JOHNS HOPKINS

Ten by Twenty:

A Vision for Johns Hopkins by 2020

Dear Johns Hopkins Community,

As we near the end of the *Ten by Twenty*, the strategic vision that has steered Johns Hopkins since 2013, we are seeking to evaluate our progress to date and to begin dreaming—together—about the future course of this extraordinary institution.

The *Ten by Twenty* set out 10 goals for us to reach by the end of 2020 as we advanced four key priorities: One University, Individual Excellence, Commitment to Our Communities, and Institution Building. The following update offers preliminary assessments of our performance against each goal, sharing concrete examples of initiatives from across the university. This summary builds on our three previous progress reports (released in 2015, 2017 and 2019), and is intended to prompt candid conversations as we gather groups of faculty, students, and staff over the next few months to solicit their input.

This report is, of course, only a starting point. We shaped the *Ten by Twenty* through conversations with more than 1,000 people across our community, and the goals we articulated came to life through the work of thousands more over the past seven years. As we assess our progress, we seek a similar level of engagement; your insights and perspectives will provide a fuller understanding of what we have accomplished, where we have fallen short, and how we should look ahead. Among the questions we hope you will consider are:

- Have we accomplished our aim of knitting together One University, and what are the obstacles that still stand in the way of furthering interdisciplinary collaboration?
- Does our undergraduate experience truly stand among this nation's best, and have we sufficiently shored up the rigor and excellence of our selective doctoral programs?
- How can we continue to requite our mission to be both in and truly of Baltimore, and what must we do to deepen our partnership with our neighbors and communities?
- How might our new Washington, D.C., facility at 555 Pennsylvania Avenue enable us to bring research to bear on shaping national debates, and should we be playing a different role on the global stage?
- In the wake of a record-setting fundraising campaign and a transformative gift from alumnus Michael Bloomberg for undergraduate financial aid, have we established a base of resources that will allow us to advance our boldest aspirations for education, service, and discovery?
- Which *Ten by Twenty* priorities should continue to guide our work? Are there priorities or goals that no longer feel as pressingly relevant? And are there new priorities that have risen to the fore in recent years and must be reflected in our next strategic vision?

As we begin to set our sights on a new strategic vision for the university's future, this is also a moment to dream big, to imagine what Johns Hopkins can be if we unleash our collective aspirations. Understanding there is more we can accomplish together, I am looking to you to help articulate ambitions worthy of our current Johns Hopkins community, and the generations that will follow us.

We hope you will take part in this important conversation by attending one of the *Ten by Twenty* listening sessions that I and other university leaders will host or by sharing your thoughts through the *Ten by Twenty* website. We will regularly update the site to provide information about opportunities for input.

Sincerely,

Ronald J. Daniels

Rand Danilo

About the Ten by Twenty Priorities

The 10 goals of the Ten by Twenty are organized under four key priorities for the university:

One University » Goals 1, 2, 3

Tomorrow's most pressing questions will not be confined to silos, and neither will be the solutions. From its earliest days, Johns Hopkins has embraced robust collaboration across disciplines, understanding that both our intellectual curiosity and our drive to advance humanity are better served if we work together. This priority calls on us to remove the barriers that stand in the way of interdisciplinary scholarship and research—fostering interactions across the university that respect the discipline of the disciplines while promoting the cross-pollination of ideas that will catalyze a new generation of discovery.

Individual Excellence » Goals 4, 5, 6

Since its founding as America's first research university, Johns Hopkins has been committed to a simple premise: that it should be the best place in the world to grow, discover, and achieve. To continue that legacy, the institution must attract the most talented minds and, once they are here, help them realize their full promise. For our students, this means unparalleled opportunities for intellectual growth and accomplishment, and connections to mentors, the community, and one another. For our faculty, it means an intellectual environment that supports bold innovation, freedom of thought, collegiality and discovery, and the relentless pursuit of excellence. And for our employees, it means a workplace that respects their contributions and provides meaningful pathways for professional development and advancement.

■ Commitment to Our Communities » Goal 7

Johns Hopkins is nested in local, national, and international communities. The university is not only in Baltimore—it is truly and proudly of Baltimore. As the city's largest anchor institution, firmly rooted in its past and its future, we feel the constant pull of urban issues. We are connected in a similar way to our larger national and international communities; our education, research, and medical care extend to every corner of the country. And no academic institution has demonstrated a greater commitment to the developing world, or played a larger role in seeking to remedy the impact of the gaping disparities in wealth, health, and education around the globe. Our university has the capacity to contribute so much to the communities of which we are a part. We must galvanize our intellectual and moral strengths—for the betterment of our communities and the betterment of ourselves.

