# **Chair of the Faculty**

In academic year 2015, professor Steven R. Hall (Department of Aeronautics and Astronautics) served as chair of the faculty, professor John Belcher (Department of Physics) as associate chair, and professor John Yates (Sloan School of Management) as secretary.

Seven faculty meetings were held, leading to approval of several changes to the Rules and Regulations of the Faculty. These included adding the registrar as an ex officio member of the Committee on Graduate Programs (CGP) (section 1.73.1), implementing updates to requirements for master's degrees (section 2.85), and removing 18.023 as a School of Science core option (section 2.84). The Faculty approved the creation of an SB degree in Theater Arts and elected the inaugural members of the Committee on Campus Planning. Other important issues presented to the Faculty included the final Report of the Task Force on the Future of MIT Education, MIT's role in Boston's bid for the 2024 Olympics, Title IX policies, and student safety and sexual assault. In October, the sole incumbent member of the Faculty ex officiis, Dr. Mary Rowe, completed her term. (Last year, Dr. Rowe had been elected to maintain this status in her role as ombudsperson and special assistant to the president until October 2014, when she returned to her role as adjunct faculty at the Sloan School of Management.) In April, associate professor Kay Tye was recognized as the recipient of the Harold E. Edgerton Faculty Achievement Award, and in May, professor Tyler Jacks was named the winner of the James R. Killian Jr. Faculty Achievement Award. Over the course of the year, the Faculty remembered three colleagues with memorial resolutions: Seth Teller (Electrical Engineering and Computer Science), JoAnn Carmin (Urban Studies and Planning), and Alexander Rich (Biology).

On behalf of the Faculty, the three officers met monthly with the Institute's senior administration and conducted a variety of activities. The officers joined Provost Martin Schmidt in continuing professor Jay Keyser's 29-year tradition of hosting informal monthly dinners for Institute faculty, known as Random Faculty Dinners. With president Rafael Reif, Professor Hall co-appointed an ad hoc faculty committee to review the consultative process that led to the creation of the Institute for Data, Systems, and Society. As faculty chair, Professor Hall continued to serve as a member of the Academic Council and Academic Appointments subgroup, and at the end of the year, Provost Schmidt and Professor Hall announced the appointment of three new Institute Professors: Sallie "Penny" Chisholm (Department of Civil and Environmental Engineering), Ronald Rivest (Department of Electrical Engineering and Computer Science), and Marcus Thompson (Music and Theater Arts Section).

Finally, it is important to acknowledge in this report the tragic suicides during academic year 2015 of a faculty member, a graduate student, and two undergraduate students. Following these difficult losses, chancellor Cynthia Barnhart, Professor Hall, and the presidents of the Undergraduate Association and the Graduate Student Association invited the community to participate in a pilot event called "All Doors Open." The intent was to encourage personal connections and space for reflection. Meanwhile, Professor Belcher worked closely with the offices of the student deans and MIT Medical to support awareness and outreach around mental health.

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## **Faculty Policy Committee**

Steven Hall is the chair of the Faculty Policy Committee (FPC), which met on 14 Thursdays during the fall and spring terms to conduct consultative, oversight, and policy making activities. Lynsey Fitzpatrick serves as FPC staff.

FPC reviewed several curricular issues this year. It opened the year by spending two meetings discussing recommendations presented in the final report of the Task Force on the Future of MIT Education. Members anticipated that several items would lead to concrete proposals and looked forward to future discussions. Later in the fall, the Committee on Graduate Programs referred a proposal to rename the Program on Polymer Science and Technology. FPC recommended that the change go forward. In the spring, FPC approved and forwarded to Faculty Meeting a proposal to create an SB degree in Theater Arts. A comprehensive update to master's degree requirements (*Rules and Regulations of the Faculty*, section 2.85) was also reviewed.

The administration referred four policy issues to FPC for consultation, including updates to faculty appointment and tenure guidelines, information technology and network requirements, academic misconduct, and the title of professor without tenure (retired). FPC also provided feedback on suggested changes to the offices of the general counsel, executive vice president and treasurer, vice president for research, and provost.

In its role providing oversight of the faculty governance system, FPC conducted indepth discussion of four committees. First, it reviewed CGP membership. An *ex officio* appointment was added for the registrar and an *ex officio* appointment held by the vice president for research was retained, with the understanding that it would be filled at the discretion of that office. Second, FPC began a discussion of the charge to the Committee on Outside Professional Activities. It is expected that this activity will carry forward into academic year 2016. Third, FPC received a report on the initial activities of the Committee on Campus Planning and determined that the committee was fulfilling the intent of the Faculty. Fourth, FPC discussed updates to Committee on Discipline (COD) rules around sexual misconduct. Committee members received a related briefing on Title IX, standards of guilt, and case resolution pathways.

To develop broader context on Institute activities, the committee invited a number of reports and annual visitors. These included well-received reports on diversity and outreach programs, including the Interphase Empowering Discovery—Gateway to Excellence program, the MIT Summer Research Program, and the Minority Introduction to Engineering and Science Program. The committee took note of positive engagements and expressed support and appreciation for the missions of all three programs. As background for future educational proposals, the committee discussed the formation and structure of the Institute for Data, Systems, and Society, including concerns related to faculty engagement. FPC also explored MIT's role in Boston's bid for the 2024 Olympics, the arts at MIT, and the MITx business model. In discussions with the president, provost, and chair of the MIT Corporation, the committee expressed continuing faculty interest in campus renewal, international engagements, student wellbeing, and research funding.

Professors Richard Larson and Lisa Steiner completed their terms this year. Professors Leslie Kolodziejski (associate chair) and Christopher Capozzola (secretary), together with professors George Barbastathis and Caspar Hare, were elected to join FPC in academic year 2016.

## **Committee on the Undergraduate Program**

During 2014–2015, 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, chaired by Professor Anne McCants of the History Section, met in alternate weeks through the fall and spring terms. Assistant Dean for Curriculum and Faculty Support Genevre Filiault served as executive officer.

The committee addressed a variety of complex and challenging issues this year. It reviewed the SB degree program in Theater Arts, engaged in discussions of multiple iterations of a proposed interdisciplinary minor in statistics, had a preliminary discussion of proposed new SB programs in the Sloan School, and reviewed the language in the *MIT Bulletin* describing the Laboratory Requirement.

