

# MIT Faculty Newsletter

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"Faculty and Staff Views on the Choice of the Next MIT President": A Faculty Newsletter special Zoom presentation. May 24th from 4:00 – 5:30. See page 15 or click here to learn more about it and to register.

### MIT and a Green New Deal for Cambridge

#### Quinton Zondervan

**MIT WAS FOUNDED IN 1861**, at the start of the war over slavery, to catalyze the Industrial Revolution in America. In that regard it has been spectacularly successful. Industrialization itself was critical to breaking the stranglehold of slavery on America's economy at the time. Unfortunately, our reliance on fossil fuel combustion has created a new crisis, and MIT has the opportunity to play a leading role in helping us break free from that dependency.

In Cambridge, about 80% of our greenhouse gas emissions are generated by buildings, and just 6% of the building stock is responsible for about two-thirds of the City's total emissions. Many of these buildings are owned by MIT, including through the MIT Investment Management Company (MITIMCo), its real estate investment arm. Kendall

## From The Faculty Chair

### Faculty-Corporation Engagement in the Triangle of MIT's System of Shared Governance

Lily Tsai, with Rick Danheiser, Robert Jaffe, and Thomas Kochan

## Why MIT's system of shared governance works

**ENGINEERS KNOW ABOUT THE** strength of a triangle. It is a shape that is not easily distorted under pressure. Structures that use them last for centuries.

In the shared governance of MIT, the relationships between the Faculty, the Administration, and the Corporation are the three sides of a triangle. Each carries out different but complementary responsibilities. In this column, I focus on one side of that triangle – the relationship between the Faculty and the MIT Corporation. While members of the Administration need to spend an enormous proportion of their time running the Institute and solving the many management problems that arise every day, members of the Faculty and the



MIT Commencement

### Editorial

### I. Congratulations to our Graduates of the Years of the Pandemic II. No New Cold – or Hot – War!

## Congratulations to our Graduates of the Years of the Pandemic

**MIT'S FACULTY HONORS AND** takes particular pride in the accomplishments and resilience of the Class of 2022. You have had to navigate and overcome the unprecedented stresses of these recent years on the way to this important marker in your lives and careers. For many, this has meant long periods of isolation from fellow students and friends. For international students, travel restrictions have often forced extended absences from home and family.

As you have learned and grown – absorbing, resynthesizing, and generating knowledge and new insights – so have we, in collaboration with you. Your future contributions to your communities, to society, and to humanity will be among the most gratifying outcomes of our academic efforts together.

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**Subscriptions** \$15/year on campus \$25/year off campus

## Congratulations to our Graduates continued from page 1

Teaching and mentoring students under the conditions of the pandemic has required the development of new skills and commitments, by students, faculty, staff, and administrators at the Institute. When successful, this has been a source of satisfaction. We hope, however, that having to continually adapt to the stresses and limitations of the pandemic will not be a new normal.

The values of scientific investigation and assessment, often taken for granted previously, have stood out in the response to the pandemic, but have also now become arenas for contention and even denial. Defending these values will require the urgent involvement of us all. The Class of 2022 will be entering a world of considerable uncertainty and an increased level of social and political polarization. The developments of recent years have sparked many of you to become attentive to issues of climate change, global health and inequality, social justice, peace and nuclear disarmament, and the need to protect fundamental democratic and human rights.

Many of you participated in the 2020 U.S. Presidential election as your first engagement with the electoral arena, and your active involvement there as educated and thoughtful citizens is more needed than ever, as this country's politics become ever more fraught. With Vladimir Putin's Russia wreaking destruction on Ukraine and its people, the effects of conflicts that may have once seemed very far away to most of us have propagated globally and become impossible to ignore. We are impelled to step up to our responsibilities as citizens to ensure that government actions in the world increase the prospects of peace and prosperity for the world's peoples, rather than undermining them.

During your time here, the campus experienced a revival in student engagement. Examples include the MIT Divest campaign; the opposition to MIT's agreements with the Saudi Arabian monarchy; the campus die-in led by Black students; the protest and counter-forum to Henry Kissinger's role as spokesperson for ethics in artificial intelligence; the revival of MIT Students Against War; the recent formation of a graduate student union at MIT; and many other expressions of social, economic, and political concerns. This engagement is heartening.

We on the Faculty have watched and supported the burgeoning of your many talents, your creative ambitions, your recovery from setbacks, your quirky self-expression, and your creative and entrepreneurial energy. We hope that, as your individual paths unfold, you will put your powers to work on solving some of the problems that confront us all, and on making our societies here and abroad more responsibly productive and more supportive of those in need. On behalf of the entire Faculty, we wish the Class of 2022 vision, wisdom, strength, commitment, and success, in addressing the unique challenges we will all face together.

The Editorial Board of the MIT Faculty Newsletter

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#### **No New Cold – or Hot – War!** The Increased Danger of Nuclear War

THE WORLD IS AWASH in nuclear weapons on hair-trigger alert. This stark statement includes Russian missiles, British missiles, French missiles, Pakistani missiles, Indian missiles, Israeli missiles, and U.S. missiles and bombers. Given the heightened tension over the Russian military attack on Ukraine, certainly every military person in the line of command for missile launch in every nuclear-armed nation is on alert and experiencing high adrenaline and high anxiety. Not since the Cuban missile crisis have we had a time in which an inadvertent, accidental, or intentional launch of nuclear missiles is so likely. Then it involved only two major powers; not so, today.

Once launched, the missiles cannot be called back. Any launch from a NATO country will trigger launches from Russia; launches from Russia may well trigger retaliation from NATO or the U.S. Millions of people would be obliterated in the first seconds after the detonations and many millions more would die in the subsequent months.

Calls for a ceasefire in the current crisis are critical. This ceasefire cannot be to gain advantage for Russia, or NATO, or the U.S. It is to reduce the danger of a nuclear exchange which would be irreversibly catastrophic. And, of course, with respect to the Ukrainians, a ceasefire is the surest path to reducing the loss of life and suffering.

We in the U.S. must first take responsibility for our own nation's actions and policies. The U.S. administration has unilaterally withdrawn from key nuclear disarmament treaties, including the Anti-Ballistic Missile (ABM) treaty in 2002 and most recently in 2020 the Intermediate Nuclear Forces (INF) Treaty. This is one source of deepening military insecurity expressed by the Russian government.

Our government needs to return to the bargaining table with Russia, China, and North Korea, among other nations. It must hammer out treaties to reduce the risk of nuclear weapons uses.

The U.S. has nuclear bombs stored in five countries in Europe. Multiple Ohio class submarines are always at sea. Just one of these submarines, armed with 12 missile launchers and each missile armed with eight independently-targeted warheads, can obliterate every large city in Russia or China. Of course, such a launch would in all likelihood lead to a Russian response with missiles that would obliterate every major city on the East Coast of the U.S. The insanity of the situation is almost beyond belief.

The nuclear deterrent policy with its "mutual assured destruction," is certainly the biggest, most compelling and most dangerous policy error in human history. These missiles don't increase national security, protect us from terrorists, get us to work, house us or clothe us, or help produce items that do. However, they are enormously profitable to the manufacturers, paid with many billions of our tax dollars.

