MIT Faculty Newsletter

in this issue we offer updates on MIT's response to Covid-19 (articles below) and "Strong MIT Campus Research Performance," (page 11). There's also "The Ad Hoc Committees on Principles and Processes," (page 8) as well as "Push the Pause Button on Teleconference Interviews for New Faculty Hires," (page 12).

MIT Dome

From The Faculty Chair
Improvements in Policies for Promotion and Tenure are Overdue

Rick L. Danheiser

HOW CAN WE IMPROVE MIT's promotion and tenure processes? This has been a priority on my agenda since the beginning of my term as Chair of the Faculty. In the summer of 2019, I began discussing aspects of promotion and tenure with Provost Marty Schmidt, and the consideration of improvements in our procedures has been a focus of discussions at meetings of the Faculty Policy Committee (FPC) this past year. Among the questions under discussion are whether improvements might be possible with regard to fairness and the level of transparency in our processes, whether the criteria used in evaluating faculty for promotion are appropriate, and whether our current procedures make the most efficient use of faculty time.

Reviewing the processes involved in promotion and tenure is not a new

Gratitude for our Community's Commitment to Reinventing MIT in the Era of Covid

Cynthia Barnhart

AT THE SEPTEMBER 16, 2020 Institute faculty meeting, I shared the image below (page 4) as a way to convey the breadth of Covid-19's impact on our mission and operations – and the intensity and scope of the MIT community's response. This represents the coordinated work of many interlocking teams, involving an estimated 1,000 students, staff, and faculty, since the pandemic required the ramp down (and ramp up) of research operations, the move out of undergraduates and the return of several hundred this fall, the switch to remote learning – and myriad other changes since last spring.

What enabled this rapid pace of change? One thing: The commitment of students, staff, faculty, and alumni to reinventing MIT in this Covid-era. The senior officers and I are all incredibly grateful for their wisdom, energy, and

Editorial
I. Moving MIT Forward
II. Supporting our Students in Making Change
III. Our New Website

Moving MIT Forward

MIT'S STUDENTS, GRADUATE students, postdoctoral fellows, faculty, staff, and administrators are facing the task of renewing education and research under conditions of extraordinary difficulty. There are few precedents to follow, and the arena is strewn with unidentified challenges. For the younger and early career groups, in addition to the stresses of the current moment, their anxieties are compounded by uncertainties as to their future. Nonetheless, thus far the commitment and intensity of our colleagues in addressing MIT's responses to the pandemic seems to offer a way forward.

Some of the arrangements are highlighted in Chancellor Barnhart's account, "Gratitude for our Community's Commitment to Reinventing MIT in the Era of Covid," (page 1). There is also an

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Photo Credit: *Page1:* Jake Belcher

Moving MIT Forward

update on MIT research during Covid by Vice President for Research Maria Zuber, "Strong MIT 2020 Campus Research Performance," (page 11).

Campus rules and arrangements are regularly updated at MIT Now and at MIT's Covid-19 Info Center. Statistical updates on Institute Covid-19 testing are available at the MIT Medical website.

Supporting Our Students in Making Change

On July 1, 2020, President Reif called upon us to take stock of the country's and MIT's history of racial injustice and to do better. He said,

"We have a historic opportunity to accelerate the transition to a more just and equitable future. To help achieve lasting progress on racial justice and equality everywhere, as a community, we must be part of that transformation. It is our responsibility to use this moment of tectonic social change to build a better MIT – an MIT that works for everyone."

In his letter, Reif outlined a series of steps that MIT would take to further that goal. These are important moves. But the time has come to take action, rather than follow a pattern of calling for a report, hosting a breakfast, and then filing the report away in a drawer (see the FNL May/June 2020 editorial).

A number of graduate student organizations, including Grad Students for a Healthy MIT, the Black Graduate Student Association, and the Graduate Student Council Diversity, Equity, and Inclusion Committee, have formed a coalition to act on President Reif's charge: **Reject Injustice Through Student Empowerment** (RISE). They argue that ". . . the MIT administration cannot and should not be leading the way of this fight for racial justice alone – shared leadership with students is essential." Calling for efforts to address discrimination and marginalization, RISE has built a grassroots advocacy effort and has launched a petition that articulates 13 demands. As of this writing, 67 student groups and nearly 900

individuals have signed the petition. Details can be found on the RISE website, but in brief, these are the demands:

1. Reform Graduate Admissions and Faculty Hiring
    1. Make strategic commitments to reform graduate admissions and improve URM graduate student retention
    2. Promote diversity in faculty hiring and tenure through evidence-based practices
    3. Increase student participation in hiring and tenure decisions

2. Increase Resources for Education and Support
    1. Expand educational programming and training
    2. Hire DEI Officers for departmental accountability
    3. Provide Institute-wide support for anti-oppressive research and labor

3. Reform the Policies for Prevention and Response of Faculty Misconduct
    1. Reform the policies and procedures for handling allegations of misconduct against faculty and staff
    2. Publicize data and outcomes for allegations of misconduct against faculty and staff in annual IDHR reports
    3. Implement targeted policies for preventing and punishing retaliation
    4. Guarantee transitional funding

4. Advance Funding Equity at MIT
    1. Guarantee 12-month funding for all PhD programs offered at MIT
    2. Establish non-competitive internal dissertation completion fellowships
    3. Guarantee a minimum annual cost-of-living adjustment for all graduate stipends

The MIT faculty can exert a significant influence over the culture at MIT, and even though we are overburdened in many ways, we must take responsibility for the nature of that culture. Moreover, we can have considerable influence over students and often we make a difference in their careers. We are the mentors and guides for the next generation of leading researchers in and practitioners of our specialties. We must not expect the

Administration and human resources professionals to do all the work of reforming the climate at MIT. We must step up, for change must come in everyday actions in our labs, classrooms, offices, departmental lounges, and Zoom meetings.

The RISE petition makes demands to support us in this effort. They call upon us to work together to revise the hiring and admissions process, to undertake training to prevent discrimination and support marginalized students, staff, and faculty, and to improve measures to hold each other accountable. And most important, RISE offers opportunities for faculty, staff, and students to be part of a collective effort, as President Reif frames it, "to understand and help dismantle the modern manifestation of a system of racial injustice that, for four centuries, has betrayed our society's highest ideals." This is not a time to sit back and wait for someone else to do the work. If we work together, we will make a difference.

Our New Website

With this issue of the FNL we are pleased to announce the launching of our updated *MIT Faculty Newsletter* website (fnl.mit.edu). The website has been completely redesigned with added functionality. It is now responsive and can be properly accessed on any device (computer, tablet, or cell phone). We have also added an MIT viewer commenting feature to select articles.

The website was redesigned and coded by Opus (www.opusdesign.us), and we worked closely for months with Creative Director Julia Frenkle. Julia was instrumental in both the redesign and functionality, and her tireless efforts on our behalf could not be more appreciated. We would also like to call out Bara Blender, MIT's Communications Strategist, whose ongoing assistance and advice greatly improved the final product.

So please visit our new website and let us know what you think. (If you're reading this online please go to the bottom of the page and note your thoughts.) ■

Editorial Subcommittee

Reinventing MIT in the Era of Covid
Barnhart, from page 1

ongoing service, as we seek to make the fall semester a success and to shape our approach for spring.

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No single graphic can fully reflect the true scale of our community's efforts to respond constructively to Covid. But I hope this at least suggests the enormous effort it took to get us to this point – and points to the continuous need to anticipate and adapt to new conditions.

In the early days of the pandemic, we established groups to ensure continuity and strategic response in eight areas: academics, research, business, community, medical, student/residential life, communications, and space management. The group leads formed the nucleus of a planning team that met on a daily basis. When the continuity and response groups identified additional needs, they formed additional groups, such as a PPE working group, the Emergency Academic Regulations (EARs) group, an Academic Policy and Regulations Team (APART), a Legal, Ethical, and Equity Committee, the Residential Education Operations group, Lightning and Thunder research ramp-up committees, and the many others listed in the outer ring of the circle.

Two key groups also emerged: Team 2020 and Task Force 2021 and Beyond. Team 2020, which concluded its work in June, was focused on the here and now, and they helped us arrive at our fall plan to invite members of the senior class together with a smaller number of undergraduates from other classes facing hardships associated with travel restrictions or circumstances tied to their home state, country or home life. Along the way, Team 2020 sought input from thousands of community members: 500 people participated in design charettes, hundreds Zoomed into each of more than 70 daily 8 am calls to discuss response and planning, and thousands tuned into a number of community Town Halls.

MIT's Covid-19 Response: Re-inventing MIT

Task Force 2021

COVID-19 Systems Team

Team 2020

Finance Team

(500+ participants) **Design Charettes**

MIT Medical Team

Legal, Ethical, & Equity Committee

Health & Epidemiology Experts

PULSE Survey

PPE Working Group

Student Solutions Group

Testing Advisory Group

We Solve for Fall

Academic Department Heads & Education Officers

GSC Covid Team

UA COVID-19 Planning Team

Spring EARS

DSL Student Advisory Groups

Academic Policy & Regulations Team

Residential Education Operations

Covid Policy Reviews

Lightning Research Ramp Up

Covid Websites, newsletters ,etc.

Thunder Research Ramp Up

Community-wide and –specific Town Halls

Planning Surveys (25K Responses)

70+ "8 AM calls" (200+ campus leaders)

Reinventing MIT in the Era of Covid
Barnhart, from preceding page

To prepare for the future, Task Force 2021 and Beyond is actively engaging community members. They are currently exploring pathways that will allow MIT to adapt, lead, and thrive in a post-pandemic world – and their work will continue for a number of months to come.

After President Reif's July 7 announcement outlining our fall plans, we transitioned from planning to execution over the summer. For this new phase, we put together an implementation team of senior officers and faculty and administrative leaders, who met three times a week, consulted closely with the deans and student leaders on numerous academic and residential policy decisions, and regularly communicated our progress to the broader community.

With the fall semester well under way, our new Covid Monitoring Team is reviewing individual positive Covid cases as well as trends or patterns on campus; our Covid Decision Team is responsible for decisions related to, for example, ramping down operations in a certain area if we face an outbreak; and our Emergency Operations Management Team is supporting these and other monitoring and decision-making efforts.