In the fall, the committee discussed and responded to the report of the MITx Subcommittee of the Faculty Policy Committee. Although the committee saw potential in using digital tools to enhance residential education, it nonetheless maintained that the physical proximity of exchanging ideas and having shared experiences was essential to student development. The committee opined that the current faculty governance process for evaluation of residential subjects and evaluation of subjects for transfer credit works well. In the current landscape, the committee would not recommend awarding credit for purely online subjects, but would support departmental decisions about offering Advanced Standing Exams (ASEs) for MITx or similar online subjects. Although the committee did not recommend any change in policy, it asked for the regular collection of data showing credit awarded to students for subjects taken outside MIT and through ASEs to be reviewed regularly, so as to identify a problem if it were to occur.

In response to recommendations from the Institute-wide Task Force on the Future of MIT Education, CUP created two working groups—one to discuss a possible educational initiative and one to discuss support for and review of curricular experiments. The working group on the initiative for educational innovation was chaired by professor Duane Boning and charged with discussing what an educational initiative, as proposed by the task force, might look like and how it might interact with faculty governance. The group's report, supported by CUP, was shared with the chancellor and the task force alumni group charged with thinking further about the educational initiative.

The working group on experiments, chaired by Professor Jonathan Gruber, was charged with defining an experiment, considering how faculty committees might be made aware of experiments, and facilitating useful assessment of said experiments. The group, which included representatives from the Teaching and Learning Laboratory and the Committee on Curricula (COC), proposed a process by which committees and faculty instructors could share information and experimenters could access resources to help them consider

assessments of their experiments. This process was endorsed by the full committee and forwarded to the COC. After receiving final feedback from the Committee on Curricula, CUP will engage the faculty officers.

CUP considered the growth in the number of modular and half-term subjects offered and the effect on the curriculum and student experience as a whole. After several detailed discussions, the committee thought they did not have enough data to understand the broader implications of these incremental changes. However, it identified existing issues with term regulations and how these subjects fit in the academic calendar, which it conveyed to the FPC and the Committee on Academic Programs.

The committee also heard a report on the 2014 summer@future program and discussed future possibilities. While there was no clear consensus on plans for the summer of 2015, the committee generally agreed that there was a unique opportunity during the summer to offer different types of education and experiences and that these ideas should be carefully evaluated with regard to their pedagogical value and unintended consequences for students.

In addition, the committee heard annual updates from its subcommittees—the Subcommittee on the HASS Requirement (SHR) and the Subcommittee on the Communication Requirement (SOCR)—and the chancellor.

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

This year, SHR continued with regular responsibilities related to oversight of this General Institute Requirement (GIR), including questions of policy related to the Humanities, Arts and Social Sciences (HASS) Requirement. The subcommittee was chaired by Professor Helen Elaine Lee and met approximately every two weeks during the academic year.

Oversight activities were varied. Sixty-one petitions for subjects to count toward the HASS Requirement were considered in AY2015; 31 were for subjects taken at Harvard University through cross-registration. SHR also reviewed 20 new and 36 revised subjects to count toward the HASS Requirement, including subjects experimenting with pedagogies and format. Given the phase-out of the Humanities, Arts and Social Sciences Distribution (HASS-D), SHR revised its policy to allow all readmitted students the option of completing the revised distribution.

The subcommittee continued to monitor enrollments in HASS distribution categories and concentrations. As part of this work, SHR heard an update on the new enrollment tools used in managing the caps on subjects that are Communication Intensive in the Humanities, Arts, and Social Sciences (CI-H). SHR provided feedback to the project team, advocating deploying similar tools to aid the enrollment process in other limited-enrollment HASS subjects.

SHR responded to the Report of the MITx Subcommittee of the Faculty Policy Committee. Members discussed the value of residential education and weighed the merits of awarding external credit that would count toward the HASS Requirement, including credit via Advanced Standing Exams. SHR agreed that the exchange of ideas, unscripted conversations, and debates in a classroom experience are a vital part of the HASS Requirement. It was proposed that the use of MITx content in residential subjects should facilitate greater interaction and a more productive use of contact time. Where the residential classroom experience is integral to HASS subjects, it was not immediately clear to members of SHR that external credit should be awarded for MITx (or edX or other massive open online course [MOOC]) subjects. However, SHR is willing to review proposals for HASS credit for MITx or other online subjects with the support of the academic units.

SHR discussed the current status of the faculty-recommended HASS Exploration (HEX) Program and considered additional outreach activities to encourage development of HEX subjects. SHR approved one new subject, Global Shakespeares, for AY2016, bringing the total number of subjects in the program to 13.

In fall 2014, the new online HASS concentration form opened to all students except those graduating in AY2015. The online form replaced a paper, two-form (proposal and completion) process. Students still need to submit the form twice—once to propose and once to confirm completion—but no longer need to carry paper forms from office to office. SHR heard an update on the project and reviewed assessment data. Overall, students and advisors found the online form easy to use and an improvement over paper. SHR will continue to explore whether there is a decrease in the quality or quantity of the advising students receive (or seek) from their concentration advisors.

### **Subcommittee on the Communication Requirement**

During AY2015, CUP's Subcommittee on the Communication Requirement was cochaired by professors Eric Alm and Anne Whiston Spirn. The subcommittee engaged in a number of activities in its oversight of the undergraduate Communication Requirement at MIT, including the review of 74 student petitions and attendant policy issues.

SOCR reviews all Communication Intensive in the Major (CI-M) and CI-H proposals, including the review of new subjects and the relicensing of existing subjects. When appropriate, SOCR continues to consult with SHR. This year, SOCR reviewed proposals for 20 new communication intensive subjects, including 12 Communication Intensive in the Humanities, Arts, and Social Sciences–Writing Focused (CI-H/HW) and eight CIM subjects, and relicensing proposals for 12 CI-H/HW subjects, including subjects experimenting with format, pedagogies, and online tools to enhance communication instruction.

SOCR responded to the Report of the MITx Subcommittee of the Faculty Policy Committee. Members discussed the value of residential education and the award of external credit to count toward the Communication Requirement. SOCR was unanimous in its opinion that any MITx (or other online) content should enhance communication instruction and enable more face-to-face faculty–student interaction or workshops. For MIT subjects that go through the current faculty governance process, SOCR will

continue to look closely at how class time is used. Members also agreed that the reliance on mechanized or peer-to-peer feedback in MITx and other MOOC subjects is not sufficient to substitute for the CI subjects. SOCR determined that, although it may be possible in the future to consider the award of external credit for CI subjects, online subjects are not yet able to match the quality of residential CI subjects and should not be awarded CI credit.

