# **Chair of the Faculty**

In AY2018, Professor Susan Silbey (Anthropology) served as chair of the faculty, Professor Rick Danheiser (Department of Chemistry) as associate chair, and Professor Craig Carter (Department of Materials Science and Engineering) as secretary.

There were 1,047 faculty members during AY2018. Of these, 166 were assistant professors, 219 were associate professors, and 662 were full professors. These were joined by 61 professors, post-tenure.

Seven Institute Faculty meetings were held. These resulted in the approval of the creation of one new undergraduate major leading to an SB degree in urban science and planning with computer science, as well as updates to *Rules and Regulations of the Faculty* to reflect current practices and allow for greater flexibility in making some types of housekeeping changes.

During AY2018, in response to numerous comments and suggestions, the faculty officers began a successful practice of including topics for open discussion during Institute Faculty meetings, allotting 45 to 60 minutes for each, with only approximately one third of the time for presentation. This new practice drew an increased number of faculty to the meetings. Discussions were on issues such as: Senior House; the first-year undergraduate experience and experimental class designing a first-year experience; the MIT Quest for Intelligence; a potential computational thinking requirement for undergraduates. Research projects from a subject entitled 21H.S01/21H.S02 MIT and Slavery and the spring 2018 subject entitled 2.S991/2.S990/CMS.S63/CMS.S99 Designing the First Year at MIT included presentations by and conversations with students enrolled in both subjects.

In addition to these discussions, the faculty heard the standard annual reports on: underrepresented minority faculty and graduate student recruitment and retention; tuition and financial aid; the Committee on Discipline's caseload and disciplinary trends for the previous academic year; the slate of nominations for faculty officers and the standing committees of the faculty; and citations for faculty moving to the ranks of professor emeritus and professor, post-tenure.

The faculty also received updates on: fundraising activity; the MindHandHeart initiative; federal immigration policy changes and MIT's response to these; the implementation of MIT's climate action plan; the Campus Sustainability Task Force; The Engine Working Groups; the federal research budget; and the new consensual relationships policy and mandatory sexual misconduct prevention training developed by the Committee on Sexual Misconduct Prevention and Response.

In February, Professor Richard Schrock (Department of Chemistry) presented the AY2018 Killian Lecture, entitled "Adventures in Inorganic Chemistry and Catalysis." Associate Professor Vinod Vaikuntanathan (Department of Electrical Engineering and Computer Science) was recognized as the recipient of the Harold E. Edgerton Faculty Achievement Award in April, and in May, Professor Gerald Fink (Department of Biology) was named the winner of the James R. Killian Jr. Faculty Achievement Award; Professor Fink will present the AY2019 Killian Lecture. During AY2018, the faculty remembered President Emeritus Paul E. Gray (Department of Electrical Engineering and Computer Science) with a memorial resolution.

On behalf of the faculty, the three officers met monthly with the Institute's senior administration and conducted a variety of activities. The officers, in collaboration with the Office of the Provost, continued the long-held tradition of hosting informal monthly dinners for Institute faculty, known as Random Faculty Dinners. The officers also conducted a listening tour each semester, visiting with each school council to learn what was on the minds of faculty members. During a year where much attention was focused on the undergraduate curriculum, the officers wrote an article on this topic in the March/ April 2018 issue of the MIT Faculty Newsletter, entitled "MIT Education at a Crossroads," and in June 2018, they held a productive workshop on the undergraduate curriculum that was attended by approximately 100 faculty, staff, and students from across the Institute.

As chair of the faculty, Professor Silbey served as a member of Academic Council, the Academic Appointments Subgroup, and Deans' Group, as well as serving on the MITx Faculty Advisory Committee, the standing Institute Committee on Race and Diversity, and the Enrollment Management Group. Professor Silbey also accompanied President L. Rafael Reif on his visits with school councils and department heads to discuss the future of computation at MIT. Professor Silbey additionally hosted two dinners for women faculty and a small group of senior women staff. Professor Rick Danheiser, associate chair, served as a member of the Committee on the Undergraduate Program and the Committee on Graduate Programs. Professor Craig Carter, secretary, served on the International Advisory Committee and participated in weekly informal gatherings of senior administrators who deal with issues pertaining to students.

Professor Silbey also wrote the following additional articles for the MIT Faculty Newsletter:

- September/October 2017: "The Fundamental Challenge Facing Higher Education Today"
- November/December 2017: "An Institute of Shared Governance"
- January/February 2018: "#MeToo at MIT: Harassment and Systemic Gender Subordination"
- May/June 2018: "The Obligations of Citizenship"

# **Faculty Policy Committee**

Susan Silbey, chair Tami Kaplan, staff

Chaired by Professor Silbey, the Faculty Policy Committee (FPC) met on 16 Thursdays during the fall and spring terms to conduct consultative, oversight, and policy-making activities.

2

Committee members were informed about a wide range of curricular issues during AY2018. This included reviewing one new degree proposal, for a new SB program in urban science and planning with computer science (Courses 11 and 6). Professor Craig Wilder (History at MIT) spoke with FPC about a new subject, entitled 21H.S01/21H.S02 MIT and Slavery, that was taught for the first time in fall 2017, and that engaged students in primary source research in the MIT Archives to explore aspects of MIT's history that touched on slavery; the students subsequently presented on their research at an Institute Faculty meeting during spring 2018. Professor Krishna Rajagopal (Department of Physics), dean of Digital Learning, provided the FPC with an overview of his role and sought the FPC's input on several issues.

The broader issue of the undergraduate curriculum – both General Institute Requirements (GIR) and its overall shape in terms of credit units, major subject choices, concentrations, and so on—was a common thread through the remaining three curriculum-related topics heard by the FPC. Professors Duane Boning (Department of Electrical Engineering and Computer Science), chair of the Committee on the Undergraduate Program (CUP), and Jeff Grossman (Department of Materials Science and Engineering), chair of the CUP Study Group on Undergraduate Majors Selection, gave an interim report on the efforts of the Study Group to discover, analyze, and discuss trends in undergraduate majors selection and enrollments. Amitava "Babi" Mitra, executive director of the New Engineering Education Transformation (NEET) program, and Professor Anette Hosoi (Department of Mechanical Engineering), co-chair of the Core NEET Committee, visited with the FPC to introduce members to this new School of Engineering initiative; NEET is an interdepartmental program starting in the sophomore year that focuses on education through project design and implementation. Vice Chancellor Ian Waitz also came to FPC early in the academic year to get input on his plan to launch a new subject in spring 2018 entitled 2.S991/2.S990/CMS.S63/CMS.S99 Designing the First Year at MIT, as part of his efforts to explore ways to enhance the first-year undergraduate experience at MIT. Though this endeavor was not focused solely on the undergraduate curriculum, a key question was how this curriculum impacts first-year students.

In its role providing oversight of the faculty governance system, the FPC received a briefing on current issues pertaining to conflicts of interest from the vice president for research, the senior director of the Office of Sponsored Programs (OSP), and OSP's conflict of interest officer. Their primary focus this year was on developing a conflict of interest policy for graduate students. The FPC also discussed and approved a number of housekeeping changes to *Rules and Regulations of the Faculty* intended to align *Rules and Regulations* with current practice. An important change now permits the faculty officers to update the text in *Rules and Regulations* to reflect title changes of individuals and offices without the need for a vote of the faculty. These modifications were approved by the faculty in May 2018.

To develop broader context on Institute activities, the FPC invited a number of visitors on a wide range of key issues. These briefings included a discussion on freedom of expression on university campuses and overviews of the new initiative entitled the Quest for Intelligence, plans for education IT systems, the creation of professional development activities for postdoctoral associates and fellows, and the decadal reaccreditation process, as well as updates on the efforts of the Ad Hoc Task Force on Open Access to MIT's Research and the context for graduate student unionization at peer institutions. The FPC was also consulted on the development of a new Institute-wide consensual relationships policy and the creation by the Undergraduate Association of a confidentiality policy for undergraduates serving on standing committees of the faculty.

In discussions with the president, provost, and chair of the MIT Corporation, the committee expressed continuing faculty interest in campus planning, with a keen, current interest in issues pertaining to the cost and availability of housing for both faculty and graduate students. Chair Susan Silbey highlighted in particular the concerns of women faculty regarding these issues, as well as regarding faculty equity in areas such as salaries. Additional topics of note that were discussed with the provost included the way tuition is charged for graduate students, the Volpe development project, and the School of Computing proposed in a September 20, 2017 letter in *The Tech* from MIT's seven currently active Turing Award laureates. The chair of the MIT Corporation also provided FPC members with an overview of the role of the Corporation in MIT's governance structure.

Professors George Barbastathis and Caspar Hare completed their terms on June 30, 2018. Professors John Lienhard and Patrick Winston were elected to join the FPC for three-year terms beginning in AY2019.