Institution Building » Goals 8, 9, 10

To strengthen our position as one of the world's premier academic research institutions, Johns Hopkins must marshal the required resources, policies, and infrastructure to support the advancement of our academic mission. This includes gathering information and creating processes that appropriately inform our decision making; fortifying our competitiveness for federal and other research funding; and growing our endowment through philanthropy and other sources of investment. Through these efforts, we can build an even stronger university, one that is able to invest strategically in our core academic priorities and the groundbreaking discoveries of tomorrow.

PRIORITY

One University:

Forging Collaboration Across Disciplines

1

GOAL

Selectively invest in programs that support our core academic mission.

Johns Hopkins' long-standing commitment to selective excellence has driven our investments in new and existing initiatives across the institution. Divisional leaders have thoughtfully created, redesigned, or reinvigorated programs; the Department of Environmental Health and Engineering forged between our schools of Public Health and Engineering in 2016, and the Peabody Institute's significant investments in the Dance and Music for New Media programs in recent years stand as key examples. The launch of high-profile initiatives, such as the Bloomberg American Health Initiative, represent similarly strategic investments in areas supporting our core academic mission. But we recognize the importance of building on our tradition of selective excellence throughout Johns Hopkins, using this ethos to steer difficult choices on the allocation and reallocation of resources to our highest priorities.

Examples:

Elevating the humanities and social sciences. Legendary investor Bill Miller's \$75 million commitment to the Johns Hopkins Department of Philosophy in 2018—believed to be the largest ever gift to a university philosophy program— brought the total raised for the humanities and social sciences in the university's Rising to the Challenge campaign to nearly \$250 million. Other areas of benefaction included the Alexander Grass Humanities Institute, the Stavros Niarchos Foundation Agora Institute, and the Aronson Center for International Studies.

Big data. In 2019, experts from the School of Medicine and the Applied Physics Laboratory rolled out the Precision Medicine Analytics Platform (PMAP), a secure place for researchers to store and conduct complex analysis with large, sensitive datasets, and tools to help steer their work. PMAP is the latest of several important investments in JHU's big-data infrastructure. Others include: the Institute for Data Intensive

Examples of Major Gifts Supporting the Humanities and Social Sciences

\$150 million

Stavros Niarchos Foundation Agora Institute

\$75 million

William H. Miller III Philosophy Department

\$10 million

Alexander Grass Humanities Institute

\$10 million

Aronson Center for International Studies

\$2 million

Nancy H. Hall Curatorship of Rare Books and Manuscripts at the Sheridan Libraries

Engineering and Science (IDIES), which was considerably broadened in 2014 to support teams collecting massive data sets in fields including astrophysics, genetics, fluid mechanics, and bioinformatics; the Maryland Advanced Research Computing Center (MARCC), a powerful, high-performance computer center shared by Johns Hopkins and the University of Maryland, College Park, and backed by state funding; and the Mathematical Institute for Data Science (MINDS), where multidisciplinary teams focus on the mathematical, statistical, and computational principles underpinning the analysis of complex data.

Environmental Health and Engineering. The creation of this academic department, thought to be the only program of its kind affiliated with a school of public health and a school of engineering, builds on the success of the Bloomberg School's Department of Environmental Health Sciences and the Whiting School's Department of Geography and Environmental Engineering. The collaboration, announced in 2016, is uniquely positioned to conduct cutting-edge research, prepare scholars to tackle issues at the nexus of public health and engineering, and pave the way for new systems, technologies, and policies that will help mitigate environmental threats and protect human life and health on a global scale.



GOAL

Strengthen our capacity for faculty-led interdisciplinary collaboration and launch a set of innovative cross-cutting initiatives that will contribute substantially to the world of ideas and action.