SOCR's 2008 Report on the Assessment of the Implementation of the Undergraduate Communication Requirement recommended that the criteria for designation of CI subjects focus less on mechanical criteria and more on educational objectives and the value of the educational experience. In revising the CI criteria over academic years 2011–2014, the subcommittee began to create an inventory of good practices. SOCR is working to meet the increasing demand for additional resources and opportunities to share good practices for teaching communication skills within the community of MIT's CI instructors, particularly new instructors or those developing new CI subjects. A portion of most meetings this year was devoted to sharing good practices in, materials developed for, or innovations in communication instruction. SOCR will continue these discussions next year, especially as online tools evolve and are used more widely.

SOCR heard two updates on the new enrollment tools, launched in fall 2014, designed to manage the caps on CI-H/HW subjects. SOCR heard updates on the project and its assessment and provided feedback to the development group. The subcommittee was pleased to learn that in the fall term, 80% of students who used the new tools received their primary choices. This is slightly better than the placement results via the HASS-D lottery, which partially managed enrollments in CIH/HW subjects before it was phased out.

## **Committee on Academic Performance**

Charles Stewart III is the chair of the Committee on Academic Performance (CAP); Stephen Pepper serves as CAP staff.

## **Petitions and Academic Actions**

The Committee on Academic Performance reviewed 407 petitions this year. Last year's number was 301; the average for the past 10 years is 306. (This 25% increase in the number of petitions reviewed is discussed under the Policies and Procedures heading.) Of this year's petitions, 377 (93%) were approved and 28 (7%) were denied. Four petitions were incomplete at the end of the year; four had been withdrawn by the student.

In AY2015, the committee issued 218 academic warnings. Last year's number was 266; the average for the past 10 years is 287. There were 26 students who were required to withdraw. Last year's number was 23; the average for the past 10 years is 38 students. Details of this year's actions are given below.

Table 1. Committee on Academic Performance End-of-Term Action Summary, 2014–2015

	Fall 2014	Spring 2015		
Year	Warnings	Required Withdrawals	Warnings	Required Withdrawals
Freshmen	20	4	30	2
Sophomores	27	6	23	2
Juniors	32	3	29	1
Seniors	39	5	18	3
Total	118	18	100	8

The committee continued an initiative begun in 2013 by sending commendatory emails to students who completed their term on warning with a record above minimum expectations—64 students for fall term 2014, 59 students for spring term 2015.

#### Readmissions

CAP oversees undergraduate readmissions as specified in the *Rules and Regulations of the Faculty*. The committee continues to use the process that was defined by the committee and Student Support Services in June 2010. The team leader of Student Support Services reports readmission data to the committee in September and February.

The Readmission Committee received 80 completed applications for the fall 2014 semester. Of these, 53 (66%) were approved and 27 (34%) were denied. There were also two appeals of fall 2014 readmission denials, one of which was reversed and the other upheld after review of new information.

The Readmission Committee received 71 completed applications for the spring 2015 semester. Of these, 47 (66%) were approved and 24 (34%) were denied. There was one appeal of a spring 2015 readmission denial, which was upheld after a second review.

### **Degrees**

Faculty rules state that "[t]he Committee shall present to the Faculty its recommendations on candidates to be awarded Bachelor's degrees (section 1.73.5 c)." In AY2015, the committee recommended degrees as follows:

September 2014: 9 students, 11 majors February 2015: 80 students, 94 majors June 2015: 1,010 students, 1,179 majors

No department requested single-deficiency degrees—that is, recommendation of a degree despite a missing departmental requirement. This is fairly unusual.

### **Policies and Procedures**

Last year's report pointed out a significant increase in Late Add/Drop/Change petitions after the online Add/Drop/Change form was deployed for all students. Student statements cited ignorance of the final step—submitting the form to the registrar—even though the registrar's staff had sent individual emails the day before the deadline to all students with a pending form.

This trend accelerated during AY2015, rather than diminishing; although students and advisors were more familiar with the system, petition statements continued to say that students did not realize a third step existed, or that they forgot to take it. Faced with this volume, CAP delegated to its chair approval of "failure to click" petitions where the student had created and the advisor had approved the form before the deadline. Such petitions continued to require the full process—statements from student, advisor, and instructor—although all were approved administratively "with neglect," which puts the student on notice that a similar future petition will likely not be approved. Again, because of volume, June decision letters for "failures to click" were sent by email, not postal mail.

Over summer 2015, the committee chair and staff, together with the registrar, will review "failure to click" data and discuss possible changes to communications, the online Add/ Drop/Change, process, or both. The aim will be to reduce the number of petitions for late drops, adds, and changes of status.

### **Petition Fee Structure**

Another CAP response to the volume of "failure to click" petitions was to discuss possible financial disincentives. The committee had discussed petition-processing fees in AY2014, expressing concerns including possible financial hardship for some students, committee reluctance to deny petitions after previous neglect, and adding a disincentive for frivolous petitions. After discussions at the October 2014 meeting, the chair met with Registrar Mary Callahan, who explained that processing fees contribute significantly to that office's budget.

Ms. Callahan came to the November 2014 committee meeting and affirmed an agreement worked out with the chair:

- Replace the current \$50 processing fee with a \$25 filing fee for approved petitions
- Add a \$25 fine to the filing fee for petitions approved with neglect
- Add a \$50 fine for petitions approved with neglect after a previous approval with neglect (double neglect)
- Charge no filing fees or fines for situations caused by staff error or advisor or instructor neglect

CAP will urge the dean for undergraduate education to make up the shortfall in the registrar's budget caused by this new fee structure, which will be implemented in AY2016.

#### **Online Submission of Petitions**

As part of its own ongoing reorganization, Information Systems & Technology in January 2015 appointed a new team focused on online submission of Late Add, Drop, and Change Status petitions. The team, jointly sponsored by Undergraduate Advising and Academic Programming and the registrar, includes the committee's staff associate and associate registrar Brian Canavan. Significant work was accomplished through the spring 2015 term, with user testing in June and July and a first rollout scheduled for August, ahead of the fall 2015 term.

## **Modular Subjects**

The committee continued to receive petitions after the Add Date from students seeking to switch from one side of a joint or "meets with" subject to the other. Most of these were for 7.10 or 20.111, which are the same subject, Physical Chemistry of Biomolecular Systems. This subject meets with 5.60 Thermodynamics and Kinetics for the first half of the spring term, splitting off in the second half. Some students are not aware of the overlap; others change majors during the term and need to switch to the relevant department version. The committee has approved most such petitions.

