

MIT Faculty Newsletter

<http://web.mit.edu/fnl>

in this issue we offer articles on conduct in the workplace, “#MeToo at MIT” (below) and “MIT’s New Sexual Misconduct Policy” (page 8); responses to U.S. policy on immigrants and immigration, “Solidarity at its Best” and our Editorial (below), and “Trump’s Insults Pour Salt in Wounds of Haitians” (page 12); and an update on open access to MIT research (page 20).



January 2018 Women's March, Washington, DC

Solidarity at its Best: But Need to Stay the Course

Thomas A. Kochan

THREE DAYS BEFORE CHRISTMAS I witnessed the power of solidarity at its best when a very diverse community came together in a park in Chelsea to celebrate what Francisco Rodriguez called a “Christmas Miracle.” The basic features of Francisco’s story are well known: Six months ago, Francisco was arrested and detained by ICE because his petition for asylum had not been renewed. He had come to the U.S. in 2006 from El Salvador after his colleague was assassinated, fearing he was the next to be attacked. He subsequently married and started a family here and was employed as a custodian at MIT since 2011. While imprisoned, his wife gave birth to their fourth child, an event he was barred from attending. On Thursday, to his great surprise, he was released just in time to spend Christmas with his family.

continued on page 7

From The Faculty Chair #MeToo at MIT: Harassment and Systemic Gender Subordination

Susan S. Silbey

IN OCTOBER, THE WALL STREET *Journal* reported that just under 50% of female workers claim to have personally experienced sexual harassment at work, and over 40% of men report that they have witnessed harassment. Some men enjoy dominating others, and some seem to believe that women are, and should be, willing to trade sex for employment and advancement. Of course, the number of men who harass women is much fewer than the number of women harassed; one predator has many victims. The #MeToo movement has so far focused on some of the worst forms of sexual predation, which certainly deserve attention and justice. However, to understand women’s persistent inequality – not only harassment per se, it is time to address the many men who have not harassed women but have also not acknowledged their contri-

continued on page 4

Editorial

Support the Olympic Truce: Diplomacy with North Korea Not War; Haiti: Responding to Various Needs

**Support the Olympic Truce:
Diplomacy with North Korea Not War**

THE WINTER OLYMPICS AND Paralympics are being held in Pyeongchang, South Korea February 2 through March 18. In November 2017, the United Nations General Assembly adopted a resolution calling for an Olympic Truce, or a cessation of hostilities during the Winter Games. The Olympic Truce was a feature of the original Greek Olympic Games, to allow athletes to travel from warring city-states. The current Olympic Truce proposal was supported by 157 UN Member States, including both Koreas and future hosts of the Olympic Games: Japan, China, France, and the United States. In the spirit of the truce, the North Korean and South Korean governments have agreed to field joint teams during the Olympic games.

continued on page 3

contents

The MIT Faculty Newsletter Editorial Board

Aron Bernstein
Physics

Robert Berwick
Electrical Engineering & Computer Science

***Manduhai Buyandelger**
Anthropology

***Nazli Choucri**
Political Science

Christopher Cummins
Chemistry

Woodie Flowers
Mechanical Engineering

Ernst G. Frankel
Mechanical Engineering

***Jonathan King (Chair)**
Biology

Helen Elaine Lee
Writing and Humanistic Studies

Seth Lloyd
Mechanical Engineering

Fred Moavenzadeh
Civil & Environmental Engineering/Engineering Systems

Ruth Perry (Vice Chair)
Literature Section

***Nasser Rabbat**
Architecture

Patrick Henry Winston
Electrical Engineering & Computer Science

David Lewis
Managing Editor

*Editorial Subcommittee for this issue

Vol. XXX No. 3 January/February 2018

	01	Solidarity at its Best: But Need to Stay the Course Thomas A. Kochan
From The Faculty Chair	01	#MeToo at MIT: Harassment and Systemic Gender Subordination Susan S. Silbey
Editorial	01	Support the Olympic Truce: Diplomacy with North Korea Not War; Haiti: Responding to Various Needs
	08	Introducing MIT's New Sexual Misconduct Prevention and Response Training and Consensual Relationships Policy David A. Singer
	11	MIT Day of Action: April 17, 2018 Call For Participation Roger Levy, Sally Haslanger, Ceasar McDowell for the Day of Action Organizing Team
	12	Trump's Insults Pour Salt in Wounds of Haitians Healing After Succession of Disasters Erica Caple James
	14	Inclusive Community Faculty Dinners Edmund Bertschinger
Letters	17	No More MIT Voo Doo Molly Ruggles
Teach Talk	18	Comment on "How Deeply Are Our Students Learning?" Eduardo Kausel
Letters	19	Deep Learning or Deep Ratings? Alex Slocum
	20	Update on the Task Force on Open Access to MIT Research Chris Bourg, Hal Abelson
	22	Teaching this spring? You should know . . .
M.I.T. Numbers	24	MIT Faculty By Gender (AY 2018)

Photo credits: Page 1: Kyle Tsui <https://commons.wikimedia.org/w/index.php?curid=65697791>; Page 13: Logan Abassi, AFP.

Address

MIT Faculty Newsletter
Bldg. 10-335
Cambridge, MA 02139

Website

<http://web.mit.edu/fnl>

Telephone 617-253-7303

Fax 617-253-0458

E-mail fnl@mit.edu

Subscriptions

\$15/year on campus

\$25/year off campus

Support the Olympic Truce
continued from page 1

This decision offers a unique moment to promote peace on the Korean Peninsula.

During the 1950s' war in Korea, the U.S.-led military coalition dropped a total of 635,000 tons of bombs, including 32,557 tons of napalm, on Korea, more than during the whole Pacific campaign of World War II. Prof. Bruce Cumings in his 2011 treatise, *The Korean War: A History*, describes the devastation of the cities and towns, and the deaths of hundreds of thousands of North Koreans. Since then, U.S./South Korea joint military forces have held "invasion" exercises off the coast of North Korea every year for decades. Is it so difficult to understand that the North Korean regime and perhaps North Korean people feel the need for a nuclear deterrent?

South Korean President Moon Jae-in has apparently persuaded President Donald Trump to postpone U.S./South Korea war drills that would have overlapped with the Olympics. Delaying these military exercises could pave the way for a longer-term "freeze for freeze" deal – a suspension of military exercises in exchange for a ban on North Korea's nuclear and missile testing. Ultimately, this delay could mean an official end to the Korean War by replacing the 1953 armistice with a permanent peace treaty.

Another war with North Korea would be more disastrous than the last one, whether conventional or nuclear. The use of nuclear weapons could escalate to a conflagration which would devastate Asia and the Pacific. South Korea would bear the immediate brunt of any conflict with North Korea and would certainly suffer millions of casualties. The Olympic Truce represents a unique opportunity to defuse tensions and begin the work of reconciliation on the Korean peninsula. A national coalition has formed to support this effort, calling for endorsement of the Olympic truce [bit.ly/truce-endorse] and a variety of supporting local actions.

Haiti: Responding to Various Needs

On page 12 of this issue, we reprint Prof. Erica Caple James's response to President Trump's January 11 scurrilous reference to Haitian, Salvadoran, African, and other immigrants, "Trump's Insults Pour Salt in Wounds of Haitians Healing

Graduate students, professors, and scholars of Haitian descent are integral to MIT, as well as belonging to an important community in the City of Cambridge, whose public schools have long offered bilingual programs for Haitian students.

After Succession of Disasters." Haiti was the first nation in the world to throw off the curse of slavery and holds an important place in world history. Its own history has been difficult – in part because of its role as a beacon of freedom to enslaved populations. Prof. James cogently summarizes this history and the often-destructive U.S. role.

In addition, because of its location in the Caribbean, Haiti has borne the burden of natural disasters, hurricanes, and earthquakes, including most recently the devastating earthquake of January 12, 2010, as well as Hurricane Matthew on October 4, 2016. MIT faculty and staff were active in the relief efforts for the earthquake victims ("Responding to the Earthquake: A Workshop, Lecture Series, and More," *MIT Faculty Newsletter*, Vol. XXII No. 3). Prof. Amy Smith and the D-Lab have worked on clear water projects and alternate sources of charcoal production for cooking, to lessen deforestation. The cholera outbreaks call attention to the need for improved water quality and clear water resources. Prof. Michel DeGraff, Dr. Vijay Kumar, and Prof. Haynes Miller have led efforts to improve STEM education through the use of technology-enhanced active-learning resources and methods in Haitian Creole, also known as "Kreyòl" ("The

MIT-Haiti Initiative: An International Engagement," *MIT Faculty Newsletter*, Vol. XXIX No. 1). Prof. James is evaluating post-disaster food and water development programs in Haiti with support from J-WAFS (the Abdul Latif Jameel World Water and Food Security Lab).

Graduate students, professors, and scholars of Haitian descent are integral to MIT, as well as belonging to an important community in the City of Cambridge, whose public schools have long offered bilingual programs for Haitian students. Just this year, the Boston Public Schools system, with the help of Prof. DeGraff, launched the first ever two-way (English and Kreyòl) immersion program in Massachusetts – with a curriculum that will enrich the humanity of both Haitian and non-Haitian children in the Boston area.

President Trump's comments are only one example of the many efforts to discredit constituencies and communities who are our fellow citizens, students, and colleagues. Last spring, an MIT faculty, staff, and student coalition organized a Day of Action/Day of Engagement to encourage responses that defended our beliefs in inclusiveness and democracy. This effort will be continued this April 17. The call for this follow-up Day of Action/Day of Engagement can be found on page 11. We encourage faculty to sign on to this effort, and to plan to participate at whatever level appropriate.

Editorial Subcommittee

#MeToo at MIT
Silbey, from page 1

butions, not mentored them, not promoted them, all the while grooming one man after another to take *his rightful place* for succession and success in the workforce.

As disabling as they can be, sexual harassment or assault are not the only – or even the largest – source of gender subordination in most work environments. Women’s occupational inequality is driven by far subtler processes that happen every day, like being ignored or having contributions overlooked or appropriated, or being assigned to lower status roles while men are pushed ahead, honored and celebrated, often on the basis of women’s work. Women’s subordination is a consequence of their invisibility other than as sexual objects. That is why it is time to address what we might call “the elephant in the room.”

