Report of the President

Adapting to Disruption and Sustaining MIT's Mission

With the pandemic still posing a health risk this year, we continued to let data guide our decisions about a range of Covid-19 policies, such as testing, masking, and gathering. We adjusted our approach as needed in response to new information and kept the community informed with regular updates. Our vaccine requirement allowed us to keep the campus operational and infection levels low, but when students did test positive, we provided them and their close contacts with guidance and support.

In November, Task Force 2021 and Beyond released its final report, which captured a remarkable range of practical ideas and plans for implementation. Some, such as an ambitious effort to improve graduate student advising and mentoring, are already under way. Others, like a recommendation to strengthen career development programs and opportunities for staff, will leverage what we have learned about remote work. And still others, such as a review of the undergraduate academic program to consider improvements in the General Institute Requirements, will rely on the collective wisdom of our faculty.

This year's exceptional endowment returns allowed us to support several strategic priorities, including increased funding for graduate and undergraduate students and improvements to MIT's physical and digital infrastructure. We were also delighted to be able to offer a special 3% pay increase for campus-based, benefits-eligible staff and faculty, as well as stipend increases for postdocs, research assistants, teaching assistants, and graduate students with fellowship appointments.

Heightening Our Impact in Education and Research

MIT's Climate Grand Challenges, launched in 2020, yielded nearly 100 proposals, representing faculty and researchers from all five schools and the MIT Schwarzman College of Computing. After rigorous review, we invited 27 teams to develop comprehensive plans, and in April we announced the five chosen to proceed as flagship projects. With additional funding and support from MIT, the teams can move quickly to develop, implement, and scale their solutions. Researchers presented the flagship projects at a showcase event that included a discussion with Special Presidential Envoy for Climate, Secretary John Kerry.

The MIT Climate and Sustainability Consortium (MCSC) engaged students through MIT's Undergraduate Research Opportunities Program, enabling undergraduates to explore topics relevant to their own interests, the MCSC, and member companies—from carbon capture to value-chain resilience to biodegradables. The inaugural cohort of the MCSC Impact Fellows Program began this fall, representing a wide range of backgrounds and experiences. The fellows worked on key topics that MCSC member companies have identified as critical to making progress toward their climate goals.

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Through the MCSC Seed Awards, we linked the work of the consortium to campus climate and sustainability efforts, awarding a total of \$5 million over two years divided among 20 projects. The winning projects are led by principal investigators across MIT's schools. We also announced the new Climate and Sustainability Scholars Program, which will offer undergraduates a year-long, interdisciplinary experience in developing and implementing research projects.

In March, I announced the creation of the MIT Morningside Academy for Design, inspired by recommendations from design-minded faculty across MIT and established with a gift from The Morningside Foundation. The academy will amplify the impact of MIT's existing world-class programs in design by creating a global hub for design research, thinking, and entrepreneurship. Housed in the School of Architecture and Planning, it will enable people across disciplines to turn ideas into design solutions with the potential to solve humanity's great challenges.

Our vision for the MIT Schwarzman College of Computing moved closer to becoming a reality this year, with \$881 million committed of our \$1.095 billion fundraising goal and seven new faculty hired. Social and Ethical Responsibilities of Computing launched a new scholars program, in which students participate in projects with multidisciplinary teams across computing, data sciences, humanities, social sciences, and the arts. To bolster innovation in next-generation articial intelligence (AI) hardware, the college partnered with the School of Engineering to launch the MIT AI Hardware Program. And Science Hub, a new collaboration with Amazon, aims to support research, education, and outreach in areas of mutual interest, beginning with AI and robotics.

This year saw a major transition for edX, launched by MIT and Harvard in 2012 to expand access to high-quality university courses. Recent rapid shifts in the online learning market, spurred by the pandemic and a surge in remote learning, have made it increasingly challenging for a nonprofit to keep pace. After careful consideration, the edX board agreed to sell the assets of edX to 2U, Inc., a publicly traded company that provides a platform for lifelong learning. edX will be reorganized as a public benefit company. Following the sale, MIT acted swiftly to secure appropriate protections for learners and instructors. 2U will transfer net proceeds from the \$800 million transaction to a nonprofit organization led by MIT and Harvard to explore the next generation of online education.

Under the leadership of Professor Anant Agarwal, edX engaged more than 160 partners, reached more than 39 million learners, exceeded 110 million course enrollments, and pioneered new online credentials. edX established the expectation that online learning should include free access to rigorous college course content and helped create today's thriving market for online learning.