In AY2015, CAP reviewed several petitions involving new half-term subjects 6.0001 and 6.0002, and again saw a few half-term subjects in the Department of Mechanical Engineering that overlap with parts of full-term subjects. The committee understands that Aeronautics and Astronautics and other departments hope to offer similar modular subjects.

Members expressed a desire that departments would align such subjects with the existing add and drop dates, or at least make clear announcements about the deadlines to students in those subjects. The chair relayed this concern to the faculty chair and suggested a cross-committee working group to address the issue.

### **Credit Limits**

CAP imposes credit limits on students placed on academic or communication warning (144 for spring 2015, 215 for fall 2015). All students have a 12-unit credit limit for Independent Activities Period (IAP), and freshmen are limited to 54 units in the fall and 57 units in the spring term. Outside these limits, MIT undergraduates may register for as many units as they wish.

In March, the undergraduate officers invited CAP chair and staff associate to join them for a wide-ranging discussion, some of which focused on over-registration. Officers, concerned about the holistic health of students, were responding to renewed discussion of student stress in *The Tech*, online, and in dorm meetings, especially in light of student deaths. Many officers favor following the lead of peer institutions, most of which impose credit limits on all students; other officers would like to investigate this possibility. Asked if CAP could impose a universal limit, the chair suggested that a better approach would be to appoint a dedicated work group to explore all implications of such a change.

## **Membership**

The Committee on Nominations extended the term of professor Ian Hutchinson to cover the fall sabbatical of professor Ronald Ballinger. In August, newly elected member T. Alan Hatton stepped down, having discovered that teaching commitments and travel would prevent him from attending most meetings. The nominations committee therefore extended Professor Hutchinson's term to June 2015. CAP operated with a faculty vacancy from February through May 2015 while professor Rebecca Saxe was on leave. Average attendance at meetings was 8.25 members in the fall and 7.13 members in the spring.

### **Committee on Curricula**

The Committee on Curricula is chaired by Dennis Kim; the executive officer is Joan Flessner-Filzen. The COC 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 for substitutions for the GIRs. The voting members consisted of six faculty members (including the chair) and four student members. The committee met seven times during the fall term, three times during IAP, and eight times during the spring term. Two meetings were canceled due to weather-related closures of the Institute.

## **Review of Undergraduate Subjects**

The chart below compares the current year to AY2014.

Table 2. Committee on Curricula Review of Undergraduate Subjects

	AY2014 (through 6/2/14)	AY2015 (through 6/5/15)
New subjects approved	90	59
Subjects reinstated	2	8
Subjects renumbered*	8	188
Subjects removed	61	51
Subjects revised	359	303
Total	520	609

<sup>\*</sup>The 2014-2015 total includes the renumbering of the 171 subjects offered by Global Studies and Languages. The prefix for those subjects changed from 21F to 21G

### **Review of Undergraduate Curricula**

In addition to numerous editorial changes to degree charts and minors, the committee approved the following major curricular changes:

Course 1: Termination of the degrees in Civil Engineering (1-C) and

Environmental Engineering (1-E)

Course 21: Restructuring the degree to retire the concept of "major

departure" and recognize the Humanities degree as an

interdisciplinary degree with specific tracks

Course 21G: Addition of a track in German, which had formerly been

designated as an option in the Humanities degree (Course

21)

Course 21M: Establishment of a new degree in Theater Arts (21M-2), a

program that had formerly been available as an option in the Humanities degree (Course 21) (with the existing degree

in Music redesignated as 21M-1)

3-A, 4-B, 10-C: Creation of degree charts, which had previously only been

described in narrative form in the Bulletin

#### **Other Actions**

Over the course of the year, the committee:

- Reviewed, in conjunction with CUP, a proposal to establish a new interdisciplinary minor in statistics. This is the first undergraduate program proposed by the newly established Institute for Data, Systems, and Society. After extensive discussion and consultation, COC declined to approve the proposal; however, in providing detailed feedback to the sponsors, COC expressed its enthusiasm for the concept and encouraged the sponsors to revise and submit a new proposal in the fall for AY2017.
- Asked CUP to clarify the criteria for Institute laboratory subjects to better align
  with current practice and provided feedback to CUP on its recommendations for
  approving and monitoring experimental subjects.
- Reviewed a proposal to establish an exchange program with the University of Tokyo for students in Courses 2, 3, and 22. However, COC declined to endorse the proposal. As a follow-up measure, COC asked CUP to consider what standards should apply to the review of departmental exchange programs, as there are no formal criteria on record.
- Began using subject evaluation data to engage with departments about subjects for which students report spending significantly more time than expected, on the basis of assigned units.

- Held numerous discussions concerning online learning. Included in those conversations were Janet Rankin (interim director of the Teaching and Learning Laboratory) and Professor Michael Cima, who developed and taught the digital version of 3.091 Introduction to Solid State Chemistry. One faculty member used COC's new supplemental form to propose a digital version of an established subject. The committee remains concerned that it will be unable to effectively identify subjects with digital content until such time as the proposal intake process itself is revised to solicit that information.
- Responded to the referrals and recommendations from the MITx Subcommittee.
- Continued to monitor developments with respect to IAP, taking note of the
  fact that a class schedule for IAP was published in the online subject listing
  for the first time during this academic year. The committee also reviewed data
  concerning both academic and non-academic activity during IAP and shared the
  data with the same committees that had participated in the review of IAP (FPC,
  CUP, and CGP).
- Conducted its biennial review of subjects that fulfill the Restricted Electives in Science and Technology (REST) Requirement.
- Received an update from, and provided input to, the project team involved in implementing a new catalog production system for the 2015–2016 edition of the MIT Bulletin.
- Approved changes to the Reserve Officers' Training Corps curriculum in Military Science and engaged with Naval Science concerning proposed changes to its curriculum.
- Adopted standards for the maximum amount of GIR overlap allowed in degree programs, on the basis of how programs incorporate subjects that fulfill the REST, Laboratory, and HASS requirements.
- Received reports from SOCR and SHR concerning petitions received and reviewed by those committees. It also received a report from the sponsors of the Atmospheric Chemistry minor concerning the first year of operation for that program.

