

Report of the President

In the face of continued economic uncertainty, the Institute maintained a fiscally constrained course while retaining the commitment to core investments for MIT's long-term future. Budgets across the Institute were reduced in response to the global economic downturn, but MIT upheld its support for need-blind admissions and continued faculty hiring, the two most critical elements to secure the Institute's long-term strength. MIT had the great honor of hosting the 44th president of the United States, Barack Obama, who addressed the community on the importance of designing a sustainable energy future. The report from the Initiative on Faculty Race and Diversity was completed and the International Advisory Committee and the MIT Global Research Council issued reports to further guide MIT's international programs.

Undergraduate and Graduate Education

Student Enrollment

The Institute received 16,632 applications for the class of 2014, a 6 percent increase from the prior year and a record high. The Institute admitted 10.1 percent of applicants, a record low. Among the 1,069 enrolling students, 45 percent are women, 23 percent are underrepresented minorities, and 16 percent are the first generation in their families to attend college. Forty-four percent of new students were valedictorians and 93 percent were in the top 5 percent of their graduating high school classes.

The Institute makes extraordinary efforts to address the remarkable abilities of the incoming class academically, in co- and extra-curricular programs, and also by meeting their financial needs. This year, despite the economic downturn, MIT demonstrated its commitment to undergraduate financial aid with a 9.8 percent budget increase. With this increase, the Institute continues its long tradition of educating the most able undergraduate students regardless of their financial need.

Alumni Honors

Oliver E. Williamson '55 was named a co-winner of this year's Nobel Prize in economics. In granting the award, the Royal Swedish Academy of Sciences cited Williamson "for his analysis of economic governance, especially the boundaries of the firm." Williamson is professor emeritus of business, economics, and law at the University of California, Berkeley. His most important work explains how large corporations emerge and survive through efficiency. He has also taught at the University of Pennsylvania and Yale University. Another MIT alumnus, Rudolf Kalman '53, SM '54 of the Swiss Federal Institute of Technology in Zurich, was a winner of this year's National Medal of Science, the top science honor in the United States.

Three MIT alumni were awarded MacArthur Fellowships—known as the "genius grant"—Peter Huybers PhD '04, an assistant professor of earth and planetary sciences at Harvard University, who has helped explain changes in the earth's climate over the past 1.8 million years; John A. Rogers PhD '95, a professor of engineering at the University of Illinois, for his work in materials science; and Daniel Sigman PhD '97, a biogeochemist at Princeton, for illuminating the effects oceanic biomass has had on the earth's climate over the past two million years.

Faculty

Faculty Honors

While it is impossible to enumerate all of the honors that MIT faculty members receive each year, one of this year's notable awards was the National Medal of Science to JoAnne Stubbe, the Novartis professor of chemistry and professor of biology, for her work in understanding the mechanisms of enzymes that play an essential role in DNA replication and repair. At a ceremony at the White House in October, President Barack Obama presented Stubbe, and eight other scientists, with the medal, which represents the nation's highest scientific honor. Professor Stubbe joined the MIT faculty in 1987 and is a member of the National Academy of Sciences, the American Academy of Arts and Sciences, and the American Philosophical Society. She joins seven other current faculty who have won the National Medal of Science: Ann Graybiel (2001), Robert Langer (2006), Stephen Lippard (2004), Alexander Rich (1995), Phillip Sharp (2004), Isadore Singer (1983), and Robert Weinberg (1997). Emeritus faculty David Baltimore (1999), Mildred Dresselhaus (1990), Gobind Khorana (1987), Daniel Kleppner (2006), Paul Samuelson (1996), Robert Solow (1999), and Kenneth Stevens (1999) also have won the award.

Initiative on Faculty Race and Diversity

For nearly 150 years, MIT has built and maintained its standards of excellence by welcoming the most qualified people to MIT and providing them with an environment in which they can do their best work. To this end, Provost L. Rafael Reif launched the Initiative on Faculty Race and Diversity in 2007 to increase the number of underrepresented minority faculty at MIT. A team of nine MIT faculty members, from all of the five Schools, conducted extensive research and analysis over two and a half years to investigate whether and how race and ethnic identity have affected the Institute's ability to recruit and retain faculty. The committee was asked to identify which aspects of MIT's culture, procedures, or environment may have influenced faculty experiences at the Institute.

This year the Initiative on Faculty Race and Diversity issued its final report, which found that the Institute has an opportunity to strengthen its efforts to recruit and retain underrepresented minority faculty and to work with peer institutions to build a pipeline of talent. While MIT's efforts to hire and retain minority faculty have produced significant gains in recent years, continued improvements to policies and practices are necessary to strengthen mentoring processes and to foster a stronger culture of inclusion. The Institute will be well served by the report as it pursues the frontiers of knowledge and innovation. Strengthening MIT's culture of inclusion is not an optional exercise; it is the indispensable precondition that enables MIT to capitalize on the diverse skills, perspectives, and experience of its community to better advance its mission.