Avoiding nuclear apocalypse requires: a) supporting an immediate cease-fire in Ukraine; b) rejoining the ABM and the Intermediate Nuclear Forces Treaties, which reduce the most acute of the nuclear weapons risks; c) U.S. adoption of "No First Use" of nuclear weapons as a clear national policy; d) Congressional votes against increased appropriations aimed at upgrading our nuclear weapons capacity; and e) the United States taking a leading role in calling for the nuclear-armed powers to sign and begin putting into force the Treaty for the Prohibition of Nuclear Weapons.

> Jonathan A. King, Robert P. Redwine, Nasser Rabbat and Nazli Choucri

#### Faculty-Corporation Engagement in the Triangle of MIT's Shared Governance Tsai, from page 1

Corporation are often preoccupied by the questions that matter over a 10-, 20-, even 50-year period:

"What are our fundamental values, and what principles should we uphold?"

"What should be the nature, the role and the value of an MIT education?"

"What is MIT's place in the world? How do we earn that place and use our voice in decisions that matter?"

The long-time horizons shared by the Faculty and Corporation stem both from the nature of the work we do and because many individuals in both the Faculty and Corporation spend decades at MIT. The Corporation is primarily concerned with the long-term financial health and academic excellence of MIT as measured across decades. The essential job of the Corporation is to provide and plan for stable support, both financial and institutional, to ensure the future of the education and research provided by the Faculty. Planning for faculty research can span more than 30 years, as it has for the new electron-ion collider in Long Island that will become operational in 2030. In overseeing undergraduate education, the faculty conduct comprehensive reviews of the curriculum on roughly 10-year cycles; the next is slated to begin in the fall.

Despite the important roles of MIT's Corporation and Administration, a student thinking of coming to MIT, or a funder reviewing a proposed program or project, is not scrutinizing the Corporation or Administration. They are looking at achievements in the teaching and research of the Faculty, and of the graduates who were educated by that Faculty.

The MIT Faculty is the foundation on which the reputation of the Institute rests, and faculty members are deeply conscious of the great responsibility that entails. Many faculty have devoted their entire careers to MIT and have become identified with the Institute in the eyes of the public and the members of their profession. This is why it is inappropriate to map MIT's governance structure onto a corporate template with owners (the Corporation), managers (the Administration), and employees (the Faculty).

A better analogy would be a law or architecture firm where the Faculty map to senior partners who share a career-long equity stake in the health and growth of the organization. Tenured faculty cannot easily be fired. However, they can leave for places that provide them better institutional and financial support – the kind of support, such as support for graduate students, community well-being, and institutions for research administration, that effective collaboration between faculty, administration, and trustees provides.

The point is not that the Faculty are more central to the successful functioning of a great university than the Administration or Trustees - but rather that the Faculty, Administration, and Corporation are equal and complementary partners in a shared triangle of governance. The Corporation has a fiduciary responsibility, the Administration has a management responsibility delegated to it by the Trustees and the Faculty, and the Faculty has an intellectual and ethical responsibility for the university's future. When all three relationships - Faculty-Administration, Administration-Corporation, and Corporation-Faculty are strong and supporting one another, that is when MIT is best able to push forward ambitious new visions and respond to challenges in a united way.

Over the last couple of years, however, we have heard with increasing intensity from both Faculty and Corporation members that the Corporation-Faculty side of the triangle has been weakened in recent years, particularly during the pandemic, and that it will be important to build it back in an intentional and proactive way.

We are pleased to report that we now have a number of different mechanisms for doing so over the coming months.

#### Shared governance at the unit level

The Visiting Committees are, of course, an essential mechanism for communica-

tion between faculty and Corporation members, particularly at the departmental level. At a recent Faculty Policy Committee (FPC) meeting, members reflected on how cut off the MIT community has felt from the Corporation during the pandemic and how difficult it has been for faculty to give Corporation members an accurate sense of how things look on the ground. Corporation members, on the other hand, have noted to me that so much of the valuable information exchange through Visiting Committees is not in the presentations and briefings, but in the informal, unscripted conversations happening along the sidelines, particularly with rankand-file faculty. Such richer forms of information exchange were absent for 20 months while in-person Visiting Committees were suspended from April 2020 to November 2021.

Visiting Committees illustrate how the triangle of shared governance can work to the benefit of each DLC. The faculty work with the DLC Head, the Visiting Committee works with faculty during its visit, and then the DLC Head, Dean, and Administration collaborate with the Visiting Committee to move the department forward. When each side of the triangle is strong, the department is fully supported to operate smoothly, build on its strengths, and expand its horizons.

In addition to these "local" triangles at the unit departmental level, MIT's system of shared governance calls for a similar structure at the Institute level to enable Faculty, Administration, and Corporation to reflect on and respond to Institute-wide questions and challenges together. This macro-level triangle does not assemble itself out of the smaller triangles; it must be deliberately constructed and maintained.

#### More than the sum of the parts: Shared governance at the Institute level

To strengthen the Corporation-Faculty side of this triangle at the Institute level, the Corporation approved three new mechanisms at its December meeting that

#### Faculty-Corporation Engagement in the Triangle of MIT's Shared Governance Tsai, from preceding page

will be piloted over the next two years. These mechanisms respond to calls from the Faculty for rebalancing the role of the MIT Faculty in the shared governance of the Institute after the revelations concerning Jeffrey Epstein's interactions with MIT.

In March 2021, at the request of my predecessor, then Chair of the Faculty Rick Danheiser, the MIT Corporation charged an ad hoc committee of Faculty and Corporation members<sup>1</sup> with reviewing existing mechanisms of engagement between the Faculty and Corporation and evaluating whether other mechanisms were desirable. After a discussion of the committee's findings at the October 2021 Corporation Meeting, the committee's recommendations were further refined and presented at the December 2021 Corporation Meeting where they were approved by the Corporation.

During the next two years, the Faculty and Corporation will pilot the following:

1. Random Faculty and Corporation Dinners (or Zooms) scheduled around quarterly Corporation meetings. This mechanism enables open-ended and indepth conversations between Faculty and Corporation members to increase understanding and to build relationships that bridge across their differing cultures.

2. Invitation of the Chair of the Faculty to discussions of the Executive Committee of the Corporation regarding matters of significance to the faculty. When the Executive Committee wishes to hear from faculty about matters of significance to the Faculty, the Corporation Chair and the MIT President will invite the Faculty Chair to attend all or a portion of the discussion of such matters. If the Faculty Chair wishes to speak with the Executive Committee about matters of significance to the Faculty, they can describe the topic and request an agenda slot from the Chair and the President.

3. A speaking and discussion slot for the Chair of the Faculty at each Corporation meeting upon the Chair of the Faculty's request. The Chair of the Faculty will notify the Chair of the Corporation, President, and Provost of the topic they would like to speak on when requesting a slot from the Chair of the Corporation. This slot provides an opportunity for the Corporation to talk with the Faculty Chair about faculty priorities and question the Faculty Chair interactively to understand better the logic undergirding these priorities.