## **Committee on Discipline**

### **Reported Cases**

Acting in accordance with its purpose of adjudicating cases of alleged student misconduct and student organization misconduct, the committee, chaired by Professor Suzanne Flynn, had 268 cases brought to its attention in academic year 2015. Of those cases, 235 (88%) were complaints alleging misconduct by individual students and 33 (12%) were complaints alleging misconduct by student organizations. These cases were resolved in a variety of ways. The following is a summary of types of violations for AY2015, compared with the previous year's totals.

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Table 3. Complaints of Individual Student Misconduct

Academic Year Total: Incident Type	2013–2014	2014–2015
Academic Misconduct	61	33
Cheating	30	15
Plagiarism	4	6
Unauthorized collaboration	13	10
Other	14	2
Personal Misconduct	151	193
Alcohol	73	86
Other drugs	11	11
Assault	5	1
Harassment (other than sexual) and stalking	2	9
Property damage	2	1
Disorderly conduct	10	6
Theft	2	6
Unauthorized access, improper use of Institute property	23	25
Domestic violence or argument	7	3
Fire safety, arson	3	13
Weapons, dangerous objects	3	1
Residence hall security or guest violations	*	9
Hazing	*	9
Other	10	13
Sexual misconduct (excluding sexual harassment)	4	9
Sexual harassment	1	0
Total	217	235

Note: Each case is counted once, even when more than one allegation exists in a case.

Table 4. Complaints of Student Organization Misconduct

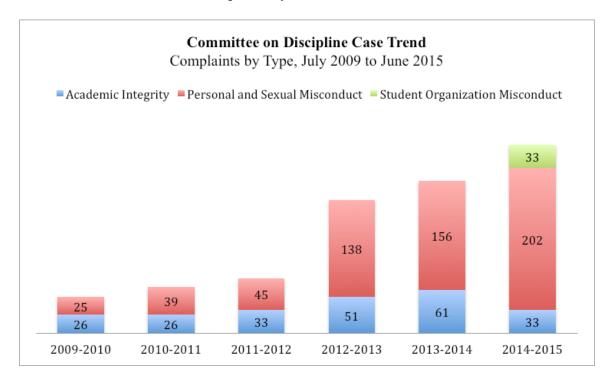
Academic Year Total: Incident Type	2014–2015
Alcohol	13
Other drugs	1
Exceeding occupancy	2
Fire safety	2
Hazing	6
Harassment (other than sexual)	3
Open air spaces policy/unauthorized roof access	3
Disorderly conduct	1
Other	2
Total	33

Note: Each case is counted once, even when more than one allegation exists in a case. COD did not report data on student organization cases in prior years, so no comparison is available.

<sup>\*</sup>Category not calculated in prior year. Complaints in these categories in prior years would have been listed in other.

#### **Case Trend**

The number of reported cases was 23.5% higher in AY2015 than in AY2014. Part of this increase was caused by the addition of student organization misconduct cases to the COD's portfolio of responsibility. If that change had not taken place, this year's total reported cases would have been 8% higher than the previous year. The number of academic integrity complaints decreased by 46% in AY2015 but the combined categories of personal and sexual misconduct increased by 29.5%. The number of cases presented to COD has risen 425% over the past six years.



### **Case Resolutions**

COD uses a variety of methods, both formal and informal, to resolve cases presented to it. These resolution methods are described in the *Rules and Regulations of the Committee on Discipline*. The resolution methods used by the committee in AY2015 are presented below and compared with the previous academic year.

Academic year 2015 was the second year that COD had the sanctioning panel resolution method available. This method continues to be regarded as successful and is chosen by a majority of students who have the choice between a sanctioning panel or a hearing.

Table 5. Case Resolution Methods Used by the Committee on Discipline

Academic Year Total: Resolution Type	2013–2014	2014–2015
COD administrative resolution	108	149
COD hearing	0	1
COD sanctioning panel	10	7
Faculty letters to file	43	18
Withdrawal of case or dismissal	0	4
Restorative justice or alternative dispute resolution	1	1
Case closed because of help-seeking protocol	26	27
Non-adjudicative resolution	16	38
Delegated to student-run judicial mechanism	*	13
Cases pending (as of June 30, 2015)	13	10
Total	217	268

<sup>\*</sup> Category of sanction not calculated in prior academic year.

### **Case Outcomes**

The philosophy of COD is that student discipline is one expression of the comprehensive education that a student receives when attending MIT and that by participating in structured educational sanctions (e.g., substance abuse education, mentoring programs, essays that demand critical thinking and personal reflection, and so on), the student learns to correct his or mistakes and will develop into a more mature person. A very small number of cases (about 2% in AY2015) require a student to be separated from the Institute, either temporarily or permanently, because of the Institute's need to ensure a safe environment. About 98% of cases are resolved without suspension or expulsion. This table presents the outcomes assigned by COD in AY2015, compared with AY2014 year.

Table 6. Committee on Discipline Sanctions by Academic Year

Academic Year Total: Sanction Type	2013-2014	2014–2015
Expulsion	1	0
Suspension or degree deferral	7	5
Removal from Institute housing (house or FSILG)	3	1
Probation	24	38
COD letter to file	71	75
Substance abuse education or treatment	78	74
Restitution	4	6

Note: It is common for 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.

<sup>\*</sup> Category of sanction not calculated in prior academic year.

Academic Year Total: Sanction Type	2013–2014	2014–2015
Other educational sanctions or referrals	123	142
No-contact order, directive to stay away from certain buildings	7	2
Faculty letter to file	43	18
Academic integrity seminar	*	15
Targeted community service project	*	10
Required abstinence from alcohol and drugs	*	6

Note: It is common for 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.

## **Additional Activity**

In addition to responding to complaints of misconduct, COD pursued a number of other activities this year.