Everyday sexism and subordination

As demeaning and frightening as assault and sexual harassment are, inattention and disrespect are pernicious too. They are effective in systematically denying women their rightful opportunities at work and in society, desired expertise, and legitimate positions of professional authority. For example, a recent obituary (*NY Times*, December 31, 2017) for Stanford neuroscientist Ben Barres (MIT ’76) quotes him as saying that “people who don’t know I am transgendered treat me with much more respect: I can even complete a whole sentence without being interrupted by a man.” Yet often women who have achieved exceptional status and position cannot expect the same. This is true even in the most elite and august professional arenas. Although energetic give-and-take debate characterizes oral arguments before the U.S. Supreme Court, these historic engagements have become a showplace of habituated gender discrimination. “When Sandra Day O’Connor was the one woman on the court, 35.7% of the interruptions were directed at her; in 2002, 45.3% were directed at O’Connor

and Ginsburg. In 2015, 65.9% of all interruptions on the court were directed at the three female justices. With more women on the court,” write Jacobi and Schweers, authors of a study of oral argument, “the situation only seems to be getting worse.” [<https://hbr.org/2017/04/female-supreme-court-justices-are-interrupted-more-by-male-justices-and-advocates>].

Technology workplaces

Closer to home, the situation is no better and perhaps worse because technology companies – the ambition of most of our students’ post-graduate employment plans – are notoriously inhospitable to women. A 2015 survey of 200 senior-level women in Silicon Valley [“The Elephant in the Valley” <https://www.elephantinthevalley.com>] reported that 47% have been asked to do lower-level tasks that male colleagues are not asked to do (e.g., note-taking, ordering food, etc.); 66% say they’ve been excluded from social or networking opportunities because of gender; 88% have had clients or colleagues address questions to male peers rather than to them; 87% have been on the receiving end of demeaning comments from male colleagues; 75% say they were asked about marriage and family plans during job interviews. Ninety percent say that they have witnessed sexist behavior at company gatherings offsite and at industry conferences, and 84% have been told that they are too aggressive (with half hearing that on multiple occasions).

Although these well-educated, highly skilled tech professionals reported being the target of unwanted sexual advances from a superior, the everyday activities of their male colleagues were the more significant barrier to their enjoying satisfying work and rewarding careers. Business conferences conducted at golfing and fishing weekends, pick-up basketball games after work, and long nights drinking in bars that employ scantily-clad dancers and sex workers may not be consciously designed to demean or exclude women – but they do. This extra-curricular fun among colleagues effectively marginalizes women, limiting their ability to

develop professional networks, cultivate shared organizational or professional identity, and build friendships helpful for strong working relationships. While most men are not harassers, ordinary male-bonding and socialization rituals reinforce structures that reproduce degradation and subordination of women.

In 2015, President Reif appointed a Committee on Sexual Misconduct Prevention and Response, charged with overseeing the Institute’s policies and practices for preventing and responding to sexual misconduct and other forms of gender-based discrimination. For the last two years, the Committee has been updating *Policies and Procedures* on sexual misconduct, shaping a policy on consensual sexual relationships, and guiding the initiation of mandatory sexual misconduct prevention training (see page 8 of this issue). This is important work. However, gender problems in the academy, as elsewhere, extend beyond blatant sexual assault and harassment.

Gender stratification in engineering education

For more than a decade, I have been collaborating on a study of the education and careers of engineers. This was originally begun as an effort to see whether innovations in engineering education would produce a different kind of engineer as designers of the programs hoped (at Olin College of Engineering and Picker Engineering Program at Smith College). We followed a cohort of students (from these schools plus UMass and MIT) through college and into the workplace. In answer to the original research question, we found no significant variations in the career aspirations, political and social commitments, and post-college experiences across the four schools. Despite the innovative educational models and consistent with national data, women in our panel were twice as likely as men (in the three co-ed institutions) to switch out of engineering to other STEM majors. But men who switched out of engineering were more likely than women to switch to

non-STEM majors. In other words, the women wanted to stay in STEM, but not engineering. We also found that upon graduation, women who did stay in engineering earned on average \$17,000 less per year than did their male peers. And yet when women transferred out of engineering, they were paid a significantly higher salary (another approximately \$17,000) than the men who transferred out of engineering. In other words, there was little incentive for women to remain in engineering since high technology workplaces requiring engineering degrees valued women less than men.

Using interviews, diaries, and surveys, we tried to identify the taken-for-granted, often unnoticed and unintended practices that drove these high-achieving women away from engineering. (It should be noted that women entered college with preparation and SAT scores comparable to male students and often left with a higher average GPA.) Contemporary media accounts relentlessly describe toxic workplaces in Silicon Valley (and in finance). Interestingly, women engineering students do not describe their engineering education in similarly harsh terms. They offer narratives of generally supportive faculty and welcoming environments. Nonetheless, they also describe being sidelined on team projects, relegated to managerial rather than technical roles, and in the process being denied the same opportunities as male students to hone and sharpen their classroom learning through hands-on skills. Women become the coordinators and spokespersons for the teams, collecting materials, scheduling meetings, and sometimes becoming the team's public face; however, they also fear they are doing the "housework" for colleagues because they presumably lack comparable technical skills.

When women students move from classroom to engineering internships, they report similar and sometimes more blatant exclusion. While internships and summer jobs provide students additional opportunities beyond class projects to "try on" the role of engineer, these worksites

echoed the gender stereotyping experienced in school projects: men were assigned interesting problem-solving tasks where they could develop their analytic and technical skills, while women were more often assigned social and organizational tasks that did not value or grow their engineering skills. Almost without exception, men reported the internships and summer jobs as a positive experience, often the highlight of their education. Women's reports were just not as uniformly positive as were the men's. Some women spoke highly of their internships, but many thought that they were not given equal opportunities. As a consequence, fewer women than men report being confident that engineering can be a satisfying lifelong occupation.

Ideological support for inequality / Believing in Objective Merit

Differential experiences in projects and internships do not prevent the majority of female engineering majors from completing the course. While providing clear and strong criticisms of their experiences, they rarely recognize structural inequities or translate their experiences and their own marginality into a commentary on the engineering profession itself. Instead, perhaps admirably, they recommit themselves to finding a place in the profession. They explicitly reject feminist or institutional interpretations, often ending a story about differential treatment with the coda: "But I'm Not a Feminist." To most of the women we studied, feminism is a voice of complaint, asking for special treatment through affirmative action. They see feminism as an expression of partiality for women and so they reject it because it suggests that their own talent and experience could not meet objective standards of merit and individual achievement. They told us that they do and will succeed because they are better than those who complain and because engineering's objective standards of performance will reward their greater talent and effort. These accounts help to show how sex discrimination and the ideology of meritocracy work together to repro-

duce structural inequality on the basis of gender.

Is it possible that engineering education not only prepares future engineers with the technical skills required in high tech workplaces, but through its socialization processes also prepares women students to anticipate, and male students to reproduce, gender bias? Are we preparing the student or are we producing the tech workplace? Minimally, a culture of engineering education that valorizes technical prowess while denigrating social skills has significant consequences for the culture of the technological workplace, as well as for occupational sex segregation.

Sexism in economics

We could take this observation to another field. Like engineers, economists claim to be "very objective in their view of the world," despite empirical data to the contrary [www.nytimes.com/2018/01/10/us/politics/women-economics.html]. Just as undergraduate female engineers are confident that the engineering professions' merit criteria are objective, so too economists cling to the notion that they operate with objective tools and judgment. And yet, the recent outpouring of research on differential treatment of women in economics provides abundant evidence of systematic bias and examples of outright misogyny. Women's subordination in economics cannot be fully explained by hostile work environments, quid pro quo sexual harassment or women's ability and effort. The most common modes of gender subordination come from the more everyday activities of simply ignoring women's contributions, unconsciously preferring the company of men, and not acting when harassment is observed. "I don't think it's because we don't know what is implicit bias. We know," said Rhonda Sharpe, the President of the National Economics Association. "It's whether we stand up and call it out, and usually we don't." [www.nytimes.com/2018/01/10/us/politics/women-economics.html].

continued on next page

#MeToo at MIT

Silbey, from preceding page

The evidence has begun to circulate widely. Heather Sarsons found that men are tenured at roughly the same rate regardless of whether they coauthor or solo-author. Women, however, become less likely to receive tenure the more they coauthor. Erin Hengel found that papers written by female economists scored up to 6% higher on readability tests than those of men, but that they languish in peer review a half-year longer than those of men – independent of the outcome of the review. Economists report the same pattern of interruptions when women are speaking as is observed for STEM scholars and Supreme Court justices. Alice Wu documented outright hostility and misogyny in parts of the economics profession by analyzing posts in a job market rumor forum. From over one million anonymous posts exchanging information about who is hiring and being hired in the profession, she showed that the 25 most often used words associated with the female pronoun were not about economics or research skills. In order of frequency, they were: “hotter, lesbian, bb (Internet for baby), sexism, tits, anal, marrying, femi-nazi, slut, hot, vagina, boobs, pregnant, pregnancy, cute, marry, levy, gorgeous, horny, crush, beautiful, secretary, dump, shopping, date, nonprofit, intentions, sexy, dated, and prostitute.” The parallel list of words associated with discussions about men reveals no similarly singular or hostile theme. It includes words that are relevant to economics, such as “advisor, Austrian (a school of thought in economics), mathematician, pricing, textbook, Wharton” as well as more general terms reflecting dominance such as “goals, greatest, Nobel, bully, burning, fought.”

[www.nytimes.com/2017/08/18/upshot/evidence-of-a-toxic-environment-for-women-in-economics.html].

We disregard anonymous Internet postings at our peril, even as it protects those who wish to hide behind its affordance of anonymity. This is speech spoken freely and without consequence,

believing it spoken to like-minded Internet travelers. We may think this “cesspool of misogyny” (so described by David Romer, a Berkeley economist) is too far removed from our lives at work

of belief in “universalistic (or meritocratic) criteria” among “high status,” and science-based occupations [Xie, Fang, & Shauman, 2015, p. 333] where gender discrimination persists at high rates.

Eliminating male predation will certainly make many women’s lives better. But alone it will not make a level playing field. To understand persistent subordination and inequality, we must attend to the habitual routines of our scholarly endeavors

and with our students. But it is the underground foundation for the visible structures of merit and fairness we aim to establish and sustain in our own institution. Whether the aggregate effects of anonymous posting on the Internet outweigh the consequences of a system of action without accountability is a discussion worth having by itself, perhaps for another time.

Aspiring to meritocracy

I frequently explain that MIT is one of the most meritocratic institutions of higher education. I am proud and delighted to be able to say this. Students are admitted on the basis of their own record, without preference for family or social connections, or reward for past or future philanthropic donations. Of the most competitive and highly ranked institutions, MIT has the lowest percent of our student body coming from the highest income strata, among the lowest median family income, and until recently the largest percent coming from the bottom half of the income distribution. On issues of admissions, we show no signs of income, race, and gender discrimination. Salaries are regularly scrutinized for indicators of similar discrimination.