Over the last few years, it has become clear that the Corporation-Faculty leg of MIT's shared governance at the Institute level has atrophied, with no mechanisms for ensuring that the perspectives and priorities of the Faculty can be directly communicated to the Corporation. Instead, faculty priorities have been mainly conveyed to the Corporation via the Administration. Rather than a triangle of shared governance, governance has looked more like a single line running between the Faculty to the Administration to the Corporation.

Why might it be desirable to have mechanisms for the Faculty to communicate directly with the Corporation? During the ad hoc committee's deliberations, several key answers to this question emerged. The first was this need to build up the Corporation-Faculty leg so that shared governance could operate robustly at the Institute level. The current system of Visiting Committees enables Corporation members to talk with faculty, but these conversations typically focus on local issues of interest to a particular department. Participants and presenters do not have the opportunity to reflect on Institute-wide priorities and challenges, which only arise on an ad hoc basis, if at all.

Another finding from the committee was that more two-way dialogue between the Corporation and the Faculty would be beneficial. Real-time exchange, with ample opportunity to ask and answer questions as they arise in conversation, is essential for participants to understand each other's points of view as well as the reasons behind them. This builds mutual trust through "thick," more nuanced interactions, rather than "thin" information exchange through written summaries or brief presentations, and it enables different views and actions to be harmonized.

## The increasing significance of shared governance

At MIT and in the world, we are facing new challenges, and we need more than ever to build shared understandings and support for Institute-level initiatives and decisions to make the most of the potential impact MIT can have in the world.

Our modes of producing and organizing research are becoming more complex. Departments vary greatly in the challenges they face in doing their research – under-recovery, graduate funding, research administration, etc. are important issues for many, while manifesting differently for different fields. Shared governance helps us come to solutions that can work for the short- and long-term, and that have a claim to legitimacy across the Institute.

MIT is experiencing rapid institutional changes in multiple areas – the College of Computing, research administration services, research and computing, DEI, online and professional education, and the call for institutional response to societal challenges such as climate change. Discussions about how to implement recommendations from Task Force 2021 and Beyond are also underway. The unusual returns on the endowment have released some

<sup>&</sup>lt;sup>1</sup> The Corporation members of the committee were Drew Faust, Diane Greene, Kenneth Wang, Colin Webb, and Song Yee Yoon. The Faculty members of the committee were Rick Danheiser, Daniel Hastings, Thomas Kochan, and Lily Tsai. After the first several meetings, the committee invited Cynthia Barnhart to join as a representative of the Administration. Our committee met five times, including one meeting with the President and Provost.

#### Faculty-Corporation Engagement in the Triangle of MIT's Shared Governance Tsai, from preceding page

additional resources, but we will need to prioritize carefully how we use them. Thus far, there has been no clear process for widespread engagement of the Faculty on the setting of new budget priorities or for strategic planning on changes in the institutional and administrative structures. So far, it has been a process of "governance by patching." To rationalize this process and respond with a productive and coherent strategic plan, and to garner broad support for the initiatives that emerge, all three legs of MIT's shared governance will need to support and collaborate with one another.

Not surprisingly, other universities have also been strengthening the relationship between faculty and trustees. The participation of faculty on university boards and their committees has been a topic of active discussion around the country in recent years and has been implemented at a number of universities. In 2016, the Association of Governing Boards of Universities and Colleges surveyed its members and reported that approximately 31 percent of private universities have either voting or non-voting faculty representation on their boards.<sup>2</sup> A 2012 survey conducted by Ronald Ehrenberg, an economist at Cornell and Director of the Cornell Higher Education Research Institute, found that there was a faculty member on the Executive Committee in 26 percent of those universities that have an Executive Committee.<sup>3</sup>

Since December when the new mechanisms for engagement were approved, there has been immediate interest on both the part of the Corporation and the Faculty in utilizing these mechanisms at the next possible opportunity. Lasting impact may take time, but this has been a moment when members of the Corporation seem particularly interested in the views of the Faculty. As Chair of the Faculty, I have already had more speaking and discussion slots with the Corporation and the Executive Committee in the last six months than any of my recent predecessors.

Many faculty may wonder how engaging with the Corporation makes a difference, as they have little firsthand knowledge of the Corporation's internal structure or routine activities. One of the Corporation's key responsibilities, for example, is reviewing and approving the operating budget of the Institute every year. Like many responsibilities, this authority is generally delegated to the Executive Committee of the Corporation, which is chaired by the Chair of the Corporation and consists of the Chair, the MIT President, the EVPT, the Chair of the MIT Investment Management Company, the Chair of the Risk and Audit Committee, and between seven and 10 other members who are nominated by the Governance and Nominations Committee from members of the Corporation and elected by the Corporation.

In response to this year's increase in endowment payout, members of the Administration presented proposals for how to allocate these additional funds to the Executive Committee including new recurring as well as one-time expenditures. Members of the Executive Committee had the opportunity to ask questions, probe the logic behind the proposed allocations, and to request additional information when necessary. Faculty input into these processes, as described in the three initiatives described above, would enrich these discussions and put the resulting initiatives on a stronger foundation.

Processes like these enable the Corporation to carry out its responsibilities for overseeing the administration of the Institute's educational and research programs, the performance of the Institute's administration, and the organizational structure of the Institute to ensure they are consistent with the Institute's mission, policies, and practices.

## Looking ahead to the presidential search

The upcoming presidential search will be an important opportunity for the Corporation members on the search committee to listen to faculty and community members across MIT, to demonstrate how much the Corporation values the views of the Institute's many stakeholders, and to get back in touch with the grassroots. It will also be a chance to encourage everyone in the MIT community not only to think about their own particular concerns or local challenges, but to go beyond group-specific interests and focus instead on the collective good. How do we come together to define the long-term challenges and priorities for the Institute as a whole for the next 10, 20, 50 years? How can MIT live up to its responsibilities to be a role model of the world? What is a vision for the MIT of the future that makes us want to come together and contribute to building?

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**Author's Note:** The above article was written in collaboration with Professors Rick Danheiser, Robert Jaffe, and Thomas Kochan.

<sup>&</sup>lt;sup>2</sup> Association of Governing Boards of Universities and Colleges. (2016). "Shared governance: Is OK good enough?" <u>https://portfolio.du.edu/downloadItem/366497</u>. Data from a 2020 survey are not yet publicly available.

<sup>&</sup>lt;sup>3</sup> Ehrenberg et.al., Table 2.

#### **MIT and a Green New Deal for Cambridge** Zondervan, from page 1

Square's innovation economy is driven by companies founded on technological and scientific breakthroughs often happening at MIT. Rising rents from these highpaying jobs leads to gentrification and displacement, while largely excluding low-income and minority community members from the economic opportunity generated. According to the Cambridge Community Foundation report, less than 5% of Black Cambridge residents work in the innovation economy.

To be fair, MIT and many of these companies do groundbreaking research and technology development that generate considerable benefits to people all over the world. But their reliance on freely polluting the atmosphere and exacerbating social injustice is unsustainable, and is actively contributing to the destruction of our world. Sadly, each generation of students at MIT has to learn about this tragic dynamic on their own, while swimming against the tides of propaganda. I know, because I was one of them.