Through the impact of a number of initiatives—from the Bloomberg Distinguished Professorships (BDP) program to new cross-disciplinary awards, centers, and institutes—Johns Hopkins' disciplinary silos are steadily toppling. Since 2013, cross-divisional appointments have increased from 15% to 18%, meaning that nearly 100 more full-time faculty at the university are now jointly appointed in at least two departments or divisions. And these faculty are collaborating with colleagues on research, leading to

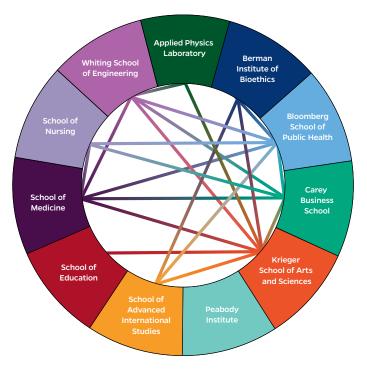
a 71% increase in cross-divisional publications. Our students are responding to the faculty's lead, with cross-divisional enrollments university-wide up by 8 percentage points between 2013 and 2019.

Examples:

Bloomberg Distinguished Professorships.

The BDP program, launched in 2013 thanks to a generous gift from alumnus Michael Bloomberg, has greatly accelerated collaboration in our professoriate. We have named 47 BDPs since the first class in 2014, each with joint appointments in two or more distinct departments or divisions, breaking down administrative and research barriers among them. These renowned scholars are leading 11 interdivisional initiatives and are demonstrating the power of thinking across disciplinary lines.

Discovery Awards. Since 2015, we have provided \$100,000 grant awards to 135 cross-divisional teams, led by faculty (or



Connections Forged through BDP Appointments

staff from the Applied Physics Laboratory) from at least two divisions or affiliates of the university, that are poised to arrive at important discoveries or applied creative works. Representing all units of the university, 485 researchers have used Discovery Awards to advance disparate fields—from machine learning-assisted healthcare to photovoltaic materials to inclusive documentary film.

Space@Hopkins. Connecting APL and the schools of Arts and Sciences, Engineering, and Medicine, this collaboration considers topics ranging from solar science to spacecraft engineering. Few other universities are as well positioned to explore, for example, the health repercussions of space travel by bringing together medical faculty, engineers, and scientists to work on questions arising from long-duration space missions.

Kissinger Center and Agora Institute. In 2016, SAIS launched the Henry A. Kissinger Center for Global Affairs, recruiting a distinguished faculty of scholars and practitioners to address complex global challenges and develop an understanding of statecraft, informed by history and culture. The next year, we started the Stavros Niarchos Foundation Agora Institute, a multidisciplinary forum to strengthen global democracy through supporting informed, inclusive dialogue around contentious issues and produce real solutions.

3

GOAL

Enhance the impact of Johns Hopkins Medicine, the Bloomberg School of Public Health, and the School of Nursing as the world's preeminent academic health sciences enterprise by deepening collaboration among these entities and with disciplines in other parts of the university and across the globe.

Our East Baltimore schools are collaborating more than ever before to address today's health challenges—not only responding to national and global health crises, but also developing new cross-disciplinary programs to fill critical gaps in the health care sector. This collaboration is evidenced by the 71% jump in sponsored cross-divisional research among the three schools over the past five years. And each school is excelling in its own right, with top-ranked programs in a number of areas—including No. 1 rankings from *U.S. News & World Report* for the School of Nursing's master's, Doctor of Nursing Practice, and online programs in 2019.

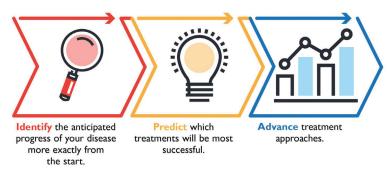
Examples:

Pathbreaking cancer research. In March 2016, we launched the Bloomberg-Kimmel Institute (BKI) for Cancer Immunology, elevating our already world-class cancer immunology program by unifying and channeling the efforts of experts in genetics, microbiology, biomedical engineering, and other fields. Already, 17 different cancers can be treated by immunotherapy drugs pioneered at BKI. If these drugs were available to every cancer patient worldwide, they would save 2 million lives each year.

Opioids. Responding to the opioid addiction crisis that surges across the U.S., a multidisciplinary group at Johns Hopkins, led by the Bloomberg American Health Initiative, teamed up with the Centers for Disease Control, Bloomberg Philanthropies, and several other organizations to mount a response that will improve treatment and prevention programs, develop novel interventions, and share effective solutions—with the clear goal of saving lives.

