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Special Thanks

Thank you! To all of you gathered here in the great embrace of Killian Court — to all the students, faculty, alumni, staff, members of the Corporation, and friends — thank you for your welcome to the great global family of MIT.

The MIT family is enlarged today, and honored, by the presence of delegates from many of the world's leading colleges and universities. We are proud to count you as colleagues, and delighted to count you as friends. The institutions you represent have been powerful drivers to democratize education, helping to liberate the minds and lives of people around the world. Together, we share a duty to guide and guard this legacy of freedom.

Let me begin by offering four special thank-yous.

First, to the members of the search committees, who first inspired me with the intelligence, enthusiasm, and values that sit at the very center of MIT. They calculated the forces holding me to another of the world's great universities, and exerted just the right countervailing force to propel me here.

I owe a second, and most profound, thanks to all the MIT Presidents who have come before, especially those who are here with us today: Howard W. Johnson, Paul E. Gray, and Charles M. Vest. Together, they represent the extraordinary succession of leaders who have helped shape the world-changing institution we celebrate today.

MIT has a habit of holding onto its presidents after they leave office. Observers at other institutions find that very hard to comprehend. "How does that work? Like a car with four steering wheels?" I can't explain exactly how it works — but it works! I am immensely grateful to these three great leaders for sharing with me their institutional insight, their personal wisdom, and their abiding love for MIT.

My third thank-you goes to my closest collaborators, my family: to my husband, Tom; our wonderful daughter, Elizabeth; and her trusty golden retriever, Casey. They did not ask for this adventure, but they have been the most cheerful, intrepid, and inspiring companions I could ever hope for!

And finally, I want to thank the entire MIT community. Over the last several months, many, many of you have brought me, like so many beautiful gifts, your own reasons for loving MIT. You have told me your stories, shared your passions, and revealed your hopes for the Institute's future. Through these gifts, you have taught me about the essence of this truly extraordinary institution.

The Essence of MIT

The world knows a lot about MIT, but some of the most remarkable things, you just can't know until you get here. For example: the incredible energy of the place! There's a kind of crackling drive and curiosity that fills the air. MIT feels like a stadium with no seats; everyone is in the game, sometimes 24 hours a day!

In our celebrations this week, I've been delighted by the cascade of art and music, revealing MIT's intense creativity. The fact is, that same creative passion, intensity, and intellectual playfulness drive everything here – the entrepreneurial ideas, the innovations, the discoveries.

The MIT you have shared with me is also a place of deep personal integrity, and a place of striking practicality. That essential practicality points to one more crucial factor that can't be seen from the outside: The wonderful way that engineering, not just as a discipline, but as a worldview, infuses every aspect of life and thinking here. The values of engineering – the rigor; the implacable curiosity; the disciplined creativity; the appetite for good, old-fashioned hard work; the passionate, enthusiastic, can-do, hands-on, fix-it-now attitude – are and always will be the values of MIT.

It is through the bond of these shared values that MIT succeeds in serving the nation and the world. This university is spectacularly international and at the same time quintessentially American. Here, it does not matter where you come from, what you look like, who your parents are, or how much money you have. What matters is only whether you can do the work.

Because our roots go deep into the soil of engineering, our branches are always reaching up toward the light of real-world applications and answers. And while we reach toward answers to the practical challenges of our times, we also explore the great mysteries of all time. MIT scientists and scholars define the important questions at the furthest reaches of the universe, because we know that the answers to those questions will provide insight to the world's greatest puzzles in ways we cannot yet predict.

In all these ways, the MIT you have helped me see is absolutely true to its founding mission. In 1861, William Barton Rogers launched MIT to expand what he called "the happy influence of scientific culture on the industry and the civilization of nations."

If MIT were merely the sum of its astonishing parts, that would be enough. But because of its exceptional unity of purpose, it is much more.

It is a complex institution, but with a single mission and with a single, unwavering standard of excellence in all of our departments, and across the spectrum from the most basic, curiosity-driven research, to the most intensely practical applications. That uniform excellence makes possible uncommon collaborations – the kind that push the boundaries. And that common purpose is our greatest strength, because all of us, together, are engaged in service to the great human family.