As I write this at the end of September, we have a very low number of positive cases, overall compliance with our policies and protocols is strong, and our testing program is working remarkably well. I hope our whole community can pause to reflect on this shared achievement and take real pride in it.

Needless to say, we need to stay vigilant! To keep our community and the broader Cambridge community safe and healthy, we still need the continued cooperation of everyone on campus.

But at the moment, we are in good shape, for three reasons: Our community members are taking responsibility for their individual wellbeing and the wellbeing of others. We have a robust testing program. And our measured approach – inviting a smaller cohort of undergraduates to return to campus – has helped position us for success.

* * * * * * * * * *

As we look ahead to the spring, when we hope many more undergraduates can join us on campus, there are bound to be challenges. We are confident, however, that our fellow community members – with their knack for collaboration and partnership; their generous dedication of time, energy, and inventiveness; and their limitless reserves of MIT Mind, Hand, and Heart – will see us through to the other side of this crisis.

At the center of this effort will once again be our faculty and academic leaders: all of you. This summer, I watched in awe as you devoted yourselves to transitioning your fall classes while striving to infuse them with the MIT *mens et manus* experience for every student, whether near or far. And I watched – sometimes even live on Zoom! – as you juggled your academic duties with the demands of home. As your colleague – and on behalf of Rafael and the entire senior team – I simply want to say thank you. It took all of us doing our utmost, together, to bring MIT back, and it was an immense honor to be on your team. ◼

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> After President Reif's July 7 announcement outlining our fall plans, we transitioned from planning to execution over the summer. For this new phase, we put together an implementation team of senior officers and faculty and administrative leaders, who met three times a week, consulted closely with the deans and student leaders on numerous academic and residential policy decisions, and regularly communicated our progress to the broader community.

subject for Faculty Governance. In fact, the Faculty Policy Committee devoted a number of meetings to promotion and tenure in 2007-08 under the leadership of Faculty Chair Bish Sanyal and Associate Chair Melissa Nobles. I was a member of FPC at that time and recall several productive discussions, including one meeting that involved all five School Deans as guests. Bish summarized the aims of this review in a *Faculty Newsletter* article that can be found at: http://web.mit.edu/fnl/volume/211/sanyal.html. As a result of these discussions, Bish appointed a "Special Faculty Committee on Promotion and Tenure Processes" in January 2009. This ad hoc committee, consisting of 17 faculty members and chaired by Tom Kochan and Bob Silbey, issued a comprehensive report in June 2010: https://facultygovernance.mit.edu/sites/default/files/reports/2010-06_Promotion_Tenure_Processes.pdf. Professors Kochan and Silbey presented their recommendations to Academic Council at a meeting on October 5 that year and Tom Kochan, who had been elected Chair of the Faculty, then summarized the conclusions of the committee in the November/December issue of the *Faculty Newsletter*: http://web.mit.edu/fnl/volume/232/kochan.html.

One of the aims of the Kochan-Silbey committee was to suggest improvements in the process by which grievances related to promotion and tenure were addressed. Subsequent discussions in Academic Council led to the development of the policy described in a new section of *Policy and Procedures* (current Section 3.3) on "Review of Decision Not to Promote or Award Tenure." Unfortunately, however, none of the other recommendations of the Kochan-Silbey committee appear to have received attention in subsequent years. As discussed below, a number of these recommendations are included in the current review undertaken by Faculty Governance in collaboration with the Provost and the Deans Group of Academic Council. It should be noted that

Associate Provost Tim Jamison has taken the lead in the review of several aspects of promotion and tenure as part of this effort.

Communicating Processes and Expectations to Pre-Tenure Faculty

One of the concerns raised in the Kochan-Silbey report was that the processes and expectations for tenure are not always communicated clearly to new faculty. This problem persists. In the 2020 MIT Quality of Life Survey, 48% of the pre-tenure faculty respondents disagree with the statement "the criteria for tenure are clearly communicated." That room for improvement exists is consistent with my own experience based on informal conversations with junior colleagues. At the August 2019 orientation for new faculty, I conducted an informal survey as I circulated between tables at the luncheon and was dismayed to find that almost none of the new faculty had received any information on promotion procedures at that point. Subsequently, I made it a point to question junior faculty about this at random faculty dinners (and at the new random faculty lunches) and found that some faculty who had been at MIT for one or two years had received no formal information on promotion and tenure procedures. When asked where they learned of the procedures and expectations for tenure, the most frequent response was "from other junior colleagues in my department."

This situation reminds me of where children of my generation first learned about sex: "in the schoolyard" (now it's probably on the internet). Surely we can do better. My suggestion is that each School create a website (perhaps accessible only to MIT faculty) that outlines the expectations, timetable, and process for promotion at each rank. "Expectations" should include the general policy with regard to the relative role of research, teaching, mentoring, and service in evaluations for promotion. The policy with regard to the timetable for promotion to Associate Professor with and without tenure should be discussed, as well as for

the promotion to the rank of Full Professor. The role of internal and external letters should be described with an indication of how letter writers are selected. In addition, the website should discuss the various stages of review at the department level and subsequently at the level of the School Council and at the Appointments Subgroup of Academic Council. The creation of these websites should be accompanied by a requirement for meetings of all new faculty with their Department Heads during the first six months of their appointment.

Two Ranks, Three Ranks, or Four Ranks of Faculty?

MIT is almost unique in having four tenure-track professorial ranks: Assistant Professor, Associate Professor without Tenure (AWOT), Associate Professor with Tenure (AWIT), and Full Professor. At MIT, promotion to AWOT, AWIT, and to Full Professor each involves an extensive and rigorous review. The most important component in each review involves "external letters" which are solicited from a number of international leaders who are asked to discuss in detail the candidate's contributions in research and scholarship. Most of our peers have only three faculty ranks, and at most universities promotion to Associate Professor carries with it the award of tenure. Caltech has only two faculty ranks, having simplified their system about seven years ago to comprise only the rank of Assistant Professor (untenured) and Full Professor (tenured).

Calls to reduce the complexity of the MIT system have been heard for decades. Many of the criticisms of our current system center around our requirement for external letters at three different stages of promotion, promotions which sometimes take place only a year or two apart. Letter writers often express irritation at being asked to submit another letter not long after having written one, and they frequently submit a perfunctory letter or one essentially identical to their prior letter. Some letter writers are confused by our unusual system and whether or not the

Improvements in Policies for Promotion and Tenure are Overdue
Danheiser, from preceding page

promotion represents the granting of tenure. A very significant problem is that it has become more and more difficult to obtain sufficient letters, especially for the AWIT promotions that require 12-15 letters from outside experts in the candidate's field. It should also be noted that the administrative burden in conducting these searches is not trivial and requires a substantial investment of faculty time.

One obstacle to reducing the complexity of our system is a lack of agreement on where the system might be simplified. Although having a full-scale review for promotion to Associate Professor without Tenure is highly unusual, most MIT faculty agree that this step is important and should be retained. Typically coming two-to-three years prior to the promotion to tenure, this review can provide the basis for valuable feedback to the candidate with regard to the strengths and weaknesses of their program, thus providing guidance for the further development of their research. In cases where the outside letters suggest that promotion to tenure will not be likely, it allows the junior faculty member to consider moving to another institution, a step that might later be more difficult if it carried the stigma of having been denied tenure at MIT.

The Kochan-Silbey report suggested that the promotion from Associate with Tenure to Full Professor be conducted without the need for outside letters. Promotion from tenured Associate Professor to Full Professor requires continued demonstration of world-class excellence in research and scholarship, as well as an outstanding record of teaching and service. In the case of promotion to Full Professor, service contributions at the Institute level are generally expected, which is not typically the case for the two earlier promotions.

Changes along these lines are currently under discussion at meetings of the Deans Group of Academic Council. Proponents of eliminating external letters for this pro-

motion argue that evaluation of continued excellence in scholarship can be made on the basis of a set of "internal letters" from MIT faculty, who obviously can also comment on the candidate's teaching and service contributions at MIT. It has been noted that it is extremely rare that promotion to Full Professor is denied after an external review because of weak outside letters. This is due to the fact that undertaking a promotion to Full Professor is typically delayed by the department if there is any doubt about the outcome of an external review.

Opponents of eliminating external letters for the promotion to Full Professor feel that a review by outside authorities is essential and the importance of retaining this review outweighs the effort and drawbacks associated with soliciting an adequate number of letters. One point of agreement is that consistency at the level of each School is essential and that consistency in policy across the Institute may even be advisable, especially in view of the increasing number of dual appointments at MIT.

Mentoring of Pre-Tenure Faculty
The Kochan-Silbey committee found the state of mentoring across Schools and departments at MIT to be "a significant concern" and recommended that guidelines for mentoring be created and made more uniform throughout the Institute. At the very least it would be worthwhile to review the arrangements for mentoring pre-tenure faculty in each department with the aim of sharing best practices across the Institute and perhaps achieving greater uniformity. This review is currently underway under the leadership of Associate Provost Tim Jamison.

Criteria and Standards for Promotion
Section 3.2 of *Policies and Procedures* lays out the criteria for tenure at MIT:

Persons awarded tenure must be judged by distinguished members of their discipline to be of first rank among scholars and to show promise of continued contribution to schol-

arship. Tenured members of the Faculty must also demonstrate outstanding teaching and university service; however, teaching and service are not a sufficient basis for awarding tenure.

A single standard for tenure applies across the Institute, for all Schools and disciplines and for all modes of inquiry. Although the single standard requires that all candidates be of exceptional quality as confirmed by distinguished members of their disciplines, it may be appropriate, based on the culture of the discipline or the modes of inquiry, to look at different factors as evidence of significant scholarly achievement.