# **Committee on Academic Performance**

Scott Hughes, chair Jocelyn Heywood, staff

The Committee on Academic Performance (CAP) concerns itself with the academic progress of undergraduate students at MIT. The work of the committee typically revolves around the consideration of petitions during the academic year to change a student's academic record (mostly petitions to allow the late dropping and adding of subjects), the review of students each semester who appear to be making insufficient academic progress, and the recommendation of SB degrees to the faculty.

The CAP also makes recommendations to the faculty on academic standards, the academic calendar, examinations, degree requirements, and grading.

#### Petitions

The CAP reviewed 701 petitions this year. Last year's number was 721. As we had hoped, with increasing familiarity with the online add-drop process, we saw a slight reduction in the number of petitions. Unfortunately, we continue to see high numbers of "failure to click" petitions. For AY2019, we will continue to work with the Registrar's Office to track these petitions.

Of this year's petitions, 594 (85%) were approved and 107 (15%) were denied.

# **End of Term Academic Actions**

In AY2018, 508 undergraduate students were flagged for review at the CAP's grades meetings, comprising approximately 11% of the student body. (As a general matter, a student is flagged for review if they have a term GPA of 3.0 or lower, or has registered for fewer than 36 units.) There were significantly more students flagged in the fall term (300) than in the spring term (208). Based on comments from faculty, academic advisors, and students, as well as information provided in petitions reviewed by the CAP, the intense hurricane season of fall 2017 affected the academic performance of quite a few of our students. (Recall that Atlantic hurricanes Harvey, Irma, and Maria occurred between August 17 and September 30, 2017.) This is a good example of how CAP review can reveal non-academic stressors that impact students' lives.

The CAP issued 250 academic warnings as a result of these reviews. Last year's number was 195. Students required to take an academic leave totaled 16. Last year's number was 23. Details of this year's actions are given below.

	F	all 2017	Spring 2018		
Year	Warnings	Required academic leaves	Warnings	Required academic leaves	
First years	18	0	22	2	
Sophomores	46	0	22	4	
Juniors	32	4	26	4	
Seniors	53	1	31	1	
Total	149	5	101	11	

#### CAP End of Term Action Summary, AY2018

The committee continued to send commendatory emails to students who completed their first term back from taking a leave with an excellent academic record. The committee also commended students who were on warning for the term and performed well above minimum expectations. The CAP sent four of these emails for fall 2017 and seven for spring 2018. Student Support Services also sent a couple of unofficial recognition emails to students who did well.

#### Degrees

In AY2018 the CAP recommended degrees as follows:

September 2017: 11 students, 13 majors

February 2018: 90 students, 105 majors

June 2018: 944 students, 1,092 majors

5

#### **Returning Students**

Student Support Services reported returning student data to the committee in September 2017 and February 2018 as follows:

- Student Support Services received 42 completed requests for return from personal, medical, or required academic leave for fall 2017. Of these, 42 (100%) were approved and zero (0%) were denied. Under the new leave of absence category, 25 students returned. Their returns were automatically processed without CAP approval.
- Student Support Services received 16 completed requests for return from personal, medical, or required academic leave for spring 2018. Of these, 16 (100%) were approved and zero (0%) were denied. Under the new leave of absence category, 16 students returned. Their returns were automatically processed without CAP approval.

# **Policies and Procedures**

# "Failure to click": Follow-up on Online Add/Drop/Change Forms

The online add/drop/change form has now been in place for four full years. In AY2018, 198 petitions included a student statement citing ignorance of the requirement that the form be sent to the registrar through a final step initiated by the student clicking on a "submit to registrar" link in the online form. (This is despite the fact that the registrar's staff sends individual emails the day before the deadline to all students with a pending form.) The figure in AY2017 was 260.

The CAP has named these "failure to click" petitions and has authorized the chair to approve them administratively where the evidence is clear. Such approval is given "with neglect," which carries a fine and puts the student on notice that a similar future petition will likely not be approved.

The registrar continues to monitor the number of "failure to click" petitions, comparing it with the number of students who successfully complete an online add/drop/change form. There have been some complaints from students and faculty that the fee for these "failure to click" petitions should be waived. Based on data and discussions within the committee, the CAP voted at its April 20, 2018 meeting to approve waiving the petition fee for "failure to click" first-time offenders.

#### **Medical Leave and Hospitalization**

In March 2017 Chancellor Cynthia Barnhart released the recommendations of the Committee on Medical Leave and Hospitalizations. The CAP discussed the recommendations at its April 14, 2017 meeting and made recommendations to make a slight change to the wording in the policy. While the leave and return policies appear to be working well, the chair found during AY2018 that the evaluation of each individual case has placed more of a burden on him. The CAP will be exploring options to delegate this task to another member of the committee.

#### Membership

The committee enjoyed a year of stable membership, with no changes during the year. The average attendance of the nine voting members at petition review and end-of-term meetings, scheduled a year in advance at fixed times, was eight for each of the fall and spring terms.

Stephen Pepper, former staff administrator to the CAP, returned to his position on an interim basis during fall 2017. In January 2018, Jocelyn Heywood, an MIT employee for 19 years, was named the permanent staff administrator to the CAP.

# **Committee on Campus Planning**

Stephen Graves, chair Amy Kaiser, staff

During AY2018, the work of the Faculty Committee on Campus Planning (FCCP) focused mainly on two activities: the review of emerging plans for the MIT campus, and efforts to understand MIT's planning processes and organizational infrastructure, so as to determine where the committee can most usefully provide input.

The committee learned about and reviewed the planning for the following ongoing activities:

- Evolving plans for West Campus and Northwest, via presentations from landscape architecture firm Reed Hilderbrand and the Office of Campus Planning (OCP)
- Changes in parking and commuting policies, via presentations from Director of Sustainability Julie Newman and OCP
- Current and anticipated residential life projects, via presentations from Vice Chancellor Ian Waitz and OCP
- Updates on the Volpe project, via a presentation from MIT Investment Management Company (MITIMCo) Directors of Real Estate Michael Owu and Kathryn Brown

The committee also learned about the following elements of the current planning processes and organizations:

- Capital projects and governance, via presentations from Deputy Executive Vice President Anthony Sharon, Associate Provost Krystyn Van Vliet, and Director of Campus Planning Jon Alvarez
- Classroom renovation planning, via a presentation from Classroom Strategist Peter Bedrosian
- MIT's relationship with the city of Cambridge and how that shapes MIT projects, via a presentation from Office of Government and Community Relations Co-Director Sarah Gallop

7

FCCP continues to have concerns about the evolving plans for MIT's West Campus. The committee prepared a memo of questions and observations on West Campus planning for Associate Provost Krystyn Van Vliet and Deputy Executive Vice President Anthony Sharon, requesting the following:

- Development of a full master plan for West Campus
- Broader campus input on campus needs and emerging plans
- More thinking about which uses could, or should, be accommodated on West Campus, and which uses have the potential to strengthen West Campus as a place that serves the full campus community
- More focus on the Student Center, given long-standing student dissatisfaction with the facility
- More convenient parking both for commuters and event attendees
- Protection of existing tree plantings and additional focus on landscape ecology in plan implementation
- Additional consideration of long-term plans to reconfigure athletic fields

FCCP is also concerned about parking affordability and convenience. The recent changes in parking (related to both pricing and location) may pose a hardship or significant inconvenience to those who commute to work by car, as well as for visitors to Kresge Auditorium, DAPER facilities, and other key locations. In addition, the new commuting policies may be discouraging people who can telecommute from coming to campus.

The committee provided a list of draft questions addressing these topics to Institutional Research and the MIT Parking Office for inclusion in this fall's commuting survey. Committee members and staff have offered to assist the survey team in refining the questions as needed over the summer.

Related to the above concerns, the committee appreciates the efforts of the Planning Subcommittee of the Committee for Renovation and Space Planning (P-CRSP) and its working groups to engage in planning for West Campus and parking. The committee also appreciates the appointment of a liaison who serves on both the FCCP and P-CRSP. The committee looks forward to continued discussion on these important topics.

Finally, FCCP foresees many challenges related to our relationship with the city of Cambridge as our graduate housing projects, and especially the Volpe project, proceed. The committee values the hard work of the Office of Government and Community Relations in helping to navigate and skillfully manage this relationship. The committee hopes to have a continued engagement with this office as these development projects advance in their planning and move toward implementation.