### **COD Sexual Misconduct Task Force**

Chancellor Cynthia Barnhart charged professor Munther Dahleh, past chair of COD, to lead a task force to review and propose revisions to the procedures of the committee regarding sexual misconduct cases. The task force included students, faculty, current and former COD members, the Title IX coordinator, Violence Prevention and Response, Office of the General Counsel, professional staff from the Office of Student Citizenship, the Office of the Dean for Student Life, Community Development and Substance Abuse, and the Student Activities Office. The task force completed a broad literature review of the social science research related to sexual assault generally and in the college environment specifically, undertook a detailed study of the current laws and regulations that apply in this field, prepared an analysis of the data from MIT's Community Attitudes on Sexual Assault survey, and examined COD's actions in sexual misconduct cases over the past several years. The talent and expertise of task force members was combined to make 10 recommendations to the community. The task force then solicited feedback from the community via email, hosted a town hall meeting, and presented the recommendations to the faculty and other stakeholders. The task force then analyzed this feedback and is now working on updating COD rules to be consistent with their recommendations. It is anticipated that the revised rules will take effect in fall 2015. When this revised process is in place, MIT will have an enhanced procedure for handling sexual misconduct allegations that is fair to all students involved, provides extensive training to everyone involved in handling cases, resolves complaints more quickly, makes the investigation of these cases more professional, and reduces the burdens on the students involved in the discipline process as significantly as possible. This will serve as a major milestone in MIT's campaign to prevent and respond effectively to sexual assault.

<sup>\*</sup> Category of sanction not calculated in prior academic year.

## **Update to Rules and Regulations**

Following extensive consultation with student leaders, student organization leaders, staff in the Division of Student Life, and the Faculty Policy Committee, Professor Dahleh offered a motion in March 2014 to amend the Faculty Rules governing COD to make it explicit that alleged misconduct by student organizations will be adjudicated by COD. This motion was passed unanimously in April 2014. The Committee on Discipline subsequently revised its internal rules and regulations to enact this change and provide for more detailed definitions and procedures for the adjudication of student organization misconduct. Additional updates to COD rules and regulations provided for a detailed procedure for conducting sanctioning panels and technical changes.

## **Increased Committee on Discipline Training**

The Office of Student Citizenship increased the annual training provided to members of COD from eight hours in AY2014 to 20 hours in AY2015. The expanded training included hands-on practice adjudicating mock cases, training in sanctioning and exercising the particular kind of structured judgment required in deciding COD cases, and extensive training on areas related to sexual assault (including the neurobiological effects of trauma on the victim's brain and the practical implications of this research), data from the MIT Community Attitudes on Sexual Assault survey, and a review of a qualitative study done with sexual assault survivors at MIT who reported their experience to the Institute. This increased training was well received by members of COD.

## **Committee on Graduate Programs**

The Committee on Graduate Programs is chaired by Nicolas Hadjiconstantinou and administered by Jessica Landry. The committee consulted on a broad array of issues affecting graduate education. The September meeting set forth a list of potential agenda items for academic year 2015, the majority of which were reviewed by the committee, along with others that emerged during the year.

In September 2014, CGP received a proposal by Chemistry doctoral student Carl Brozek for developing a document that would summarize common values on graduate student advising and mentoring and could be made available to students and faculty members. Discussion continued at the October, November, and December meetings. Mr. Brozek, as a representative of the Academic, Research, and Careers subcommittee of the Graduate Student Council (GSC), worked closely with the Office of the Dean for Graduate Education and the CGP chair during this time to revise his proposal based on the committee's feedback and existing graduate policies and procedures, as well as Institute policies and procedures related to graduate students. The result was two documents summarizing a set of common values on the graduate student experience, with Institute policy guiding that experience. This information was shared broadly with students, faculty, and staff in graduate programs in the form of a print and web publication, *Best Practices in Graduate Student Advising*.

Two topics continued from the previous academic year. Changes to the *Faculty Rules and Regulations* (section 2.85) related to the elimination of the H-level subject designation brought to light several minor but long-standing discrepancies between master's degree

requirements described in this policy statement and the current degree requirements determined by graduate degree program committees over time, communicated to students in the *Bulletin* and department materials, and used to perform degree audits. In some cases, these differences had existed for several decades. The committee first discussed these discrepancies in spring 2014 and approved a minor update to required units for the master's degree in city planning in May 2014. At its November 2014 meeting, the committee approved two more substantial updates for the master's degree in architecture and master's degree of business administration. These three recommended changes were subsequently approved by FPC and by Faculty vote in April 2015.

Another topic that was carried over from the previous academic year was a proposal for structural changes to the Sloan School's Master of Finance (MFin) Program. In May 2014, the committee first reviewed a request to increase the duration of the MFin Program by adding an optional summer internship component. While generally supportive of this change, CGP had substantial concerns about the resulting increased demand on graduate student housing during the fall term. The committee asked the MFin Program to submit a revised proposal with a letter of support from the dean of the Sloan School addressing this issue. In December 2014, the MFin Program faculty director presented a revised proposal with adjustments to the overall class size and a cap on the 18-month cohort, as well as a letter of support from the dean that confirmed that intended changes to enrollment numbers in other Sloan School master's degree programs would offset the increase in MFin students, resulting in no additional campus housing demand. The committee agreed that the proposed adjustments adequately addressed its initial concerns and approved the changes, with the caveat that the MFin leadership will update CGP on the outcome of this change once the pilot group completes the 18-month program in December 2016.

The committee also considered several new topics related to graduate program offerings. A request to change the name of the interdisciplinary Program in Polymer Science and Technology to Program in Polymers and Soft Matter, in order to better align the program title with a shift in research emphasis within the discipline and among MIT faculty, was approved at the first meeting of the academic year. At the final meeting of the year in May 2015, the committee reviewed an upcoming change within the System Design and Management Program to incorporate a second core track focused on integrated design and management. CGP endorsed this change without reservation, noting that the increased overall program size would be small, on the order of 15 students per year, and most System Design and Management students are early-career professionals who do not apply to campus housing. The committee indicated that it would appreciate an update on the integrated design and management track by the end of the 2016 academic year. The committee also provided feedback to Professor Alan Jasanoff on a proposal for a certificate program in neurobiological engineering, and broached the subject of setting a policy that requires, rather than suggests, that all proposals for certificate programs be brought to CGP for review.

In March, April, and May, the committee devoted significant time to a proposal for a major revision of the Engineering Systems Division (ESD) doctoral program, including related changes to the existing ESD SM degree and the termination of the

Technology, Management, and Policy doctoral program. The committee approved the termination of the Technology, Management, and Policy program without reservation; this program has been slowly being phased out for several years and has not admitted any new students since 2009. The committee was generally supportive of the proposal for a revised ESD PhD program; however, members raised concerns that a number of academic elements of the proposed program were not fully developed to the extent typically required for CGP approval, and that the absence of both a name for the sponsoring entity and new program were impediments to moving forward with the review process. Additionally, the committee felt that the ambitious scope of the proposed program made the issue of its effects on other components of MIT's graduate program, as well as the commitment of adequate resources, very important. A revised proposal from the newly named Institute for Data, Systems, and Society addressed the academic questions raised by CGP, including the composition and purview of the PhD thesis committee; the mechanism for granting credit to students who enter the program with a master's degree in a relevant field; the plan to secure the commitment of faculty and instructors needed to deliver the key social science program content; and the formulation of a learning objectives and assessment plan. The committee approved this updated program in May and referred the proposal to the FPC for the next phase of faculty governance review.