Nonetheless, when we look inside the work we do here – both in teaching our students and working with faculty and staff – the story is not the same. Perhaps it is time to push the inquiries and efforts deeper into the ideological justifications that mask misogyny. Indeed, recent scholarship has underscored the persistent role

Eliminating male predation will certainly make many women’s lives better. But alone it will not make a level playing field. To understand persistent subordination and inequality, we must attend to the habitual routines of our scholarly endeavors – after work gatherings, weekend socializing, task assignments, habits of interruption, biases in peer review and against co-authorship – all of which are established initially by male norms and framed by what is comfortable for men. The ugly Internet speech reveals what we can find if we dig deep, but we need only study and assess the routine activities of our work to understand how our systems of measuring merit do anything but. We achieve true equality not when the first woman Einstein is named and celebrated, but when normally competent – no less especially accomplished – women are treated the same as the most ordinary of men. And please let me be clear: this is not about lowering standards. It is time we rid ourselves of that shibboleth once and for all.

Understanding the #MeToo movement and addressing the systematic subordination of women requires that we understand the structural foundations of professional successes: whoever controls resources and sets the rules of the game will come out ahead. Until now, women have been systematically excluded from both. ■

Susan S. Silbey is Leon and Anne Goldberg Professor of Humanities, Professor of Sociology and Anthropology, and Professor of Behavioral and Policy Sciences, and Chair of the Faculty (ssilbey@mit.edu).

Solidarity at its Best

Kochan, from page 1

While these basic features of Francisco's saga and his release were well covered in the media, what is less understood and appreciated are the collective efforts of the coalition of powerful groups that heretofore had never worked together that made it happen.

That story starts with Francisco's unbreakable spirit. He started his comments that morning by first thanking God and attesting to his faith. He went on to describe, in both English and Spanish (for the benefit of TV crews from Spanish- and English-language stations), how he kept his spirits up through this ordeal by keeping busy – cleaning the clothes of his cellmates, translating for those who didn't speak English, and dreaming about various Spanish dishes he might cook if he was still there on Christmas. But he had his dark days as well, especially as he thought about his children and new baby. Yet he persevered, convinced that in America justice would prevail because, as he said, he had broken no laws. And, his hopes were bolstered by what he saw as the broad, dedicated, and influential mix of people working on his behalf.

Francisco even took the time to praise his guards as good people who treated him well. As I listened, I thought just maybe I was witnessing a contemporary small scale Nelson Mandela, a remarkably unbitting, forgiving, and pious example of why we gain so much from those with the courage to immigrate to our country.

Aside from hearing Francisco's inspiring words, what was so remarkable about the Friday event was the diversity of those who came to celebrate his release. It epitomized the original meaning of solidarity – working together for the common good. I can't ever remember being at a gathering in which an immigrant and his family, MIT, the Service Employees International Union (SEIU), Jobs with Justice (an NGO that advocates for immigrant and worker rights), and one of Boston's most presti-

gious law firms, Goodwin Procter, celebrated something they accomplished together. Fittingly, Francisco expressed his appreciation to all both in English and Spanish.

SEIU Local 32B and Jobs with Justice (JWJ) carried the torch for Francisco and his family since he was arrested. They

Francisco even took the time to praise his guards as good people who treated him well. As I listened, I thought just maybe I was witnessing a contemporary small scale Nelson Mandela, a remarkably unbitting, forgiving, and pious example of why we gain so much from those with the courage to immigrate to our country.

organized rallies, engaged politicians to support his cause, set up a "go-fund-me" site for contributions, and stayed in constant contact with Francisco while attending to his family's needs in his absence. Their mantra, voiced by Lily Huang, Co-Director of Mass. JWJ, spoke volumes, "immigrant rights are worker rights": organizations that represent immigrant workers cannot separate out these two areas of law and politics.

MIT helped mobilize the legal team that successfully petitioned the court first to stop ICE from moving Francisco to an out-of-state jail and then convinced government attorneys that he could not be held for more than six months without having a hearing on his case. And about 200 MIT faculty, through personal contributions, raised over \$30,000 to support the family in its time of need. MIT President Rafael Reif often uses the term "One MIT" to describe how the Institute values all members of its community – students, faculty, and staff alike. True to its word, MIT translated it stated values into action.

The lawyers who worked on Francisco's case, led by John Bennett from Goodwin Procter, donated their time and

expertise to Francisco's cause. Their only regret, as Bennett said, is that there are many others still detained by ICE who also need assistance, but have not gained as much public awareness or support as Francisco. They should not be forgotten, a point that Francisco also made in his remarks.

And the fight for justice for Francisco must go on. His petition for asylum is still before the 10th Circuit Court of Appeals, so his coalition of supporters will need to keep working together as the case moves forward. It is important not to declare victory yet, but to keep this case firmly in the public eye until justice is served and the family can be assured it can remain living together in this country.

Perhaps, as Francisco said, this was a Christmas miracle for him and his family. But there is a larger message here for all of us: If this diverse set of organizations and people can come together in solidarity to support each other in this family's time of need, perhaps we can do so as well by standing up for what is right and fair on other divisive issues facing our country and our society. An old labor song calls for "Solidarity Forever." I don't know about forever, but now is as good a time as ever to build on this extraordinary example of solidarity at its best. ■

Thomas A. Kochan is George Maverick Bunker Professor of Management (tkochan@mit.edu).

Introducing MIT's New Sexual Misconduct Prevention and Response Training and Consensual Relationships Policy

David A. Singer

IN A HEARTFELT EMAIL to the MIT community in November, President Reif noted how sexual harassment “violates our fundamental expectations of respect and equality,” and acknowledged that MIT is “not an oasis of safety.” The email arrived in the wake of a series of revelations of misconduct by elected leaders, media personalities, and celebrities, and sought to reassure the community that MIT is taking steps to address the problem within our own ranks. Importantly, he noted that some of these efforts have been years in the making.

Starting this year, all faculty and staff will join all incoming students and new hires in participating in foundational online sexual misconduct prevention and response training. MIT is also implementing a new consensual relationships policy, which prohibits certain relationships in which academic and/or supervisory authority are present. As the inaugural chair of the Committee on Sexual Misconduct Prevention and Response (CSMPR), I would like to provide the faculty with some context for these new policies.

The CSMPR was created in the fall of 2015 in response to the final report of the Sexual Assault Education and Prevention Task Force, an ad hoc committee charged by the Chancellor in 2014 to review current policies and education efforts toward all forms of sexual misconduct. The Task Force recommended that MIT create an advisory board to review policies, services, and programs on campus and to make sure that momentum was not lost with a variety of efforts already underway. In the fall of 2015, President

Reif gave the CSMPR its charge: to provide policy guidance to the Provost, Chancellor, Vice President for Human Resources, and Institute Community and Equity Officer, and to oversee an Institute-

Force, the CSMPR studied the issue of faculty and staff training. We heard anecdotes from around MIT that students were often better informed about Title IX and applicable laws than faculty and staff,

Starting this year, all faculty and staff will join all incoming students and new hires in participating in foundational online sexual misconduct prevention and response training. MIT is also implementing a new consensual relationships policy, which prohibits certain relationships in which academic and/or supervisory authority are present.

wide approach to prevent and respond to sexual misconduct and other forms of gender-based discrimination.

The Committee is large by MIT standards: our roster of 32 members includes faculty, staff, and students from across the Institute's Schools, offices, and divisions. (See text box, page 10, for a link to the CSMPR's Website.) Our first challenge was to find a room on campus large enough to accommodate our monthly meetings.

The Committee conducted a triage assessment and agreed that two main issues warranted special attention: the absence of required sexual misconduct prevention and response training for faculty and staff beyond new employees; and the absence of a policy on consensual relationships in MIT's *Policies and Procedures*.

Sexual Misconduct Prevention and Response Training

Spurred by the final report of the Sexual Assault Education and Prevention Task

Force, the CSMPR studied the issue of faculty and staff training. We heard anecdotes from around MIT that students were often better informed about Title IX and applicable laws than faculty and staff, despite the fact that all faculty and some staff are considered “responsible employees” who are required to take steps after being informed of an instance of sexual misconduct. Some faculty expressed a lack of confidence in their ability to help a victim of sexual misconduct and a lack of knowledge about private and confidential campus resources. We also explored the policies of MIT's peer institutions and learned that many schools require online sexual misconduct prevention and response training for all employees, not just new hires. Moreover, Massachusetts lawmakers have been considering new legislation that would require all state employees, and possibly all private college and university employees, to undergo appropriate training. It quickly became clear to the CSMPR that MIT should stay ahead of these trends and not lag behind its peers. But more importantly, we agreed that required training is necessary to promote a common and consistent set of standards and expectations with regard to Title IX, and to ensure that faculty and

staff have the know-how to respond to and prevent sexual misconduct at MIT.

In the spring of 2016, the Committee – guided by our experts from the Title IX Office and Violence Prevention & Response – identified the three leading online training products used by colleges and universities. Committee members evaluated each program on their own time, and representatives from each company joined us to walk us through the programs and answer our questions. We continued this vetting process throughout the spring and came to a consensus that EverFi Haven for Faculty and Staff was our top choice for MIT.

One benefit of adopting Haven is that EverFi is already the vendor for our undergraduate and graduate student training programs, which means that everyone at MIT – faculty, staff, and students – will ultimately “speak the same language” about sexual misconduct. As to the program itself, members of the CSMPR liked its logical flow, high-quality videos, sensitivity to diversity, and simple interface.

In addition to recommending Haven as the training product, the Committee further recommended that training should be required for all faculty and staff (students and new hires already receive required training), and that MIT should consider brief refresher courses in the future for employees who have already received training. These recommendations appeared in the CSMPR’s first annual report.

With encouragement from the Provost and Chancellor, I met with each of the five School deans during the summer and fall of 2016 to share these recommendations, and I was invited to return to three School council meetings. I also represented the CSMPR at a November 2016 meeting of the Faculty Policy Committee and a February 2017 Deans’ Group meeting. Feedback from these meetings was generally positive, but some faculty expressed reservations about various aspects of the online program and uncertainty about faculty compliance with required training. Provost Marty Schmidt, Chancellor

Cindy Barnhart, and Vice President and General Counsel Mark DiVincenzo visited the five School councils late last year to continue these discussions.