# **Committee on Curricula**

David Vogan, chair Pam Walcott, executive officer

The Committee on Curricula acts on proposals to create, revise, or remove undergraduate subjects; proposals to create, revise, or terminate undergraduate curricula; student applications for double majors; and petitions concerning General Institute Requirements. The voting members consist of six faculty (including the chair) and four student members. The committee met five times during the fall term, five times during the Independent Activities Period (IAP) in January, and seven times during the spring term. During the academic year, the committee acted on 636 subject proposals, including proposals for 89 new subjects, and approved numerous minor changes to degree charts. The committee approved the following major curricular changes:

**Course 1:** Change of name for 1-ENG SB *from* Engineering as Recommended by the Department of Civil and Environmental Engineering *to* General Engineering as Recommended by the Department of Civil and Environmental Engineering

**Course 2:** Substantial revisions to 2-OE SB to introduce a junior-level lab experience and capstone CI-M; approved revisions to 2-A SB to provide more exposure to linear algebra

**Course 4:** Substantial revisions to 4-B SB and minor in design to provide more structure, and to the minor in architecture to align the introductory studios for the three programs. Approved change of name for 4-B SB *from* Architecture Studies *to* Art and Design

Course 5: Addition of a flexible track leading to the SB in chemistry (Course 5)

**Course 10:** Substantial revisions to Course 10 and 10-B SBs to increase flexibility by modifying Integrated Chemical Engineering (ICE) capstone and topics subjects

**Courses 11 and 6:** A new joint major in urban science and planning with computer science (Course 11-6)

#### **Other Actions**

- Approved five subjects for use in the New Engineering Education Transformation pilot program, including seminars for the NEET threads in 3.006 Advanced Materials Machines and 20.051/20.052/20.053 Living Machines, and 3.007 Introduction to Materials and Mechanical Design for the Advanced Materials Machines thread
- Reviewed spring 2017 and fall 2017 subject evaluation data on subjects for which students reported spending significantly more time than expected, based on assigned units; the committee notified departments of subjects that fall into this category

- In keeping with its responsibility to seek reviews of interdisciplinary minors at least once every five years, conducted reviews of the minors in astronomy and biomedical engineering; also received reports from the minors in entrepreneurship and innovation, and statistics and data science on their respective first years of operation
- Continued to monitor developments concerning the Independent Activities Period. The committee reviewed data concerning both academic and nonacademic activity during IAP and shared the data with the same committees that had participated in the review of IAP (Graduate Programs, Undergraduate Program, and Faculty Policy)
- Received reports from the Subcommittee on the Communication Requirement (SOCR) and the Subcommittee on the HASS Requirement (SHR) concerning petitions received and reviewed by those committees

# **Committee on Discipline**

Suzanne Flynn, chair (July 2017–December 2017) Andrew Whittle, chair (January 2018–June 2018) Tessa McLain, executive officer

# **Reported Cases**

There were 232 total complaints brought to the Committee on Discipline's attention in AY2018. The Committee on Discipline (COD), chaired by Professor Suzanne Flynn (fall 2017) and Professor Andrew Whittle (spring 2018), resolved complaints by adjudicating cases of alleged misconduct. Of those 232 complaints, 191 (82%) were complaints alleging individual student misconduct and 41 (18%) were complaints alleging student organization misconduct.

# Case Trend

The total number of reported cases was 16% lower in AY2018 than it was in AY2017.

The following stacked bar chart, entitled "Committee on Discipline Case Trend, Complaints by Type July 2014 to June 2018," shows that the number of cases reported to the COD increased from 268 in the AY2015 to 317 in AY2016. The chart then shows a decrease, with 279 cases reported in AY2017 and 232 in AY2018. Source: MIT Committee on Discipline.

The tables below summarize alleged policy violations from AY2018 compared to previous years. There is often more than one alleged policy violation per complaint.

Alleged policy violations type	AY2017	AY2018
Academic misconduct	80	61
Cheating	47	20
Plagiarism	6	17
Unauthorized collaboration	22	10
Other academic misconduct	5	14
Personal misconduct	197	204
Alcohol	60	55
Other drugs	14	6
Assault, reckless endangerment, threats/intimidation	12	14
Harassment (other than sexual)	7	4
Property damage	0	9
Disorderly conduct	29	17
Theft	5	5
Unauthorized access/improper use of MIT property	16	17
Fire Safety, arson	6	17
Weapons, dangerous objects	2	2
Residential life and housing policies	11	14
Hazing	0	0
Institute expectations of student behavior/integrity	28	25
Other	2	2
Community well-being	4	8
MITNet rules of use	1	9
Title IX related cases	7	2
Sexual harassment	1	0
Stalking (including nonsexual stalking)	0	1
Nonconsensual sexual contact or penetration	6	1
Intimate partner violence	0	0
Total	284	267

# Number of Alleged Policy Violations by Type in AY2017 and AY2018

Alleged policy violations type	AY2017	AY2018
Alcohol	10	20
Other drugs	0	0
Exceeding occupancy	8	8
Fire safety	2	1
Hazing	0	2
Harassment (other than sexual)	1	1
Disorderly conduct	0	5
Noise complaints	19	7
Recruitment violations	2	0
Social event policy violation (unregistered, no guest list, not checking IDs, etc.)	28	38
Other	8	4
Total	78	86

# Number of Student Organization Misconduct Alleged Policy Violations by Type in AY2017 and AY2018

*Note*: It is common for there to be more than one alleged policy violation in a case, so there are more alleged policy violations than cases.

# **Case Resolutions**

The COD utilizes a variety of resolution methods, described in the Rules of the Committee on Discipline. Table 3 shows the COD's resolution methods in AY2018 compared to the previous academic year.

For the fourth year, the COD was responsible for student organization misconduct. COD continued its strong partnership with student organization coordinating groups (e.g., Interfraternity Council, Panhellenic Council, Association of Student Activities, etc.) to resolve most cases of alleged student organization misconduct by referring them to student-run judicial boards.

This was the second full year that the COD used the new method for sexual misconduct and Title IX related complaints. All related cases during AY2018 were resolved using this method.

Case resolution type		AY2018
COD administrative resolution	100	119
COD hearing	1	2
COD sanctioning panel	6	2
COD sexual misconduct hearing	4	0
COD sexual misconduct sanctioning panel	0	1
Faculty letters to file	63	47
Complainant withdrew case or dismissal**	19	9
Good Samaritan Amnesty Policy (GSAP) applied: referred to Alcohol and Other Drug Services (AODS)	9*	7*
Non-adjudicative resolution: restorative justice, mediation, referral to other office	28	4
Delegated to student-run judicial mechanism	36	27
Cases pending (as of June 30, 2018)	13	14
Total	279	232

#### Number of Case Resolutions by Type in AY2017 and AY2018

\* Most of these went to AODS and only a few were referred to OSC because at the onset it was unclear if GSAP applied or not in the case.

\*\*Dismissal is NOT the same as a finding of not responsible. It means that the situation did not rise to the level to warrant a case creation.

#### **Case Outcomes**

COD strives to meet its educational philosophy of student accountability through intentional educational sanctions (e.g., substance abuse education, mentoring programs, projects, reflections, workshops, etc.). Through these structured sanctions, students learn about various interpersonal skills and are able to reflect on their own personal development. A small number of cases (2% in AY2018) require a student to be separated from the Institute, either temporarily or permanently. About 98% of cases are resolved without suspension or expulsion.

Sanction type	AY2016	AY2017	AY2018
Expulsion	3	2	1
Suspension	3	8	4
Removal from Institute housing (House or FSILG)	2	2	0
Housing relocation	0	2	1
Probation	35	34	29
COD letter to file	73	59	79
Substance abuse education or treatment	109	53	58
Restitution	3	1	0
Other educational sanctions or referrals	153	181	148
Decision-making workshop	*	*	29
No contact order, directive to stay away from certain buildings	10	9	4
Faculty letter to file	35	63	47
Academic integrity seminar	15	5	3
Total	441	419	403

#### Number of Sanctions by Type during AY2016, AY2017, and AY2018

*Note*: It is common for the COD to assign more than one sanction in a case, so there are more sanctions than cases. Sanctions exclude all cases in which the respondent was found not responsible, the case was dismissed, the case was delegated to a student-run panel for action, or the case is still pending.

\*Not previously counted, would have been captured in "Other educational sanctions."

#### **Additional Notes**

In addition to responding to complaints of misconduct, the COD pursued a number of initiatives this year.

#### **COD Sexual Misconduct Subcommittee**

The COD Sexual Misconduct Subcommittee worked to increase training related to Title IX-specific cases. Over the past few years, this subcommittee has developed expertise and consistency in hearing these types of cases and has received over 20 hours of training specific to these unique cases.

The subcommittee also met biweekly for the academic year to examine the COD process for adjudicating sexual misconduct under the new COD sexual misconduct rules and procedures (implemented in November 2015), and plan for the upcoming review of the process during AY2019.