The committee discussed broad educational issues and recommendations raised in the July 2014 Report of the Institute-wide Task Force on the Future of MIT Education, as well as curricular questions related to the May 2014 Report of the MITx Subcommittee of the Faculty Policy Committee. Specifically, the committee discussed the Institute-wide Task Force report recommendations concerning "bold experimentation": offering summer classes for credit; encouraging an ecosystem that promotes educational connections and inter-School synergy; using online and blended learning to strengthen the teaching of communications; and offering online on-demand coursework modules to graduate students. Additional discussion focused on the MITx subcommittee report's recommendations concerning how online activity is reflected in the three-category unit designation for subjects; awarding of transfer credit for edX study; ensuring the quality of faculty-student interaction when evaluating subject proposals; and the importance of providing face-to-face training for teaching assistants delivering online courses.

The committee began a review of policies regarding graduate visiting students in April, to be continued in AY 2016. Specifically, the committee considered how current Institute and graduate policies and procedures for regular enrolled students should apply to students who have visitor status.

In May 2015, at the request of the dean for graduate education, the committee formulated suggestions for academic policies following a campus tragedy, for recommendation to MIT's senior leadership.

## **Committee on Campus Planning**

The Committee on Campus Planning, chaired by Muriel Medard, was created as a new standing committee of the faculty through a motion at the May 2014 faculty meeting. Membership was elected through out-of-cycle nominations proposed by the Committee

on Nominations in October 2014. In its inaugural year, the main task of the committee was to understand the project landscape and economic considerations, and to establish interactions with other standing bodies. The chair serves as an ex officio member of the Building Committee and other members sit on related ad hoc committees.

Meetings took place approximately every two weeks and the committee took a broad approach to planning issues. Over the course of the year, the chair met with the chancellor and provost, and the committee pursued discussion with a wide variety of stakeholders, including the GSC, the Undergraduate Association, the Panhellenic Association (PanHel), the Dormitory Council, the fraternities, sororities, and independent living groups (FSILGs), academic departments, and the Faculty Policy Committee. There were two early goals: to collect information and provide context, and to understand different perspectives with the aim of articulating a set of principles to support future decision making.

## **Committee on Student Life**

The Committee on Student Life (CSL), chaired by Professor Hazel Sive, is concerned with the quality of the learning and living environment at MIT, with specific attention to issues of community. The duties of the CSL include:

- Exercising general attention to the range, availability, and effectiveness of
  Institute-wide support services to students, and with the formal and informal
  relationship among the students, the Institute, and the Faculty
- Considering proposals that would change or modify policies pertinent to student life and making recommendations to the Faculty and the dean for student life
- Encouraging innovation in programs regarding student life, particularly involving Faculty, including the coordination and review of initiatives
- Interacting with other Faculty committees and student governing organizations and with the Schools, departments, and so on, on important issues concerning student life and community and communicating with the MIT community about such issues
- Serving as the standing Faculty advisory body to the dean for student life

## **Schedule and Agenda**

The committee met approximately every two weeks in AY2015. The CSL's membership comprised an outstanding group of faculty and students, who are deeply interested in issues of student life.

The agenda of the CSL is set by the chair in consultation with the committee. To understand current concerns, CSL invited students and members of the senior administration to meet with them. Guests included student leaders from GSC, Panhel, and the Dormitory Council, and senior administrators who have a focus on student life, including the chancellor, dean for student life, dean for undergraduate education, dean for graduate education, Institute community and equity officer, senior associate dean

and director of Undergraduate Advising and Academic Programming, head of Student Support Services, MIT's general counsel, and the director of MIT Medical.

The committee aimed to identify pressing issues and address these in meetings. The CSL also initiated projects that addressed student life. The chair met with the dean for student life biweekly to discuss CSL proceedings and offer the services of the committee to address issues.

## **Opinions and Projects**

In addition to extensive discussions with guests, four major projects were undertaken by CSL. The outcomes are summarized below. Two of these resulted in opinions and two resulted in prototypes.

## Sexual Material (Murals) in Residences

CSL considered freedom of expression with a focus on when and whether it was permissible to display sexual material in MIT living spaces. This was formulated into a committee opinion.

#### **Medical Withdrawal Policies and Procedures**

The Committee on Student Life considered medical (and related academic) withdrawal policies for undergraduates at MIT. The committee fully understands that withdrawals are sometimes necessary and useful to the trajectory of a student. The committee further acknowledges the extensive organization, thought, and good will that are put into the process by administration, medical personnel, and faculty. Nonetheless, there is considerable concern among undergraduate students, graduate students, and faculty members around procedures and policies associated with medical withdrawals. The committee considered the areas of top concern and explored different approaches to the framework of the process that may ameliorate those concerns. The starting point was the notion that the MIT community continually strives to offer the most supportive atmosphere for students.

### **Dorm of the Future**

Before West Campus planning for a new dormitory begins, CSL, in agreement with dean Costantino "Chris" Colombo, began discussions to understand what a successful student living space means. This "Dorm of the Future" project entailed defining key parameters that could be considered in thinking about new living spaces. A prototype survey was devised that could be populated by focus groups in all undergraduate dorms. The survey was set up together with Jagruti Patel of Institutional Research. Good progress was made, and it is anticipated that this project will be completed early in AY2016.

### **Know Your Student**

This project, supported by Dean Colombo, is designed to allow faculty to know about student life. Most faculty members are not familiar with dormitories and living groups and know their students primarily in the classroom. A dedicated site will be housed

on the Dean for Student Life website and referred to on the Faculty website. The initial goal was to apprise faculty members of student living arrangements and to encourage faculty members to eat with students and become involved in other student activities outside of the classroom. However, the site is now seen as an opportunity to disseminate good advising and mentoring practices and to empower the faculty with guidance of students beyond the present norms. CSL put together categories of information that may be useful to faculty members. Further development of the site will be undertaken in AY2016, after receiving input from other constituencies.