It is obvious that there are differences in the nature of research in different disciplines and it is natural that the details of how scholarly contributions are evaluated will differ among Schools. However, it is less clear that this needs to be the case in areas other than research. In particular, the way in which mentoring, teaching, service, and related contributions are currently evaluated and how they factor into decisions on promotion and tenure also varies among Schools, and the Institute may wish to define certain standards that would apply across the Institute. Should letters from students, including current and former research group members, be solicited as part of the evaluation process? Is our current system equitable and consistent with our values with regard to diversity and inclusion? To provide a foundation for changes in these areas, two ad hoc committees are currently being appointed: an Ad Hoc Committee on Teaching and Learning Assessment (by myself, Vice Chancellor Ian Waitz, and TLL Director Janet Rankin), and an Ad Hoc Committee on a Strategic Plan for Graduate Advising and Mentoring (by myself, Associate Provost Tim Jamison, and Vice Chancellor Ian Waitz). ■

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The Ad Hoc Committees on Principles and Processes

Peter Fisher
Tavneet Suri

THE AD HOC COMMITTEE to Review MIT Gift Processes, which we call the Process Committee, was convened in mid-October 2019 by Provost Marty Schmidt. At the same time, Faculty Chair Rick Danheiser formed the Ad Hoc Faculty Committee on Guidelines for Outside Engagements, which we call the Principles Committee. Over the following 10 months, the two committees operated in parallel, with three Principles Committee members also serving on the Process Committee. Since principles and processes cannot, in practice, be separated, the two committees worked together, but synchronously; the issues seemed urgent enough to warrant both committees running in parallel. Both committees released their reports for comment to the MIT community on September 10, 2020.[1]

The two committees were convened to address a strong sense that we seriously needed to step back and better understand, and improve, the decision-making underlying our gifts and engagements.[2] Campus-wide discussions in the wake of engagements with Saudi Arabia, Epstein, and others highlighted the need for a set of values and principles that could guide acceptance of both our gifts and engagements, with accompanying gift processes that then adhere to these values and principles.

As MIT grows, we rely more heavily on a broader range of donors and engagements for our operations and our

research, especially since the proportion of our support from U.S government agencies is declining. MIT's increasing reliance on these non-federal sources necessarily raises profound questions about these gifts and engagements. Are we intentionally or unintentionally, through these gifts and engagements, promoting an agenda that may counter our research and educational mission? Are we allowing bad actors to "launder" their reputations by engaging with us? Do these gifts and engagements inhibit our ability to promote our values in our community?

MIT has been at the world's forefront of research and education and has continually shown leadership on the issues of the day. MIT must again step up and show leadership on this set of issues that all higher education institutions are facing, and do so in a way that integrates input from as much of our community as possible, while also recognizing the mission of MIT and the necessary role fundraising plays in achieving it.

The Principles Committee was convened to build a set of values and principles to guide all our gifts and engagements. To that end, as a committee, we convened several campus conversa-

tions (15 in total across faculty, students, staff, and alumni) in fall 2019 to collect input. We requested departments, labs, and centers to convene their communities to write short white papers that would give similar inputs. In total, we received 17

In our report, we articulate a set of values and principles that we hope will guide our gifts and engagements. We then went a step further to develop a set of practical guidelines (in the form of tools) based on these values and principles that our community can follow in decision-making.

white papers. We also held multiple office hours and solicited feedback via emails and informal discussions committee members had within the community. The Principles Committee's charge included a standing parallel Student Committee on Outside Engagements who deliberated on the same issues – the student committee's report is included in the draft report. Pulling together all this input, the Principles Committee then deliberated extensively on these issues through spring 2020. The bottom-up approach we took allowed us to both understand and integrate the broader MIT community's views into our deliberations.

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[1] The two reports are available online to the MIT community: the Principles Report and the Process Report.

[2] The Principles Committee charge is here and the Process Committee charge is here.

Committees on Principles and Processes
Fisher and Suri, from preceding page

making. These guidelines enable us to align our gifts and engagements with our core values and principles. We recognize that the MIT community is a set of diverse individuals, with differing roles and viewpoints. Nevertheless, the MIT community is linked through common values and principles: the more firmly we can articulate those through all our actions, the stronger we are as a community.

After integrating all the feedback from the MIT community collected during fall 2019 and our own deliberations, we came to a consensus around the following nine core values: academic integrity; academic freedom; education and mentorship; service; diversity, equity, and inclusion; transparency; professional integrity; respect; and the courage to act on our convictions. The report carefully details these values and how they will work in concert with our broader principles of achieving excellence and maintaining our reputation. As we highlight in the report, "any excellence worth achieving, and any reputation worth maintaining, will be so in part because it is an expression of these core values and principles."

The guidelines for use by decision-makers at MIT are structured in the form of two tools that allow all involved in the decision-making process around a given gift or engagement to deliberate on how the specific gift or engagement upholds our values. We recognize that each decision is unique and will not necessarily fall neatly into a particular category. We therefore constructed guidelines that would assist decision-makers by providing an inventory of questions and a basis for further deliberation. To ensure we did not create undue system inefficiencies, the tools incorporate the notion that some gifts and engagements are simple to "green-light" and others should clearly be quickly given a "red-light", reserving time for efficient deliberation for the in-between cases.

The questions in the tools therefore focus on two types of issues: what we refer to as red lights and yellow lights. The red and yellow light issues are equally important, differentiated by how easy or difficult it is to define the problem or draw clear cutoff lines. We recommend that any failure of the red lights should stop the gift or engagement. A failure to pass any of the yellow lights requires careful deliberation by our community, for which we recommend the creation (by Faculty Governance) of a Standing Committee. Red light issues encompass questions of national security violations, the law, academic freedom, and political, civil, and human rights. Yellow light issues arise when a gift or engagement has implica-

tions for our reputation, our ability to promote our values in our community, and our research and educational mission. Finally, any red light failures can be appealed to the Standing Committee.

The recommended Standing Committee should be charged, first, to deliberate and make recommendations on complicated cases, and, second, to document each recommendation to create a body of precedents (or case law) to be used in making future decisions. This combination of tools, the Standing Committee, and a body of documented precedents will ultimately make decision-making more efficient while remaining in line with our core values and principles.

The Process Committee was convened to recommend changes to the practices guiding the solicitation, processing, and acceptance of gifts at MIT. As the Process Committee, we built upon the Principles

Committee's recommendations to further highlight the role, composition, and structure of the Standing Committee, the use of precedents, and to operationalize the tools' use. To that end, the Process Committee made the following seven recommendations.

The recommendations fall into three categories. First, Recommendations 1 and 2 advise MIT to make the processes and policies surrounding fundraising transparent through outreach to the entire MIT community, including training for any community members engaged in fundraising. More broadly, we recommend the Institute undertake a significant effort to inform the community on the role and importance of gifts to MIT's operations, finances, and culture. We view our Interim Report of February 14, 2020, as the first step in this direction. We also endorse and want to see strengthened a commitment to MIT continually examining and developing its values, both through Taskforce 2021 and the Values Committee announced by the Provost and Chancellor on February 2, 2020, and beyond that.

Process-related Recommendations 3, 4, 5, and 6 form the second category. MIT Advancement has robust processes already in place for its operations. We recommend all community members involved in these processes be required to operate using the tools developed by the Principles Committee, including and especially those fundraising outside of

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Committees on Principles and Processes
Fisher and Suri, from preceding page

MIT Advancement. Currently, a six-member Interim Gift Acceptance Committee (IGAC) reviews all significant gifts. We recommend expanding the IGAC to become the Gift Acceptance Committee (GAC) with 18 members. Half of them should be faculty appointed by Faculty Governance, with the GAC's balance recommended to be administrative domain experts, students, and a post-doctoral fellow. The GAC is our recommended implementation of the Standing Committee recommended by the Principles Committee. The idea of this large committee is that it should operate like the Committee on Academic Performance, having all the needed expertise on-hand to make the right decisions in a timely way. We recommend the Provost chair the GAC, bringing our most senior faculty leader out of the shadowy margins and into the sunlight to engage with faculty and staff on gift policy. We also recommend processes that allow the GAC to respond to the MIT community's concerns over past gifts. In concert with the Principles Committee, we also recommend recording all GAC recommendations (including minority opinions where needed) and ultimate decisions in a body of precedents to be used for future decision-making.

Our final category, Recommendation 7, reinforces the goal of transparency in fundraising by asking MIT to develop a Gift Policy Guide to ensure that the MIT community understands the need for fundraising and to educate everyone involved about these recommended best practices.

We constructed our recommendations to allow MIT's fundraising model, which is centralized in MIT Advancement and decentralized through individual faculty and staff spread throughout the Institute, to continue to flourish and remain entrepreneurial. We designed our recommendations to reduce the impact on fundraising efforts while also providing a continuing review that includes a broader spectrum of the community. The Committee discussed extensively the inclusion of students on the GAC – our hesitation was that students' presence could cause disquiet among donors. We arrived at the view that, as many of our donors are alumni, student involvement may encourage our alumni. We also see student participation as a means of informing the student community about

MIT's commitment to incorporating its values into fundraising.

The work of the Process Committee relates only to gifts, while the Principles Committee developed tools for both gifts and engagements. Given the importance of gifts to MIT's operations and recent history, we believe MIT must immediately move forward with implementing our recommendations with the goal of completing the needed changes within a year. Once implementation is underway, we suggest that the Administration and Chair of the Faculty empanel an Engagements Committee to start work this winter to build a set of processes for engagements, taking the work of our two committees as given. This Engagements Committee should have faculty membership partially drawn from the current Process and Principles Committees and include administration and staff members with the needed expertise in engagements. The Engagements Committee should use the process our two committees followed as a template for their work and the members of the Engagement Committee from our two committees would provide the needed continuity and ensure consistency with our committees' recommendations.

Our committees succeeded because they had clear, limited charges, the needed staff and administrative expertise, and carefully chosen faculty and student members. Our committees have served their purpose and we look forward to supporting our successor committee as we continue to work together to make MIT a better place.