#### **Continued COD Training**

The Office of Student Conduct continued to provide briefings, trainings, and ongoing development activities to the members of the COD. Over 20 hours of such activity was provided to all members of the COD. Advanced topics included unconscious bias in

decision making. In addition to standard training provided to all COD members, the members of the sexual misconduct subcommittee received an additional 18 hours of specialized training in issues related to sexual misconduct, more than any members of the COD have received before. The enhanced training included: LGBT issues related to the COD's work; questioning techniques; and the neurobiology of alcohol-induced blackouts and the practical implications of this research for the COD. This additional training was received well by members of the COD.

# **Committee on Graduate Programs**

Bradford Skow, chair Jessica Landry, staff

In the last few years, the Committee on Graduate Programs (CGP) has spent the largest part of their time reviewing proposals for new degree programs, many of them blended programs, in which students are admitted after completing a MicroMasters through MITx.

During the AY2018 the committee saw no proposals for new degree programs, but at its first meeting in September, it reviewed and approved a proposal to modify an existing degree program to accommodate students with a MicroMasters. The Department of Mechanical Engineering proposed to modify their Master of Engineering in Advanced Manufacturing and Design—the main modification was a new admissions track. The new track admits students who have earned a MicroMasters Credential in Principles of Engineering that the program offers on MITx. Admitted students are granted 48 units of advanced standing credit and finish the degree in residence over one regular semester and one summer session.

The committee also spent some time thinking about the criteria it has used to evaluate proposals for blended programs; they include the following:

- 1. If not proposed as an existing degree type, does it meet the general requirements for the MASc?
- 2. How will the admissions process be administered?
- 3. Is there a plan for funding the students?
- 4. Will the program be evaluated regularly? By a visiting committee, or some other mechanism?
- 5. If there is a fully residential version of the degree, or a related MEng or SM degree, do they complement each other?
- 6. If the start of the residential portion of the program does not correspond with the campus housing lease cycle, how will this impact students' ability to find housing?
- 7. How will students be oriented to the various campus resources during their brief time in residence?
- 8. Will teaching assistants be hired from outside of the MIT student community?

The committee identified some additional criteria:

- 9. A degree program should be an offering of a collective; if the drive to start a new program is led by only one or two faculty members, there should be a plan to sustain the program if they leave or stop being involved.
- 10. Blended programs should work to build community among students in both the blended and residential tracks.
- 11. There should be a plan to make sure there are enough resources (for example, classroom space).

The committee determined that the existing online program proposal form covers only questions 1–8, so questions related to issues 9–11 should be added to the proposal form. Also, proposal authors should be asked more directly to describe the plan for helping students find housing during their residential term(s), either on or off campus, and the plan for staffing teaching resources.

At the CGP's October meeting, Vice Chancellor Ian Waitz talked about three initiatives for graduate students that his office is working on:

- He wants graduate students to get better information about career options and how they can apply their new degrees.
- He wants to help departments and programs improve graduate student advising.
- He wants the X.ThG subject evaluations to be better managed.

The vice chancellor asked if the committee wanted to get involved with any of these, and if so, how. The committee decided that it should serve in an advisory capacity to the vice chancellor, as follows: The Vice Chancellor's Office is planning to conduct surveys of graduate students as part of the first two initiatives; the committee asked to hear summaries of those surveys and offer ideas from members about advising and professional development. After a presentation by Professor Leslie Kolodziejski about her experience with X.ThG subject evaluations as the graduate officer for Course 6 (Electrical Engineering and Computer Science), the committee suggested that the vice chancellor ask all the other graduate officers for a similar type of feedback.

At the committee's November meeting, the chair proposed adding a new policy statement to *Graduate Policies and Procedures* requiring graduate officers to themselves review and sign or otherwise certify degree lists before they go to the Graduate Academic Performance Group. It has become common (or at least not uncommon) for graduate administrators to sign the form, since they do most of the day-to-day monitoring of student progress. However, both the Office of Graduate Education and the Registrar's Office are concerned that this is a problematic practice: the person who signs a degree list is certifying that all students on the list have completed their degree requirements and should be recommended to the MIT Corporation to receive their degrees; it seems preferable for this to be done by a faculty member, or at least by a graduate officer—only a small number of graduate officers are not faculty members. Also, occasionally questions come up about a student's degree after they have graduated and, in those situations, the responsibility for the answers should rest ultimately with a faculty member or senior member of the teaching staff.

The committee next met in February. At this meeting, Professor Stephen Bell shared the recommendations that his working group on graduate tuition models, which he planned to later share with MIT's senior leadership. In March, David Randall, senior associate dean for student support and wellbeing, discussed with the committee the changes being made to the medical leave and return policies for graduate students.

The CGP was joined at its April meeting by Rupinder Grewal, conflict of interest officer. Grewal discussed with the committee some trends, issues, and questions regarding graduate students who engage in outside professional activities. The kinds of outside professional activities graduate students engage in have changed since MIT's policies were written. For example, while the policies discuss whether a student may work in a company that a faculty member has founded, the policies do not specifically discuss whether a faculty member may work for (e.g., as a board member) a company that a graduate student founded while a student at MIT. Increasingly, students are starting companies before they graduate, and involving MIT faculty who are in a supervisory relationship with the student. This creates potential conflicts of interest. The committee concluded that the existing policies need to be clarified and new Institute policies may be needed.

At its May meeting, the committee heard from Professor Jiang Wang and Heidi Pickett, director of the MIT Sloan Master of Finance Program, who came to talk about changes to the MFin program that the committee approved four years ago. At that time the CGP approved adding an 18-month track alongside the existing 12-month track and asked for an update after two years. Wang and Pickett told the CGP that the 18-month track is very popular, and they are working with Sloan School leadership to try to expand it.

Several issues came to the CGP that did not require review by the whole committee. The CGP chair, acting on behalf of the committee, reviewed a draft of the new parental leave policy for graduate students. He also approved the creation of new thesis fields in Courses 14, 16, 17, 18, and the Institute for Data, Systems, and Society, of the form "x and statistics" (e.g., "mathematics and statistics") as part of an interdisciplinary program of study in statistics that Professors Devavrat Shah and Munther Dahleh are creating. In consultation with the vice chancellor, the CGP chair also approved a proposal from the Department of Chemistry to remove the four existing thesis fields they offer for a PhD and replace them with one ("chemistry"); a proposal from the Department of Aeronautics and Astronautics to add the thesis field "aerospace, energy, and the environment;" and a proposal from the Department of Biological Engineering to discontinue thesis fields in "applied biosciences" and "bioengineering."

#### **Committee on the Library System**

Roger Levy, chair Tracy Gabridge, executive officer

The main themes of the work of the Committee on the Library System (CLS) in AY2018 involved guidance to the MIT Libraries regarding issues of user privacy, content access, and community engagement around a variety of planned initiatives and decisions facing the Libraries. Later in the year the committee also took up the broader question of CLS's remit and how the committee might most effectively serve the MIT community in years to come.

In fall 2017, CLS was chaired by Professor Adam Albright (Department of Linguistics and Philosophy) and met in October and November. In spring 2018, CLS was chaired by Professor Roger Levy (Department of Brain and Cognitive Sciences) and met in March and May.

The October 2017 meeting involved a welcome to new committee members and an introduction to Patricia Flanagan, the Libraries' interim associate director for academic and community engagement. The committee also discussed a pilot space analytics proposal by MIT start-up Bitsence, regarding the possibility of implementing a sensor system for gathering anonymized data from the electronic devices of users of Libraries' spaces. The committee raised concerns regarding user privacy. The committee further gave feedback on a draft of the Libraries' new strategic priorities document. The committee also gave feedback on a draft of a general survey prepared by the Libraries for the MIT community.

At the November 2017 meeting, CLS members discussed the question of whether and how the Libraries might advocate in the face of relevant policy issues, using the case study of censorship of articles by Cambridge University Press in the operation of its journals in China as an example context for discussion. The committee was supportive of the prospect of the Libraries playing an active advocacy role in support of open access and information dissemination in such contexts. The committee also received updates on past business—in particular, the Libraries decided not to pursue the Bitsence proposal discussed at the previous meeting—and on the upcoming Grand Challenges Summit. CLS was also treated to a reveal of the new MIT Libraries branding.

At the March 2018 meeting, CLS reviewed the renovation plan for Hayden Memorial Library and the plans for an internal data privacy and security audit. The committee gave feedback and suggestions regarding community engagement in anticipation of the Hayden renovation. The committee also discussed potential changes to the charge to the CLS in *Rules and Regulations of the Faculty* suggested by the Office of the Chair of the Faculty, and the possibilities for incorporating points raised in discussions and recommendations by the Open Access Task Force into the remit of CLS.