Precision Medicine Initiative. JHM, the Bloomberg School of Public Health, and the Applied Physics Laboratory have partnered to revolutionize the diagnosis and treatment of disease. Developing a learning health system to harness multiple data sources, they can elucidate disease differences, previously regarded as the same condition, that enable doctors to pinpoint individualized diagnoses and advanced treatments. The Initiative is already doing this for cancer, multiple sclerosis, and many other health conditions. Its 18 Centers of Excellence are each focused on a specific

Precision Medicine Approaches



disease, and the Initiative is planning 50 centers in the next five years.

New cross-divisional training and practice. In 2019, the School of Nursing partnered with JHM to launch a new advanced practice track of its Doctor of Nursing Practice (DNP) program that readies graduates to be certified registered nurse anesthetists (CRNAs), who play a crucial role in innumerable medical procedures. And the School of Medicine recently joined with the Carey Business School to offer an MBA/MD, a five-year program that coordinates curricula from the two schools to provide business and medical training. Cross-divisional collaborations are also bringing the practice of healthcare to schools like the Peabody Institute, which partnered with JHM to open the Johns Hopkins Rehabilitation Network Clinic for Performing Artists.

Individual Excellence:

Supporting Faculty, Students, and Staff



GOAL

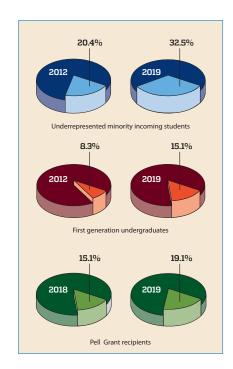
Build Johns Hopkins' undergraduate experience so it stands among the top 10 in the nation.

From the diversity of our students to the supports we provide to smooth their path through the university, our undergraduate experience has improved in significant ways, facilitated by landmark philanthropy and a sharp focus on students' needs. We have more to do to fully support our undergraduates once they arrive on campus, but the examples below show how far we have traveled since the start of the *Ten by Twenty*.

Examples:

Student excellence in all dimensions. Over the past decade, our incoming undergraduate class has leaped from 24th to 2nd in the nation in academic strength, according to *U.S. News & World Report*, while also becoming the most diverse class in Johns Hopkins history. Underrepresented minorities made up 32.5% of the incoming class in 2019, up from 20.4% in 2013. We now have the 5th highest ethnic diversity index of any private university in the country. These exceptional students are now enjoying an undergraduate experience that consistently ranks among the top 10 nationally, according to *U.S. News*.

\$1.8 billion for undergraduate financial aid. A transformative gift from alumnus and former New York City Mayor Michael R. Bloomberg enabled our undergraduate admissions to be permanently need-blind and no-loan, dramatically expanding access to a JHU education. Importantly, the gift also supports the success of first-generation and limited-income college students after they arrive on campus, through programs like Hop-In, which provides year-round, high-touch, holistic advising.



Expanded learning opportunities on and off campus. Course offerings like HEART (at the Whiting School) and SOUL (at the Krieger School) are providing our undergraduates more opportunities to learn in smaller settings; 76.7% of our undergraduate classes now have fewer than 20 students. New scholarships such as the Aronson International Experience Grants are making educational opportunities abroad more accessible. And many more paid internship offerings—from the Community Impact Internship Program (CIIP) to InBaltimore internships to APL's CIRCUIT program—are deepening our students' skills and involvement in the community. All of this learning is undergirded by new and strengthened educational supports, including the Hopkins Office for Undergraduate Research (HOUR) and the Life Design Lab, which connects students to courses, experiential learning, alumni, and employers.

New places to learn, live, and grow. Today's undergraduates can conduct cutting-edge interdisciplinary experiments at the Undergraduate Teaching Labs, develop and fabricate new innovations at FastForward U Homewood, edit new films and recordings at the Hopkins-MICA Film Centre, and then return home to off-campus housing at Nine East 33rd, a new building anchoring the revitalized Charles Village commercial corridor. None of these facilities existed at the start of the *Ten by Twenty*.

5

GOAL

Build on our legacy as America's first research university by ensuring that at least two-thirds of our PhD programs stand among the top 20 in their fields.

Since 2013 we have expanded our PhD offerings, invested significantly in benefits and professional development opportunities for PhD students, and established a rigorous program review process through the universitywide Doctor of Philosophy Board. We have also pledged \$1.5 million to help our PhD programs do even more to support their students' career preparation. But the fact remains that too many of our PhD programs are not recognized for the level of excellence we expect of JHU programs and, for example, remain outside the top 20. Elevating our PhD programs must be a key priority going forward.