As the Principles Committee emphasizes, "We hope that this guidance will become an integral part of MIT's DNA –

> The work of the Process Committee relates only to gifts, while the Principles Committee developed tools for both gifts and engagements. Given the importance of gifts to MIT's operations and recent history, we believe MIT must immediately move forward with implementing our recommendations with the goal of completing the needed changes within a year.

a feature of our shared institutional culture and our characters as individuals." The values underpinning the recommended guidelines came through a bottom-up process, reaching out to the community for input and deliberating extensively. In both committees, the process of deep deliberation was crucial to building consensus around the issues. This involved a significant commitment from all the members of the two committees. Implementing these recommendations from the two committees will take a similar commitment from the entire MIT community. In that vein, we encourage all faculty, staff, and students to engage with our reports and provide input and feedback. Please send comments to *adhoccomments@mit.edu* by October 30.

Ultimately, we all hold the responsibility of ensuring that our individual and collective actions align with our values and principles, as implemented and made actual through processes we can all trust. We all have a role, therefore, in building these principles and processes. ■

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Strong MIT 2020 Campus Research Performance

Maria T. Zuber

LAST MARCH, MIT'S RESEARCH enterprise quickly reduced its on-campus research activity to about 10% of normal capacity as a result of the global Covid-19 pandemic. By April, plans were underway for a measured approach to bring our lab researchers safely back to campus as conditions and Commonwealth of Massachusetts guidance permitted. Meanwhile, our faculty, researchers, and staff quickly adapted to working from home to do all that they could to keep as much of MIT's groundbreaking research going as possible. As a result of this

tremendous effort from our research community, the MIT campus only saw a 1.5% drop in our research volume in fiscal year 2020. Almost the entire drop was attributed to declines in travel and material and services purchases.

Additionally, through the collaborative effort of our faculty, researchers, and research administrators, MIT submitted 3,359 proposals in FY2020, a 7% increase over the prior year. New awards also increased by 3% over FY2019, putting MIT in a strong funding position for the future. This achievement was accom-

plished while planning and implementing a campus restart process that included returning non-lab researchers who needed campus access, and developing the hybrid on-campus-remote fall semester.

Our MIT community continues to demonstrate amazing resilience and teamwork through the challenges faced this year. Thank you all for what you have done this spring and summer, and for all that we will achieve this upcoming year. ■

Maria T. Zuber is Vice President for Research *(mtz@mit.edu)*.

Research Volume by Prime Sponsor Type FY16-FY20
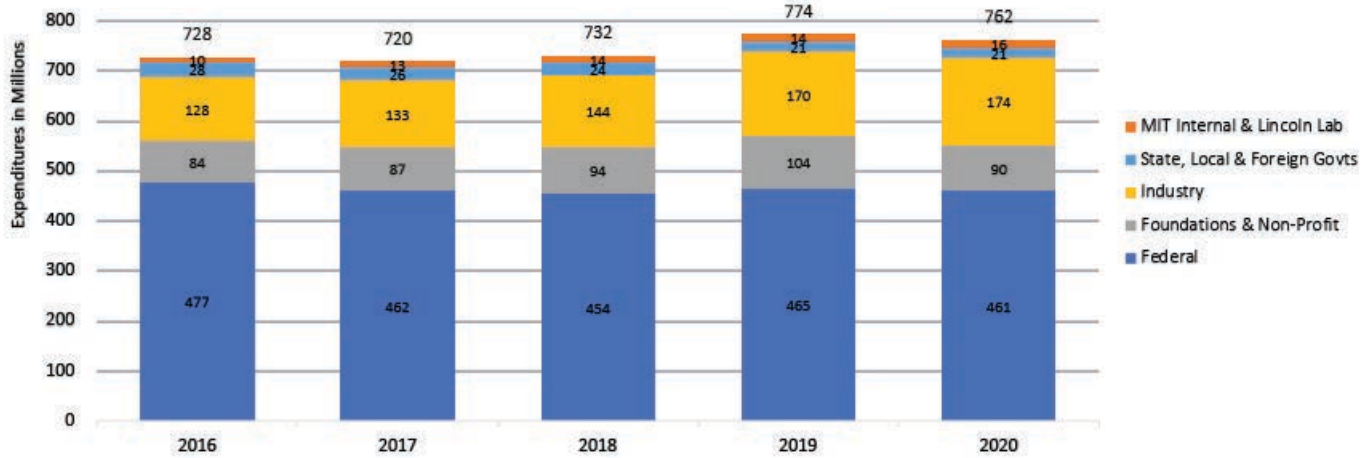
Campus Proposals and New Awards Increased in FY2020
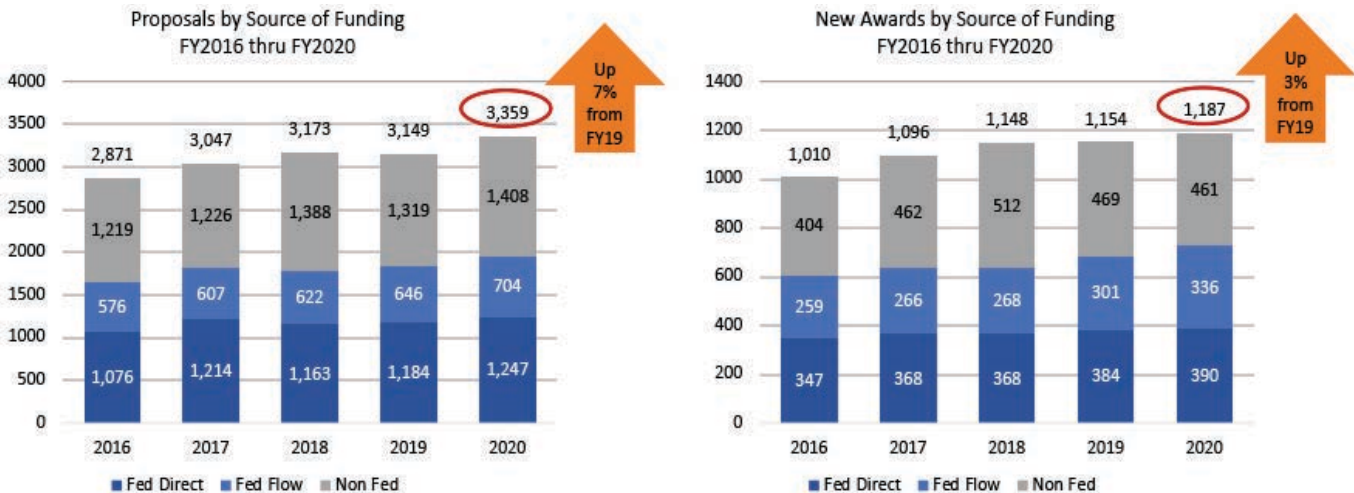
Push the Pause Button on Teleconference Interviews for New Faculty Hires

W. Craig Carter
Amy K. Glasmeier
Susan S. Silbey

TELECONFERENCE INTERVIEWS are unfair to all faculty candidates, especially those with children at home. Evidence is mounting – the brunt of this unfairness falls upon female candidates.

Working and Zooming from home creates unexpected challenges for our faculty colleagues with children at home. For many of these, it compounds the stress of childcare that is apparent from MIT's 2020 Quality of Life Survey[1]. The Administration's response is important in recognizing and providing additional childcare support[2] and adapting tenure policies in response to Covid-19. Rather than adopt one size fits all policies, however, if choosing to be a leader, the Institute should respond to the diverse conditions of and within our faculty. For example, a person with twins or triplets has a different need than someone with one child at home; a single parent is in a different situation than is a two-parent family. Some of the women faculty have asked that each case be treated separately. One size fits all eliminates local adaptation and discretion, restricting degrees of freedom in managing family responsibilities and places undue burden on women faculty.

of young mothers to manage a work/life balance – and their daughters are observing the extra stress, extra work, and societal pressure that harkens back to the 1950s[5].

Data show that female faculty have already been disproportionally affected during Covid[3]. Men are submitting 50% more papers during the Covid era than prior to it, while there are estimates that women's scholarly productivity has dropped by 50%[4].

Why is this so important? Data show that female faculty have already been disproportionally affected during Covid[3]. Men are submitting 50% more papers during the Covid era than prior to it, while there are estimates that women's scholarly productivity has dropped by 50%[4]. The pandemic threatens the ability

Why shouldn't we also err on the side of discretion and postpone faculty searches in the era of Covid? At this moment, we have few means of leveling the playing field for faculty candidates who face the same challenges. Because we cannot take domestic status, gender, and identity into account during the interview process, we are hamstrung from repairing the inequity ourselves. But are we really? Only in an ideal, non-pragmatic, empirically unsubstantiated model of the world does this thinking prevail. We are expected to look past idiosyncrasies and focus on a person's science. Variations from some abstract models of human behavior are condemned as irrational or poor quality. Yet, to ignore variation is certainly unscientific and the bias becomes intentional.

[1] 29% of female and 18% of male faculty indicated that they were somewhat or very dissatisfied with their ability to integrate the needs of [their] work with those of [their] personal/family life. 76% of female faculty have children living in the same household compared to 59% of male faculty. 72% of female faculty indicated being the primary caregiver for a child compared to 47% of male faculty (non-binary gender data was unavailable).

[2] https://hr.mit.edu/covid19/childcare-subsidy#:~:text=MIT%20is%20pleased%20to%20offer,19%20supplemental%20child%20care%20subsidy.&text=Employees%20may%20request%20a%20nontaxable,of%20three%20children%20per%20household.

[3] https://www.natureindex.com/news-blog/decline-women-scientist-research-publishing-production-coronavirus-pandemic, https://science.sciencemag.org/content/368/6495/1075

[4] https://www.thelily.com/women-academics-seem-to-be-submitting-fewer-papers-during-coronavirus-never-seen-anything-like-it-says-one-editor/?fbclid=IwAR24svhKANR6tAE6GIgQURzuHLduXwzITsvuTTZoUJM0F_V413Pn_ubJ-rl, https://www.insidehighered.com/news/2020/04/21/early-journal-submission-data-suggest-covid-19-tanking-womens-research-productivity

[5] https://www.theguardian.com/inequality/2020/jun/18/uk-society-regressing-back-to-1950s-for-many-women-warn-experts-worsening-inequality-lockdown-childcare

The emerging research indicates that faculty-hire evaluations are being adversely affected: a faculty candidate's interruptions and distractions during a stressful interview provide catalysts for the emergence of implicit bias – systematic but unacknowledged variation in treatment by some category of difference. Or worse, the disproportionate interruptions and distracting comments provide self-justification for evaluators to vocalize such gender biases. If differential standards for assessing a candidate prevail in an institution that goes on record as opposing such actions, the implicit bias becomes explicit despite the institution's regulations prohibiting such practices. Observing whether Covid-19 has had a measurable effect on hiring-related gender-inequity is a research topic being pursued by our social science colleagues: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7302767/.