At the May 2018 meeting, CLS discussed the various options available to the Libraries for user IP authentication for access to library resources (such as online journal articles). The current system, which is IP-based authentication, is seen as unlikely to be viable in the long run due to both overhead costs and new authentication standards likely to emerge and gain widespread adoption in the future. Future options range from standards emerging from the Resource Access for the 21st Century (RA21) project to MIT-controlled authentication and access to content through MIT interfaces to vendor application programming interfaces (APIs), to open access. These options vary in the level of user data privacy, openness (including whether people physically on the MIT campus but without MIT credentials will remain able to access MIT-subscribed content), and administrative overhead and cost. The committee recognized the challenges facing the Libraries in choosing among these options, and emphasized the importance of privacy and openness considerations. The committee also reviewed results of the 2017 Libraries Survey and a summary of observations at the Grand Challenges Summit. Finally, the committee continued the previous meeting's discussion regarding CLS rules and regulations and discussed a broader possible range of advocacy and activities, potentially including revisions to the committee membership, that CLS might take up in future years.

Looking ahead, CLS is well-positioned to continue to serve in its advisory role to the MIT Libraries as the Libraries continue with their existing initiatives, make new plans, and respond to future challenges. Additionally, CLS must continue exploring how to ensure it represents the interests of the entire MIT community, and continue investigating what it can do to most effectively support the values of the Libraries and the Institute more broadly, in particular around issues of interface between the Libraries and the MIT community, including open access to scholarly content, user privacy, policy advocacy, and more.

# **Committee on Nominations**

David Darmofal, chair Tami Kaplan, staff

The Committee on Nominations performed the majority of its work from October to December. In late September, the committee conducted an annual survey of all faculty to identify service preferences for standing faculty and Institute committees. The committee contacted deans and committee chairs for suggestions, noting that some schools consider Institute service as a factor in promotions, and updated materials to share with prospective committee members and officers. The committee made nine out-of-cycle (interim) appointments and nominated 25 faculty for appointments beginning on July 1, 2018, with the slate including nominees from 19 academic units across all five schools. The committee also led a process to nominate Professor Rick Danheiser (Department of Chemistry) to serve as chair-elect during 2018–2019 and chair of the faculty from 2019–2021. The slate was presented at the March faculty meeting and unanimously adopted in May.

# **Committee on Student Life**

Mark Bathe, chair Judith Robinson, executive officer

The Committee on Student Life (CSL) consists of six elected members of the faculty, three undergraduate and two graduate students, and as ex officio nonvoting members, the vice president and dean for Student Life and the senior associate dean for Residential Education, who serves as the executive officer to the committee. During AY2018, the committee was chaired by Professor Leslie Kolodziejski (Department of Electrical Engineering and Computer Science) during the fall semester, and by Professor Mark Bathe (Department of Biological Engineering) during the spring semester. The committee had five guest members this year, including two undergraduate students, one graduate student, and two staff members from the Division of Student Life (DSL). During AY2018, the committee comprised an outstanding group of faculty, staff, and students from across the Institute, all deeply concerned with issues of student life. The committee met approximately every two weeks, for a total of 15 meetings.

Because successful education depends on social and affective, as well as cognitive, aspects of the student's experience, the committee is concerned with student life and the quality of the learning and living environment at MIT, with specific attention to issues of community.

The duties of the CSL include: (a) exercising general attention to the range, availability, and effectiveness of Institute-wide support services to students, and to the formal and informal relationship among the students, the Institute, and the faculty; (b) considering proposals to change or modify policies pertinent to student life and making recommendations to the faculty, the vice president, and the dean for Student Life; (c) encouraging innovation in programs regarding student life, particularly those involving faculty, including the coordination and review of initiatives; (d) interacting with other faculty committees, student governing organizations, and with the schools, departments, and so forth, on important issues concerning student life and community, and communicating with the MIT community about such issues; and (e) serving as the standing faculty advisory body to the vice president and dean for Student Life.

#### Agenda

The agenda of the CSL is set by the chair, in consultation with the vice president, dean for Student Life, and the committee. In the fall semester, agenda items included a review of the revised Title IX policies, and MindHandHeart programs and initiatives. During the spring semester, the agenda focused on student common spaces across campus and campus-wide access to high-quality and affordable food. The committee toured several student spaces, including the Stratton Student Center, Walker Memorial, Rebecca's Café, the Compton Lounge, the Stata Center, and Athena clusters across campus including on the fifth floor of the Stratton Student Center.

#### Guests

Guests included student leaders, faculty, and senior administrators as follows (in alphabetical order):

- Malte Ahrens, undergraduate, Undergraduate Association Innovation Committee
- Gustavo Burkett, senior associate dean for Diversity and Community Involvement, DSL
- Peter Cummings, executive director for Administration, DSL
- Michael Fahey, senior real estate officer, MIT Investment Management Company
- David Friedrich, senior director of Housing Operations and Renewal
- Mark Hayes, director of Campus Dining, DSL
- Kathryn Jiang, undergraduate, secretary, Undergraduate Association
- Maryanne Kirkbride, executive administrator, MindHandHeart
- Vanessa Kitova, undergraduate, Undergraduate Association Innovation Committee

- Sarah Melvin, undergraduate, president, Undergraduate Association
- Sarah Rankin, director, Title IX and Bias Response
- Anthony Sharon, deputy executive vice president, Office of the Executive Vice President and Treasurer
- Amanda Strong, director of Real Estate, MIT Investment Management Company
- Oliver Thomas, director of Community Partnerships, Information Systems and Technology
- Professor Krystyn Van Vliet, associate provost, Office of the Provost
- Malvika Verma, graduate student, Graduate Student Council, Housing and Community Affairs
- Additional students from the UA Innovation Committee

#### **Actionable Topics**

The major goal of the CSL during the spring semester was to analyze the availability of high-quality common space and food for students across campus. High-quality space refers to space that is both accessible and functional for MIT's students' needs, and high-quality food refers to dining options that are both healthy and affordable to students. The committee worked closely with both undergraduate and graduate students throughout the semester to analyze these aspects of space and food on campus.

The CSL appreciates the considerable efforts of DSL and MIT Facilities to improve student space and dining across campus. The committee also recognizes that financial investments in housing and student space, highlighted in more detail below, have been significant. The CSL aims to champion this progress and urges MIT to stay the course given the positive impact that enhanced physical space has on students' quality of life, wellbeing, and academic success.

#### **Student Space on Campus**

Planned short-term enhancements to the Stratton Student Center (W20) focus on making spaces more welcoming and available to students and also more productive for tenants. Projects currently being scoped and priced include the following:

- Conversion of the fifth floor Athena cluster to more flexible common space
- Renovations of the second floor Stratton Lounge
- An overall aesthetic upgrade of the building interior with fresh paint, new fixtures, and updated furniture
- Renovations to the Wiesner Art Gallery in the Student Center
- Opening of the Coffeehouse Lounge for students during the day (previously, this space was only available by reservation)

The feasibility of renovations to all building bathrooms is also being assessed. On a more functional level, plans have been approved for a new kosher kitchen, relocated from Building W11 to the basement of Building W20, followed by a prep and cooking area for Anna's Taqueria adjacent to the kosher kitchen.

The CSL supports these upgrades to the Student Center and, at the same time, recommends that the feasibility of large-scale renovation be evaluated. The Student Center is located centrally on MIT's original campus, and offers a common location for all undergraduate and graduate students to convene for studying, collaborating, relaxing, and playing, as well as dining. For the large number of MIT undergraduate and graduate students who live off campus, it is even more important as a central common space to dine, relax, and work between classes and athletics or other afternoon and evening activities.

If the Student Center were a part of the longer-term capital campaign, it could in principle be renovated to be on par with student centers at many of MIT's peer institutions, including Harvard University, which recently renovated its Science Center and its Smith Student Center, which also posed significant challenges to renovation. Potential partnerships with corporations such as Amazon, Google, or Apple could offer innovative solutions to identifying renovation sponsorship, in addition to other fundraising sources.

The committee also wholeheartedly endorsed the Compton Lounge pilot this past semester as a shining example of what our undergraduate students can accomplish on their own to enhance their common spaces on an extremely modest budget that, in this case, was generously funded by the Division of Student Life.

The committee felt that MIT should evaluate the feasibility of replicating this pilot on a larger scale in the near future. That said, one consideration is that several students volunteered their time to ensure the Compton Lounge space was stocked with food and clean cups for drinking beverages. One challenge of implementing additional pilots on a larger scale will be sustaining that level of commitment from student volunteers, or otherwise identifying professionally staffed support.

Fostering an enjoyable, high quality of life at the Stratton Student Center, as well as at other locations throughout campus, including the Compton Lounge, is essential to the health, happiness, creativity, and productivity of MIT's undergraduate and graduate student populations.

Two new spaces were opened this year as additional lounges for students: the Rainbow Lounge and Rebecca's Café in Walker Memorial, and the new Social Justice Programming and Cross Cultural Engagement Intercultural Center (SPXCE; pronounced "space"), which is located on the ground floor of DuPont Athletic Gymnasium. The SPXCE serves as a center for over 100 students groups and organizations.