In the 1980s, as an immigrant high school student in Florida, my dream was to study at MIT. Unable to afford it, I attended a local liberal arts school where I learned about the destructive powers of global warming, and became a climate activist. It took me years after completing a Master's degree at MIT in 1995, to figure out how to combine my interests in technology and preventing climate destruction.

Working with Sunrise Cambridge, local community activists, and colleagues on the City Council, I've proposed a Green New Deal for Cambridge (cambridgegnd.org) that would charge large commercial buildings for their climate destroying emissions, and create economic opportunity for low-income and minority communities in Cambridge through green jobs, to ensure a just transition. I hope that MIT, Harvard, and the other corporate interests driving the innovation economy in Cambridge are ready to account fully for the social and ecological damage they do, and will become more active partners in doing justice alongside innovation. Here are three areas the harm it does. Pollution kills, both immediately through asthma and other health impacts, and long into the future through ongoing climate disaster. Leaders acknowledge when harm is being done and work hard to eliminate and mitigate that harm.

To be fair, MIT and many of these companies do groundbreaking research and technology development that generate considerable benefits to people all over the world. But their reliance on freely polluting the atmosphere and exacerbating social injustice is unsustainable, and is actively contributing to the destruction of our world.

where MIT can demonstrate clear leadership and join us in creating a Green New Deal for Cambridge.

1) Focus on eliminating emissions from its own buildings. MIT and others argue that the electrical grid is not ready in Cambridge to withstand full electrification of every building and vehicle in the city, and that therefore they should be allowed to offset local greenhouse gas pollution with global carbon credits. While certain offsets make sense as a temporary measure, such as MIT's investment in a North Carolina solar array, more farfetched carbon offsets like paying for tree plantings elsewhere in the world are highly problematic. Ultimately, we cannot offset our way out of this crisis and will need to focus on permanently eliminating these emissions from the buildings that generate them right here in Cambridge.

2) Account for embodied emissions. A lot of pollution is generated by the mining, manufacturing, and transportation of the materials that go into a new building. It is beyond time for MIT and other commercial property developers to fully account for this pollution and pay for 3) Share the wealth by creating green jobs in Cambridge. Almost all the wealth generated in Kendall Square flows to the already wealthy and privileged. Black kids growing up in poverty across the street from MIT's Technology Square are almost completely excluded from that economic activity due to centuries of racism, discrimination, and legislated economic injustice. MIT could lead the way in repairing this harm by adding green jobs training and recruiting to their job connector program.

Now, as at the time of its founding, MIT has the opportunity to be a beacon of hope and optimism during dark times. But it will take more than sheer scientific and technical excellence to complete this mission. It will require a commitment to inventing the future while repairing the damage done by the past and the present. Supporting the Green New Deal for Cambridge represents an excellent opportunity to do just that.

Quinton Zondervan, MIT EECS SM '95, is a Climate Activist, Social, Software and Biotech entrepreneur, and is currently serving a third term as Cambridge City Councillor (qzondervan@cambridgema.gov).

### **Project Indigenous MIT**

David Shane Lowry

**IN OCTOBER 2021, A** committee led by Professor Dan Hastings issued MIT's "Values Statement." Their committee, absent of Native/Indigenous participants, issued a statement that suggests that we at MIT will:

...strive to be transparent and worthy of each other's trust...(and) challenge ourselves to face difficult facts, speak plainly about failings in our systems, and work to overcome them.

The statement went on to say that we (MIT) ought to:

...take special care not to overlook bad behavior or disrespect on the grounds of great accomplishment, talent, or power.

With that very clear permission, I would like to speak "plainly" about the place of Indigenous peoples and knowl-edge at MIT.

This past fall, I was hired to teach 21H.283 ("Indigenous History of MIT"). Part of the work of this course was (and remains) the task of persuading the MIT community to address its role in the long history of genocide of Native/Indigenous peoples in the United States. My goal this year has been to uncover the story of MIT (a story of science and technology) that begins with the fact that MIT was funded through the Morrill Act of 1862 (which took land/water from over 80 Native/Indigenous nations). Furthermore, we are examining the continuity of this story from 1861 to today.

Francis Walker, MIT's third president, became famous through his role in the

business of Native/Indigenous erasure. For example, he led the Bureau of Indian Affairs (BIA). The main goal of the BIA was to proactively move Native/ Indigenous peoples out of sight and out of mind.

The erasure continues.

My work, which is actually the work of the entire Native/Indigenous community at MIT, has been exciting and heavy. It has been exciting because it was sanctioned by the Provost's Office and President Reif. It has been heavy because it helped reveal our (Native/Indigenous) absence across MIT. When a national news report came out about my new role at MIT, I received a death threat. Perhaps people outside MIT didn't want Native/Indigenous people in positions of influence, but MIT wanted us - right? As I looked around, however, there were no Native/Indigenous people in the MIT administration. There were no tenure-track/tenured faculty who come from Native/Indigenous communities. None of the new Assistant Deans of Diversity were Native/Indigenous.

A few weeks ago, in April 2022, President Reif issued a message to the MIT community that outlined MIT's commitment to addressing its role in the genocide of Indigenous peoples. Though Reif's letter didn't clearly *admit* that MIT has a role in the genocide of Indigenous peoples, it set the stage for such an admission. Reif promised an "ad hoc" committee led by the ICEO office and Chancellor Melissa Nobles to address the future of MIT's commitment to Native/Indigenous peoples. This committee is already hampered by the fact that MIT has no (zero) Native/Indigenous faculty who are in positions of tenured authority to impact the work of the committee. It is also hampered by the fact that MIT's administration is not advised by a Native/Indigenous expert or a committee of Native/ Indigenous elders.

When I came to MIT as an undergraduate in 1999, I heard countless students state that Clarence Williams, former MIT faculty, was masterful in his recruitment of Black students and Black faculty to MIT. I stated back then that we needed "a *Native* Clarence Williams." We needed a powerful Native/Indigenous person to be in the President's office and on the Corporation.

Last semester, I exchanged a few emails with Professor Paula Hammond and other members of the "Hammond Committee" on faculty diversity and recruitment. I believe they were commissioned around 2008 with a final report that came out in 2010 (I apologize if the dates are wrong). Professor Hammond remembered (through email communication) that there was one Native/ Indigenous faculty member who they counted in their analysis. This Native/Indigenous faculty member wasn't tenure-track or tenured.

About a month earlier, I traveled down to Harvard to have a conversation with Professor Evelynn Hammonds who created the Center for the Study of Diversity at MIT in the early 2000s before her move to Harvard. I asked her one question: "Why did that Center never have American Indian faculty or invite Native/Indigenous scholars to MIT?"

#### Project Indigenous MIT Lowry, from preceding page

I bring up those conversations with Hammond and Hammonds not to place these two brilliant scholars under a harsh spotlight but to reveal how even in MIT's work to diversify - even in MIT's work for racial justice - Native/Indigenous peoples have been left out. This is not coincidence. MIT was planned in the 1860s to perpetually extinguish American Indian people. The origins of the Institute are a nerdy forgetfulness and preoccupation with engineering work that has never required us to pause to acknowledge where we (MIT community members) sit and how we profit from the ongoing genocide of Native/Indigenous peoples.

