the academic depth chart via the creation of 26 Penn Integrates Knowledge (PIK) professorships, for scholars holding joint appointments in two or more of the University's 12 schools. These teachers and researchers straddle a variety of academic borders. Barbara Mellers, who became the I. George Heyman University Professor in 2011, has appointments in the School of Arts and Sciences' psychology department as well as Wharton's marketing department, where she teaches a course about ways to predict consumer preferences and shape global marketing strategies. Richard Perry University Professor Christopher Murray, who holds 26 patents for inventions at the nanoscale, is shared by SAS's chemistry department and the School of Engineering and Applied Science's materials science department. Dorothy Roberts, the George A. Weiss University Professor, splits time between SAS's sociology department and the Law School, where she teaches courses

es ranging from civil rights to family law.

PIK professorships are more expensive than traditional appointments—partly due to the scientific research infrastructure needed to support many of them. To underwrite the first six, Richard Perry W’77 and Lyn and David Silfen C’66 donated \$5 million per position, nearly twice the cost of a conventional professorship in the School of Arts and Sciences. But they have proven to be a powerful recruitment tool. The lion’s share of PIK professors were lured to Penn from competitors ranging from Stanford University to IBM.

Presidential Professorships have provided another way to invigorate Penn’s faculty. These five-year term chairs come with research grants and University salary support to the sponsoring schools, which can nominate both senior and junior faculty for the positions. Aiming to reward “outstanding faculty at all ranks who contribute diversity through their backgrounds, research, mentorship, clinical commitments and/or teaching,” Gutmann has named a total of 39 Presidential Professors to 10 of Penn’s schools since the program began in 2011. When each five-year term expires, or a holder of one of these chairs leaves the University, its funding returns to the central pool to be reallocated. So far, recipients have included 11 women and 23 underrepresented minorities, and 10 have come from the Perelman School of Medicine.

Faculty diversity has been a priority predating Gutmann’s tenure, but during the last 17 years the University has produced at least nine official reports about Penn’s progress toward gender and minority inclusion among the teaching ranks. First, though, some broad trends worth mentioning: Between 2004 and 2020, the standing faculty has grown from 2,440 to 2,827. Meanwhile the associated faculty—which includes the research track, academic clinician track, and practice professors—has grown from

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Rational Exuberance



It’s *the term Penn President Amy Gutmann uses to describe the emotional temperature this fall among students, faculty, and staff returning to a mostly normal campus environment, but “rational exuberance” also fits as an expression of the way she has led the University throughout her energetic, ambitious—and yes, transformational—presidency. A day before bounding on stage in a Penn sweatshirt and jeans to celebrate the conclusion of the \$5.4 billion Power of Penn fundraising campaign [“Gazetteer,” this issue], she talked with Gazette editor John Prendergast about welcoming students to a new academic year for the last time, some of the signature achievements of her administration, and what Penn has meant to her. Their conversation has been edited.*

To start, I’d like to ask you to talk a little about how it has felt to reopen the campus and welcome the students back to in-person classes this semester. How much is that tempered by continuing concerns about COVID? And how does it feel, in addition, this being the last time you’ll greet a new Penn class as president?

Well, it’s felt fantastic, amazing, incredible. Every possible feeling of joy. The students and faculty and everybody who’s back—what I call it is rational exuberance: Everybody is expressing some form of, ‘We’re never going to take for granted the simple and profound pleasures of our lives at Penn.’ Being in the classroom, being on Locust Walk, being on Franklin Field, singing together, the orchestra playing together, the band, it’s just—it is rational exuberance.

And it feels like a miracle, but it actually wasn’t a miracle that enabled us to reunite. It’s not only our planning and united community actions on vaccination and testing. It is actually thanks in large part to messenger RNA technology, the modifications made by Drew Weissman and Kati Kariko that were foundational to the Moderna and Pfizer COVID vaccines. So the rational exuberance is backed by breakthrough discoveries and a Penn team that’s second to none.