#### **Residence Halls**

Undergraduate residence halls received major and minor upgrades during AY2018 to enhance the experience of the residents. New House was fully renovated and is

scheduled to reopen to all residents this fall. Smaller-scale projects in response to requests from students and house teams included the following:

- New entry kitchens in MacGregor House and an enhanced country kitchen in Burton Conner
- Upgraded study space in Random Hall
- Installation of bottle-fill water coolers in Baker House
- Creation of a new TV lounge in McCormick Hall and improved audio-visual equipment in Next House
- New maker space in East Campus
- Addition of a new stage in the courtyard of Maseeh Hall

MIT's IS&T group is completing previously planned network upgrades in Next House, Baker House, Simmons Hall, and Edgerton House. These will improve network performance and the computing experience for residents.

Graduate housing improvements requested by students and house team members included the following:

- The lounges in Edgerton and 70 Amherst Street received new furniture, as did Sidney-Pacific's lobby and Tang Hall's common room
- Space in Sidney-Pacific was designated for meditation
- Laundry capacity in the Warehouse was increased
- Eastgate's 29th-floor lounge received a new central air conditioning system

# Food and Campus Dining Services

The CSL noted that food prices were systematically higher on campus than even some of the most expensive retail outlets off campus (e.g., up to 25% higher prices at LaVerde's than at Whole Foods; up to 40% higher prices at Stata Café than at Whole Foods, etc.), which was very concerning. Bringing high-quality, affordable food to the Stratton Student Center together with high-quality studying, relaxing, collaborating, and playing space should serve to immensely improve the overall quality of life of both undergraduate and graduate students at this central location on campus, for all of the reasons noted above.

The CSL appreciates the many improvements that are in the works for campus dining and retail services for AY2019. Following an extensive food and dining review that involved students, faculty, and staff, the Compass Group—composed of Bon Appetit and Restaurant Associates—was selected to manage MIT's house and retail dining operations. On July 1, 2018, the groups will assume operation of Forbes Family Café, Koch Café, Café Four, Bosworth's Café, Steam Café, and 100 Main Marketplace. One exception is Rebecca's Café in the Pritchett Dining Room, which opened in spring 2018 and will continue to offer late-night food options, cooking classes, meal kits, and an engaging social space. Also, a complete review of the Lobdell Food Court in Building W20 will begin in fall 2018. With the new retail and dining contract comes new dining plans that offer more flexibility, convenience, and new dining dollars that can be used at retail dining outlets across campus. Having one vendor will also allow MIT to have consistent pricing across campus at Compass retail locations. To address issues of food security, in fall 2017, MIT Dining and Bon Appetit partnered with the Undergraduate Association to launch SwipeShare, a guest swipe donation program that has helped students in need obtain sufficient nutrition. The program will continue in fall 2018 and be complemented by TechMart, an on-campus grocery that will sell a limited number of staple food items at cost. Both SwipeShare and TechMart initiatives were in response to recommendations from the Food Insecurity Solutions Working Group.

#### **CSL Recommendations**

Based on guest presentations and facility tours, the committee formed the following specific recommendations to the MIT administration in order to improve the quality of student space and food on campus:

#### **Student Space**

**1.** Develop short- and long-term plans for continuously improving student space on campus

Long-term commitment and buy-in is needed from the MIT administration on an ongoing basis in order to ensure that MIT maintains high-quality space on campus for its students. The CSL supports DSL's initial work in developing such plans.

This should be realized by forming a standing student committee of undergraduate and graduate students that interacts regularly with, and advises, the MIT administration to ensure that common spaces campus-wide are high quality and meeting the needs of students. This would involve students on an ongoing basis with space identification, space planning, space monitoring and review, space renovation, and space upkeep, maintenance, and service, as well as possibly also including student employment in student-run spaces (e.g., coffee shops, etc.).

- 2. Develop a long-term plan for continued upgrades to the Stratton Student Center Though there are many short-term upgrades in process, the Stratton Student Center needs a long-term renovation plan (gut renovation, five to ten years) to be on par with MIT's peer institutions, including Harvard and Stanford. A long-term plan on the five-to-ten-year timescale could be part of MIT's 2030 planning.
- 3. Continue to integrate professional design support into renewal planning Dedicated professional designers should work with students, faculty, and the administration on an ongoing, permanent basis in order to evaluate, plan, and renovate spaces in a manner that meets the needs of students. Initial focus should be on short-term upgrades of the Student Center and informal spaces similar to the Compton Lounge. DSL integrated this process into New House renewal planning and the CSL supports continuing this practice.

# 4. Evaluate Campus Security

General access to the Stratton Student Center has been changed and the building is card access only beginning at 11 pm. DSL has explored starting card access at an earlier time, but students have expressed concern about making this change. MIT should evaluate security needs in the Student Center, as well as for Walker Memorial, East Campus, and the Libraries, particularly at night after 8 pm. A comprehensive security analysis should be performed to determine improvement needs.

# 5. Review feasibility of replicating the Compton Experiment

A review of the feasibility of replicating the Compton Lounge experiment (described above) across campus should be undertaken. Such a review could begin by identifying other spaces that can be used to offer additional central spaces for students to relax, rest, study, play, convene, and snack, with coffee, hot chocolate, fruit, granola bars, and so on, including but not limited to the Stratton Student Center and Walker Memorial.

# **Student Access to Food**

1. Establish a dining services advisory committee

The cost of food on campus should be comparable across campus, and be competitive with outside food retailers. The CSL applauds DSL's plan to establish an advisory committee of students, faculty, and staff. This group should be directly involved in regularly surveying and monitoring food prices and quality across campus in collaboration with MIT's administration in order to ensure sustainable, long-term stability and competitiveness in both quality and cost of food across campus.

# 2. Evaluate the opportunity to standardize the ownership, or administration, or both, of retail space to determine if MITIMCo property should be administered by DSL

The selection of the retail vendors in the Stratton Student Center should be determined by an organization whose primary goal is aligned with student interests. MIT should either acquire this space from MITIMCo, or otherwise subsidize or incentivize retail outlets so that high-quality vendors can thrive in the Student Center for the students' benefit, similar to Harvard's philosophy and operation regarding Clover Food Lab. Healthy food is essential, both as grocery and dining options, and should be pursued as a central mission of MIT dining in the Student Center, as well as across campus.

# 3. Enhance food availability

To enhance food availability, innovative, high-quality food vending machines should be available across campus with coffee, hot chocolate, fresh sandwiches, high-quality salads, grain bowls, fruit, and so forth, as in the Media Lab. MIT should work with Life Alive, Clover, Trader Joe's, and other high-quality local food vendors to enable high-quality vending machines to replace or supplement the current preponderance of junk food and sugary drinks (Coke, Red Bull, etc.) that is well established to result in poor physical and mental health, and that currently populates MIT's corridors. Pritchett Dining Hall should also be well-lit, clean, safe, accessible, and offer high-quality food during prime dining hours, as well as overnight. In summary, the CSL found that steps are being taken to improve the quality of student spaces and food options on campus, but the committee believes that more work is needed to address quality, cost, and access issues on the east and west sides of campus. Given the central importance of these features of the undergraduate and graduate student experience on campus, the committee cannot overstate the importance of MIT's administration immediately addressing these deficiencies in order to enhance student health and wellbeing. MIT should offer places where graduate students and off-campus undergraduates can study and rest between classes and find healthy and affordable food on campus. MIT should make this a top resource priority. Ensuring that MIT students are offered the highest quality of life during their undergraduate and graduate student experiences will ensure both a healthy and productive current student population, as well as an appreciative alumni pool that fosters future generations of MIT applicants.

# **Title IX Policy Revisions**

The CSL supported revisions made to the Title IX policies in the *Mind and Hand Book* so that they align with Institute policies and procedures.

#### **Informational Topics**

#### **MindHandHeart Initiatives**

The CSL supported the initiatives developed and implemented through the MindHandHeart program.

# **Committee on Undergraduate Admissions and Financial Aid**

Daniel Frey, chair

During AY2018, the Committee on Undergraduate Admissions and Financial Aid (CUAFA) focused primarily on the cap on international student enrollment, and a study on the benefits of racial diversity in the undergraduate student population to MIT's educational goals. In September 2017, CUAFA members also recommitted themselves to the core principles and values detailed in the committee's 2010 document entitled "Guiding Principles and Values for Admissions and Financial Aid":

- Meritocracy
- Egalitarianism
- Excellence
- Responsibility
- Diversity
- Accessibility
- Affordability
- Sustainability
- Competitiveness

### The Cap on International Students in Undergraduate Admissions

The undergraduate admissions process is the same for all students; however, MIT places a cap on the number of students the Institute will enroll who are international citizens who reside outside the United States.