What we have discovered this year in 21H.283 is an MIT community so compartmentalized – so non-responsible to itself and its own history – that any one MIT leader in any one moment can say things like "I didn't know that Natives weren't here" or "I didn't mean for there not to be Natives on faculty." This plausible deniability no longer works in the early 2020s as MIT's peer institutions – including Harvard, Berkeley, UMass, and Stanford – are busy touting their Indigenous experts in disciplinary areas from science to law.

MIT is also stuck in a state of Indigenous mockery. This past fall, I was excited to celebrate Indigenous Peoples' Day with the MIT community. I was sure that in the aftermath of my hiring, MIT would very purposely celebrate Indigenous Peoples' Day and commit bandwidth to making Native/Indigenous lives matter. However, on the morning of Indigenous Peoples' Day the magnitude of the celebration was overridden by the celebration of the Nobel Prize in Economics as one of MIT's faculty members, Joshua Angrist, won this award. Indigenous Peoples' Day was a mere footnote.

Why is this a big deal?

One of the most surprising finds in our course 21H.283 was the role of Alfred Nobel – whose name is used for the "Nobel Peace Prize" and other Nobel prizes – in the 19th century economy of Indigenous genocide. His main invention, dynamite, was used to demolish Indigenous communities and ecosystems throughout the United States – especially California. Nobel "peace" was born in a process of ethnic cleansing through science and technology that ultimately poured large amounts of cash back into MIT.

The Dupont family, who became quite wealthy while funding the Union (and the Confederacy) during the Civil War, ended up purchasing Nobel's dynamite patent as they took almost total control over the explosion economy into the early should dedicate at least 100 million dollars to Project Indigenous MIT (which is the result of our work this year). Guidelines for how MIT ought to spend that 100 million dollars are included in the 2021 letter from 21H.283 to Provost Schmidt.

I am concerned that we do not know when Native/Indigenous bodies were shared between Harvard's Peabody Museum and MIT. There is a particular department in MIT that consistently profited from access to Indigenous and non-Indigenous relatives stored in Peabody's crypt-like infrastructure. The name of this department is CMRAE – the Center for

What we have discovered this year in 21H.283 is an MIT community so compartmentalized – so nonresponsible to itself and its own history – that any one MIT leader in any one moment can say things like "I didn't know that Natives weren't here" or "I didn't mean for there not to be Natives on faculty."

20th century. Much of their wealth, derived from the business of Indigenous death and dismemberment, funded endowments and faculty lines. Three members of the Dupont family sat on the Corporation (MIT's Board of Trustees) in the early 1900s and carefully crafted the MIT that we know today.

Did you hear about the recent news at Harvard University? Harvard promised 100 million dollars for work to understand, address, and repair damage from the enslavement of Native/Indigenous and Black peoples. In President Reif's letter on Indigenous issues, he stated that 50 thousand dollars (which is, unfortunately, a loan on Morrill Act of 1862 money that MIT is due to receive anytime) will go to Indigenous life/scholarship at the Institute in the wake of our Institute-wide discussion of MIT's widespread role in genocide of Indigenous peoples. But this is not enough. I urge MIT to increase that amount immediately to be in alignment with/in relationship with the commitment that Harvard has just made. MIT

Material Research in Archaeology and Ethnology. Did CMRAE handle Native/Indigenous bodies? We do not have records that explicitly say that they did, but that does not mean that they did not. Much of the abuse of Indigenous peoples in the United States is unrecorded because Native/Indigenous peoples have been mislabeled and scattered. In that ambiguity, Native/Indigenous peoples are dehumanized.

CMRAE is housed within Course 3. Course 3 began in MIT's early years when MIT faculty (including Ellen Swallow Richards) turned extraction of American Indian minerals from land taken in the Morrill Act of 1862 into a full-fledged discipline: the Department of Mining Engineering. Course 3 is an example of how MIT disciplinary prominence continues to be birthed within genocidal policies that MIT senior administrators have never apologized for.

In many ways, this is a story of MIT's clumsiness. One of my first conversations on campus in the fall semester was with

#### Project Indigenous MIT Lowry, from preceding page

COUHES/IRB (Committee on the Use of Human Experimental Subjects/ Institutional Review Board). The COUHES administrators couldn't Indigenous-related remember any research that had been vetted by the IRB. I asked them if they could look for (in their databases) instances of research proposals from the past that included or affected Indigenous communities. They could not.

Native/Indigenous people at MIT are treated like ghosts. (President Reif, in his recent letter, referred to it as the "presence of absence.") To change this reality - to return full humanity to Native/ Indigenous peoples at MIT - we must ensure that our students and faculty are required to form relationships with Native/Indigenous communities at/ around MIT and where they do work. Anthropologists, historians, chemical engineers, space scientists, managers, etc. - people from all disciplines at MIT must be responsible for their presence and the impact of their work in Native/Indigenous lands, spaces, and intellectual worlds. Since all of this is stolen Native/Indigenous land and water, that means that we must change how we do our work anywhere. That means that we must reinvent how we prepare and support all students.

Across MIT's Schools and Colleges, we must urgently provide students with Native/Indigenous faculty mentors that can lead them/teach them beyond their disciplinary specialties with a goal of helping all students see Indigenous worlds in humanizing ways. MIT students cannot wait. How is Political Science's work on voting rights not centered on Native/ Indigenous communities? Why aren't students in "ICE" (Course 10's final underproject) mentored graduate by Native/Indigenous faculty? How is environmental/civil engineering taught at MIT without Native/Indigenous scholars on its faculty? A Course 2 PhD student recently reached out to me because she wants to work with me to help her understand the intersection between manufacturing processes and Indigenous community. Each MIT School and College must recruit and retain Indigenous faculty that address and make up for the absence of Indigenous knowledge in each MIT School and College. Also, ethics at MIT ought to be taught by Native/Indigenous scholars.

MIT is a standard-bearer. It has a long legacy of being *just that* – of being a leading figure in the inhumane American machine that decimated (and continues to decimate) Native/Indigenous life and knowledge. Now, MIT must lead the way in *advancing* Indigenous life and knowledge.

We use the *firehose* metaphor to describe MIT education. Students are told that being at MIT is like "drinking from a firehose." Do you know what firehoses are used for in real life? They are used to break crowds. They were used on up Indigenous, Latinx and Black Americans during the Civil Rights movement to keep them quiet – to keep them from fighting for human rights. Firehoses were recently used at Standing Rock against Indigenous peoples as they protested the laying of pipelines through their communities gas pipelines that are, in part, engineered by MIT alum.

It is not OK for Indigenous people not to be at MIT in important roles (as executives, faculty, etc.). It is not OK for MIT faculty or students to be out of relationship with Indigenous peoples and communities. It is not OK for students to be overworked and not cared for (which goes against Indigenous principles). We must bring humanity to MIT. MIT must center Native/Indigenous knowledge and scholars across MIT's Schools and Colleges. MIT must begin to return Indigenous land and provide reparations for its role in dismantling and erasing Native/ Indigenous peoples.