So what does it feel to me? I just have this great joy of being on campus with others. It was very lonely during COVID. I do feel this kind of pang every time I think about not being here. But right now I'm just enjoying the pleasure of being at Penn with the whole community, with all of our people.

Looking at your tenure more broadly, you introduced the Penn Compact at your inauguration in 2004, and it's been a through line over the course of your tenure. Can you talk about how you developed those guiding principles—and why the Compact has provided the right framework for shaping Penn during this period?

When I did a listening tour of Penn, before I was even officially president, what Penn aspired to just matched the values that I've had my whole life. So, inclusion, innovation, and impact—positive impact on people's lives—that's where I grounded our strategic vision, and it was very much Penn's sweet spot. And it is Penn's sweet spot. I'm sitting here in College Hall looking out at the larger-than-life statue of Ben Franklin. And of course, if your founder is Ben Franklin, inclusion, innovation, and impact should be your guiding lights. And those values are very core, in my mind and in my life, to who we are as Americans at our best.

My father fled Nazi Germany when he was 23 years old. He passed away really suddenly when I was in high school, and we had very little money, and neither of my parents had a college degree. But it was with a combination of my parents' love and inspiration, hard work, and generous financial aid that I was able to become the first in my family to graduate from college. And Penn stands for that American story, multiplied over and over again.

This leads right into my next question. Among the accomplishments of your administration, how important would you say that managing to establish Penn's all-grant financial aid program has been?

Our all-grant financial aid program has been a game changer, and a life changer, and a key priority for the University. That made it possible for the most talented, hard-working students to afford a Penn education. And we're talking about middle-income as well as low-income students who otherwise could not possibly have afforded Penn, or who would have graduated with just so much debt. We're now [at a point where] 80 percent of our students graduate debt-free.

It changes students' lives like it changed my life. It changes their families' outlook and hope for the future. It transforms communities because our students go out and make huge changes inspired by their Penn education and by the generosity which turns out to be the right thing for us to do.

One of the statistics that I'm most proud of is that in 2004 one in 20 Penn students was the first in their family to attend college, and today that number is one in seven. The number of low-income students has also skyrocketed.

I imagine a day when the only limiting factor to what anyone can contribute to society, to science, to art, to culture—to every area of human endeavor—is the stretch of their own aspirations and their commitment to hard work. And that's how you fuel revolutionary healthcare. That's how you spark innovation. That's how we're going to address climate change. And we're going to create stronger communities. It's by access, affordable access to the greatest education. And I believe Penn is one of the providers of the greatest education. And its value is absolutely dependent on making a Penn education affordable.

The PIK professorships have been the most high-profile example, but overall what has the impact on faculty been from increasing endowment resources for that purpose? How has Penn's faculty changed over the years?

We've created hundreds of newly endowed faculty and staff positions. And the Penn Integrates Knowledge Professors are a fantastic example of the evolution of our faculty over the years. They embody so many of the qualities that make Penn and Penn faculty great. Which starts with bringing brilliant minds together and creating space for collaboration.

Two other initiatives of which I am equally proud are the Presidential Professorships and the President's Distinguished Professorships. And they all have the same goal, which is to bring to Penn and support faculty members at all stages of their career, of the most diverse backgrounds, who collaborate across disciplines, across fields, to come up with the most creative solutions to really interesting, fascinating, and difficult issues facing us.

When you look at our faculty appointments across the board, you see similar qualities. Obviously, the thirst for knowledge, the ability to see things differently, and here, I would say, is the Penn distinctive advantage: the yen for collaboration. And put simply, you cannot attract these types of leaders without investing the resources to propel their aspirations beyond the horizons of current knowledge. But you also can't attract these kinds of leaders without a collaborative culture.

Under your leadership, Penn has seen an enormous number and range of construction and renovation projects, from Penn Park to the east to New College House West. How have you approached the sort of "master builder" part of the president's role, and what projects have given you the most satisfaction?