Openness, Excellence, and Invention

We continue a tradition that has illuminated the world for centuries. Think of the names that ring this magnificent courtyard: Aristotle, da Vinci, Newton, Darwin, Pasteur. Separated by centuries and nations, and working with different tools, they are yet united by a passionate curiosity to understand the world. These remarkable explorers all shared an ardent desire for the truth, and through that same thirst, today's students and scholars are united with them.

We call these buildings "the Main Group," and they actually tell an important story about MIT's past, and also about its future.

In 1916, these mighty limestone walls rose to begin the great MIT experiment on the Cambridge side of the Charles River. The new MIT displayed a kind of open architecture, both literally and metaphorically. This huge, single, interconnected building embodied the vision of an open, unified institution, without internal boundaries — a place where people interested in similar problems could work together freely, across what might otherwise be disciplinary divides. In their design, these buildings actually helped invent MIT, and they have helped MIT invent the future.

The Main Group also symbolizes a century of technological triumphs. These majestic structures evoke a faith in progress that should still inspire us, and they set a standard of unrelenting excellence and invention that is still the standard we live by at MIT today. At the threshold of the last century, the engineers, scientists, and scholars at MIT built an institution that unleashed the potential of new insights and new technologies. Now, at the threshold of our own century, it is up to us to do the same.

I believe we will do it by relying on the same openness, excellence, and invention that have brought us so far.

We will capitalize on our spirit of openness to create productive collaborations across our own Schools and departments, and with other institutions in the public and private sectors. We will work toward intellectual openness around the world, and to preserve the vital flow of international students and scholars, who contribute so much to our universities, and to our society as a whole.

Building on our tradition of excellence and invention, and working closely with our colleagues in industry and government, we will continue to serve as a preeminent engine of economic growth, a powerhouse of the innovation economy for the region, the nation, and the world.

And we will bring all these strengths to bear as we help to tackle humanity's most urgent problems.

Grasping the World's Great Challenges

Indeed, the world has never needed MIT as much as it does now. Think how many of the major challenges of this uncertain, unsettled age are shaped by science, technology, or daunting problems of quantitative analysis and complex synthesis — energy, climate change, AIDS, stem cells, urban sprawl, global poverty, access to health care, and even the future of Social Security.

With our expertise in interdisciplinary problem-solving, MIT is uniquely equipped, and obliged, to make a critical difference: to do the analysis, to create the innovations, to fuel the economy, and to educate the leaders the world needs now. In that context, and understanding that profound responsibility, I believe MIT must step up to the great global challenges of our day. There are many I could cite, but let me highlight just two.

First, this generation is bearing witness to a fascinating convergence of engineering and the life sciences. This convergence holds the promise of transforming our lives, but it is not unprecedented. In fact, at MIT, we know the precedent very well. Seventy years ago, President Karl Compton insisted that the physical sciences must play a critical role in education and research at MIT. The result was nothing less than a new era in engineering. To appreciate the power of the collaborations that Compton helped spawn, you only have to think of MIT's Radiation Laboratory. The Rad Lab helped develop radar. And radar helped win World War II. Today, engineering is making the same kind of fertile connections with the life sciences, and I believe we can expect equally revolutionary results.

At MIT, we have a gift for learning from one another. Combining our historic strength in engineering and our newer strengths in biology and the brain and cognitive sciences, we are already opening unprecedented opportunities for educational innovation, invention, and discovery. Geographically and intellectually, we are bringing together our computer scientists and life scientists, our linguists, philosophers, and engineers. We are already seeing a torrent of new collaborations, insights, and results. Just as MIT has led in those disciplines that define the Information Age, MIT can and must lead in this essential new field-of-all-fields.

A second great opportunity, and a great obligation, is our institutional responsibility to address the challenges of energy and the environment. Over the last thirty years, these two words — energy and the environment — have gotten a little tired, not from overuse but from lack of progress. The time for that progress is now. I believe that the country and the world may finally be ready to focus on these matters seriously. Again, it is our responsibility to lead in this mission.

Tackling the problems that energy and the environment present will require contributions from all of our departments and schools. Many MIT faculty are working already on new routes to renewable and sustainable energy. We need to advance this scientific and engineering work, while focusing our efforts, and magnifying their

impact, through our world-class expertise in economics, architecture and urban planning, political science, and management.