Teleconference-only interviews put candidates with children at a marked disadvantage. If we cannot commit to postponing faculty searches now, then there is a *partial* remedy. There is good evidence – nationally and locally – to suggest that inviting observers to the hiring process enables full, yet less biased, discussion. Such an approach could be an enactment of faculty collegiality and a celebration of One MIT – and would be good practice going forward.

We have superb female graduate students and postdocs currently competing for faculty positions. Certainly, we want that competition to be fair for them. There is a recognition that Covid-19 inequities should be addressed in evaluating new faculty hires[6]. But, if we cannot (and we should not) take identity into account – how can we?

Let's sequester those precious faculty hires until the Covid madness passes and then reenter at a time when the playing field is more easily and legally leveled. Let's stop before we get further behind. ■

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[6] https://www.pnas.org/content/117/27/15378
https://www.mtu.edu/advance/resources/articles-books/supporting-faculty-during-and-after-covid.pdf

MISTI Global Seed Funds Call for Proposals Launched September 14

Alicia Goldstein Raun

THE MISTI GLOBAL SEED FUNDS program (https://misti.mit.edu/faculty-funds) enables participating teams to collaborate with international peers, either at MIT or abroad, to develop and launch joint research projects. MISTI GSF is comprised of a general fund and numerous country, region, or university-specific funds.

MISTI GSF typically launches in the spring with a deadline in the fall. However, MISTI postponed the launch this year to the fall because of the Covid-19 pandemic. The call for proposals opened September 14 and will close December 14, 2020. Applicants will be informed of the results in mid-April 2021. Funds will be available for use from May 2021 through December 2022. This year, apart from the general fund, there are 26 region-specific awards targeting Belgium, Brazil, Chile, China, Colombia, France, Germany, India, Israel, Italy, Japan, Jordan, Korea, Mexico, Spain, and the United Kingdom. New funds for this cycle include:

- MIT-Colombia Cali Seed Fund
- MIT-Israel Broshy Brain and Cognitive Sciences Fund
- MIT-Jordan Abdul Hameed Shoman Foundation Seed Fund
- MIT-Mexico Instituto Politécnico Nacional Seed Fund

The goal of MISTI GSF is to enable researchers to build lasting collaborations that tackle global problems. Funded projects unite teams of faculty and students with international peers, combining their individual strengths to address challenging issues that may have a worldwide impact. Every year, the program gives over $2 million to faculty from every School across the Institute, awarding $20 million to 948 projects since its inception in 2008. A majority of MIT faculty have submitted at least one MISTI GSF proposal.

Typically, MISTI GSF projects have researchers traveling the globe year-round, with many trips happening during the summer. When Covid-19 spread across the world this spring, it quickly became evident that the GSF projects would be impacted. Consequently, MISTI extended the use of funds beyond the typical 20-month window and has allowed the repurposing of funds for student salaries for certain funds.

To apply for MISTI Global Seed Funds, please visit the online application portal. ■

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Beyond Risk Management?
How to Learn from MIT's International Engagements

Bish Sanyal

I WAS INSPIRED BY Richard Lester's article in the May/June 2020 *Faculty Newsletter* ("On the Risks and Benefits of New International Engagements") in which he laid out a comprehensive process to assess the risks of MIT's new international engagements. The article addresses many of the concerns MIT faculty have been raising for years, with the steady expansion of MIT's international engagements since the early 2000s. MIT should be applauded for considering the faculty's reservations seriously and for putting forward a well-articulated process of risk assessment.

Risk management is, however, only one aspect of any international engagement; it does not fully address the central purpose of such engagements – namely, knowledge creation and learning. To be sure, we are now more aware of risks, but do we also have a better sense of what kind of international engagements lead to what form of learning? I realize that starting in the 1990s many universities advocated for global engagements primarily to take advantage of the increasing flow of international funding. Even though that euphoria about how to quickly expand university endowments has somewhat receded after the market collapse in 2008-2009, it still remains one reason, among others, by many universities for continuing international engagements. At MIT, which regularly receives multiple requests for co-operations from abroad so other nations might create their own MITs, the issue of international engagements has not been as financially driven. As far back as the 1960s, when MIT first assisted the Indian government in creating the Indian

Institute of Technology, MIT has been involved in international engagements primarily to contribute to the creation of learning environments.

This emphasis on learning was proudly displayed in President Charles Vest's decision to create MIT's OpenCourseWare, which was not intended for revenue generation. It is that noble attitude which still inspires me after all these years, and I remain deeply interested in the issue of learning. In particular, what type of international engagements by MIT would flourish new knowledge creation and learning? The answer is not as obvious as it may seem at first glance; there are multiple mostly untested assumptions we carry about what leads to learning as a result of international engagements.

As a learning community, MIT has acted on many assumptions about the best modalities of external engagements. As the Institute engages in risk assessment, I hope it will also be open to testing the key assumptions about learning benefits which have shaped its international engagements so far. I raise this issue because I am curious as to what extent the assumptions that guided MIT's global engagements in the past proved to be accurate, or which need to be revised based on evidence from our experiments abroad. I believe this is a fair question to raise, because as an institute of science and technology emphasizing that all research findings be grounded in empirical evidence, MIT should formulate its future policies based on evidence from past efforts. But does such evidence exist, based on rigorous evaluation of MIT's past international engagements?

Take the case of the recently concluded MIT-Cambridge University joint effort. Masterminded by MIT's then-Chancellor, Larry Bacow, this effort rested on a central assumption: that by exchanging students between MIT and Cambridge University a better learning environment would be created than if learning was restricted to students confined to one university alone. There were a few corollary assumptions as well: that Cambridge University represented a distinctly different learning tradition than MIT, and that students would benefit by tapping into both traditions of excellence. On the Cambridge side, there was much hope that their exchange students would inherit the entrepreneurial spirit of MIT students and learn to innovate rather than simply analyze problems in the old European tradition. Which is why the British government agreed to pay a significant amount for this student exchange.

But how did the exchange program actually work out? Are the students on both sides who participated in the program any different in their learning capabilities compared to the students who did not participate in the exchange program? If so, how so? Which aspects of the exchange program produced what kinds of benefits? Were there any surprises? Any unintended consequences, good or bad? An anecdote may be helpful here. I had a few students from Cambridge University enroll in a course I taught with Amy Smith from D-Lab on the design of intermediate technologies. One day after class as I walked back with a few students to the main building at 77

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Mass. Ave., I asked the exchange students if they agreed that MIT offered a different learning environment than Cambridge University. The students unanimously responded "Yes!" "What was different?" I asked. The students responded that at MIT there is more class discussion and more back and forth between faculty and students than at Cambridge. Then I asked: "Did you make any new friends at MIT?" Underlying this question was the assumption that students often learn more from each other than from faculty, which is often the reasoning behind why MIT should enroll international students. The Cambridge University students responded, "Not really." "Why?" I asked. One student answered with a laugh: "American students are either studying or running; they do not socialize the way we are used to at Cambridge." This anecdote opens up a whole range of questions, answers to which can only be found if we formally evaluated the exchange program.

Another example is MIT's involvement in the King Fahd University in Saudi Arabia. When I was Chair of the Faculty (2007-2009) many faculty complained to me that it was a mistake to engage with an undemocratic regime which discriminated against women, Jews, and the LGBTQ community. When I raised this issue with colleagues who were supportive of MIT's engagements in Saudi Arabia, I was told that by working with an undemocratic regime with biases with which we disagree, we may be able to usher in gradual changes from within by simply demonstrating the way we work at MIT. I heard a similar argument about why MIT should continue to engage with fossil fuel companies: that we can raise their awareness of environmental issues more by engaging with them than by boycotting them.

Some may recall that similar arguments were made in the 1980s when many wanted the United States government to boycott South Africa's Apartheid regime.

Boycotts do not work, the argument went; it would only make the Apartheid regime dig in its heels deeper in defiance of boycotts. Who is right? The end of the Apartheid regime in South Africa did prove that boycotts matter; while the Saudi Government does not show any inclination to change, unless one considers granting women the right to drive a major reform at a time when in the West self-driven cars are ready to enter the market! Richard Lester's article suggests that MIT has learnt a lesson or two from our past engagements with Saudi Arabia. It will be good to build on those lessons and probe the efficacy of various types of engagements. But that would require a serious evaluation, which could be a learning experience for both those who still believe that they could change policies of institutions by working with them, and those who do not.

Let me provide a third example of why serious evaluations of MIT's past international engagements can be very useful to better understand what creates the best learning environment. Many MIT faculty are engaged in some form of joint research around the world.

This trend was somewhat formalized and celebrated when MIT, under Charles Vest's leadership, joined hands with four other leading international universities to address the challenges posed by environmental degradation. What kind of assumptions regarding the benefits of joint research motivated MIT to participate in this effort? One assumption, I remember, was that in an increasingly integrating world, many problems – particularly related to environmental issues – could no longer be addressed adequately by research conducted within any one national territory. Since globally produced problems require a global consensus on how to address them, leading universities in any one nation should encourage joint research with leading universities in other nations. This argument, of course, dates back to pre-China-bashing days when globalization was seen as a benefit for humankind. But, as the national mood

changes and new restrictions are imposed by the federal government, do we have concrete evidence about the benefits and costs of joint research? To what extent did the initial assumptions prove to be accurate? Did such efforts really have a global impact? Why or why not? What were the surprises we must learn from to revise our guiding assumptions about what kind of multinational research efforts lead to new insights? What are the factors that deter that form of knowledge generation? It is customary to hear the benefits of co-production of knowledge, but once one probes the modalities of cooperation – who provided the leading research questions, who designed the research methodology, who paid and who is likely to benefit from new knowledge – the answers may not be as obvious as they seem at first glance.