MIT also leveraged online learning in other ways, supporting more than 2,500 MIT courses on the Canvas learning management system. We reached 5.6 million unique learners through MITx and launched MITx Online, which offers massive open online courses (MOOCs) created by MIT faculty and instructors, delivered through the Open edX platform. We will soon launch a sixth MicroMasters program, focused on AI and

data science, and we continued to welcome MicroMasters certificate holders into residential programs; since 2018, 188 MicroMasters recipients have earned master's degrees from MIT.

Enhancing Campus Infrastructure and the Innovation Ecosystem

In addition to advancing construction on a physical home for the Schwarzman College of Computing, we received approval to begin construction of the Met Warehouse space, which will house the School of Architecture and Planning, the MIT Morningside Academy for Design, and Project Manus, an MIT initiative to foster student maker communities.

We began construction of a new graduate residence on the West Campus and launched the design process for the two parallel buildings of the East Campus. We completed an upgrade of our Central Utilities Plant, which will increase energy efficiency and improve the resiliency of the campus. And we opened wonderful new spaces, including a graduate residence in the heart of Kendall Square and the truly welcoming (and easy to find) MIT Welcome Center.

We considered MIT's digital infrastructure as well, articulating our vision to address research computing needs, strengthen cybersecurity, and modernize systems. In May, we announced the new Office of Research Computing and Data, which will help ensure MIT researchers have the computing resources and data management services they need to do their best work. The office will be led by Professor Peter Fisher, who will step down as head of the physics department.

The Engine continues to foster the region's "tough tech" ecosystem. It invested in 11 new companies out of its Fund II, and its Follow-On Fund I was raised in the fourth quarter of 2021 with total commitments of \$135 million. The Engine also extended its influence at the federal level this year through advocacy on infrastructure legislative initiatives and prepared to open its 750 Main Street expansion. Including lab, office, fabrication, and event space, the expansion will bring academia, industry, and the extended community together to collaborate on breakthrough ideas.

Cultivating a Caring Community

Diversity, Equity, and Inclusion

Following the release of a draft strategic action plan for diversity, equity, and inclusion (DEI) in March 2021, Institute Community and Equity Officer (ICEO) John Dozier and the DEI steering team engaged in wide-ranging dialogue, collecting feedback from across campus and holding three dozen community engagement sessions. From the outset, they focused on gathering the widest possible range of opinions, perspectives, and voices to ensure that the final report—to be released soon—will reflect the unique qualities of the Institute.

This year we committed to increased support for our Indigenous community. The research class "The Indigenous History of MIT" explored how Indigenous people and communities have influenced the Institute's rise and development and made clear how much more there is to learn. Among the commitments we have made are the creation

of a tenure-line faculty position in Native American Studies and funding for a study to research and document the role Francis Amasa Walker, MIT's third president, played in advancing the American reservation system.

There will be new opportunities for students to study Indigenous languages through the MIT Indigenous Language Initiative—MIT will fund two graduate fellowships for each of the next two academic years. Also, I asked Chancellor Melissa Nobles and ICEO John Dozier to co-chair an ad hoc working group of faculty, staff, and students to consider a range of issues, including whether MIT should develop an official land acknowledgment or statement of relationship with our internal and external Indigenous communities.

Supporting International Colleagues and Students

Throughout the fall, MIT continued to support Professor Gang Chen, arrested on charges of concealing his connections with China. We voiced support for all members of MIT's Chinese and Chinese American community. And we were relieved and delighted when in January, a year after his arrest, the government dismissed all charges against Professor Chen.

Upon learning of Russia's invasion of Ukraine, we reached out to support students, staff, and faculty who are from Ukraine or have family there. We offered financial, legal, and emotional support for students, including MIT scholarships to replace spring work contributions. In light of the Russian government's actions, we also pivoted quickly to end MIT's decade-long—and until then fruitful—relationship with the Skolkovo Institute of Science and Technology.

Aligning MIT Policies with MIT Values

As part of our commitment to cultivate a safer, more welcoming community, we have improved a range of policies. These efforts included revising our complaint resolution policy and updating a policy to balance our commitments to transparency and privacy in addressing inappropriate behavior.

We established the Gift Acceptance Committee (GAC) as a standing body that will maintain two faculty slots, with faculty serving three-year terms. A review group will rigorously evaluate gifts, informed by guidelines for outside engagements. The GAC will conduct an annual self-assessment, with the provost reporting to the MIT Faculty and Corporation—an essential step in our ongoing work to ensure that MIT's gift acceptance practices align with our values.