To this end, we have begun working with the faculty to develop a major new Institute-wide initiative on energy. This initiative will foster new research in science and technology aimed at increasing the energy supply and bringing scientists, engineers, and social scientists together to envision the best energy policies for the future. We will seed this initiative with resources for new interdisciplinary faculty positions. Together, I believe we will make an enormous difference.

Of course, even these two tremendous challenges do not begin to describe all the things we need to accomplish in the years ahead – from revising the undergraduate curriculum, to setting a new standard in management education, to serving as champions for higher education and research, and informing public policy and opinion on the critical issues of our time.

As MIT has always done, we must grasp the world's great challenges. We must seize the day.

Fostering Community

The world offers us limitless opportunities for important work. But for MIT to help build a better world, we must be able to build on the strength of our own community. We need to do everything we can to make sure that MIT becomes an even more inspiring, welcoming, and enriching place to work and to live. Community springs from shared experience. It grows out of values held deeply and in common. It cannot be manufactured on demand, but it can be fostered. That is our challenge now.

Some steps are simple. MIT has always welcomed remarkable numbers of first-generation college students; to maintain that commitment, we need to amplify our ability to offer financial aid. We also need to sustain our rich diversity of ideas and cultures by building a powerful pipeline of young women and underrepresented minority students, eager to pursue advanced degrees and academic careers.

But beyond those practical challenges, we need to do something less tangible but just as important. We need to recognize in ourselves a serious hunger for a richer sense of connection, community, and joyfulness. I have seen this desire all over campus. I have heard it from undergraduates, graduate students, faculty, staff, and alumni. What makes me optimistic is that I have also found an eagerness to explore new ways to enrich our campus community.

In a place like this, the riptide of sheer busy-ness can overwhelm human connections. But even with the astonishing pace and pressure, this campus is dotted with the bright sails of wonderfully vibrant smaller communities – the fraternities, sororities, independent living groups, and residence halls; the staggering array of co-curricular

activities; and the enormous number of athletic teams and clubs. Our challenge now is to create a broad, welcoming harbor that has room for every boat.

Inspiring the Next Generation

The three letters “MIT” summon up the image of excellence in languages across the globe. Yet – and it is a real puzzle – MIT’s light is still somewhat under a bushel. Especially here in the United States, there is too little understanding of what we do at MIT, much less of how well we do it.

Our task together is to make our light shine out brightly enough to inspire in the next generation the same love and passion for truth and discovery, for creativity and problem-solving, that brought us all here. We need to help America fall in love all over again with the marvelous possibilities and promise of engineering, science, and technology.

It is impossible to stand at the podium in a place like this, on an occasion like today’s, and not wonder, “How exactly did I come to be here?” My own answer is that I came by Sputnik!

When that first space flight happened, I was six years old. I vividly remember the thrill of it – not the threat of Soviet supremacy, but the amazing excitement of knowing that, through sheer hard work and ingenuity, one day human beings would get to the moon!

Like so many of you, I also come to this place hand in hand with my many inspiring teachers. I once asked my thesis advisor at the NIH why he studied the architecture of the brain, and I’ll never forget his answer. He said, “Because it is beautiful.”

Engaging in advanced research is a special privilege. It was a tremendous joy to find work that pleased me so much, and that had the potential to make such a difference in people’s lives. That’s how I came to be here.

Now, here we all are, in the serene majesty of Killian Court: The fortunate members of an amazing community, and the heirs to an incredible intellectual inheritance, here with our friends, embraced by the eternally inspiring names inscribed in the frieze above.

Each of you has your own story, your own inspirations, the people and ideas and challenges that inspired you and carried you here, too. Together, we need to be that inspiration, to reveal those truths and those pathways to the next generation. We need to be the spark that ignites the passion of every child who wants to grow up to make the world a better place. We need to reach those young explorers and bring them with us on the great adventure of discovery and innovation that is the soul of MIT.

The presidency of this unique institution is a tremendous responsibility. Fortunately, I know that all of you will be my partners in the years to come. Not individually, but together, we steward this great Institute, building on its magnificent past to grasp the

challenge of the future. I am deeply honored that you have asked me to share the journey with you. And I thank you very much.