Let me conclude by restating what we already know: that we do not fully understand what creates the best learning environment. There are multiple "hypotheses" about what works and what does not. The most current one I hear is about the benefits of competition which is driving the search for a Covid-19 vaccine. We will all be better off the sooner we have a safe vaccine, and if competition hastens the process, so be it.

So between cooperation and competition, which one works better, when, and why? Answers to such questions require rigorous evaluations of past efforts, lacking which we continue to lose opportunities to learn. I realize that formal evaluation of any effort is never simply a technical exercise: the process of evaluation and its findings often have political implications as fingers get pointed towards those who made "mistakes." I am hoping that as a leading knowledge institution MIT can transcend such an attitude and expand our knowledge of not only which type of international engagements are most risky, but which ones offer the most benefits and why. ◼

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Highlights from the 2020 MIT Quality of Life Survey

Amy K. Glasmeier
Ken Goldsmith
Gregory Harris
Jonathan Schwarz

MIT HAS ADMINISTERED FIVE major Quality of Life (QOL) surveys. The first survey of faculty and staff was run by the ad hoc Committee on Work and Family in 1989. The second survey was sponsored by the MIT Council on Family and Work in October of 2001. In 2012, the survey underwent a major revision, including aligning many of the questions with MIT's quadrennial survey of faculty. The 2012 survey was repeated in 2016. The 2016 survey is one of the most used survey datasets administered by Institutional Research.

In 2013 and 2017, a separate survey was administered to all enrolled students at MIT and covered some of the same topics as the faculty and staff survey. In 2020, the two surveys were combined, and for the first time the entire MIT community was surveyed at the same time.

The 2020 MIT Quality of Life Survey captures a snapshot of our campus community just before COVID and the evacuation of campus. On January 28, 2020, more than 26,000 faculty, staff, and students on campus and at Lincoln Laboratory were asked to share their views about MIT. The survey closed on March 11 with an overall response rate of 50%. As with all surveys run by Institutional Research, the survey data are treated as confidential, and the results are not presented in a way that identifies individual respondents. Readers are advised that the results of the survey may have been affected by issues that arose in the fall related to gifts provided by Jeffrey Epstein. Dramatic changes in context are known to have an influence on subjective judgements of survey participants.

The 2020 survey relied heavily on previous Quality of Life surveys. Because multiple surveys were combined to form this survey, not everyone saw every question. For example, faculty were not asked about extracurricular activities, and postdoctoral scholars were not asked about their experiences with tenure. Overall the 2020 survey had 288 questions. Institutional Research has posted an interactive Tableau visualization which includes selected results from previous surveys as well as the 2020 QOL (see: https://ir.mit.edu/surveys).

The results of the 2020 survey provide the Institute with the tools to understand the intersection between work and non-work activities. In general, respondents reported being satisfied at MIT, working hard to succeed in their studies and jobs, and sometimes finding it difficult to manage all they have to do.

Satisfaction

The first question on the survey asked everyone about their satisfaction in their particular role (e.g., faculty, staff, student) at MIT. Overall, 87% of respondents reported being "very satisfied" or "somewhat satisfied." The percentages varied by role and location. On average, Lincoln Laboratory staff reported higher levels of satisfaction than main campus staff. Among students, undergraduate students reported higher levels of satisfaction than graduate students.

Over time, overall satisfaction has dropped for students and main campus faculty and staff. Faculty satisfaction (percent somewhat or very satisfied) was 92% in 2012,

93% in 2016, and 87% in 2020. Similarly, for on-campus staff, the figures were 90% in 2012 and 2016 and 86% in 2020. At Lincoln Laboratory, overall satisfaction was in the low 90%s each of the three years.

Students showed a marked decrease among those who answered "very satisfied"; 51-52% of students said they were very satisfied in 2013 and 2017, compared to 42% in 2020. This is reflected in their ratings of the quality of their academic and student life experience. In 2013, 78% of students reported that their academic experience was excellent or very good. 59% said their student life experience was excellent or very good. In 2020, those percentages declined to 71% for academic experience and 49% for student life experience.

Quality of Academic and Student Life Experience

Another item on the survey asked about the balance between life inside and outside MIT. 79% or more of administrative, support, service, research, and other instructional staff said they were somewhat or very satisfied with their ability to integrate the needs of their work with their personal/family life. Faculty and postdoctoral scholars reported lower levels of satisfaction on this measure (69% and 66%, respectively). Across all groups, the results looked similar over time.

Students were asked a similar question on the survey: "How satisfied are you with your ability to balance academics and other aspects of your life?" 62% of students answered somewhat or very satisfied, down from 67% in 2017.

Overall, how satisfied are you in your role at MIT?

	Very satisfied	Somewhat satisfied			
Admin Staff	50%	38%			
Faculty	53%	34%			
Graduate Student	41%	43%			
Other Instructional Staff	58%	30%			
Postdoc	38%	44%			
Research Staff	57%	35%			
Service Staff	67%	23%			
Support Staff	47%	38%			
Undergraduate Student	45%	45%			
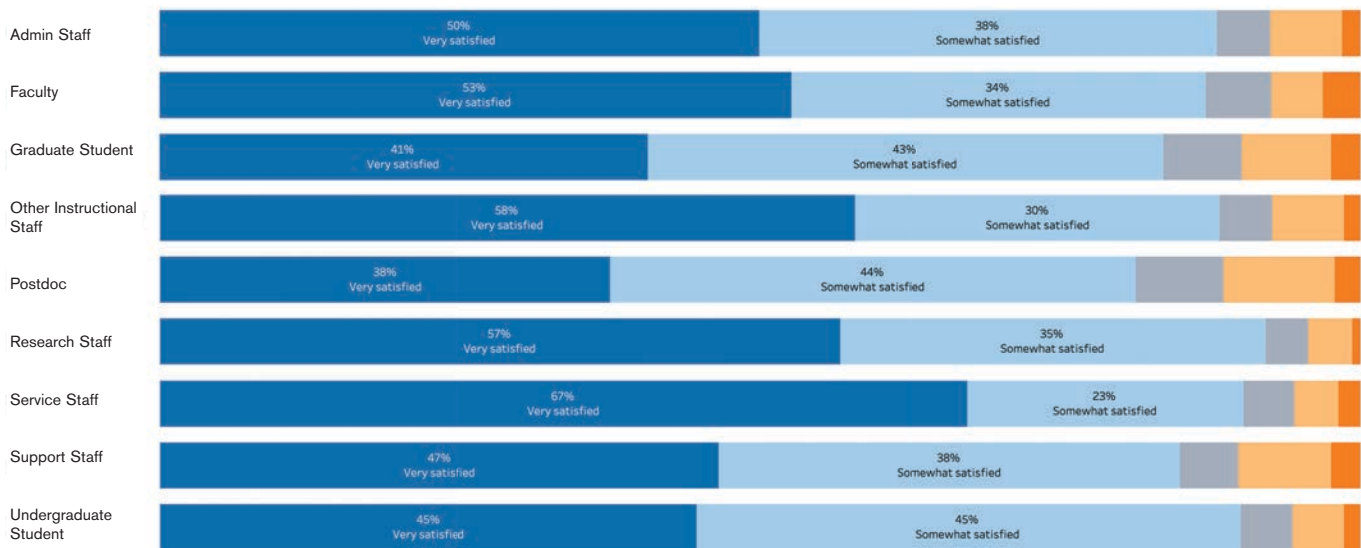
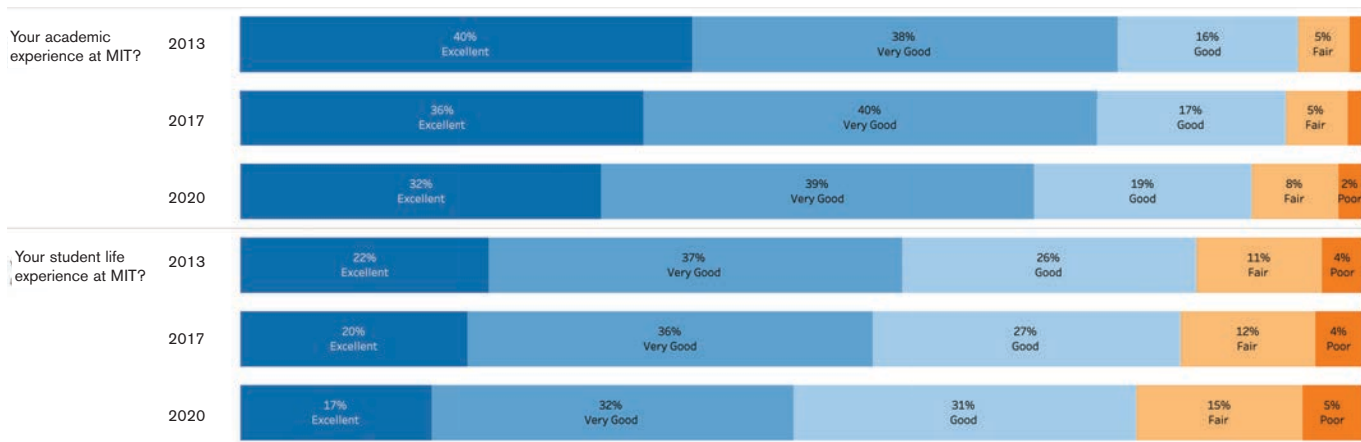**Overall, how would you rate the quality of:**

		Excellent	Very Good	Good	Fair	Poor
Your academic experience at MIT?	2013	40%	38%	16%	5%	
	2017	36%	40%	17%	5%	
	2020	32%	39%	19%	8%	2%
Your student life experience at MIT?	2013	22%	37%	26%	11%	4%
	2017	20%	36%	27%	12%	4%
	2020	17%	32%	31%	15%	5%

Workload

To further explore workload balance issues, the survey asked respondents to rate their workload at MIT. Very few respondents reported that their workload was too light or much too light. The percentage who reported their workload to be about right ranged from 82% of service staff to 45% of the faculty. A higher percentage of undergraduate students (51%) said their academic and research workload was too heavy or much too heavy compared to graduate students (41%).