The program is not perfect. Some faculty might find that clicking through a series of scenarios, videos, and quizzes is less satisfying than in-person training, an

The program is not perfect. Some faculty might find that clicking through a series of scenarios, videos, and quizzes is less satisfying than in-person training, an option that we are continuing to explore for the full community (it will be offered as an option to individuals by request).

option that we are continuing to explore for the full community (it will be offered as an option to individuals by request). In response to faculty feedback, we have customized the front end of the training program and added a wealth of MIT-specific details, including contact information for relevant offices. The Title IX office led by Sarah Rankin, in conjunction with the Provost, Chancellor, HR, and the CSMPR, will continue to work with the vendor to improve the program as we receive feedback in the coming months.

As anyone who takes the training will see, the program covers all aspects of Title IX and related laws and includes modules on supporting survivors of sexual assault, encouraging bystander intervention, and recognizing the potential for violence on campus and in the workplace. The program offers specific guidance on requirements of supervisors in responding to student and employee revelations of sexual misconduct, addressing inappropriate behavior from a supervisor, and responding to intimate partner violence that affects the workplace. The program takes approximately 45 minutes to complete.

New Policy on Consensual or Romantic Relationships

After making a recommendation about sexual misconduct prevention training,

the CSMPR turned its attention to MIT’s policies on consensual relationships. As of 2017, MIT was an outlier among major research universities in that we had no official policy, just a brief mention of sexual relationships in our conflict of interest policy (Section 4.4 of *Policies and Procedures*). In contrast, all the other uni-

versities examined by MIT’s Office of the General Counsel (OGC) had detailed policies on relationships between faculty and undergraduate students and other combinations in which academic and organizational hierarchies create inherent conflicts of interest and potential for abuse of authority.

Beginning in 2016, the CSMPR worked closely with Marianna Pierce, policy and compliance specialist in HR, who is an attorney with substantial experience in drafting policies for universities and nonprofit organizations; she sketched out the contours of a policy that fit MIT’s often complicated academic and employment environments. We engaged in an iterative process, joined by Vice President and General Counsel Mark DiVincenzo, senior employment attorney Allison Romantz from OGC, and Vice President for Human Resources Lorraine Goffe, to tweak the policy to address relationships involving student teaching assistants (TAs), graduate resident tutors and advisors (GRTs/GRAs), and instructors of online courses.

With a revised draft in hand in early 2017, we sought feedback from the faculty officers, Heads of House, GRT Council, Deans’ Group, Graduate Student Council, a group of EECS graduate and undergrad-

continued on next page

MIT's New Sexual Misconduct Policy

Singer, from preceding page

uate TAs, Faculty Policy Committee, and ultimately Academic Council. Many aspects of the policy were not controversial, including rules for relationships with undergraduates. However, the applicability of the policy to MOOC instructors required more discussion, including a separate meeting with the directors of MIT's professional and executive education programs. We could not please everyone, but the resulting policy is, in my opinion, both thoughtfully designed and appropriately suited to MIT's multifaceted workplace.

Here are the basics of the consensual relationships policy:

- No one in the MIT community other than another student (undergraduate or graduate) can have a sexual or romantic relationship with any undergraduate student. (Special rules apply for TAs and GRTs.)

- No one can have a sexual or romantic relationship with a graduate student if that person is (or might reasonably be expected to be) in a position of authority over that graduate student.

- Principal Investigators (PIs) are prohibited from having a sexual or romantic relationship with a graduate student or postdoc over whom the PI has direct or indirect authority.

- All supervisors (including faculty supervisors) are prohibited from having a sexual or romantic relationship with anyone they supervise or anyone over whom they otherwise have direct or indirect influence or authority.

Preventing and Addressing Sexual Misconduct at MIT

For reporting options, policies, and resources

Title IX and Bias Response Office

617-324-7526

<https://titleix.mit.edu>

For 24-hour support and information

Violence Prevention and Response (VPR)

617-253-2300

<https://studentlife.mit.edu/vpr>

To report a crime or for police assistance

617-253-1212

<http://police.mit.edu>

For details on the consensual relationships policy

<https://policies-procedures.mit.edu/consensual-sexual-or-romantic-relationships-workplace-or-academic-environment>

For details on the Committee on Sexual Misconduct Prevention and Response (CSMPR)

<http://facultygovernance.mit.edu/committee/committee-sexual-misconduct-prevention-and-response>

- Relationships between MOOC instructors and students are prohibited only when academic authority is involved, such as when the instructor is involved in grading and the student is seeking academic credit or a credential.

The full policy provides more detail and definitions, and also offers guidance to faculty on notification, recusal, and managing potential conflicts of interest. An FAQ is also available; please see the text box for links to the relevant Websites.

Concluding Thoughts

Required training and the new consensual relationships policy have been in development for more than two years, and reflect a collegial and iterative process involving

faculty, staff, and students. I think it is important to note that these policies affect every single member of this community. As President Reif wrote in his November email, the important work of preventing sexual misconduct is up to all of us. Training will ensure that all of us understand the seriousness of sexual misconduct and how to respond to it, while the consensual relationships policy is an important step toward addressing the abuse of authority and conflicts of interest that can arise when one person has academic or supervisory authority over another. ■

David A. Singer is an Associate Professor in the Political Science Department and Chair of the Committee on Sexual Misconduct Prevention and Response (CSMPR) (dasinger@mit.edu).

MIT Day of Action: April 17, 2018 Call For Participation

Roger Levy
Sally Haslanger
Cesar McDowell
for the Day of Action
Organizing Team



THE SECOND ANNUAL Day of Action at MIT, a large-scale grass-roots civic engagement and action event, will be held on Tuesday, April 17, 2018. The Day of Action comprises community-contributed content including lectures, town-hall sessions, film screenings, workshops, and more, devoted to the political, economic, environmental, and social challenges facing us today, and to community building and strengthening. It is open to all parts of the MIT and broader local community. Last year's Day of Action had

over 70 events and drew over 1,000 participants. April 17 is a student holiday, but not an Institute holiday, so participation doesn't require cancelling or skipping classes for MIT faculty or students.

Together, we act to fulfill MIT's mission "to bring knowledge to bear on the world's great challenges," seeking open-minded dialogue with peers and colleagues of diverse backgrounds and views. All of us, regardless of political affiliation, can contribute to identifying and seeking out the roots of the greatest challenges facing our

society, and to planning for actions addressing these challenges in the present day and in times to come. We intend this Day of Action to be open to all, representing the full diversity of our society. We are made stronger by open, respectful dialogue and the exchange of ideas from the widest variety of intellectual, religious, class, cultural, and political perspectives. We invite you to join us, to share your concerns and questions, your hopes and ideas, and your knowledge and skills.

You can join our efforts by helping organize or volunteer, by submitting your idea for a session or activity, or simply by telling us you plan to attend and spreading the word!

To learn more and get involved, visit dayofaction.mit.edu. You can read about last year's events at MIT [<https://www.dayofaction.mit.edu/events-2017>] and Princeton [dayofaction.princeton.edu], and about MIT's March 4 Movement of 1969 [science.sciencemag.org/content/163/3872/1175].

The Day of Action organizing team can be contacted at dayofaction@mit.edu. ■

Roger Levy is an Associate Professor in the Department of Brain and Cognitive Sciences (rplevy@mit.edu);

Sally Haslanger is a Professor in the Department of Linguistics and Philosophy (shaslang@mit.edu);

Cesar McDowell is Professor of the Practice of Community Development in the Department of Urban Studies and Planning (cesaar@mit.edu).

Trump's Insults Pour Salt in Wounds of Haitians Healing After Succession of Disasters

Erica Caple James

ON JANUARY 11, 2018, President Donald J. Trump reputedly denigrated migrants to the United States of African, Caribbean, and Latin descent by asking why the U.S. would want to permit persons coming from so-called “shithole countries” to enter America. It goes without saying that these words are morally repugnant and belie our nation’s invitation to receive “your tired, your poor, your huddled masses, yearning to breathe free.”

Whether stated exactly as reported or in some other similarly disparaging form, Trump’s insults poured salt in the wounds from which Haitians are still healing after a succession of natural and human-authored disasters.

Eight years ago, on January 12, 2010, Haiti suffered an earthquake that killed between 220,000 and 300,000 people, displaced more than a million people, destroyed much of the capital’s infrastructure, and leveled the gains the country had recently made economically and politically. Political upheaval (1991-1994, 2004-2006), devastating floods and mudslides (1998, 2004), and resulting food shortages and food riots (2008) hampered the Haitian government’s efforts to secure democracy and economic security and deepened the nation’s dependence on international governmental and non-governmental humanitarian and development aid.

In many cases, however, humanitarian relief worsened Haiti’s recovery. The aid that was to reach Haitians to repair these devastating environmental, economic, and political conditions did not arrive or was largely appropriated by the humanitarians that raised money from Haitians’

suffering. So-called humanitarians also introduced a devastating infectious disease that had not been seen in the country for more than a century. Beginning in 2010, when U.N. peacekeeping forces failed to prevent their own human waste from leaching into a major river in the Artibonite region, cholera was

Eight years ago, on January 12, 2010, Haiti suffered an earthquake that killed between 220,000 and 300,000 people, displaced more than a million people, destroyed much of the capital’s infrastructure, and leveled the gains the country had recently made economically and politically.

reintroduced in Haiti from Nepal. Since then the disease has killed 10,000 people and infected nearly one-tenth of the population. The U.N. has never accepted responsibility for its fault, nor has it provided reparations to victims who still struggle with the aftermath of disease.

Tens of thousands of Haitians still reside in makeshift camps since the earthquake leveled their homes. In 2016, Hurricane Matthew devastated agricultural production and damaged infrastructure in the south. The aftermath of the storm overburdened health facilities still struggling to meet the needs of Haiti’s people.

Although international governmental and non-governmental development organizations continue to provide aid to Haiti, the structure of assistance, largely filtered through private for- and not-for-profit organizations, has produced a nation now known as the “Republic of NGOs” (non-governmental organizations).

Instead, as Trump’s reputed words remind us, Haitians have long been held at fault for cataclysms not of their own making. Conservative American religious leader Pat Robertson called the 2010 earthquake divine retribution for Haitian’s reputed “pact with the Devil” to achieve independence from France. *The*

New York Times reported recently that Trump castigated all Haitians seeking to migrate to the U.S. as having AIDS. The accusation thereby justified a revocation of the Temporary Protected Status that permitted Haitians to apply for entrance to the U.S. since 2010, especially given the humanitarian emergency in Haiti. Trump’s revival of an erroneous assertion from the CDC (made in 1982) that Haitians were vectors of HIV is a painful evocation of the negative stereotypes that have been directed toward Haiti and Haitians since the nation’s independence from colonial France in 1804.