Examples:

Leading the country in PhD data transparency. Beginning with its co-creation of the Coalition for Next Generation Life Sciences, JHU has become a national leader in publishing data on its PhD program performance, including on: doctoral student retention, attrition, and completion; time to degree; diversity; and career outcomes. Enrolled and exit surveys of PhD students, first administered in 2015, are also enabling assessment of student satisfaction with mentorship, career services, and financial aid.

Reviews of PhD program quality. For the past three years, we have improved our oversight of PhD programs through deans' reports and the Doctor of Philosophy Board (DPB). Issues brought to light in DPB reviews have resulted in reduced teaching demands for PhD students, program changes and new university pol-

icies on PhD mentoring and career advising, and a hard cap on the number of years to degree conferral for doctoral students; these shifts are empowering our PhDs to take their next career steps sooner. A newly formed PhD student advisory committee is providing additional insight on areas in need of improvement and ongoing student input into proposed changes and policies.

Stronger graduate student benefits. As doctoral students are often balancing education and family, we have invested an additional \$1 million in student health benefits, with new options for dental and vision coverage, lower deductibles, and better mental health coverage. We have also introduced eight-week parental leave accommodations and provided qualified students up to \$5,000 annually in child care benefits.

Expanded science PhD pathways. To prepare our PhD candidates in the sciences



Managed by the Office of Institutional Research

for careers in sectors beyond academia, we have invested over \$1.5 million in programs that promote and facilitate field-specific and interdisciplinary professional development. These include the Biomedical Careers Initiative, the BME EDGE (Extramural Development in Graduate Education) program, the XDBio cross-disciplinary graduate training program, the Johns Hopkins-AstraZeneca Scholars Program, and the OPTIONS career exploration and development program, which is now required curriculum for ~40% of School of Medicine PhD students.

6

GOAL

Attract the very best faculty and staff in the world through a welcoming and inclusive environment that values performance and celebrates professional achievement.

In recent years, the university has made large investments in attracting, supporting, and retaining world-class faculty and staff. Since 2013, we have created 267 new endowed faculty positions across our divisions, and launched recognitions—including the Catalyst Awards, President's Frontier Award, and Provost's Award for Excellence in Faculty Mentoring—and supports that enable and celebrate faculty achievement. We also enhanced our support for all employees and their dependents by, for example, creating a new birth recovery and parental leave policy that provides up to 10 weeks of fully paid leave for new parents.

Examples:

JHU Roadmap on Diversity and Inclusion. In fall 2015, the Black Student Union and other members of our community raised concerns about Johns Hopkins' progress with respect to diversity and inclusion. The resulting dialogue led to the creation of the JHU Roadmap on Diversity and Inclusion, which was endorsed by the board of trustees in October 2016. With an emphasis on transparency and accountability, the university has released annual progress reports on the Roadmap; shared regular updates with granular data—more than many of our peers—on the diversity of our faculty, students, and staff; and initiated a range of new programs, policies, and public reports to underscore diversity and inclusion as sustained priorities.

Faculty Diversity Initiative. Following a five-year, \$25 million commitment made in 2015 to improve faculty diversity, we have begun to see sustained increases in female, minority, and underrepresented minority faculty members. Launched before the *Roadmap*, this initiative is a cornerstone of that work.

Supporting Hopkins families at work and at

home. In addition to introducing fully paid family leave for new parents, we built the first on-campus early childhood learning center for Homewood-area faculty and employees in 2015, and we have expanded the size of Live Near Your Work grants to up to \$17,000, and the number of neighborhoods included in the program, supporting more than 1,100 employees as they bought homes in Baltimore City over the past decade.



This exhibit of portraits co-sponsored by the Black Faculty and Staff Association



celebrates black students, faculty, and staff who contributed to the university's rich history. Started in 2012, it now includes a digital archive with several dozen current and former members of the JHU community, and portraits in prominent locations throughout the university.

Commitment to Our Communities:

Enriching our ties to Baltimore, the nation, and the world

GOAL

Enhance and enrich our ties to Baltimore, the nation, and the world so that Johns Hopkins becomes the exemplar of a globally engaged urban university.