Following on from last year's Diversity Leadership Congress a new website called [Inventing Our Future](#) was launched. The website includes a forum for members of the community to tell their stories through video profiles and blogs; it also provides a venue for event listings and other resources.

Lincoln Laboratory held its own Diversity Leadership Congress this year to advance the Lab's diversity and inclusion programs. Geeth Chettiar, vice president of diversity and equal opportunity programs at Lockheed Martin, gave a keynote address in which he explained how diversity and inclusion were strategically important for his company.

Distinguished Visitors

On October 23, MIT had the honor of welcoming President Barack Obama to campus. President Obama toured labs to learn about current innovations in energy research. These tours included demonstrations from Professors Vladimir Bulovic, Marc Baldo, Angela Belcher, Paula Hammond, and Alex Slocum. As part of his visit, President Obama delivered an address on the national clean energy agenda to an audience in Kresge Auditorium that included MIT faculty, staff, and students, as well as Massachusetts governor Deval Patrick, Cambridge mayor E. Denise Simmons, and other local officials. President Obama's visit was the first by a sitting United States president since President Clinton spoke at the 1998 Commencement.

MIT also welcomed British foreign secretary David Miliband SM '90 to campus to deliver the Karl Taylor Compton Lecture, which he focused on the war in Afghanistan. Janet Napolitano, secretary of the US Department of Homeland Security, visited MIT and participated in a roundtable discussion with university leaders that focused both on ways that the department could amplify its recruitment of talented young people and on how it could increase its research collaborations with academic institutions.

Microsoft cofounder and philanthropist Bill Gates also visited campus this spring as part of a three-day tour of five universities across the country aimed at inspiring students and teachers to focus on issues of global need. Mr. Gates's presentation in Kresge Auditorium, "Giving Back: Finding the Best Way to Make a Difference," was followed by a question and answer session with the audience. While on campus, Mr. Gates also met with faculty and students working on projects related to the work of the Bill and Melinda Gates Foundation.

Financial Constraint

The global economic downturn presented MIT with serious challenges; however, due to prudent financial adjustments and a careful approach to limit expenditures, the Institute has maintained its course. In a letter sent to the community this year, President Hockfield and Provost Reif shared details about the financial situation, including an update on the decline in the endowment. MIT took several steps to maintain financial stability and continued to look for new savings. In a team effort that was led by the Institute-wide Planning Task Force and inspired by suggestions from the Idea Bank and the thoughtfulness of budget administrators across the Institute, MIT turned this difficult period into an opportunity to improve its operations, to amplify the sources of MIT's greatest strengths, and to design ways to apply resources more effectively.

The Institute-wide Planning Task Force

Because MIT's response to the economic downturn allowed time for careful, farsighted budget-reduction planning, the Institute now has the benefit of cost-cutting suggestions

from the community integrated into the thoughtful work of the Institute-wide Planning Task Force. Launched in February 2009, the task force of approximately 200 faculty, staff, and student leaders has developed a set of innovative proposals for strengthening MIT by reducing costs and enhancing revenue. Communications channels including the Idea Bank, public forums, and a public comment period on a preliminary version of the report contributed a broad set of views to the Task Force's final report; from the outset, its work was characterized by an ambitious information-gathering process that emphasized thoughtfulness, transparency, and collaboration. Some of the recommendations will be included in the FY2011 budget, while others will require additional study before implementation for future budget cycles.

The Institute also reported reassuring results from three key sources of income this year: research funding, philanthropic giving, and endowment returns. Budget plans for the next several years anticipate slow, steady financial improvement, and the current endowment performance aligns well with those plans. While the modest gains that the Institute expects will not relieve the need to make budget reductions, if endowment performance continues steady improvement the Institute will not require cuts beyond those that have already been budgeted. Going forward—and remembering how dire the global economic situation appeared just a year ago—the Institute's anticipated returns should offer a hard-earned sense of relief. And, as the economic crisis continues to play out, the Institute will continue to protect its core strengths and values, including a commitment to need-blind admissions and need-based aid for undergraduates, and the continued recruitment of new faculty.

International Initiatives

International Advisory Committee and Global Council

MIT has long been a magnet for global talent, as well as a powerful source for new ideas, discoveries, and innovations. These mutually interdependent strengths, and the growing importance of the Institute's international reach, has fostered many successful partnerships. To understand and strengthen its global engagements, the Institute issued two forward-looking reports this year. The International Advisory Committee (IAC) released its report, *Guiding Strategies for MIT's International Activities*, which outlined goals, guidelines, and recommendations for how MIT's international research engagements can support and amplify the Institute's mission. In addition, the MIT Global Council, which examines and assesses new and existing international activities to guide the development of long-range plans for robust education and research programs, released its report. The report, *Mens et Manus et Mundus*, not only outlined opportunities to expand international learning at the Institute, but also provided guidelines to make international education a core component of an MIT education. Both bodies consist of Institute faculty and administrative leaders.