Overall, how would you rate your workload?

For main campus and Lincoln Laboratory staff, the survey asked a series of questions about work arrangements, including how much freedom employees had regarding their work schedule. A sizable percentage of respondents said they had the choice to work some portion of their time from home or another location; 51% of administrative staff, 63% of other instructional staff, 60% of postdoctoral scholars, and 54% of research staff answered "very much" or "a moderate amount." Having the choice to work remotely, however, was less possible

for support staff at 31% or service staff at 20%. [Obviously these results would have been quite different had the survey been administered after the stay-at-home order!].

MIT staff were also asked to indicate their level of agreement with this statement: I am expected to be accessible (through email, phone, pager, etc.) outside of normal work hours. More than half of other instructional staff, postdoctoral scholars, and administrative staff somewhat or strongly agreed.
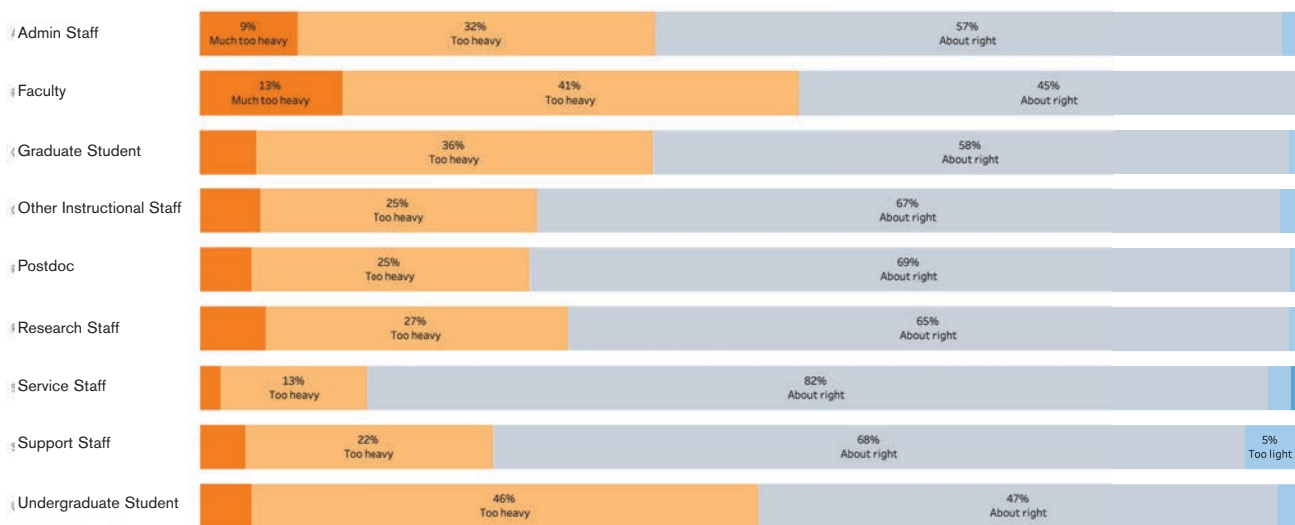
The survey included a question about whether or not employees worked off-site during regular work hours. The results

Quality of Life Survey
Glasmeier et al,, from preceding page

Overall, how would you rate your workload?

Role			
Admin Staff	9% Much too heavy	32% Too heavy	57% About right
Faculty	13% Much too heavy	41% Too heavy	45% About right
Graduate Student		36% Too heavy	58% About right
Other Instructional Staff		25% Too heavy	67% About right
Postdoc		25% Too heavy	69% About right
Research Staff		27% Too heavy	65% About right
Service Staff		13% Too heavy	82% About right
Support Staff		22% Too heavy	68% About right — 5% Too light
Undergraduate Student		46% Too heavy	47% About right

varied widely by location and role. In general, a smaller percentage of Lincoln Laboratory staff reported working remotely than main campus staff. More than 40% of main campus other instructional staff, research staff, and administrative staff said they worked remotely, compared to just 6% of service staff.

Finally, faculty and staff were asked if they had the resources (equipment, training, budget, etc.) they needed to do their job well. At Lincoln Laboratory, the responses to this question looked roughly the same by employee type; 79-83% at Lincoln said they somewhat or strongly agreed. There was more variation among main campus employees, ranging from 69% agreement (service staff) to 83% agreement (postdoctoral scholars).

Climate
Another goal of the survey was to gain perspectives on the general climate at MIT, as well as the climate in departments, labs, centers, and other units. The survey had a number of questions about department/unit climate, among them one that asked respondents to rate their level of agreement or disagreement with:

My department/unit is a good fit for me. 78-87% (depending on student level and employee type) said they somewhat or strongly agreed with this statement.

Unlike the overall satisfaction measure, which experienced noticeable drops over time in some areas, the good fit question looks relatively stable.

Below are additional items asked of faculty and staff in this section of the survey. The figure next to each statement is the percent who answered "Somewhat agree" or "Strongly agree."

• In my workplace everyone is treated with respect (76%)
• My unit's procedures are fair and equitable (70%)
• I have a voice in the decision-making that affects the direction of my unit (62%)
• I can navigate the unwritten rules concerning how I should conduct myself in my position at MIT (80%)
• My workplace is free from bias and discrimination (66%)

From a list of 10 different dimensions, students were asked to rate the general climate at MIT using a six-point scale. At one end of the scale was one word (e.g., Dangerous), and at the other end was

another word (e.g., Safe). The figure shows the mean score for each word pairing, separately for undergraduate students and graduate students.

For the word pairing Stressful: Calm, many more students selected "Stressful" than "Calm." Graduate students, on average, rated MIT's environment as more competitive than undergraduate students. Conversely, undergraduate students rated MIT as more collaborative than graduate students. Both undergraduate and graduate students rated MIT's environment as more harmful to mental health than helpful.
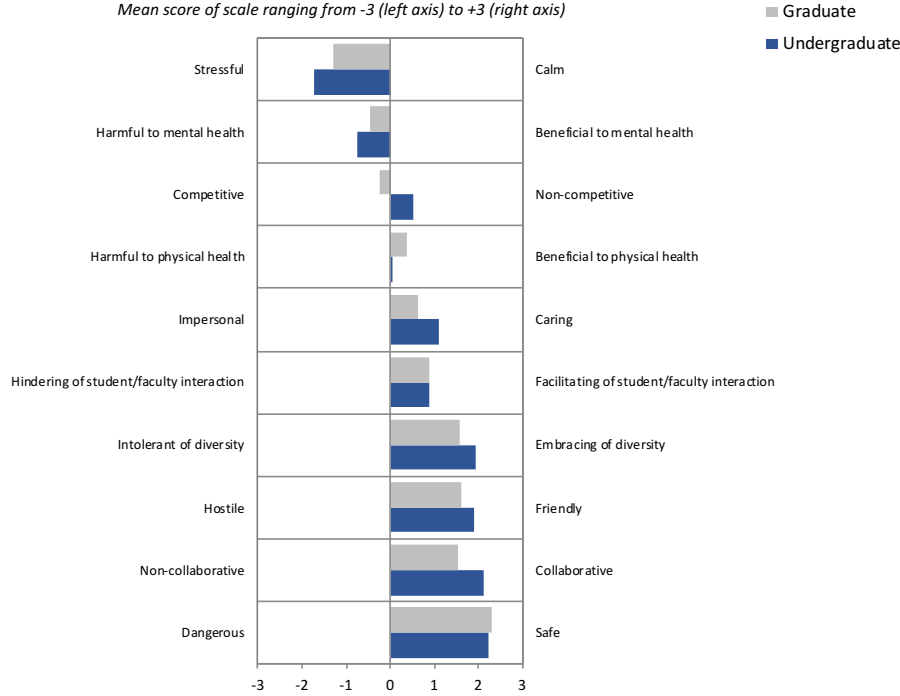
Feeling Overwhelmed & Isolated
Another section of the survey focused on potential sources of stress and the frequency of feeling overwhelmed and isolated. When asked how often they felt overwhelmed by all they had to do, more than half of students (65% of undergraduates, 60% of graduate students) and faculty (56%) said "Often" or "Very Often." Staff reported a lower percentage at 35% overall, ranging from 40% of postdoctoral scholars to 13% of service staff.
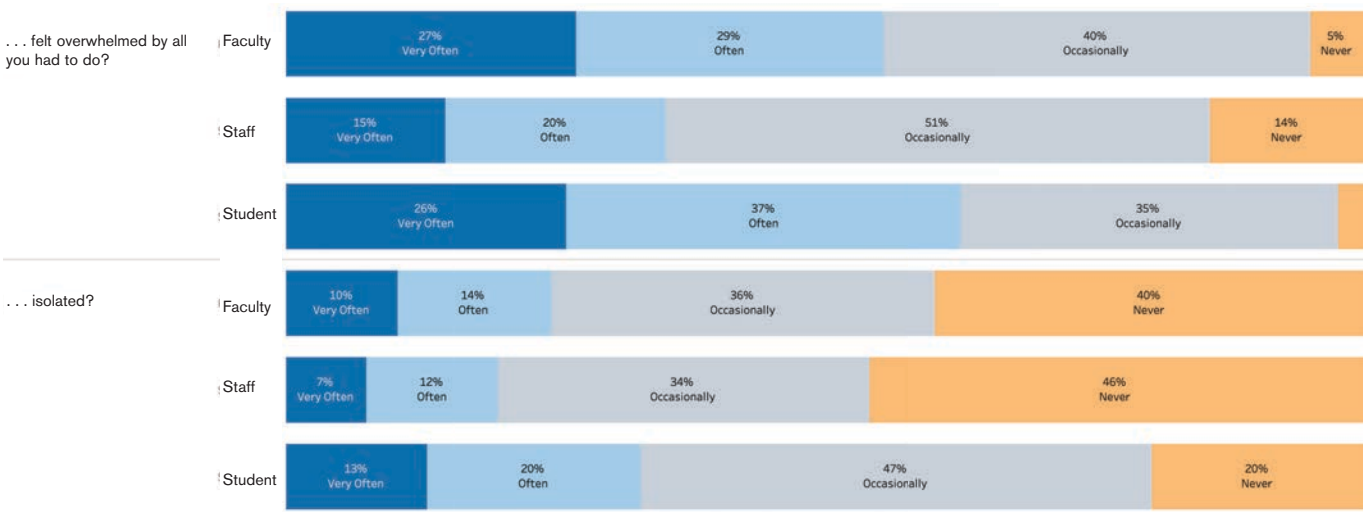
Student Rating of General Climate at MIT

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)

■ Graduate
■ Undergraduate

Left		Right
Stressful		Calm
Harmful to mental health		Beneficial to mental health
Competitive		Non-competitive
Harmful to physical health		Beneficial to physical health
Impersonal		Caring
Hindering of student/faculty interaction		Facilitating of student/faculty interaction
Intolerant of diversity		Embracing of diversity
Hostile		Friendly
Non-collaborative		Collaborative
Dangerous		Safe

-3   -2   -1   0   1   2   3

Feeling Overwhelmed & Isolated

How often have you . . .