Much of our focus in this area was directed to Baltimore City, where Johns Hopkins' economic impact was \$6.3 billion in 2019, up from about \$4 billion in 2010. The \$1.8 billion, 88-acre East Baltimore Development initiative, and the \$10 million Homewood Community Partners Initiative focused many of our initiatives and investments on bolstering neighborhoods, local schools, small businesses, jobs, and economic revitalization. Our effort to form a university police department to help address violent crime prompted intense community debate in 2019, and broad input has shaped, and will continue to shape, public safety initiatives. Nationally and globally, our faculty and students are engaging with pressing issues, such as veterans' health, climate change, and education policy.

Examples:

HopkinsLocal. Johns Hopkins exceeded the goals set for this major economic inclusion initiative in 2015. Over three years, the university and health system hired more than 1,000 city residents (including 402 returning citizens), spent \$54 million more with local vendors, and expanded opportunities for women- or minority-owned contractors. In January 2020, we announced a second phase of HopkinsLocal with an ambitious new set of goals.

Support for Baltimore's schools. From 2012 to 2019, Johns Hopkins invested \$22.5 million in Baltimore's K-12 schools. We helped to build the first new school in East Baltimore in more than 20 years—the K-8 Henderson Hopkins School, operated by our School of Education in partnership with Morgan State University, which also features an early childhood center for children from birth to age 4. We supported the launch and success of Maryland's first P-TECH programs, importing this model which provides high school students with clear pathways to an associate's degree and employment



in addressable construction spending, was committed in FY19 to contractors that were minority-owned, womenowned, disadvantaged business enterprises.



people hired over 4 years for a set of targeted positions live in focus area Baltimore City ZIP codes. In FY19 50% of targeted positions were filled by focus area residents.



was spent in targeted categories with local businesses over 4 years. Local spending increased \$113M over the baseline of 2015.

More detail available at hopkinslocal.jhu.edu.

in STEM-related fields. We were a key partner in Vision for Baltimore, a program that conducts vision screenings and provides free glasses to elementary and middle school students in Baltimore City Public Schools; the project has completed more than 50,000 vision screenings and 9,000 eye exams, and distributed more than 6,500 pairs of glasses. And through STEM Achievement in Baltimore Elementary Schools (SABES), an NSF-funded collaboration between Baltimore City Public Schools and JHU, we helped develop a program that City Schools adopted as the STEM curriculum.

Bloomberg American Health Initiative. This groundbreaking, nationally focused effort launched in 2016, has brought an intense concentration to the U.S. health challenges of addiction and overdose, violence, the environment, obesity and the food system, and adolescent health. The initiative has supported more than 100 projects across the country and has recruited 95 fellows for full scholarships from organizations on the front lines in 33 states and territories.

PRIORITY

Institution Building:

Building an ever stronger university

GOAL

Strengthen the institutional, budgetary, technological, and policy frameworks necessary to set priorities, allocate resources, and realize the highest standards of academic excellence.

Over recent years, we have streamlined student services, improved academic and operational governance, reviewed and updated universitywide policies and statements, and made our campuses more equitable places to learn, work, and live. Extending across a wide spectrum of institutional activities, these changes are aimed at improving decision-making and ensuring we remain resolutely focused on our mission. We are tracking and holding ourselves accountable along the way through public reporting on a number of metrics.

Examples:

Protecting budgetary health. The university has maintained top Moody's and Fitch ratings while enduring sequestration, recent federal funding challenges, and changing industry headwinds. Leaders across the university worked together to advocate against anticipated cuts to federal medical research funding and USAID funding and to stop an administration effort to cap at 10% allowable indirect cost recovery on NIH-sponsored research.

Student Services Excellence Initiative (SSEI). Launched in February 2016, SSEI is a major, multiyear project to improve student services including recruitment and admissions, registration, financial aid, billing, career services and alumni tracking, and advising. So far, its improvements include the adoption of a common graduate admissions platform; the rollout of the first universitywide career services platform, Handshake; the recruitment of the first university registrar; the creation of the first common academic calendar across our divisions; and the integration of the Semester.ly course planning app with the school's registration system.