**David Shane Lowry** is a Distinguished Fellow in Native American Studies in the History Section (*dslowry@mit.edu*).

## letters

On the Closing of the MIT Pharmacy

To The Faculty Newsletter:

**I VERY MUCH AGREE** with this op/ed ("On Closing the MIT Pharmacy"). The closing of the MIT Pharmacy was a real shock to me. It comes on top of a series of actions that illustrate the general decline of MIT community. I am really perplexed as to why.

### Michael J. Cima

David H. Koch Professor of Engineering

### Leadership, Management, and Education at MIT (redux)

Thomas W. Eagar Alex Slocum

This article is based on Professor Eagar's original 2004 article (MIT Faculty Newsletter, Vol. XVI No. 5, April/May 2004) with new thoughts added by Professor Alex Slocum. Both are senior faculty with extensive real-world real-engineering experience; both are passionate about where MIT came from and where MIT might head to help create a better world for all. Their combined nearly century-long experience at MIT as students and faculty is described here. Please accept us as the old good guys...

**THE WORLD LOOKS TO MIT** for leadership. And this leadership is not limited to science and technology, as was demonstrated forcefully nearly 25 years ago when an MIT freshman overdosed on alcohol two months after he arrived on campus. His death became front page news, not only in Boston but across the country and around the world. How could such a "gifted" person do such a thing asked one article; even though dozens of college students at other universities do the same thing every year? An MIT student doing such a thing is national news; the world holds MIT to a higher standard.

These expectations are not new. In a newspaper interview on December 17, 1911, Thomas Alva Edison was quoted, "There is no question but that the Massachusetts Institute of Technology is the best technical school in the country .... I have found the graduates of Tech to have a better, more practical, more usable knowledge, as a class, than the graduates of any other school in the country .... The salvation of America lies in the Massachusetts Institute of Technology." For a number of

years, I have reflected on how such grand expectations have developed, and what makes MIT unique.

One answer is that the faculty and students who have preceded us have accomplished much; but the same can be said for other notable universities. Our students have very high qualifications, but other schools' students have equal or even higher test scores. Our faculty is distinguished; but again, several other schools have faculty who are our equal or better depending on the various yardsticks used. There must be some distinguishing attributes of MIT that cause others to look to us for leadership. We should determine what these attributes are, and we should nurture and cherish them as our fundamental strengths.

Over the past few years I have identified five distinguishing qualities that make MIT unique.

- 1. MIT has one class of students/faculty
- 2. MIT is intense
- 3. MIT has a culture of creativity
- 4. MIT has unusual breadth for an Institute of Technology
- 5. MIT displays integrity

#### 1. One class of students/faculty

MIT admits only one class of students: scholars. Other elite schools proudly note that they admit three classes of students: scholars, athletes, and "legacy" students. MIT gives no honorary degrees; anyone with a degree from MIT has earned it. Only MIT and Caltech can claim such "purity" of scholarship among their alumni. The world equates admission to MIT or Caltech as certification of "genius" status. MIT undergraduates are in the top 3/10,000 of the populace in native intelligence and our graduate students are probably another factor of five even more select.

Equally so, the faculty are exceptional in scholarly abilities; in part because MIT confers tenure not just at the School level, but at the Academic Council level as well. At other schools it only takes a Dean to tenure a faculty member for some reason other than true scholarly achievement, but then that same person may become a drag upon the school for the next 30 years. Although MIT's Academic Council is an expensive use of administrative resources, it provides an extra quality filter on faculty promotions that is often lacking at other universities.

#### 2. MIT is intense

When Paul Gray stepped down as president of MIT 30 years ago, he stated that one of his disappointments was that he had not been able to reduce the "pace and pressure" of MIT. For many of us, this intensity is part of the essence of MIT, that only becomes more intense as our graduates step into leadership roles where industry asks them to address the most pressing needs of industry and government.

As a young faculty member, one of us met a distinguished engineering professor from another school at a technical conference. When he saw "MIT" on the name badge, he said, "MIT has the highest thermodynamic temperature in the universe. It's a great place to visit for a few days, but how do you stand it all the time?" Dick Simmons (namesake of Simmons Hall and a former MIT Corporation member)

said that "MIT taught me to work hard." I tell students that "MIT will take you to your limit – whatever it is." But MIT is a "no praise" zone.

When I presented these latter quotes to Professor Bob Brown (now President of Boston University) as he became Dean of Engineering at MIT, suggesting that as a leader he should praise the students and faculty more, he responded "the MIT faculty and students are reasonably bright, but insecure. That's why they work so hard. If they received praise, they wouldn't be so insecure and would not feel the need to work so hard." Working hard and learning to fail is a good experience, but failing to praise one another is a harmful byproduct of our intense culture. As Pogo Possum said, "We have met the enemy and he is us." We need to remember that 90 percent of the pressure on both students and faculty at MIT is self-inflicted. It would not diminish our culture if we learned to praise one another more often. But we must not confuse giving praise with reducing intensity. We must never stop asking ourselves as leaders "How will reducing intensity weaken the very process that has made us so strong and respected?" We must always be wary of social pressure applied by some who want to use the MIT name but not share the intense hard work that has gone into making MIT what it is today. Our goal should be to leave MIT better and stronger than we found it.

One valuable by-product of the intensity of an MIT education is the opportunity to fail. Most of our students never experienced academic failure prior to coming to MIT. It was a shock for me as a student to experience a class average of 60 on an exam, but it was an even greater shock personally to be 30 points below class average. It is good to learn humility early in life, especially if it occurs in an environment where the long-term consequences of failure are not great. We should explicitly acknowledge that one purpose of an MIT education is to learn humility through the opportunity to fail. At MIT, every person learns that they cannot be the best at everything; teamwork and openness for both praise and criticism are essential. One of our greatest strengths is that our intensity helps us learn to respect the abilities of others.

#### 3. MIT has a culture of creativity

A senior executive once asked Professor Ed Schein, "What is the difference between the MIT Sloan School and the Harvard Business School?" Ed replied, "Harvard is like the West Point of Business Schools; whereas the Sloan School is sort of the Bell Labs." Ed also notes that "MIT is an iconoclastic society." As a student at MIT, I learned to question the assumptions behind nearly everything I heard. This skill was not taught so much in the classroom; but came across strongly in my living group and in the research laboratory. MIT students and faculty delight not only in tearing down outdated or incorrect images, but in creating new ways to view the world around us. It is a sport which tends to infect all of us; and it is a highly valuable and somewhat rare characteristic in the rest of the world.

## 4. MIT has unusual breadth for an Institute of Technology

We often repeat Jerry Wiesner's phrase that "MIT is a University polarized around science and technology." While this may be true, and our roots were certainly as an Institute of Technology, over the past 75 years, MIT has broadened considerably. We may focus on technology, but we do far more than "just technology." The breadth of the scholarly pursuits at MIT never ceases to amaze me; I often say that "there is something at MIT for everyone." This is true in music, the arts, economics, linguistics, archaeology, history, and many other fields, for which the general public does not often acknowledge MIT's participation, but in which fields MIT has significant scholarly leadership. When we consider the ability of the arts, for example, to help the world realize the value and potential of technology to improve lives, and the ability of technology to enable ever more new and creative forms of art, thus spreading MIT's influence ever more broadly.