Despite their achievement as the first black republic, whose defeat of Napoleon’s forces precipitated the Louisiana Purchase, the fledgling democracy was not celebrated at a time when the United States continued to profit from chattel slavery. Although Haitians fought in the Battle of Savannah (1779) to help Americans gain independence from



Two people look back as internally displaced Haitians line up for food during a UN distribution in Port-au-Prince on January 18, 2010.

Britain, in the 19th century, they were excluded from the emerging international community as embodiments of the “cancer” of black liberty.

In 1825, independent “Hayti” was forced to agree to pay reparations of 150 million gold francs to French colonists for the loss of their property or face continued foreign military incursions to reacquire the “pearl of the Antilles.” Although reduced in 1838 to 90 million gold francs, Haiti’s payment took more than a century and was equivalent to more than U.S. \$20 billion.

The U.S. military occupation of Haiti from 1915-1934, a violent intervention intended to secure American military and business interests in the nation and the region, left few infrastructural improvements. The intervention did leave behind a U.S.-trained Haitian military force that would later be mobilized in predatory

ways against the Haitian people, most notably by the infamous Duvalier dictators who ruled between 1957 and 1986.

During this period, the Duvaliers (François “Papa Doc” and son Jean-Claude) would accumulate external debt and extract wealth from the nation with tacit support from the U.S. and other nations. After the ouster of Jean-Claude, Duvalierist cronies attacked the pro-democracy sector and on September 30, 1991, deposed the nation’s first democratically elected president (former priest Jean-Bertrand Aristide).

Haitians will readily admit that their democracy has been hobbled by these internal forces, including the inadequacy and corruption of many of their leaders, challenges with promoting democracy and upholding the rule of law, and an educational system that has privileged instruction in a language (French) that

the majority of the nation does not speak. But Haitians have continued working to build their own nation with the support of their compatriots in the United States (and other nations) whose labor and entrepreneurship support our economy.

That Trump rejects Haitians’ accomplishments and their nations’ unique history is in part a failure of History as a discipline. But with heads held high and seemingly endless endurance, the dignity, faith, and generosity of the Haitian people have much to offer the world at a time of such inhospitality and incivility. ■

Erica Caple James is Associate Professor of Medical Anthropology and Urban Studies in the Department of Urban Studies and Planning (ejames@mit.edu).

Editor’s Note: This article originally appeared in *The Globe Post* on January 12, 2018.

Inclusive Community Faculty Dinners

Edmund Bertschinger

AS INSTITUTE COMMUNITY AND Equity Officer I am charged with cultivating a caring community, with the aim of helping everyone here feel that MIT is home. After focusing on staff and students for several years, this year's emphasis turned to faculty. Early in the fall semester, I wrote individually to every tenured and tenure-track MIT faculty member inviting them to participate in a reception and dinner at the MIT Samberg Conference Center. The purpose was to share experiences and ideas about what inclusive community means and how to strengthen it at MIT. The invitation referred to the statements all academic departments made last year valuing students' well-being and diversity and also to concerns about the ability of some students and faculty to remain at MIT to study or to work in light of executive orders related to immigration. The invitation stated, "I need your ideas on how MIT can respond to these challenges and opportunities to strengthen our community. As a faculty member, you are central to the mind, hand, and heart of our university. Early this fall, before academics get too intense, is a good time to reflect on what it means to be an inclusive community, so that we can plan together ways to reduce the stress and improve the well-being of us all." When asked why he accepted the invitation, one faculty member replied that the invitation seemed so personal.

The dinners were made possible by the outstanding contributions of the staff who supported them: ICEO Program Director Beatriz Cantada, Diversity and Inclusion Officer JJ Jackson, and the staff of the Samberg Conference Center.

We hoped that 15% of faculty would reply and that 10% would attend one of the two scheduled dinners. The response was much better: about 30% replied and more than 15% signed up for the dinners. Each dinner was attended by about 70 faculty members. The attendance rate was remarkably uniform across gender, race/ethnicity, and School. Two factors were associated with a significantly higher attendance rate: (1) untenured faculty were about twice as likely as tenured faculty to attend a dinner, and (2) about half of the attendees at one of the dinners reported being freshman advisors (compared with less than 10% of faculty overall), a volunteer role that cultivates community. Many other faculty wanted to attend but could not for scheduling reasons.

Many faculty have attended the Random Faculty Dinners started in 1986 by then Associate Provost S. Jay Keyser. The two dinners held last September were similar in spirit but differed in three ways. First was the specification in advance of a focus on "the challenges and opportunities to strengthen our community." Second was a structured program, described below. Third was the relatively large size of each group, which was a pleasant surprise to most attendees. This was due simply to the large number of invitations sent; in 2010, Prof. Keyser reported that the acceptance rate for invitations to his dinners was 20%, which he noted was about the percentage of faculty who belong to committees outside their departments. The relatively large percentage of junior faculty at the dinners last fall shows that this correlation is not causal.

Dinner 1: The key elements of inclusive community

For the first dinner, faculty were presented a set of four discussion questions:

1. What are the key elements of an inclusive, respectful, and caring community?
2. What are some of the greatest challenges to achieving the inclusiveness we seek at MIT?
3. What should MIT leaders and administrators do to strengthen the community?
4. What can MIT faculty do to strengthen the community?

After faculty met each other and shared conversations around these questions over dinner, we convened as a group using an audience polling system to gather responses to the first two questions. Attendees could send a text message or use a Web-based form to anonymously transmit their comments. For the first question, the 63 responses nearly all fit into one of six categories: in descending order of frequency these were communication (e.g., "Open and honest discussions of difficult and even divisive issues"), navigating social identity (gender, race/ethnicity, country of origin, etc.), empathy (e.g., "Recognizing humanity in someone who's completely different from you"), respect, humility, and food and fun together. Analyzing the responses in real time, we created a poll asking faculty to vote on which of the following three elements was most important. The responses were:

- Learning to listen to others: 50%
- Valuing individuals across differences: 34%
- Sharing meals and experiences together: 16%

Discussion during and after the dinner suggests that sharing meals together is more valuable as a catalyst than these numbers indicate. Several faculty recalled the “blue room,” as Pritchett dining hall in Walker Memorial was called in the 1990s, as a place where faculty routinely came together outside their departments. The long tables encouraged one to meet new people in a way that the R&D Pub in Stata does not.

Responses to the second question (“the greatest challenges”) were not simply the mirror image of responses to the first. Many faculty showed that they cared deeply about increasing the value of inclusion at MIT and felt frustrated that it was not given a higher priority within the dominant culture. Most responses referred either to challenges of navigating social identity (e.g., “Negative assumptions about some groups of people at MIT”) or the inertia of academic culture (e.g., “We feel that this is not a scientific question” and “We see inclusiveness as hostile to excellence”). Surprisingly few faculty identified time or stress as key barriers, perhaps because the group was self-selected to make time for community by attending the dinner.

Instead of utilizing the polling system for the final two questions, we asked participants to further discuss the key elements of inclusive community and to report out suggestions table by table. In summary, the key elements identified in the group discussion were:

1. A sense that what you have to contribute is valued.
2. Dedicating time to interacting with and getting to know others.
3. Creating work environments that support challenging traditions working against inclusivity.

Suggestions included holding random “MIT people” dinners to allow everyone to mix, not just faculty; providing training on implicit bias; and helping departments manage the excessive informal advising some faculty members experience because they are viewed as being more approachable by students. This is a regular occurrence for female faculty and faculty of color.

Responses to the second question (“the greatest challenges”) were not simply the mirror image of responses to the first. Many faculty showed that they cared deeply about increasing the value of inclusion at MIT and felt frustrated that it was not given a higher priority within the dominant culture.

Dinner 2: Major issues of our time

After receiving feedback from attendees, we decided to provide more structure for the second dinner held eight days later. Faculty were assigned to tables with the aim of reducing isolation of members of underrepresented groups. The 10 tables received individual assignments at the beginning of the dinner (with five distinct assignments, two tables reported out on each theme). The anonymous feedback system was not used, providing more time for discussion at the tables. The feedback received afterwards was almost entirely positive.

Because the five topics are of broad interest and the discussion is of value to the entire MIT community, I summarize each topic and the discussion from the second faculty dinner.

Climate data at MIT

Responses to the Quality of Life Surveys taken by faculty, staff, and postdocs in 2016 and students in 2017 were summarized for a specific item (“I have to work harder than some of my peers/colleagues to be taken seriously”) from selected groups (faculty, staff, postdocs, undergraduate and graduate students, subdivided by several demographic measures).

The survey results show some striking differences in responses for underrepresented groups (LGBTQ, underrepresented people of color, and female faculty and graduate students) compared with those for men. Specifically, respondents from the underrepresented groups were much more likely to agree that they have to work harder to be taken seriously than men did – female faculty are three times more

likely than male faculty to agree. The differences are strikingly large and cannot be statistical flukes. Faculty were asked to discuss whether the differences arise from inequitable experience or treatment of different groups, to consider how this might be tested, and to suggest measures to improve our understanding and reduce any inequities.

Many faculty were puzzled by the data and wondered about effects of response bias, e.g., perhaps respondents who felt equitably treated responded at lower rates. (There is no evidence of this; in fact, the results for faculty themselves are especially striking and supported by numerous individual stories.) Attendees focused on students, not on faculty or staff. Two faculty members discussed MIT’s reputation as a “praise-free zone,” with one noting that this was a decades-long problem. The other said that after he sent emails congratulating students who performed well on an exam, a student responded with gratitude saying that it was the first time someone at MIT told her she was doing something right. Attendees took note of this; perhaps more students will now hear praise from faculty.

continued on next page

Inclusive Community Faculty Dinners
Bertschinger, from preceding page

Inclusive teams

Google has been studying what makes some teams more effective than others. Given MIT's broad culture of collaboration and use of team-based learning, it seems worthwhile to examine the research. Google found that for their employees, psychological safety, measured for example by how comfortable team members feel taking risks, is the most important factor determining how effective a team can be. At the dinner, faculty were asked how important teams are in student and faculty success, whether they think Google identified the right factors, and what promising practices exist to help MIT teams be effective. This was a challenging problem set!

Faculty shared examples of students feeling excluded in teams and noted that the use of teams varies across disciplines. They noted that tenure is granted to individuals and not teams, and some felt that the team concept was more corporate than academic. They recognized the importance of building a sense of belonging and cited freshman learning communities as a good example. One faculty member asked whether academic advising could be made more team-oriented, as it is in some freshman advising seminars. However, there was little if any discussion about whether faculty themselves felt welcomed in their communities and how this might depend on group identity. The subject of teams at MIT is ripe for further exploration.