Due to the cap on international admissions, these applicants are admitted at a rate less than one-third of that for the other group of applicants. Currently the total number of international applicants who reside outside the United States who enroll at MIT cannot exceed 6% of the total number of students enrolling in the first-year class. However, the total number of international undergraduates at MIT is closer to 10%, largely because, since 2011, international students attending US high schools are not subject to the cap.

After a discussion of many factors, both pro and con, CUAFA recommended to the Enrollment Management Group that there be a moderate increase of this cap to 8%, to allow Admissions staff to consider the option of admitting a greater number of outstanding international applicants.

This recommendation to increase the international student enrollment was not pursued by the senior administration at this time.

# The Value of Diversity in Undergraduate Admissions

In July 2013, CUAFA issued an internal document entitled "Report on the Benefits of Student Body Racial Diversity to MIT's Educational Goals." During AY2018, CUAFA sought to update that report. CUAFA's 2013 report discussed the benefits of diversity for the mission of MIT and reviewed potential, workable, race-neutral alternatives for achieving the benefits of diversity.

In October 2015, CUAFA published a statement explaining its rationale for considering race as one factor of many in making admission decisions.

CUAFA spent a great deal of time during AY2018 reviewing the past report and the data available to it. The committee is currently in the process of updating the earlier report.

The new report will again recommend that the evidence base for CUAFA's analysis should be improved and will recommend that specific owners responsible for this data collection be identified, and that MIT's systems be improved. As a step toward that end, the committee plans to speak next with Vice Chancellor Ian Waitz.

#### **Other Business**

CUAFA took up several other topics this year, but these occupied much less of the committee's time than the other two.

# **Rising Cost of Housing Due to Renovations**

CUAFA listened carefully to a set of concerns about housing renovations and their effects on some communities due to rising costs (New House and Chocolate City were prominently considered). Although these are important matters for MIT, CUAFA is limited in its ability have a positive impact because its actions could only help students on financial aid.

#### **Faculty Surveys Regarding Top Students**

CUAFA also heard about faculty surveys regarding top students. Committee members gave advice on how to construct the survey and to whom the survey should be administered. CUAFA also heard the results of the survey.

#### **Student Concerns Regarding Self-Help**

CUAFA also heard student concerns about the level of self-help. A study showed that requirements for self-help are not leading to stratification by family income of the amounts of student employment during the term.

#### **Committee on the Undergraduate Program**

Duane Boning, chair Genevre Filiault, executive officer

During AY2018, the Committee on the Undergraduate Program (CUP) made decisions and recommendations on a number of matters related to MIT's undergraduate educational programs and provided input on a range of issues that cut across faculty and institutional governance. The committee was chaired by Professor Duane Boning and met on alternate weeks through the fall and spring terms.

A new SB degree program in Urban Science and Planning with Computer Science (Course 11-6) was discussed and recommended by the CUP this year, with subsequent approval by faculty vote. In addition, the committee engaged in a discussion with the leadership in Course 6 around their ideas for the future and models of degrees incorporating varying amounts of computer science. The committee consulted on other important topics in undergraduate education such as the New Engineering Education Transformation initiative, new first-year advising seminars, and the academic calendar. In addition, the CUP engaged in annual consultations with its Subcommittee on the Communication Requirement and Subcommittee on the HASS Requirement.

Following up on discussions last year, the CUP heard from Professor Gerald Sussman (Department of Electrical Engineering and Computer Science) and Anne Marshall (associate director for assessment and evaluation, Teaching and Learning Laboratory) on findings from the assessment of last year's second offering of the experimental online version of 6.002 Circuits and Electronics for MIT residential students. In her assessment, Marshall found that students highly valued the flexibility of online classes. However, "this approach is effective for students who are good at managing their time and self-pacing, but can be stressful for students who benefit from external structures for pacing." Marshall also found the only significant difference in how the online versus the traditional students spent their time on extra-curricular activities was that "there was a small increase in the amount of time spent on activities with career-related organizations" for the students who took the online version. This experiment did not run during AY2018 and will not continue, as the curriculum for that subject has changed.

In addition to the aforementioned regular faculty committee work, the CUP deliberated several important issues over multiple meetings—the possibility of instituting a computational thinking General Institute Requirement (GIR) and the role of Early Sophomore Standing (ESS) in the undergraduate program.

On the question of instituting a GIR in computational thinking, the CUP heard from various key stakeholders, such as the Engineering Council, the School of Engineering Student Advisory Council, the Faculty Policy Committee, and departmental undergraduate officers, and also presented at the March 2018 Institute Faculty Meeting. At the end of the semester, the committee surveyed the faculty about options for implementation of a requirement; the results will help shape the direction of future discussions.

The topic of ESS arose through a query into the educational rationale for the existing algorithm for student eligibility. In an effort to address this query, the committee considered the role of ESS for current undergraduates and the benefits and shortcomings of the system. After identifying two main reasons students may want to take ESS, members were particularly interested in exploring how they might provide different opportunities for students to address these needs as well as others. The committee is eager to continue exploring these discussions next year. In the meantime, the CUP provided the vice chancellor with some additional clarity and a simplification of the criteria for identifying students who are eligible for ESS in AY2019.

The CUP Study Group on Undergraduate Major Enrollment, chaired by Professor Jeffrey Grossman (Department of Materials Science and Engineering), continued its work this year. As part of its charge to understand trends and factors influencing major enrollments and student choice of major, and the implications of such decisions for students, departments, faculty, and other stakeholders, the study group conducted a year-long study of the first-year student experience with major selection. The study group surveyed 250 first-year students five times over the course of the year to get a better sense of students' thoughts and experiences with major selection as they move through different points of their first year. From this group, 34 students also participated in one-on-one interviews with Rudolph Mitchell (associate director for assessment and evaluation, Teaching and Learning Laboratory), once in the fall term and once in the spring term. The focus of these interviews was to gain a deeper understanding of these students' experiences, processes, and thoughts on selecting a major. The study group has begun sharing information with various constituencies (the Faculty Policy Committee, Academic Council, departmental undergraduate officers, etc.) across campus and plans to continue the analysis of data and outreach before sharing study findings next year.

#### Subcommittee on the Humanities, Arts, and Social Sciences Requirement

Marah Gubar, chair Patricia Fernandes, executive officer

During AY2018, the CUP's Subcommittee on the Humanities, Arts, and Social Sciences (HASS) Requirement (SHR) was chaired by Professor Marah Gubar. The subcommittee met monthly and continued with its regular responsibilities related to the oversight of the HASS requirement.

SHR staff and the chair reviewed 79 student petitions for substitutions within the HASS requirement. Of the 79 petitions, 52 were for Harvard and Wellesley cross-registered subjects. SHR approved 39 new proposals for HASS subjects to count toward the HASS requirement. Of those proposals, two were for new HASS Exploration (HEX) subjects: 21L.400 Medical Narratives: Compelling Accounts from Antiquity to Grey's Anatomy

and 21L.452J/24.140J Literature and Philosophy. SHR also reviewed and supported a proposal to a structural change to the existing HASS Concentration in Science, Technology, and Society (STS). Additionally, SHR reviewed a proposal for a new HASS concentration in negotiation and leadership. After careful review and consideration, the subcommittee unanimously decided against the proposal.

The subcommittee continued its review of how students are moving through the HASS requirement by looking at the Class of 2017. In AY2017 SHR looked at the Classes of 2014, 2015, and 2016—the first cohorts to complete the HASS requirement under the revised distribution component. The results are consistent across cohorts: for each cohort, close to 40% of students completed more than the required eight subjects; on average, students completed three HASS-H subjects, three HASS-S subjects, and two HASS-A subjects; about 80% of students completed a HASS-H in year one, about 80% of students completed a HASS-S by year two, and about 80% of students completed a HASS-A by the end of year three; and the highest enrolled HASS concentrations are economics (200+), global studies and languages (200+), and music (100+).

The bulk of the subcommittee's work this year was a review of HASS concentrations. SHR focused on gathering information for each concentration—specifically, learning what is working well and what has been challenging. So far, members have met with HASS concentration advisors and HASS administrators for over 25 different HASS fields. Overall, HASS concentrations appear to be working quite well, and SHR plans to conclude this component of the review next fall in addition to surveying seniors in the fall. Beyond the information-collecting phase, a report will be issued to the CUP. Findings on best practices and recommendations will also be shared more broadly with HASS units.

The subcommittee also discussed the status of the HEX program and considered activities to encourage the development of new HEX subjects. Following the review and discussion of the new HEX subject proposals this spring, the subcommittee created a guide to help with the proposal process. The guide, which will be available to faculty interested in creating HEX subjects, details the criteria for these subjects, the rationale for each criterion, and provides examples of how existing HEX subjects meet the criteria. SHR also held a luncheon this spring for HEX instructors to discuss how the program is progressing.