Well, one thing that gives me tremendous pride and satisfaction—and we did this together; I did this with a phenomenal team—is creating our campus plan, Penn Connects. We thought it was a plan for 30 years, and we did it in 15. We created new and renovated space to the tune of over eight million square feet in 15 years. We completed so many amazing transformational projects that it's really impossible to single one out.

If I had to choose, though, the projects that stand out to me are those that both bolster our academic enterprise and our participation in the life of the city around us and connect us to the community. So one of the first was Penn Park, to transform an ugly parking lot into Penn Park, the reversal of the Joni Mitchell song: we took a parking lot and made a bit of paradise. And we made sure it was not just an exercise in beautification. It was a once-in-a-century opportunity to build new connections throughout our campus and form the seamless tie between the Penn campus, a green tie between the Penn campus and both University City and Center City.

The second project is the Pavilion, which is the hospital of the future. It's the largest capital project in Penn's history. And it wasn't just a cornerstone of the Penn Medicine campaign. It is truly a cornerstone for the future of healthcare. It dramatically expands our ability to provide the next generation of patient care.

Another two things that I really have to call out are New College House West and Lauder College House, which, a trustee said to me, "May be the single biggest, most important transformation of student life on Penn's campus in modern history." Because half of our students now live on campus. That actually frees up more single-family homes in West Philadelphia for the rest of our community. And it creates a great sense of belonging that translates into great alumni spirit as well.

And then all of the amazing academic buildings. I care a lot about the architecture and the beauty of Penn's campus, and I take a great interest in the design of every building. I know enough to know I could not do the architecture. But I'm somebody architects like to work with because I really appreciate, and I have an eye for what contributes and will make a building for the ages, not just for our time, and really contribute to the sense of Penn as this welcoming, vibrant community of knowledge, of learning, and of service.

"The people here at Penn are part of my family. So that's what I'm going to miss most."

Penn is a very big and complicated place, and you've led it now for longer than anybody else in history. What do you think is essential to being a successful leader here?

I think the secret ingredient to Penn's success is we've taken this big prestigious place and leveraged its resources to move the entire University forward in very deliberate, strategic, and unified and unifying ways. The result is that our positive impact is more consequential and dynamic than it's ever been.

And the key is our people. To be very specific, I'm very proud of the fact that I've recruited more than 40 of the best leaders in higher education: three provosts, no fewer than 20 deans, and 19 senior-level administrators. And I also have

taken a great interest in recruiting and retaining phenomenal faculty and staff.

And everybody takes the Penn Compact to heart. The highest compliment that I have gotten is that "the Penn Compact isn't yours, it's ours." It has exceeded my highest expectations because it became so quickly "our Penn Compact." And that's the greatest pleasure of being Penn's president. It's that what I can do by myself is multiplied immeasurably by the amazing people who take the vision, the mission, and the day-to-day work of the Penn Compact as theirs and ours together.

And it's made absolutely stronger by the best alumni of any university in the

world. We have the most spirited, diverse, and accomplished alumni that I know of. And it's certainly helped organize and elevate some of the most important work going on at any campus in the world.

What will you miss the most after leaving College Hall? Is there something you won't miss?

The people here at Penn are part of my family. So that's what I'm going to miss most. We've been together for, you know, so long. We've achieved so much together. We've endured tough times together. We've celebrated just countless wonderful things together. So I'll miss the people most of all. And of course for the Penn family there's no such thing as goodbye, so it's only, "See you again very soon." I am going to practice what I preach. When I leave Penn, I will also be back.

I'll also miss—there are so many things I'll miss. I'll miss cheering on our student athletes in the Palestra, on Franklin Field or Penn Park—I'll miss clapping and yelling my head off, to be more precise. I'll miss catching amazing student performances, including the Mask and Wig shows and Bloomers, which make a lot of fun of me. I will miss

being there when students move into their College Houses. I'll really miss welcoming them at Convocation. And I'll miss four years later when they process to Franklin Field to celebrate Commencement. I love Commencement. I love Hey Day. And I'll miss it again when they come back for Alumni Weekend.