Inclusiveness and diversity in a meritocracy

Faculty were given a short letter of personal reflection about MIT meritocracy written by a faculty member who attended the first dinner. The letter pointed out that student culture creates a hierarchy by discipline and subdiscipline and suggests that MIT's value of meritocracy (or perhaps its closely-related focus on excellence) is largely responsible for this. It notes that admissions processes

seek individual stars, not empathetic, supportive, and highly collaborative people. We asked faculty whether they agreed with these concerns, what are the appropriate venues for such discussions, and whether they thought MIT should describe itself as a meritocracy.

Faculty said they are not ready to give up on meritocracy, but it needs to be redefined. Comments such as "you got here because [of your gender or race]" reinforce exceptionalism and distort meritocracy. In practice, the concept of meritocracy is most strongly espoused by the dominant group, who tend to be white males. When women faculty are three times more likely to feel they have to work harder than men to be taken seriously, and when faculty of color are treated differently than white faculty, as some have shared with me privately, meritocracy has not been achieved.

Free speech, civil rights, and political discourse

Faculty were given the text of the First Amendment to the U.S. Constitution; a statement of MIT tradition to maximize freedom of speech and expression as foundations for scholarly inquiry; and a note that some universities have made formal statements on the place of free speech within their university communities (notably Chicago and Princeton). During the last two years, free speech has come into tension with civil rights on many college campuses, in some cases erupting into violence. Faculty were asked what MIT could contribute to the national debate about freedom of speech and whether they thought different academic disciplines offered distinct perspectives.

Faculty members broadly advocated pluralism while recognizing that MIT may be most effective when its statements focus in areas of domain expertise such as climate change and energy policy. They expressed concerns about use of social media for propaganda and the loss of civility in society. However, faculty had more questions than answers about this topic. After the dinner, we shared with attendees an excellent, thoughtful, and

balanced analysis of the tension between free speech and civil rights on college campuses, the PEN America Principles on Campus Free Speech. Like the others, this topic merits further conversation.

Civic engagement: What is the faculty role?

MIT's mission statement calls for us "to develop in each member of the MIT community the ability and passion to work wisely, creatively, and effectively for the betterment of humankind." Currently, national political decisions and debates on topics like the status of undocumented students, travel from some countries, funding for basic research, and the declining respect for higher education, create concern on college campuses. For some community members, these issues are deeply personal. Many of us are concerned whether people can be heard and valued at MIT regardless where they fall on the political spectrum. Faculty were given a note from a student requesting MIT's senior leadership to accept her help to enhance civic engagement at MIT. This student had attended an event in Washington, DC about the need for civic education especially for STEM students. Faculty were asked to draft a response to the student.

Faculty pointed out some ways in which MIT currently engages in these issues. Examples were shared from the School of Humanities, Arts, and Social Sciences (SHASS). Also, last spring, MIT faculty and others organized a Day of Engagement/Day of Action event April 18 devoted to civic engagement. Some faculty have participated in protests and many attended the March for Science and the Women's Marches of 2017. They struggled with how to respond to disinformation ("fake news") and anti-science political rhetoric. Many faculty agreed that this topic was a responsibility for all of MIT and not only SHASS.

Conclusions, concerns, and two invitations

The dinners had several goals. First was to share experiences and ideas about what

inclusive community means and how to strengthen it at MIT. Additionally we hoped to identify faculty who care about community and who might contribute ideas and action in the future. This was a beginning, not an end. Did we succeed?

Feedback suggests that we did. We received dozens of inspiring emails about the dinners and their topics, including many from faculty who could not attend. Faculty and students in one department were inspired to try a similar approach in their departmental community. Many faculty members shared their experience with colleagues. All of us present at the dinners made connections with wonderful colleagues we had not met before. Our sense of community was enhanced by these gatherings. This feels like a good beginning.

At the same time, some important concerns were raised by faculty who feel marginalized. At the conclusion of the first dinner we asked participants to describe their overall impression in one word. Most of the anonymous responses were positive (e.g., “Stimulating,” “Thought-provoking,” “Fun!”) but some were neutral (e.g., “Unfinished,” “Curious,” “Surprising”) or negative (e.g., “Frustrating,” “Way-too-easy,” “Self-congratulatory”).

Conversations with faculty afterwards helped clarify the disappointment, as two groups stood out in their reactions:

women and faculty from SHASS. Even if no one intended to exclude others, many of us, myself included, can be blind to behaviors such as talking over women or devaluing certain disciplines in ways that have exclusionary effect. These effects can be subtle but they are still with us at MIT in 2018. In fact, there are elements of MIT culture that promote unequal treatment (see the discussions of climate data and meritocracy above). It is not only students who can feel excluded from teams. The numbers of underrepresented people of color attending the dinners were too small (due to their underrepresentation at MIT) to provide statistical significance, but other studies such as the 2010 Hammond Report show concerns about exclusion.

We made some adjustments in the second dinner to try to reduce these effects of unconscious bias. Table assignments were made with the aim of having more gender balance, even though this meant that one table was all male. We highlighted the role of humanities and social sciences for each of the topics we discussed. While I believe these helped, they did not create a fully equitable experience for all faculty, not even in the carefully organized dinner. The challenges of equity and inclusion are MIT-hard problems!

The topic of gender equity is highly visible in society at this time owing to the #MeToo movement. But it is not only a matter of ending sexual assault. Gender equity – without which there can be no true meritocracy – requires that all of us, especially white men – learn how to interrupt and change behaviors that have the effect of making others feel excluded. Although confronting gender inequity was not a goal of the faculty dinners, it is a necessary outcome.

In response, this spring we are starting a discussion group for male faculty and staff members who want to promote gender equity at MIT and would like to learn together to be better allies for women. We plan to meet monthly for 90 minutes and will share experiences in a safe and supportive environment. If you are interested or curious, please contact me at edbert@mit.edu.

Many more faculty expressed interest in these dinners than could attend. Additionally, the first dinner group recommended broadening participation to include staff and students. In response, we held an Inclusive Community Luncheon February 12, which was modeled after the second faculty dinner. Faculty, staff, post-docs, and students were invited. ■

Edmund Bertschinger is Institute Community and Equity Officer (edbert@mit.edu).

letters

No More MIT Voo Doo

To The Faculty Newsletter:

AS AN MIT STAFF PERSON I’m always extremely uncomfortable seeing issues of MIT’s student humor magazine *Voo Doo* on campus. The magazine’s title is tacky at best, insulting no doubt, and dangerously close to hate speech.

Prof. DeGraff’s message (“‘Voo Doo’ Science at MIT?”, *MIT Faculty Newsletter*, Vol. XXX No. 2) is important. MIT is not a community that denigrates or insults someone’s religion. That is not who we are. The editors of MIT’s humor magazine need to change its title.

Thank you.

Molly Ruggles
Senior Educational Technology Consultant
Office of the Vice President
for Open Learning

Teach Talk

Comment on “How Deeply Are Our Students Learning?”

Eduardo Kausel

I ENJOYED THE ESSAY ON student learning (“How Deeply Are Our Students Learning?”, *MIT Faculty Newsletter*, Vol. XXX No. 1), and generally agree with its findings. And I can also confirm that the concept of free-body diagrams is one of the most difficult for students to master, despite it being “simple” and “obvious.” But it is also “subtle.”

What do you mean?

There exists a common difficulty that may complicate life to students during an exam: It is the way in which a question is actually phrased. If the wording leaves room for interpretation, then chances are good that Murphy’s dictum will come into full force: *if something can be misunderstood, then it will be!* This is especially true when the question uses everyday concepts and language that leave room for interpretation. As they say, if you correctly understand a question, then you already have solved half of that problem. So when I have given exams at MIT – for a good many years I taught a graduate course in *Structural Dynamics* within the School of Engineering – I made sure that the questions were clear by testing these on the TA first. Professors very often make the mistake of believing that what is clear to them will be clear to the students, especially after having taught a subject for a while.

For example, consider the concepts of velocity and speed of a particle in motion on a semi-circular path as used in the first example in the FNL article. Now, velocity is a vector that has both magnitude and direction. So is speed the same as velocity? Or is $speed = \text{abs}(velocity)$? If yes, then

that ought to have been explained explicitly in the question. And then, of course, is the added complication that “speed” has no sign, but tangential velocity does, even if it shares the magnitude with the speed. So even if in that first example the speed had been specified as being *constant* – but in what sense? – the velocity would not have been so, because of the change in direction.

But here comes also into play the everyday life experience: say you drive your car on a curved highway using cruise control, and that you set the speed at 55 mph. Is that a “constant” velocity? Not in the sense described previously, but certainly acceptable in the context of driving on the road, especially if at some point you are stopped by the police stating that you were going too fast, that you exceeded the local maximum *velocity*. In this context, the change in direction is irrelevant and velocity is the same as speed. From the perspective of the driver, he is certainly not accelerating, the centripetal acceleration notwithstanding! But in the example given, and even if the students were fully aware that velocity is a vector, then what is meant by “average velocity”? (the question specifically asked “what is the average *velocity*” and not what is the average *speed*). If the speed had been constant instead of rising slowly, does that mean that the average velocity equals the constant speed? Or is the horizontal component zero, since the particle fully reversed direction from the upper entrance point to the exit point vertically below, so there is no net lateral motion during the travel time? And what about the average vertical velocity? My sense is

that it is these ambiguities that cause most of the troubles observed.

Another example comes from the natural sciences: Suppose you were asked in an entrance exam (or in the SAT) about figs and tomatoes, and you had to decide if these were fruits or vegetables. In everyday life, a fig is a fruit and a tomato is a vegetable. But in botany, the fig is not a fruit and the tomato is not a vegetable. Instead, a fig is an enclosed inflorescence (or syconium) and a tomato is a berry, i.e., a fruit. So which is the correct answer? I’d say that the everyday meaning came first, and that botanists’ definition came later. So how does the student decide in a test what the examiner actually meant?

If it is obvious to me it should be obvious to you too, or shouldn’t it?

Consider also the elastic steel marble dropped onto a table. Yes, the kinetic energy in the ball is mgh , and the elastic energy stored in the table when the ball comes to a full stop is $\frac{1}{2} F^*u$, so $F = mg(2h/u)$, and since $(2h/u) \gg 1$, it is now clear that $F \gg mg$. But is this really trivial or obvious, especially so if you haven’t solved problems like this before, i.e., have no training? This brings me to the second observation: There exist many problems that may be quite obvious to an experienced person with deep knowledge, but it isn’t so for an undergraduate student who must drink water from a fire-hose while applying the principle of selective neglect. That is, chances are good that the instructor overestimates the “obviousness” of most questions. As C.E. Inglis (FRS, James Forrest Lecture, 1944) once stated:

In problems relating to vibrations, nature has provided us with a range of mysteries which for their elucidation require the exercise of a certain amount of mathematical dexterity. In many directions of engineering practice, that vague commodity known as common sense will carry one a long way, but no ordinary mortal is endowed with an inborn instinct for vibrations; mechanical vibrations in general are too rapid for the utilization of our sense of sight, and common sense applied to these phenomena is too common to be other than a source of danger.