. . . felt overwhelmed by all you had to do?

	Very Often	Often	Occasionally	Never
Faculty	27%	29%	40%	5%
Staff	15%	20%	51%	14%
Student	26%	37%	35%	

. . . isolated?

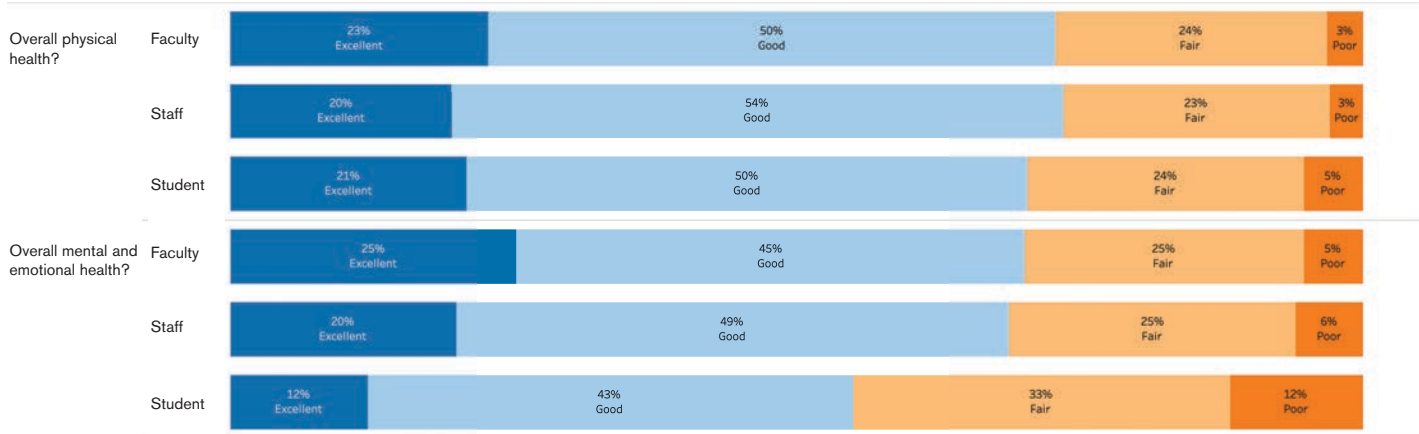|	Very Often	Often	Occasionally	Never
Faculty	10%	14%	36%	40%
Staff	7%	12%	34%	46%
Student	13%	20%	47%	20%

Quality of Life Survey
Glasmeier et al,, from preceding page

Physical & Mental/Emotional Health

How would you describe your . . .

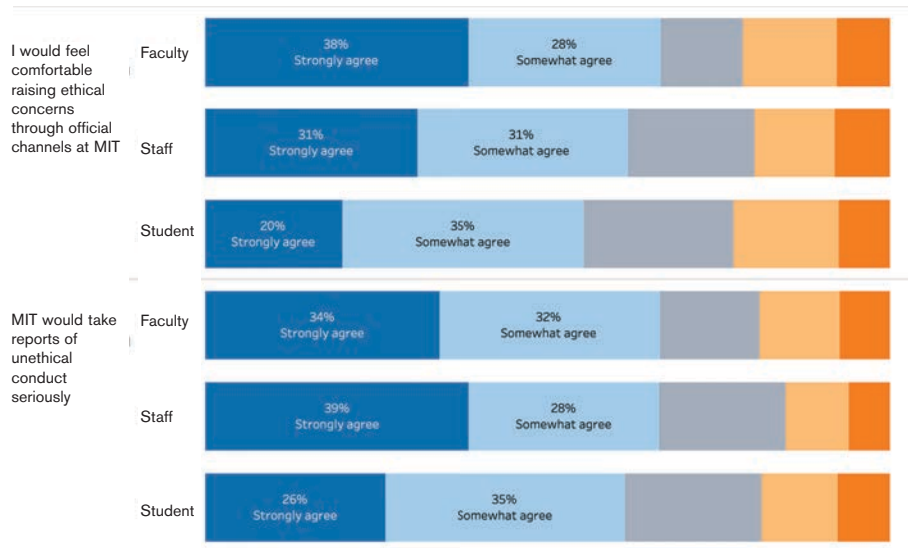## Raising Ethical Concerns

On average, a lower percentage of respondents reported feeling isolated than feeling overwhelmed. A third of students said they often or very often felt isolated, compared to a quarter of faculty and 19% of staff.

The survey included a bank of questions asking respondents to rate potential sources of stress during the current year. [Note: While some of the stress items were asked of all students, faculty, and staff, some items were unique to role and location, e.g., scholarly productivity was only asked of faculty, other instructional staff, main campus research staff, and postdoctoral scholars.] For each potential source of stress, the 4-point scale ranged from "not a source of stress" to "very stressful." Below are listed the top three sources of stress for a sample of groups at MIT as measured by the percentage who answered very or moderately stressful.

• Faculty: Lack of time to think and reflect (57%), Scholarly productivity (56%), and Securing funding for research (54%).

• Postdoctoral scholars: Securing my next professional position (73%), Scholarly productivity (71%), and Cost of housing (67%).

• Staff at Lincoln Laboratory: Commuting to Lincoln Laboratory (34%), Managing household responsibilities (32%), and Cost of housing (25%).

• Students: Balancing multiple commitments (70%), Expectation to perform as well as my peers (58%), and Concerns about life after MIT (50%).

Ethical Concerns

For the first time, the 2020 survey included two questions about raising ethical concerns. Sixty-six percent of faculty somewhat or strongly agreed that they would feel comfortable raising ethical concerns through official channels at MIT and that MIT would take reports of unethical conduct seriously. For on-campus staff, these percentages were 57% and 62%, respectively. Students reported similar figures at 55% and 61%. For Lincoln Laboratory staff, the percentages were much higher at 73% and 79%.

More complete results from the 2020 MIT Quality of Life survey can be found at: https://ir.mit.edu/qol-2020. ■

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Mission, Safety, Equity: Navigating Fall 2020 at MIT Libraries

Chris Bourg

LIKE YOU, WE IN THE MIT Libraries find ourselves in a most unusual fall semester. Over the past eight months, we have aimed to balance the research and learning mission of the Institute with the health and safety of our staff and the MIT community, and we have endeavored to approach our many challenges with creativity, compassion, and equity in mind.

I'd like to take this opportunity to recap for MIT faculty what library services look like this fall and to share some of the thinking behind our decision-making.

Same Vision, New Urgency

After COVID-19 sent most of the community off campus, the Libraries' leadership reexamined our vision, defined by the MIT Task Force on the Future of Libraries, in the context of the pandemic and our all-remote environment. In May we shared the resulting document, MIT Libraries Vision: A New Urgency, which articulates and amplifies that existing vision with a sharpened focus and a clear set of principles to guide our decision-making.

Our essential goals remained the same – open and equitable access to knowledge and collections and services tailored for maximum and inclusive impact on our community – but their importance was heightened by the disruptions of Covid-19. Some of the key elements of this crystallized vision include:

• **Digital-first strategy:** Physical items are accessible only to a limited number of people in a fixed location. We must be a digital-first library in order to maximize equitable access to content and services.

• **Focus on essential physical collections and space:** Some collections and services cannot be meaningfully replicated in a digital or online form. We will focus these to an essential core, defined by their exceptional quality and singular relevance to MIT research and teaching.

• **Advancing open scholarship:** Unimpeded access to knowledge has never been more critical for accelerating the progress of science and facilitating learning – on campus, remotely, and in communities across the globe.

The Libraries' approach to reintroducing services that demand an on-campus presence was driven by these principles, along with our own safety protocols. Our initial efforts address the biggest needs in the most equitable way possible, and we will make any needed adjustments or improvements as the semester unfolds.

Fall 2020 Services

The Libraries have continued to provide extensive services online since March, and this will not change, with a large percentage of the MIT community continuing to learn and work remotely. These services include access to millions of online resources, online consultations with subject experts, quick help via our Ask Us service, virtual workshops, and more.

We recognize that many scholars rely heavily on access to our physical collections for their teaching and research, and that lack of access has been especially challenging for them. For the fall semester, we restarted services that provide access to tangible collections while library buildings remain closed:

• Digital delivery of materials in our physical collections: Request items from general circulating collections or Distinctive Collections; if we cannot provide a digital copy through other means, we will scan material in our collections.

• Shipping and delivery: We are shipping circulating collections to home addresses and offering office delivery on campus.

Our fall course reserves service has also adapted to the largely online environment. There is no print reserves service this fall, as we cannot provide access to materials equitably (with most undergraduates off campus) or practically (due to quarantine periods for returned materials). Our staff are ready to help by providing access to online and open alternatives or scanning physical materials.

Adapting to our current reality and to a post-Covid world will require creativity, grace, and flexibility across the Institute. Please know that, whatever life and work at MIT looks like in 2021 and beyond, the Libraries will be here to support, equip, and inspire our community to solve complex problems in the service of humankind. If there is any way we can help you this fall, please reach out to us at *libraries.mit.edu/ask* or through your department's liaison. ■

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