So those are the special beginnings and culminations and reunions. There's something very, very special about the rhythms of Penn life and the celebrations that I will miss a lot. But I can still, you know, virtually sing some of those Penn songs together, and I look forward to coming back.

I racked my brain about "Is there something you won't miss?" And I can say with absolute certainty that I can't think of a single thing about this place that I won't miss.

How do you think you've changed Penn, and how has Penn changed you?

I don't believe I've changed what makes Penn fundamentally Penn. I set out, actually, to make Penn the best that it can be, rather than to change what is fundamentally Penn. I think I've helped Penn rise to its fullest, most profound potential—as of 2021. And I think for now the enduring impact will be how much more Penn can still do. I think the greatest impact one can make, and the most transformational we can be, is to create an enduring legacy that enables Penn to do more and more in the future. So I think that the unsurpassed Penn team that I've had the honor of leading has positioned our University to go further and even faster in the years to come.

And in much the same way, leading and being part of the Penn community [has] made me more fully who I am and who I set out to be as president in 2004. And that's something I'll take with me very proudly into the next chapter of my work. I think the best institutions transform the people who serve them in the best possible way. And I think Penn has done that for me. That will be Penn's enduring mark on me, to enable me to be a better leader and, I daresay, a better person than I was when I came.

Interdisciplinary collaboration has been a hallmark of Gutmann's tenure.

2,059 to 2,221. The picture is slightly hazier when it comes to the adjunct instructors and lecturers who make up Penn's "academic support staff." American universities have come under criticism in recent years for the degree to which many of them rely on this non-tenured, part-time, and low-cost workforce. The *Gazette* was unable to obtain complete figures corresponding to the evolution of Penn's

academic support staff during Gutmann's tenure, but a 2019 University report stated that these ranks grew modestly from 2,347 to 2,461 between 2011 and 2018.

When Gutmann took office in 2004, women accounted for roughly 27 percent of Penn's faculty, according to data collected by the Faculty Senate in 2003. In 2020, 36.6 percent of the faculty were women. Those gains registered across the academic hierarchy. Women now account for some 48 percent of Penn's assistant professors and more than half of its academic support staff. They also represent four of the University's 12 deans, and seven out of eight vice provosts (as well as interim provost Beth Winkelstein EAS'93, a bioengineering and neurosurgery professor who assumed that post earlier this year

["Gazetteer," Sep/Oct 2020]). A 2019 analysis found no significant difference in base salaries paid to men and women faculty.

There have been subtle changes to the way Penn reports ethnic and racial data over the past 17 years, but in broad terms, the faculty has become moderately more diverse. In 2003, 14.4 percent of the standing faculty self-identified as belonging to a racial or ethnic minority. Of those, 9.4 percent identified as Asian/Pacific Islander, 3.1 percent were Black, and 1.8 percent were Hispanic/Latino. In 2020, minorities accounted for 26 percent of the standing faculty, including 16.7 percent who identified as Asian/Pacific Islander, 4.1 percent who said they were Hispanic/Latinx, and 4 percent who identified as African American/Black.

Penn's research faculty have seen their budgets grow significantly over the span of Gutmann's presidency. Collectively, the University's research budget doubled between 2004 and 2020, from \$549 million to \$1.1 billion. (Those figures are not adjusted for inflation, which amounted to roughly 40 percent over that span.) That was mirrored by the faculty's success in garnering external grants; sponsored research awards grew from \$678 million to \$1.26 billion. Writ large, Penn's financial footprint has expanded significantly over the last 17 years, from a total operating budget of \$3.7 billion in 2004 to \$10.9 billion last year, according to annual financial reports. (The University of Pennsylvania Health System has accounted for an expanding proportion of operating expenses: just over half in 2004, versus 68 percent in 2020.)