New structures for faculty advancement. Thanks to strong leadership by our deans, a long-sought tenure track has been established at SAIS, a clinical excellence track has been created at the School of Medicine, a new faculty governance and rank system has been implemented at the Peabody Institute, and an Academic Board has been convened at the Carey Business School to oversee faculty promotions and improve academic governance. The board of trustees has also unanimously endorsed a proposal by the Faculty Advisory Committee on Tenure to establish a new university-level, faculty-led committee to provide advice on tenure cases forwarded to the president for review, similar to what is done at most Ivy Plus peers.

Setting a course for sustainability. In 2019, we announced a landmark agreement to purchase enough solar power to meet roughly two-thirds of the university's electricity needs each year. This agreement will allow us to reach an ambitious 2009 pledge to reduce carbon emissions by 51% by 2020, and it follows other major steps, including our board of trustees' 2017 decision to divest from thermal coal. We have also formed a universitywide Sustainability Leadership Council to coordinate efforts to make a bigger impact on sustainability through our research, operations, and engagement.



GOAL

Reinforce our position as the leading university recipient of competitively funded federal research support, while increasing the amount of annual research investment from other sources with appropriate cost recovery.

For 40 years, Johns Hopkins has topped all U.S. universities in research and development spending —\$2.66 billion in the 2018 fiscal year, up from \$2.56 billion the previous year, with the vast majority of those expenditures supported by federal government agencies. The Applied Physics Laboratory has been a consistent driver in this area. We have also significantly expanded commercialization efforts; licensing and industry collaborations managed by Johns Hopkins Technology Ventures, for examples, generated more than \$286 million in revenue over the five years ending in FY19.

Examples:

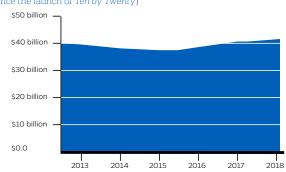
JHTV. Since 2013, significant changes across the university have shifted the culture of innovation and commercialization. In that time, Johns Hopkins has opened 44,000 square feet of innovation space—from co-working office environments to flexible wet lab space—to support a range of entrepreneurial ideas. Over the five years ending in FY19, FastForward supported the formation of 80 new startups, and its portfolio of companies raised \$2.3 billion in venture funding. JHTV has also worked to respond to faculty disclosures with transparency and consistency, normalizing what had felt like an opaque process; through its "2-2-2" service guarantee, JHTV spells out response times for each step of the process of reporting an invention.

E-Nnovation. Maryland's General Assembly in 2014 established a fund to support basic and applied scientific research at the state's colleges and universities, while leveraging private donations. In the years since, Johns Hopkins has received nearly \$7.3 million to help endow four professorships and focused research funds in areas such as age-related macular degeneration research.

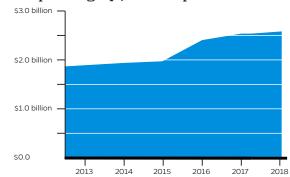
Research Development Team. The RDT, launched in 2017, promotes collaborative research across disciplines, schools, and institutions by helping faculty teams with large-scale proposal development. This work, which ranges from grant-specific workshops to managing the pre-award phase for large collaborative teams, has supported 66 faculty members across seven JHU divisions and led to more than \$42 million in external funding.

Corporate partnerships. Corporate-sponsored research expenditures grew from \$73.4 million in FY13 to \$127.6 million in FY19—although that figure fluctuated significantly over the past decade. This growth has been aided by JHTV's success in cultivating large-scale, long-term industry research collaborations, particularly at the School of Medicine.





R&D Spending by Johns Hopkins



Develop the resource base necessary to support investments in key academic priorities.

The Rising to the Challenge campaign raised more than \$6 billion in philanthropy, setting records for participation and total dollars. This fundraising—\$3.87 billion of which supports research and programs across the university—has positioned Johns Hopkins as a leader in multidisciplinary research and patient care, while significantly strengthening financial support for faculty and students, and reaffirming Hopkins' commitment to the city and people of Baltimore.

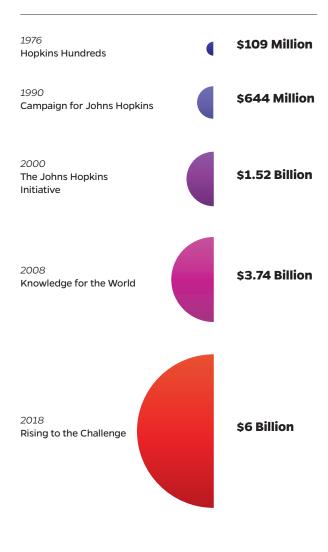
Examples:

Focused philanthropy. A breakdown of the gifts from 279,000 donors to the Rising to the Challenge campaign illustrates key university priorities: More than \$2.8 billion supports medical research and programs; new funding has endowed 267 professorships and 159 undergraduate scholarships; nearly 22% of the funds raised are advancing research that spans more than one discipline; and \$300 million supports humanities and social sciences. And that was before Michael Bloomberg's landmark \$1.8 billion gift for undergraduate financial aid and student success.