#### 5. MIT displays integrity

When Chuck Vest announced that he would step down as President of MIT, the former president, Paul Gray, and Dana Mead, Chair of the MIT Corporation at the time, both used the word "integrity" to describe Chuck's tenure as president. In his essay on "Twelve Qualities of a Leader" Norm Augustine (a former member of the MIT Corporation) notes "... the worst of all worlds results when an individual endowed with other leadership qualities lacks the most fundamental quality of all: integrity." MIT has shown integrity in the past: when Paul Gray defended the education of international students before Congress; when MIT stood alone against the Department of Justice in defense of need-based financial aid; when Bob Birgeneau, Dean of the School of Science, admitted that women faculty at MIT had not been treated equally; when MIT reacknowledged the need for Institute involvement in the daily life of freshmen (by requiring all freshmen to live in MIT dormitories); and when MIT resisted numerous assaults on academic freedom, academic honesty, university accounting, merit-based research funding, and free speech. MIT is not pure in each of these areas, but MIT has displayed much more integrity than most other universities in sharing these leadership qualities with the world.

These are some of the reasons why the world holds MIT to a higher standard. We are acknowledged as intelligent, hard working, creative individuals working on a host of complex problems that affect the lives of people around the world. But most importantly, the public sees us as having integrity. The world wants to believe what we say. If we disappoint them, they judge us more harshly, as has been the case in some notable recent lapses in our integrity that were based on the love of money and the influence of donors who were using the MIT reputation to advance themselves.

#### The True Value of an MIT Education

While the experiences of hard work, learning to fail and the resulting humility that failure engenders are essential aspects of an MIT education; the true value of an MIT education is learning to learn independently. Perhaps it is due to the habit of questioning the hidden assumptions, or of quizzing students on topics found in the reading that were not covered in the lecture, but most MIT students learn how to educate themselves. As Robert M. Hutchins, former President of the University of Chicago, stated: "The object of a liberal education is not to teach the young all they will ever need to know. It is to give them the habits, ideas and techniques that they need to continue to educate themselves. Thus, the object of formal institutional liberal education in youth is to prepare the young to educate themselves throughout their lives."

We subscribe to this philosophy at MIT, but we often fail to appreciate another maxim of Hutchins, viz. "The mind is not a receptacle; information is not education. Education is what remains after the information that has been taught has been forgotten." How often have I sat in faculty meetings where it is stated that "we must cover [such and such]; otherwise our students will not have what they need to succeed." Given that their quiz scores indicate that they only absorbed 60 percent on average of what we expected to have taught them; most of them succeed quite admirably, in spite of having a receptacle that is only 60 percent full. One of the things that makes an MIT education so valuable is concepts that are taught in the context of state of the art information so students see how what they learn can be used in practice; this catalyzes the students' own ideas and cements learning at MIT. MIT is able to do this because so many faculty professionally practice what they teach. Mens et Manus is at the core of all here.

#### A Primary Deficiency of the MIT Education

A number of years ago in Tech Talk (the former MIT weekly newletter) an MIT student asked, "Why do MIT alums usually end up working for Yale and Harvard graduates?" In response, the article quoted Alan G. Spoon, an MIT alum and COO of The Washington Post, "I'm convinced that MIT's already large contribution to our society would sharply expand if its graduates were even better advocates and raconteurs for their views and labors."1 In our opinion, first of all, what is wrong working for a graduate from another school, if that relationship enables the MIT person to realize their full potential to do great things? A brilliant design engineer should focus on creating amazing creations and their "boss" from another university, may be good at politics or finance paving the way for the MIT idea to become reality. Indeed many large companies have realized this and have equal pay promotion paths for both creative engineers and scientists as well as managers.

Second of all, the "problem" is we do not engender enough of a feeling of selfconfidence in our students; this gets back to the praise issue. People should not get praised for breathing, but there should be praise for those who try, fail, and then pick themselves up, learning from their experience and striving to do better the next time. Several studies, which the administration continually tries to downplay, report that MIT seniors felt less confident when they graduated from MIT than they did when they entered as freshmen. This is hardly surprising. By admitting a class of only exceptional scholars, MIT students live for four years in an unnatural environment. Nearly half of our freshmen were valedictorians in their high schools. They learned to compare themselves with their peers based on academics, because they always came out at the top. But when students enter MIT, they quickly learn that "on average they are average." It is a cul-

tural shock. Most MIT students soon learn to compare themselves with themselves rather than with others, and they learn to work hard; to reach the limit of their abilities. This is a valuable lesson; but we must remind them often that the MIT environment is not reality. In reality, they are the top 3/10,000 and they should leave MIT with the knowledge that they are not just average; they are the best. They should believe that it is their destiny to lead the world. I do not believe we praise them enough or remind them enough that they are truly exceptional. As a result, they must relearn their intellectual rank in society after they leave MIT. I believe we can challenge them, teach them to work hard and to feel good about themselves at the same time. As F. Scott Fitzgerald said, "The test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time, and still retain the ability to function." MIT students (and faculty) are first-rate intelligences and they can understand that they are the best, while learning that there is much that they do not understand. We must learn to embrace the contributions of others, both within MIT and outside MIT. Our students (and faculty) need to improve their skills of interaction, learn to depend on and trust others, and work as part of a team.

#### **MIT Leadership and MIT Management**

While the world looks to MIT for leadership, we look within MIT for our own leaders. There are many types of leaders. Thousands of years ago, Lao Tsu noted: "The wicked leader is he who the people despise; the good leader is he who the people revere; the great leader is he who the people say, 'we did it ourselves."

As Norm Augustine noted, "True leaders motivate people to pursue worthwhile and lofty objectives." With faculty and students of the caliber of MIT, true leadership should not be difficult to find; but management is often mistaken for leadership.

As Admiral Grace Hopper said, "No one ever managed men into battle." As an example of the conflict between leader-

<sup>&</sup>lt;sup>1</sup> Further emphasis on the need to teach students to communicate effectively, an area in which MIT has made significant improvement in recent years.

ship and management, I remember as a young professor, my contract officer in the Office of Sponsored Programs was particularly helpful in negotiating a significant new contract. Out of gratitude, I wrote a letter to his supervisor outlining my pleasure with his service. A few months later, in a conversation, I told him that I had written a letter of appreciation for his help. He told me that he had seen the letter; his manager had turned it into a letter of condemnation with the statement "your job is not to help the faculty; your job is to control the faculty." This anecdote illustrates the difference between a leader and a manager. "A leader seeks to help others; a manager seeks to control others." This difference was reinforced by Hugh W. Nibley in a Commencement address at another university over 35 years ago entitled "Leaders to Managers: The Fatal Shift."