Motivation

Then there are strong differences between undergraduate and graduate students. The former are there to get an education and a degree to move on in life, while the latter wish to specialize and acquire depth in some area. Thus, they have different motivations. Most undergraduate students warm up for exams, enough to master – or even excel in – the quizzes, but

by the time that they enroll in next semester's continuation, they may have completely forgotten a good part of what they had learned before – and I know this for a fact! This is because to them the first priority is to learn enough to do well and pass the exams and then in due time graduate. But deep learning comes only with repetition and training, not to mention motivation.

Manipulation without understanding

Many students become quite proficient in the use of mathematical tools, but that by itself does not in any way make them experts in physical model building. Mathematics is a tool that is very useful to evaluate physical phenomena, but mastery of math it is not per se an enabler of model building. These are two wholly separate “intelligences.” For example, without having seen an example of application of the convolution integral, the vast majority of students will simply fail to see the connection between some phe-

nomenon that could be described by a convolution and the mathematical operation they learned in calculus or signal processing – or at least they would do so in a quiz. Why should they see the connection? Model building is not an intuitive, natural process, but an art that is learned in part from mentors, instructors, and experience.

My own sense is that most undergraduate students learn about many different technical disciplines, and in so doing develop mental muscle – not unlike those who lift weights. They also learn how to think and acquire tools so that they can later continue learning on their own. After leaving school, many (or most) of them will have largely forgotten what they learned, including how to integrate or differentiate. But they will keep the mental mass that will allow them to be successful engineers and scientists. ■

Eduardo Kausel is a Professor Emeritus in the Department of Civil and Environmental Engineering (kausel@mit.edu).

letters

Deep Learning or Deep Ratings?

To The Faculty Newsletter:

re: “How Deeply Are Our Students Learning,” *MIT Faculty Newsletter*, Vol. XXX No. 1

A MOST EXCELLENT, THOUGHTFUL commentary. Bravo! Now the goal will be for us to think and act in accordance with the courage and vision that made MIT great in the first place: *Mens et Manus*: do we practice what we preach? From the data presented, it seems not. Yet how many faculty could answer these seemingly simple applied questions? Does this reflect an issue with not only the way we teach but also the way we hire and promote faculty? Do we have a good balance in our faculty's ability and sense of *Mens et Manus*?

Consider in our design classes: Do we encourage and reward students to couple analysis with design so they experience the endorphin rush of creative deterministic design? In our analysis classes do we couple the real world to the practical world to not just illustrate but motivate students to experience the practical side of the force? Or do we merely encourage “hacking” as an excuse so we are not bothered with having to spend the one-on-one time needed to truly catalyze students to think, experience, and really learn deep lessons for life?

Why might we be in such a rush that we do not have the time to spend actually teaching students to think...? How much time do we spend writing reports and proposals and justifications, and in com-

mittees to study how to make things better and then issue a report?

Indeed in the past three decades I have been at MIT as a prof, I have seen our pendulum swing from leading to benchmarking as we join the scramble to follow others who strive to kneel before the great ranking gods h-index and *US News & World Report*. MIT swing free of benchmarking and herd consensus and take off to once again become the true leader it once was and should be.

Ever the optimist I will be, because MIT long ago trained and set my mind free,

Alex Slocum
Professor of Mechanical Engineering

Update on the Task Force on Open Access to MIT Research

Chris Bourg
Hal Abelson

IN JULY 2017, PROVOST Martin Schmidt, in consultation with the Vice President for Research, the Chair of the Faculty, and the Director of the Libraries, appointed an ad hoc task force on open access to MIT's research. Convening the task force was one of the 10 recommendations presented in the 2016 preliminary report of the Future of Libraries Task Force [<https://www.pubpub.org/pub/future-of-libraries>]. In addition, The 2013 Report to the President on MIT and the Prosecution of Aaron Swartz raised the question as to whether MIT should strengthen its activities in support of providing open access to the research and educational contributions of the MIT community. As a result of subsequent discussions held with the faculty and relevant committees, this task force has been charged to take up this question.

The open access task force is co-chaired by Class of 1922 Professor of Electrical Engineering and Computer Science Hal Abelson and Director of Libraries Chris Bourg, and is composed of a diverse and multi-disciplinary group of faculty, staff, postdocs, graduate students, and undergraduates. The task force has established the following working groups to develop recommendations in specific areas:

Research Data

Christopher Cummins, Henry Dreyfus Professor of Chemistry

Eric von Hippel, T Wilson (1953) Professor in Management (chair)

Tom Pollard, Postdoctoral Associate, Institute for Medical Engineering and Science

Matthew Vander Heiden, Associate Professor, Department of Biology

Educational Materials and Computer Code

Heng Yi Cheng '18, Department of Mathematics

Isaac Chuang, Professor of Electrical Engineering and Computer Science; Senior Associate Dean of Digital Learning
Mark Jarzombek, Professor, Department of Architecture

Hal Abelson, Class of 1922 Professor, Department of Electrical Engineering and Computer Science (chair)

Karen Shirer, Director of Research Development, Office of the Provost

Scholarly Publications

Chris Bourg, Director of Libraries

Deborah Fitzgerald, Leverett Howell and William King Cutten Professor of the History of Technology (chair)

Nick Lindsay, Journals Director, MIT Press

Jack Reid G '18, Technology and Policy and Aeronautics and Astronautics

Jay Wilcoxson, Counsel, Office of the General Counsel

Contracts and Licensing

Peter Bebergal, Technology Licensing Officer, Technology Licensing Office

Robert Bond, Chief Technology Officer, Lincoln Laboratory (chair)

Bernhardt Trout, Professor, Department of Chemical Engineering

In addition to considering whether and how MIT might expand the 2009 Faculty Open Access Policy to cover additional MIT authors and/or additional

scholarly output beyond faculty journal articles, the task force is coordinating a renewed Institute-wide discussion of a broad range of ways in which policies and practices might be updated or revised to further the Institute's mission of disseminating the fruits of its research and scholarship as widely as possible. Sample topics to be considered by the task force include:

- How should MIT respond to publishers that require MIT authors to opt out of the MIT Faculty Open Access Policy in order to publish?

- Should MIT develop policies and/or recommended best practices for tenure and promotion committees that would encourage and reward open scholarship?

- Should MIT consider an open access policy for data, or if not a policy, a statement of commitment to open access to research data?

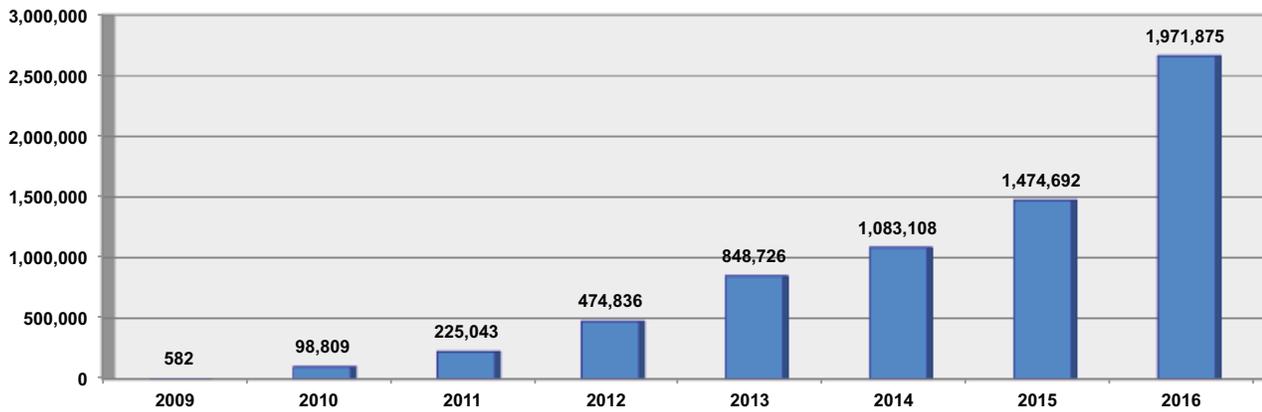
- Are there actions we could take in support of data citation/credentialing, and alternative metrics for articles, that would assist in promoting open access?

- Should MIT develop policies to encourage the open sharing of computer code?

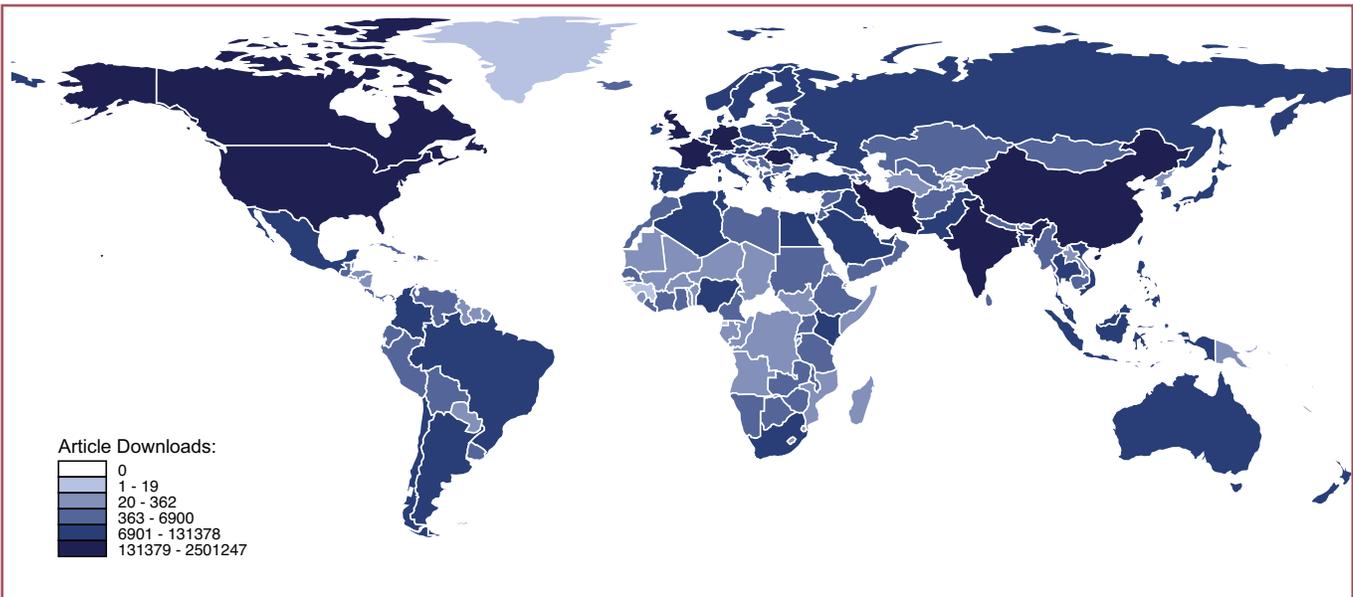
- What policy revisions might MIT consider in the area of open access to educational materials?