Bricks and mortar. Over the past seven years, our spaces for learning, teaching, and patient care have been greatly expanded: from the new Skip Viragh Outpatient Building and School of Nursing renovation at the East Baltimore campus; to Malone Hall, the Undergraduate Teaching Labs, and the expanded Ralph S. O'Connor Recreation Center at the Homewood campus. Our growth has enabled—and will continue to enable—extraordinary research and scholarship across disciplines.

Alumni connections. Since our Alumni Association was seeded just a decade after the university's founding, it has evolved to meet the needs of a larger and vastly more diverse population. In 2019, we undertook our first universitywide planning process around alumni, developing a strategic plan that responds to internal needs, external factors, and our abiding commitment to the Johns Hopkins alumni family.

Our Campaigns Through History



Looking Ahead

As this update has demonstrated, we are not proclaiming a triumphant conclusion to the Ten by Twenty. Indeed, we continue to advance our work in each of its four priorities, even as we contemplate our future, as each one touches on essential elements of our mission.

As examples:

Within One University. A surge in cross-disciplinary appointments and collaborations has created new energy across the institution. New efforts such as the Business of Health Initiative—uniting our schools of Business, Medicine, Nursing, and Public Health—are advancing interdisciplinary ideas in innovative ways, while strategic planning processes at our three East Baltimore schools are also leading to expanded opportunities and explorations of new types of collaborations. Yet, our faculty still wrestle with administrative hurdles when developing projects with colleagues from other divisions or seeking multischool appointments. Given the increasingly multidisciplinary nature of today's most pressing challenges, we cannot afford to ignore any roadblock impeding our progress in this area.

Within Individual Excellence. We will continue to feel the transformative impact of Michael Bloomberg's \$1.8 billion gift to support undergraduate financial aid and student success for years to come. This and other already planned changes—including the implementation of recommendations from JHU's Second Commission on Undergraduate Education (CUE2) the 2020 opening of the Life Design Lab, and the planned 2023 completion of a long-awaited student center—will further improve the undergraduate experience. Additional areas of focus currently include a deeper commitment to diversity through a second Faculty Diversity Initiative, a persistent commitment to promoting PhD student success, and expanded access to college and graduate education for employees.

Within Commitment to Our Communities. We are consistently seeking ways to deepen our mooring as an anchor institution in Baltimore. The January 2020 announcement of a new set of three-year HopkinsLocal goals to boost economic opportunity will frame many of our institutional activities in the near term, even as we develop and execute new initiatives in areas of strength. A world-class facility at 555 Pennsylvania Avenue in Washington, D.C., will help elevate our ongoing efforts to inform national and global policy debates. And new global partnerships will broaden the impact of our research.

Within Institution Building. Major capital investments and the campus master planning effort are steering the literal building of our institution, as we break ground or finalize designs for several new facilities across the institution—an interdisciplinary research building named in honor of Henrietta Lacks and a new 12-story research tower planned for East Baltimore, expansive research and laboratory facilities at APL's campus, and an extraordinary SNF Agora Institute building on the Homewood campus. We also continue to modernize and better coordinate university policies and the processes that shape them, and further expand the sources of funding fueling our efforts.

Our analyses of the *Ten by Twenty* and of the next steps in our strategy are important work, built on bold ambitions. But Johns Hopkins has never been constrained by existing frames and expectations. As we look to the future, we must be willing to set new and higher goals, imagine new ways of problem solving, and consider how our efforts today will set the course for our most ambitious dreams and for the generations that will follow us. The founding vision of 1876 made Johns Hopkins possible today. The course we chart now, nearly 150 years later, will set the stage of the students and scholars who enter into our community in following years—with dreams we cannot yet imagine.

Thank you for your willingness to deeply consider our current path, to dream big about our future, and to lift Johns Hopkins to heights we have not yet envisioned.