"The Generalstab tried desperately for a hundred years to train up a generation of leaders for the German Army; but it never worked, because the men who delighted their superiors; i.e. the managers, got the high commands, while the men who delighted the lower ranks, i.e. the leaders, got reprimands.... Leaders are movers and shakers, original, inventive, unpredictable, imaginative, full of surprises that discomfit the enemy in war and the main office in peace. For the managers are safe, conservative, predictable, conforming organization men and team players, dedicated to the establishment. The leader, for example, has a passion for equality. . . . For the manager, the idea of equality is repugnant and even counterproductive. When promotion, perks, privilege, and power are the name of the game, awe and reverence for rank is everything, ... In short, while management shuns equality, it feeds on mediocrity. On the other hand, leadership is an escape from mediocrity. The leader being simply the one who sets the highest example . . . . True leaders are inspiring because they are inspired, caught up in a higher purpose,

devoid of personal ambition, idealistic, and incorruptible."

From Nibley's insights I determined that the primary problem with business schools is that they teach management or control of others, rather than true leadership, which involves service to others. I also learned that one can determine whether one should work for a company even before walking through the doors: just look for the number of assigned spaces in the parking lot. It is function effectively at work because they had so many problems at home. If one cannot lead one's spouse and children and help them find joy and happiness, it is unlikely that one can lay the foundation for true leadership at work. The second item of special note is respect for the contributions of everyone. Everyone at MIT can contribute to the strength of the Institute, whether their job be great or humble in the eyes of others. In fact, the groups whose efforts are most immediately noticed if left undone are the custo-

As MIT searches for a new president, we should require our next leader to exemplify the same levels of integrity and leadership as many of our previous leaders. We should use this time of change as an opportunity to reflect on what makes MIT unique; what can be changed without sacrificing what has made us unique.

interesting how such a simple concept generates agreement among my friends in industry.

#### Conclusion

When summarizing leadership for my students, we use the following seven points:

#### A Leader:

- Gets the Right Things Done
- Does More Than is Required
- Balances Professional and Personal Responsibilities
- Respects the Contributions of Everyone
- Provides Praise When Deserved and
- Helps Learn from Failure
- Contributes to the Community
- Follows Others When Not Leading

The first is from Peter Drucker, who notes that leaders not only get things done, but they spend their time on the "right" things. Two other points deserve special note. Students (and faculty) need to understand the need to balance their professional and their personal lives. I have met many people who could not dial staff and the food service staff. Covid taught us that their work is essential to the health and safety of all of us. Without their efforts, MIT would be a much less pleasant place to work; yet we rarely praise or acknowledge these people.

As MIT searches for a new president, we should require our next leader to exemplify the same levels of integrity and leadership as many of our previous leaders. We should use this time of change as an opportunity to reflect on what makes MIT unique; what can be changed without sacrificing what has made us unique. Our mission is education, and as David O. McKay once summarized: "Character is the aim of true education ... and science, history, and literature are but means used to accomplish this desired end. True education seeks to make men and women not only good mathematicians, proficient linguists, profound scientists, or brilliant literary lights, but also honest people with virtue, temperance, and brotherly love. It seeks to make men and women who prize truth, justice, wisdom, benevolence, and self-control as the choicest acquisitions of a successful

life." Moving forward, we need to focus on these fundamentals. If we do, the rest will take care of itself.

In final summary, this collection of words in a specific rhyming pattern and shape is provided here to help cement the thoughts rendered:

Leaders Educate All Dimensions

Great leaders must be on the front lines Directly helping build great minds Not afraid to experiment Immune to any vent High on their list of druthers hands on working with others At all levels of the organization Immersion is key to idea creation

Working in the trenches Helping turn the wrenches learning what causes neglect building solid mutual respect

Identify many a tough situation apply research & education and creative reciprocity thus avoid mediocrity

Be not shy with worthy praise Talent and spirit it will raise Of failure do not be afraid Its learning being made

Reports are for the past For good thoughts to last Redefine leaderships' part Communicate results with art

Never just mollify or seek to pacify illustrate a path do the math

**Thomas W. Eagar** is a Professor of Materials Science Engineering and Engineering Management (*tweagar@mit.edu*); **Alex Slocum** is a Professor of Mechanical Engineering (*slocum@mit.edu*).

## Faculty and Staff Views on the Choice of the Next MIT President

## Tuesday May 24, 4:00 – 5:30 pm, by Zoom Sponsored by the MIT Faculty Newsletter Editorial Board

The appointment of a new President of MIT will influence education and research at the Institute for years – and perhaps decades – to come. It remains unclear whether the Committees and Policies put in place recently to correct the Administration errors of, for example, undue influence of fiscal donors on MIT life, are adequate. Thus the choice of a new President needs broad and close scrutiny. This forum is one effort in that direction.

#### Program

**Panel 1:** Chair, Prof. Jonathan King (Biology); Prof. Ruth Perry (Literature); Prof. Robert Redwine (Physics); Prof. Ceasar McDowell (Urban Studies and Planning); Prof. Rosalind Williams (Program in Science, Technology, and Society)

#### Discussion

**Panel 2:** Chair, Prof. Ed Bertschinger (Physics); Graduate Student Union Representative (invited); Graduate Student Council Representative (invited); Nader Nikbakht (President, MIT Postdoctoral Association)

#### Discussion

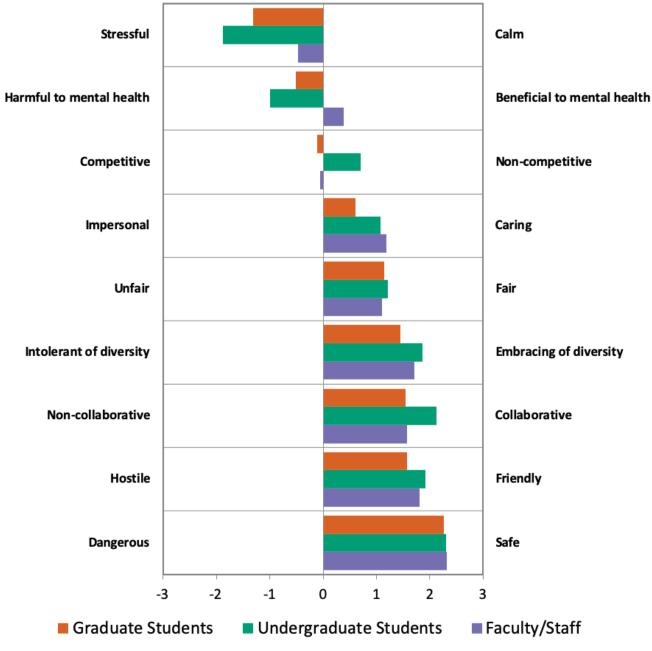
TO REGISTER: https://us02web.zoom.us/meeting/register/tZMtc-GgpjgpGdFNAx063nokHzvsXUkwUwT1

After registering, you will receive a confirmation email containing information about joining the meeting.

# M.I.T. Numbers *from the* 2022 MIT Quality of Life Survey

# Based on your experience and observation, rate the general climate at MIT along the dimensions below.

Mean score of scale ranging from -3 (left axis) to +3 (right axis)



Main Campus Employees and Students

Source: Office of the Provost/Institutional Research