In April, we shared a statement of MIT's shared values and encouraged our community to embrace it in their daily life and work. Developed by a committee charged in 2020, the statement is framed by the phrases "Excellence and Curiosity," "Openness and Respect," and "Belonging and Community." It includes a clear declaration around openness, respect, and free expression.

Reaffirming Our Commitment to Free Expression

This year, a controversy about the handling of an invited speaker from outside MIT spurred us to examine and articulate the Institute's principles and policies on free expression. In a letter to the community, I asserted that freedom of expression is a fundamental value of the Institute. To encourage serious, open discussion, we organized a faculty forum to explore a range of issues, such as steps we might take as an institution to ensure that we consistently practice free expression, and guidelines that might be helpful to our community. We also held forums for staff and alumni and gathered extensive input from students and Corporation members.

In January, Chancellor Nobles, Provost Martin Schmidt, and Chair of the Faculty Lily Tsai launched an Ad Hoc Working Group on Free Expression, chaired by two faculty members with exceptional records of scholarship, teaching, leadership, and service: Institute Professor Penny Chisholm and Professor Phillip Clay PhD '75. The working group is charged with helping to chart a constructive path forward.

Supporting Our Graduate Students

In February, the MIT Graduate Student Union (MIT GSU) filed a petition seeking an election to be represented by the United Electrical, Radio, and Machine Workers of America for purposes of collective bargaining. Institute senior leadership expressed the view that a graduate student union would not necessarily produce better outcomes for students and we explained our rationale. The election was held on April 4 and 5, and in the weeks leading up to the vote, we encouraged all eligible graduate students to become informed and cast their ballots.

On April 6, we announced the results of that vote: 75% of MIT's 3,823 eligible graduate students cast ballots, with 66% in favor of unionization. Senior leadership congratulated MIT GSU and pledged to continue working with MIT's graduate students to improve the Institute for all of our students.

Looking Ahead to MIT's Future

In September we celebrated the completion of the MIT Campaign for a Better World, marveling at its extraordinarily wide appeal: 112,703 donors collectively contributed \$6.2 billion. Important gifts this year allowed us to launch the MIT Morningside Academy for Design; name the home of MIT.nano in honor of alumna Lisa T. Su, leader of semiconductor company AMD; and direct significantly more support to our graduate students. We completed fundraising for the Music Building, the Earth and Environment Pavilion, and the MIT Museum. We reached the fundraising threshold to begin construction on the Met Warehouse. And we were able to rely on generous unrestricted gifts to adapt to the unexpected and ongoing challenges of Covid19.

This year saw several changes in MIT's leadership as highly accomplished, dedicated colleagues took on new roles. Provost Martin Schmidt stepped down to serve as president of Rensselaer Polytechnic Institute, and former MIT chancellor Cynthia Barnhart assumed the role of provost. Melissa Nobles, former dean of the School of Humanities, Arts, and Social Sciences (SHASS), took on the role of chancellor. We named

Agustín Rayo, a professor of philosophy and experienced administrator, the new dean of SHASS. Vice President for Open Learning Sanjay Sarma stepped down to focus on research, teaching, and entrepreneurship. And we appointed Cynthia Breazeal, MIT professor and AI pioneer, as dean for digital learning.

In February, I announced my decision to end my time as president of MIT at the close of 2022. So I was especially delighted that we were able to be together on campus this year for Commencement and Reunions—and to invite graduates and alumni from the two previous years to gather with us in one enormous, joyful celebration.

As I embark on my final months as MIT's president, the Institute's magnetic ability to attract the world's finest talent—and to help every member of our community flourish—has never been stronger. The physical campus and academic landscape are humming with new potential. In keeping with the campaign's aspirations to impact and service, the Institute is now better positioned to help confront humanity's great challenges—from climate change and environmental degradation to economic, educational, and health inequality.

Over the past ten years, MIT has had countless occasions to celebrate our community's achievements, successes, and triumphs. We have also endured challenges and conflicts that have caused enormous uncertainty, pain, and distress. In the best MIT tradition, we have faced hard facts together, always striving to correct course. As I prepare to conclude my term as president—and more than four decades at MIT—I am deeply, profoundly grateful for the privilege of belonging to and serving this brilliant, caring community.

L. Rafael Reif President