Both the IAC and the Global Council recommend that MIT take a more active, coherent, strategic approach to global engagement. In particular, the IAC advised that the maintenance and expansion of MIT's support for the global interests of faculty and students must remain the Institute's primary means for engaging global partners. It also indicated that MIT must take deliberate, coordinated institutional steps to remain a premier destination for the finest talent and to amplify the campus's role as

a hub for a network of international engagements in science, technology, and other areas of scholarship. The IAC further recommended identifying locations around the globe in which to concentrate Institute efforts, developing deep collaborations in selected countries that have capabilities, promise, problems, commitment, and talent complementary to those of the Institute.

Singapore

This year MIT signed an agreement with the [Singapore University of Technology and Design](#) (SUTD), Singapore's fourth and newest publicly funded university. As part of this collaboration, MIT will share its expertise in a broad range of areas, including pedagogy, curriculum development, and faculty recruitment and development, and will assist in designing programs to encourage innovation and entrepreneurship. MIT faculty and graduate students will engage in many activities at SUTD, including co-teaching courses with SUTD faculty and student exchanges between MIT and SUTD. Under the research component, MIT will help develop SUTD's research capability through collaborative research programs with SUTD faculty.

The establishment of an [International Design Centre](#) (IDC), situated at the heart of SUTD with a smaller mirror facility at MIT, will be a key component of the research partnership. The IDC has the ambition to become the world's premier hub for technologically intensive design. It will be a focal point for faculty and students from SUTD, MIT, and partner institutions to collaborate in the design of devices, systems, and services that not only address the strategic needs of Singapore, but also the region and the world. The IDC will address key world challenges, such as sustainable environments, engineering for the developing world, and information and communication technology-enabled devices for better living.

The pedagogical and research components of the SUTD-MIT collaboration are tightly integrated and intended to be a catalyst for experimentation and innovation.

Portugal

An MIT contingent met with the prime minister of Portugal José Sócrates Carvalho Pinto de Sousa, government leaders, key faculty from Portuguese institutions, and business leaders involved with the [MIT Portugal Program](#) (MPP). The contingent also visited the New University of Lisbon MBA program, founded through a collaboration among MIT Sloan and two top MBA programs in Portugal. President Hockfield spoke at the inaugural MPP graduation ceremony and attended roundtables on MPP projects. She also received an honorary doctorate at the Academy of Sciences in Lisbon, the first-ever joint honorary national degree granted by the Instituto Superior Técnico, the New University of Lisbon, and University of Porto. This joint honorary degree underscored the academic collaborations at the core of MPP.

Abu Dhabi

An MIT delegation travelled to Abu Dhabi, where they reviewed the progress of the [Masdar Institute of Science and Technology](#) (MIST), for which MIT serves as primary partner. President Hockfield met with key faculty and administrative leaders from MIST

and with the Abu Dhabi leadership, including His Highness Sheikh Zayed bin Sultan Al Nahyan and His Excellency Sheikh Nahayan, minister of higher education and scientific research.

China

MIT entered into a three-year agreement to jointly develop an executive education program in energy with Shanghai Jiao Tong University (SJTU). President Hockfield addressed a group of approximately 300 students at the SJTU Inspiration Forum this year and met with government and business leaders in Shanghai. An MIT delegation accompanied President Hockfield, travelling to Hong Kong and Taiwan, where President Ying-Jeou Ma hosted the delegation. Many in the delegation participated in the celebration of the 20th anniversary of the founding of the Epoch Foundation, a collaboration among MIT and Taiwanese industries.

Campus Development

Media Lab Extension

In March, the Institute celebrated the opening of the extension to the Wiesner Building on Ames Street. The extension houses the Media Lab, the Comparative Media Studies Program, and individual offices from the School of Architecture and Planning. The building's open design supports the collaborative and interdisciplinary culture of the Media Lab, encouraging fluid movement and communication among lab spaces.

Sloan School of Management

Construction on the new building for the Sloan School of Management continued this year as part of the Institute's greater strategic campus renewal. As part of this effort, the Institute also began the renovation and restoration of the adjacent Arthur D. Little Building. This effort aims to bring greater energy and resource efficiency to this near century-old building. Constructed in 1916, the Arthur D. Little Building is a National Historic Landmark and listed in the National Register of Historic Places.

Closing Thoughts

The devastating earthquake in Haiti this year stunned and saddened the MIT community. While the storm's devastation delivered a terrible personal blow to those in the MIT community with family, friends, or roots in Haiti, it also served as a call to action for many. The catastrophe mobilized MIT faculty, staff, and students to apply their technical skills, talents, passions, and creativity to areas of need. The community took swift action to raise money, assist the US military's task force in Haiti, and apply MIT expertise to a range of critical areas from civil engineering, communications, and logistics to energy, urban planning, architecture, and finance. The Institute mobilized in a similar way after Hurricane Katrina, and will undoubtedly help with expertise and resources when another catastrophe arises. Trying times like these remind us of the Institute's mission to bring knowledge to bear on the world's great challenges.

Susan Hockfield
President