#### Subcommittee on the Communication Requirement

Chris Kaiser and Rosalind Williams, co-chairs Kathleen MacArthur, executive officer

During AY2018, the CUP's Subcommittee on the Communication Requirement (SOCR) was co-chaired by Professors Chris Kaiser (Department of Biology) and Rosalind Williams (Program in Science, Technology, and Society). The subcommittee engaged in a number of activities in its oversight of the undergraduate communication requirement (CR) at MIT, including a review of 103 student petitions and the rate of student noncompliance with the pace of the CR.

SOCR reviewed and approved the CI-M program for the new SB degree in urban science and planning with computer science (Course 11-6). The subcommittee also approved revisions to the chemistry CI-M program, including two new CI-M subjects and the new Course 5 flexible option. Each year SOCR reviews all CI-H and CI-M proposals, including a review of new CI subjects and the relicensing of existing subjects, consulting with SHR as appropriate. In AY2018, SOCR reviewed proposals for 12 new CI subjects (six CI-M and six CI-H). This is a decrease in the number of subjects reviewed in recent years (20 in AY2017; 18 in AY2016; and 20 in AY2015).

SOCR concluded its pilot of visits to departments to review their CI-M programs. In AY2016, SOCR members agreed that it would be preferable to have the occasion to consider CI-M programs holistically, rather than only reviewing proposals one by one. In AY2017, SOCR developed a process and a set of questions for CI-M program reviews, and had its first visit, which was with Course 3. In AY2018, SOCR met with Literature to explore the possibility of revising an entire CI curriculum at once—in essence, combining a CI-M department visit with the CI-H relicensing process. SOCR also met with Course 20 to learn about both its innovative approach to communication instruction and the lecturers in Comparative Media Studies/Writing who teach CI-HW subjects.

The subcommittee has concluded that visits are not the most effective way to review the CI curricula. The pilot responded to a clear need to think about CI-M programs, to explore a new process for relicensing CI-H subjects, to understand how subjects work together, and to learn about practices in providing communication instruction. This approach allowed SOCR to review syllabi, catalyze discussions in departments about their CI subjects, and learn what is (or is not) working well. However, the siloed nature of the conversations was a significant weakness of this approach; these visits do not allow instructors to exchange ideas with instructors in other units. SOCR has a unique vantage point because of its work in reviewing proposals. Using insights garnered through the proposal review process, SOCR will encourage innovation in approaches to professional communication across the Institute. The subcommittee will also establish a new oversight process for both CI-H and CI-M subjects. The goals of this process are to understand how subjects evolve over time, to gather good practices and innovations in communication instruction, and to evaluate whether the subjects are meeting the desired outcomes for CI subjects and if they are employing any of the recommended practices.

# Harold E. Edgerton Faculty Achievement Award Selection Committee

Pablo Jarillo-Herrero, chair Tami Kaplan, staff

The Edgerton Award Selection Committee selected Vinod Vaikuntanathan, associate professor in the Department of Electrical Engineering and Computer Science (EECS), as the recipient of the AY2018 Harold E. Edgerton Faculty Achievement Award.

Professor Vaikuntanathan received a bachelor of technology from the Indian Institute of Technology Madras, and master of science and PhD in computer science from MIT. He held a position as the Josef Raviv Postdoctoral Fellow at IBM's Thomas J. Watson Research Center, and was also a researcher at Microsoft Research Redmond. Professor Vaikuntanathan then served as assistant professor at the University of Toronto for two years before returning to MIT's EECS department in July 2013 as assistant professor; he attained the rank of associate professor in July 2015. Vaikuntanathan is also co-founder and chief cryptographer at Duality Technologies. As nominated by a senior faculty colleague, "Vinod is widely considered the best cryptographer of his generation. His teaching record is stunning—it is very rare for a junior faculty member to be considered one of the best lecturers in our department. His citizenship is exemplary and he has taken on a leadership role in the EECS and CSAIL communities."

Professor Vaikuntanathan has done pioneering work in cryptography and information security. He studies encryption systems that protect the privacy of data, digital signatures that protect its integrity, and cryptographic protocols that allow organizations who do not trust each other to collaborate and perform meaningful tasks while maintaining individual privacy. An example is fully homomorphic encryption (FHE), which enables encrypted computation without having to trust a cloud provider with sensitive data: the data is encrypted using a key that is known only to the user, but uses an FHE algorithm to perform computations on the encrypted data. Even if an attacker managed to subvert the cloud, they would get nothing of value as long as the user keeps their key secret. The state of the art in FHE is now based on methods that Vaikuntanathan invented; these are many orders of magnitude more efficient than previous techniques. His work has made major steps toward widespread adoption of FHE while at the same time producing beautiful theoretical results. He is sought out globally for invited lectures, tutorials, and participation at international conferences and workshops on cryptography and complexity theory. As of June 2017, he had given 60 invited presentations in 17 countries across four continents. Vaikuntanathan has co-authored over 80 publications in proceedings of refereed conferences and journals. He also holds five patents. Professor Vaikuntanathan is the recipient of the prestigious Alfred P. Sloan Research Fellowship (2013) and an NSF Faculty Early Career Development Award (2014), as well as other awards.

Professor Vaikuntanathan's colleagues and students commend him for his clear, approachable, and engaging style as a teacher and mentor, and for his contributions to the EECS cryptography community and the curriculum. The School of Engineering recognized his contributions in these areas with the Ruth and Joel Spira Award for Distinguished Teaching in 2016.

Continuing the legacy of Professor Harold E. Edgerton, this award honors achievement in research, teaching, and service by a non-tenured member of the faculty. The Selection Committee recognizes Professor Vinod Vaikuntanathan for his innovative and broadly applicable work in cybersecurity, and for his wonderfully conversational and comprehensible lectures and inspiring discussions.

# James R. Killian Jr. Faculty Achievement Award Selection Committee

Michael Strano, chair Tami Kaplan, staff

The Killian Award Selection Committee selected Gerald R. Fink, Margaret and Herman Sokol Professor in Biomedical Research, American Cancer Society Professor of Genetics, and a member of the Whitehead Institute for Biomedical Research, as the recipient of the AY2019 James R. Killian Jr. Faculty Achievement Award.

Professor Fink joined the MIT faculty and the Whitehead Institute in 1982, following 15 years on the faculty at Cornell University. Since arriving at MIT, Professor Fink has been an outstanding scientist, leader, and educator—on campus, nationally, and globally.

Fink is among the very few scientists who can be singularly credited with fundamentally changing the way we approach biological problems. He has made numerous seminal contributions to understanding the fundamentals of all nucleated life on the planet, significantly advancing our knowledge of many cellular processes critical to life systems and human diseases. From understanding how cells are formed and function, to understanding cancer and developing insights into aging, his research has proved critical to modern-day science.

Professor Fink's overarching scientific achievement has been the development of baker's and brewer's yeast into the premier model for understanding the biology of eukaryotes (organisms whose cells have nuclei, which includes all animals and plants). In addition, his discovery of transposable elements in yeast laid the groundwork for future studies of transposable elements, yielding new insights into evolutionary genetic remodeling. A later discovery of filamentation in yeast uncovered a genetic mechanism by which disease-causing fungi switch from a benign to an infectious form and invade human tissues. This has led to a better understanding of how *Candida albicans* can overpower the immune system — clues that may lead to the development of life-saving antifungal drugs.

Fink served as director of the Whitehead Institute from 1990 to 2001, establishing during this time the Whitehead/MIT Genome Center, which in 2003 became the cornerstone facility of the newly launched Broad Institute. MIT's premier place in the world of biological research is due in no small part to Professor Fink's selfless, tireless, and generally unheralded work in creating and nurturing these institutions.

Professor Fink's tremendous accomplishments have been recognized with many awards, including the National Academy of Sciences Award in Molecular Biology, the George W. Beadle Award from the Genetics Society of America, and the Gruber International Prize in Genetics, among others. He has served as president of both the American Association for the Advancement of Science and the Genetics Society of America, and he is an elected member or fellow of the National Academy of Sciences, the American Academy of Arts and Sciences, the Institute of Medicine, and the American Philosophical Society. Professor Fink has also served on numerous scientific advisory boards and the editorial boards of a number of key journals, and he chaired a National Research Council Committee that produced a highly influential report entitled "Biotechnology Research in an Age of Terrorism; Confronting the Dual Use Dilemma." This report recommended policies and practices that would allow the continuation of legitimate research while preventing the destructive use of biotechnology. These recommendations reflect Professor Fink's wisdom and skill in finding pragmatic solutions to complicated sets of problems.

We are delighted to have this opportunity to honor Professor Gerald R. Fink for his pioneering contributions to the genetics and engineering of eukaryotic systems, and his scientific and educational leadership in the biological sciences.

Susan Silbey Chair of the Faculty Leon and Anne Goldberg Professor of Humanities

Tami Kaplan Faculty Governance Administrator