Finally, Gutmann's tenure has also been marked by programmatic growth in the instructional realm. A variety of initiatives have sought to promote cross-disciplinary collaboration and learning. Emeritus trustee Roy Vagelos C'50 Hon'99 and his wife, Diana, for instance, helped establish two joint-degree programs: Life Sciences & Management, housed in the School of Arts and Sciences and Wharton, in 2005; and the Vagelos Integrated Program in

Penn Park, created on the site of a former USPS parking lot, transformed campus open space.

Energy Research (VIPER), offered by SAS and the School of Engineering and Applied Science, in 2011. In 2007, longtime history professor Walter Licht spearheaded the creation of the Civic Scholars Program, blending scholarship and local civic engagement. Not every new program has had staying power. The Center for Spirituality and the Mind (2006) failed to outlive its founding faculty member's departure, for instance, and the Wharton Public Policy Initiative (2012) wound down several years ago. But perhaps that attests to the experimental spirit in which such enterprises are conceived. After all, even Benjamin Franklin's inventions didn't always stand the test of time—otherwise the FM dial would not be quite so lacking in the sound of glass harmonicas. —TP



Penn Connects

Amy Gutmann took up her post in College Hall on the heels of a builder. Judith Rodin's 10-year tenure featured so much construction that the *Gazette* playfully accused Penn's seventh president of harboring a "nostalgia for the sound of jackhammers." Rodin oversaw \$1 billion worth of new projects and renovations: academic additions like Levine and Huntsman Halls; research space like the Vagelos Laboratories; campus amenities like the Pottruck Health and Fitness Center and the Perelman Quadrangle; and a string of commercial developments running along Walnut Street from the mixed-use Left Bank complex at 31st Street, to the Inn at Penn and the Penn Bookstore, to the supermarket and movie theater at 40th Street ["The Rodin Years," May/June 2004].

Penn's eighth president turned out to like the sound of jackhammers even more.

During Gutmann's 17 years in office, the University carried out more than \$5 billion in building. According to figures provided by Penn Facilities and Real Estate Services, that included more than one million gross square feet of new University educational and research space, plus some 3.3 million

gross square feet in new Penn Medicine facilities. Beyond that, two new residential buildings—Lauder College House and New College House West—added 800 beds of campus housing. Meanwhile renovations improved several more million square feet of academic, research, and residential space.

Those totals do not include several projects that were completed during the first few years of Gutmann's tenure after having begun during the Rodin years—notably the Carolyn Lynch Laboratory and Skirkanich Hall. Gutmann's legacy lies in the Penn Connects master plan, a three-phase campus development framework that got underway in 2006 ["New Campus Dawning," Sep/Oct 2006]. This was conceptually organized around four "bridges of connectivity": physical corridors like the Walnut Street "living/learning bridge" and a "health sciences/cultural bridge" at the nexus of the medical campus and Penn Museum on South Street; and metaphorical corridors like a "sports/recreation bridge" encompassing new fields and open spaces in Penn Park and Shoemaker Green, and a "research bridge" consisting of an expanded medical campus.

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Given the interdisciplinary and cross-departmental bent of Gutmann's presidency, the Smilow Center for Translational Research is perhaps emblematic of the campus development she oversaw. Completed in 2013, the 10-floor building brought University-based basic scientists together with physicians to collaborate on biomedical and patient-oriented research. Designed by the globally renowned Rafael Viñoly Architects, the Smilow Center is huge (over half a million square feet), physically integrated with two other new Penn Medicine buildings (the 2008 Perel-

The Singh Center (top) and Levin Building mix distinctive architecture with topflight teaching and research capabilities.



ed the Law School's footprint in 2011. In 2016, the Perry World House became a home-away-from-home for a rotating cast of annual scholarly fellows and a regular symposium site for global policymakers.