- Are there ways that MIT might leverage our research contracts and licenses to promote and encourage the open dissemination of research where appropriate?

MIT Open Access Articles Downloads 2009 – 2016



The size and use of the DSpace@MIT collection, which houses the articles made available as a result of the MIT Faculty Open Access Policy, continues to grow.



Downloads continue to come from nearly every country in the world, as seen through the oastats service (data through May 2017).

In considering these topics and developing a set of recommendations, the task force will continue to consult with domain experts and will facilitate a set of conversations across the Institute. Open

forums to solicit input from MIT community members will be scheduled later this spring. More information about the task force can be found on our Website at libraries.mit.edu/open-access. ■

Chris Bourg is Director of Libraries (cbourg@mit.edu);

Hal Abelson is the Class of 1922 Professor of Electrical Engineering and Computer Science (hal@mit.edu).

Teaching this spring? You should know . . .

. . . the Faculty regulates examinations and assignments for all subjects.

View the complete regulations at <https://facultygovernance.mit.edu/rules-and-regulations#term-regulations-and-examination-policies>. Select requirements are provided below for reference. Contact Faculty Chair Susan Silbey at exam-termregs@mit.edu with questions or requests for exceptions.

No required classes, examinations, oral presentations, exercises, or assignments of any kind may be scheduled after the last regularly scheduled class in a subject – whether full-term or half-term – except for final examinations scheduled through the Schedules Office. The last class day for all subjects is Thursday, May 17, 2018.

Undergraduate Subjects

In both **full-term subjects** and **half-term subjects**, faculty must provide by the end of the **first week** of classes:

- a clear and complete description of the required work, including the number and kinds of assignments
- the approximate schedule of tests and due dates for major projects
- an indication of whether or not there will be a final examination, and
- the grading criteria and procedures to be used

In **full-term subjects**, by the end of the **third week**, faculty must provide a precise schedule of tests and major assignments.

In **half-term subjects**, this information must be provided by the end of the **second week**.

Regularly scheduled academic activity between 7 pm and 10 pm always takes precedence over evening review sessions or exams/quizzes. Hence:

Evening review sessions should be optional, and should be described as such. It is good practice to announce them explicitly as being for those students who do not have classes on the evening in question; some instructors schedule two review sessions to provide alternate times.

In the case of an evening exam/quiz, you must make available an alternate time for any students with such a conflict. (Note: Evening exams/quizzes may be scheduled **only** on a Tuesday, Wednesday, or Thursday.)

When **held outside scheduled class times, tests must:**

- not exceed two hours in length
- begin no earlier than 7:30 p.m. when held in the evening, and
- be scheduled through the Schedules Office

In addition, during the same calendar week, either a regularly scheduled class session must be cancelled *or* no assignment will be due.

In all **full-term** and **H4 half-term** undergraduate subjects, there may be no tests after Friday, May 11, 2018. Unit tests may be scheduled during the final examination period. For each undergraduate subject with a final examination, no other test may be given and no assignment may fall due after Friday, May 11, 2018. For each subject without a final examination, at most one assignment may fall due between May 11 and the end of the last regularly scheduled class in the subject.

For **H3 half-term** undergraduate subjects, the final week of the class is considered to be the Half-Term Final Examination Period. There may be at most one assignment due or one exam held during this final week of the class.

Graduate Subjects

In **full-term subjects**, faculty must provide by the end of the **third** week:

- a clear and complete description of the required work, including the number and kinds of assignments
- the schedule of tests and due dates for major projects
- an indication of whether or not there will be a final examination, and
- the grading criteria and procedures to be used

In **half-term subjects**, faculty must provide this information by the end of the **second** week.

For each **full-term** and **H4 half-term** graduate subject with a final examination, no other test may be given and no assignment, term paper, or oral presentation may fall due after Friday, May 11, 2018. For each **full-term** and **H2 half-term** graduate subject without a final examination, no more than one of the following may be given or fall due between May 11 and the end of the last regularly scheduled class in the subject: in-class test, assignment, term paper, or oral presentation.

For all **H3 half-term** graduate subjects, **with** or **without** a final examination, the final week of the class is considered to be the Half-Term Final Examination Period. There may be at most one exam held or one assignment, term paper, or oral presentation due during this final week of the class.

Student Holidays

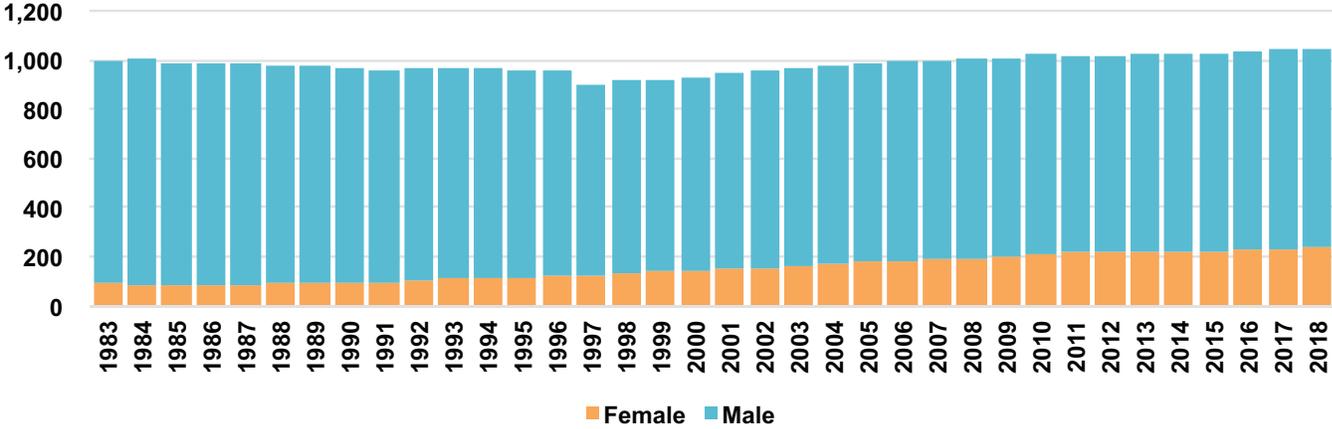
There are no classes on the following dates: Monday, February 19 (Presidents Day); Monday, March 26 through Friday, March 30 (Spring Vacation); Monday, April 16 (Patriots Day) and Tuesday, April 17.

Collaboration Policy and Expectations for Academic Conduct

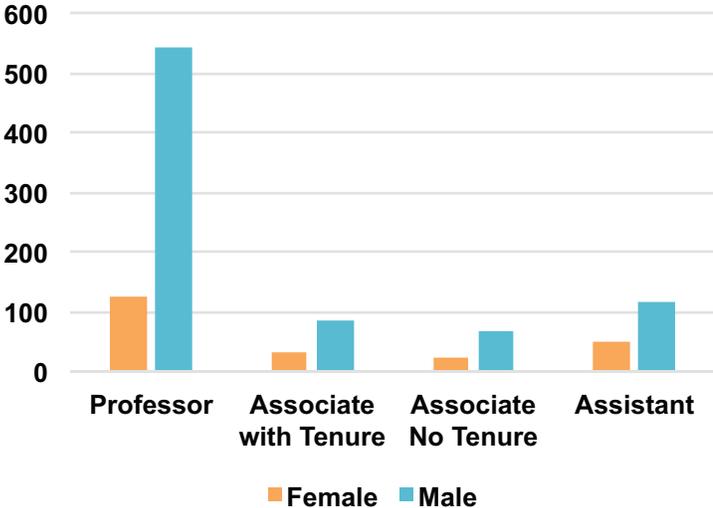
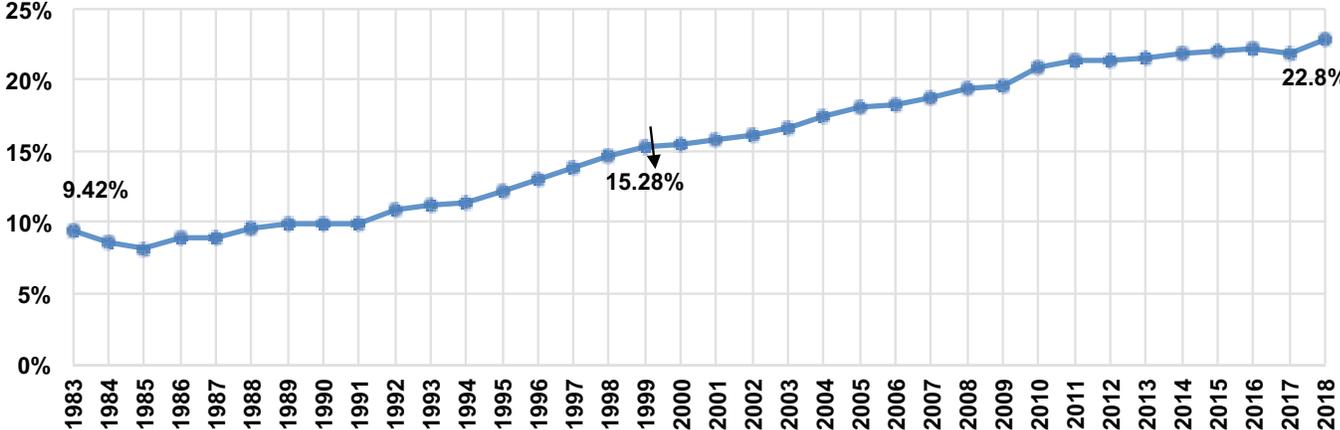
Due to varying faculty attitudes towards collaboration and diverse cultural values and priorities regarding academic honesty, students are often confused about expectations regarding permissible academic conduct. It is important to clarify, in writing, expectations regarding collaboration and academic conduct at the beginning of each semester. This could include a reference to the *MIT Academic Integrity Handbook* (integrity.mit.edu).

M.I.T. Numbers

MIT Faculty By Gender (AY 2018)



Percent of Faculty Who Are Women



Source: Office of the Provost/Institutional Research