Two new residential halls cemented the University's commitment to the College House system, while doubling down on the urbanization of campus. The Lauder College House, which welcomed its first crop of undergraduates in 2016, completed the transformation of Hill Field from a grassy expanse given to impromptu Ultimate Frisbee games into a highly programmed city block where Hill College House (thoroughly renovated around the same time) no longer stood as the only dorm. New College House West, which opened this fall, ef-

man Center for Advanced Medicine and the 2010 Roberts Proton Therapy Center), and was part of the explosive growth of Penn's hospital complex. That particular building spree will culminate with the \$1.5 billion Penn Medicine Pavilion, whose anticipated November opening will add 504 private patient rooms and 47 operating rooms in a 17-story complex that will expand Penn's patient-care footprint by 1.5 million square feet.

While the medical complex has been a site of constantly swinging cranes, Penn's research and academic capacities also grew with new buildings that rose in other parts of campus. In 2013 the Singh Center for Nanotechnology, whose eye-catching glass-cube cantilever became instantly unmissable on Walnut Street, concealed its biggest architectural trick in its innards, where a three-foot-deep layer of concrete sits directly on bedrock in a room structurally isolated from the city's bustling grid, to permit the use of an aberration-controlled electron microscope of exquisite sensitivity. The 2016 Stephen A. Levin Building, clad in a perforated screen suggestive of neural synapses, brought the undergraduate psychology and biology departments under the same roof,



along with the Biological Basis of Behavior Program and the Roy and Diana Vagelos Program in Life Sciences & Management, a dual-degree track administered by Wharton and the College.

The Annenberg Public Policy Center, which opened in 2009, provided a permanent home for an academic program initiated a decade before. Golkin Hall expand-

ected a similar transformation, as the last big swath of open space on the Superblock made way for 450 new beds of on-campus housing—which became mandatory for sophomores as well as freshmen starting this academic year.

The Gutmann era featured what was effectively a large-scale reorganization of open space on campus. Students who

may once have taken to Hill Field or the Superblock for outdoor recreation just needed to travel a little farther to access the most transformative campus landscaping project in a generation or more: Penn Park. Starting with a barren eyesore of a parking lot controlled by the US Postal Service until the University bought it in 2004, landscape architect Michael Van Valkenburgh created a series of massive berms whose slopes frame two full-length athletic turfs, the 12-court Hamlin Tennis Center, and a 470-seat softball diamond that is the envy of the Ivy League. Three pedestrian bridges offer students and Philadelphians access to the semi-public park, where 500 trees and a grassy patchwork



of unprogrammed spaces sit atop a cistern that collects roughly 2 million gallons of stormwater runoff per year.

Two additional aspects of the Gutmann-era Penn Connects master plan also merit attention. The first came in the form of Penn's real estate partnerships, which influenced campus from the edges. Building on a strategy that flowered during the Rodin era, the University inked long-term ground leases (up to 90 years) with developers who shouldered the construction costs on Penn-controlled parcels. In this



way, residential complexes including the HUB (2006), Domus (2007), the Radian (2008), and EVO at Cira Centre South (2014) added approximately 2,000 beds to the local rental market for student housing. In a similar fashion, the 49-story FMC Tower, developed by Brandywine Realty Trust astride the Walnut Street Bridge, added a hotel, restaurant, and office space—some leased by Penn—to what had been a somewhat lifeless roadway between the campus and Center City.

Creative financing also marked the second less-heralded aspect of campus improvement during Gutmann's tenure. In 2012, the University sold \$300 million worth of 100-year bonds to Wall Street investors at what was then a record-low interest rate for century-term debt. And because that debt was taxable, Penn could dodge the restrictions that adhere to tax-exempt financing—while using the money for purposes that typically fail to excite donors. To wit: deferred maintenance. So far, it has underwritten energy-efficient heating, cooling, and lighting via upgrades to a variety of buildings across campus. That may not catch the eye like the Singh Center's cantilever, but no educational institution can last long without reliable sources of light.—TP