## **Committee on the Library System**

The work of the Committee on the Library System, chaired by Jeffrey Ravel, was dominated in the past year by discussions of the forthcoming improvements to various library spaces on campus. Open access issues were also discussed. The new director of the MIT Libraries, Dr. Chris Bourg, assumed her responsibilities in February, and the Libraries successfully concluded searches for two other key leadership positions: director of the MIT Press and associate director for collections.

### **Library Space**

The committee spent extensive time in the fall discussing plans for the renewal of Hayden Library in Building 14 and corollary plans for the Barker and Rotch Libraries. The committee offered observations on three architectural variants of the renovation for Building 14. All three scenarios call for a significant reduction of shelf space in order to add more study spaces. In addition, each plan featured a café on the first floor of Building 14N, a new teaching space for the Rare Books and Archives collections, and possible reconfigurations of other public and service areas in the library portion of the building. The proposals also call for all print collections currently in Barker Library to be removed in order to turn those shelving areas into group and individual study spaces. Minor modifications to the Special Collections reading room in Rotch Library are also under consideration.

Faculty and students (on the committee and at large in the MIT community) expressed concerns about several aspects of the plans. Faculty from several departments, most notably Linguistics, argued that too many print materials were already stored off campus—they could not understand why the plans called for more reductions in oncampus storage space. There was concern about moving the engineering collections from Barker to Hayden, thereby further reducing shelf space allotted to works in the humanities, social sciences, and natural sciences. It was also noted, however, that placing the engineering materials in closer proximity to the natural science materials would be beneficial. Committee members urged the Libraries to preserve the magnificent study spaces in Building 14 that overlook the Charles River and the Boston skyline. Units in the School of Humanities, Arts, and Social Sciences that also occupy Building 14 raised objections to all three plans, which call for them to lose as many as nine offices on the north side of the building. Furthermore, members of the committee felt that the plans fell short of realizing the full potential of the Building 14 space. In particular, the committee expressed its enthusiasm for building a roof over the building's large central courtyard, which is currently open to the elements and unusable for six months of the year. Others

suggested adding one or two more levels of office space on top of the west end of the building, over the current Killian Hall space. The Institute's ability and desire to fund more extensive renovations along these lines remains an open question.

The central administration decided, in conjunction with the acting director of the Libraries, to slow down the planning process. This decision was taken in part to allow the new director of the Libraries and the incoming dean of the School of Humanities, Arts, and Social Sciences to assume their positions and get up to speed on these complex issues. It is anticipated that ongoing discussion of these space proposals will be the major agenda item for the committee in AY2016.

### **Open Access**

Previously it had been decided that open access questions had such a major impact on so many different sectors of the campus community that the Faculty Committee on the Library System was not representative enough to express the faculty's opinion on these issues. The chair of the Faculty was urged to stand up a new committee to deal with all MIT open access questions. In the spring, the director of the Libraries entered into negotiations for a new licensing agreement with Springer Publishing, a major publisher of journals in many fields of interest to MIT's faculty members and students. Part of the negotiation covered the embargo period imposed on MIT Springer authors before they could deposit open access copies of their Springer articles in MIT's online D-Space repository. The director of the Libraries brought this matter before the committee, and also asked the chair of the committee to put together an ad hoc advisory board composed of other members of the MIT faculty who are knowledgeable on these issues. In the end, the director received extensive input from various members of the faculty that allowed her to represent the best interests of the Institute. The episode illustrates the need for a mechanism to address open access questions.

Throughout the year, the members of the committee were struck by the professionalism, thoughtfulness, and openness of the Library staff members who attended meetings. Although it was in transition last year, the Libraries' leadership provided a full and candid assessment of Library affairs. The new director, and the associate directors working under her, are outstanding stewards of this major Institute resource.

## **Committee on Nominations**

The Committee on Nominations, chaired by Andrea Campbell, performed the majority of its work from November to February. In November, the committee conducted an annual survey of all faculty members 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 members and officers. The committee nominated 30 faculty members for appointments beginning July 1, 2015, with the slate including nominees from all five Schools. The committee led a process to nominate Leslie Kolodziejski (Electrical Engineering and Computer Science) as associate chair of the faculty for 2015–2017 and Christopher Capozzola (History) as secretary of the faculty, to join chair-elect Krishna Rajagopal. The slate was presented at the March faculty meeting and unanimously adopted in May.

## **Committee on Outside Professional Activities**

The Committee on Outside Professional Activities, chaired by Sheila Widnall, met twice this academic year. The first meeting was with Michelle Christy, director of the Office of Sponsored Programs (OSP), and Rupinder Grewal, conflict of interest officer. The discussion ranged from conflict of interest issues considered by OSP in the submission of research proposals to the conduct of research at MIT. The second meeting was with Ian Waitz, dean of engineering. The meeting focused on examples of conflict of interest and outside professional activities—issues that had been brought to the dean's attention by department heads as a result of the submission of annual faculty outside professional activities reports. Also, the question was raised whether the current charter of the committee and its processes make sense in today's environment.

MIT's current proposal submission process is in line with federal requirements and collects data on faculty members' outside activities. This data is processed by the vice president for research, the Committee on Outside Professional Activities, and department heads or laboratory directors in the proposal submission process. The role of the committee in this process is not clear. Ideally, faculty should have a voice in the gathering and use of such data. This issue is expected to receive ongoing consideration in AY2016.

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

The Committee on Undergraduate Admissions and Financial Aid (CUAFA) was chaired by David Jerison of the Department of Mathematics. The main activities of the committee in AY2015 were to recommend an increase in financial aid, to consider how to adjust to upcoming changes in the SAT exam, and to authorize Early Action applications from international students. The committee was presented with a statement on diversity, drafted over the summer of 2014 and based on discussions the preceding year.

### **Enhanced Financial Aid**

CUAFA considered a proposal by Elizabeth Hicks, executive director of Student Financial Services, to lower to \$7,500 per year the expected contribution of students toward the cost of tuition and living expenses. By comparison, in AY2015, students' contributions ranged from \$7,900 for first-year students to \$9,100 for fourth-year students. The proposal merges "self-help" and expected summer earnings into one number that does not increase with class year. It permits students to use outside scholarships to replace not only the self-help amount, as in the past, but also summer earnings. The proposal does not change the parental contribution. CUAFA strongly supported this proposal and passed it on to the Enrollment Management Group. It was ultimately approved by the MIT Corporation. With this change, the expected student contribution is \$30,000 over four years.

### **Future Increases in Financial Aid**

CUAFA authorized a new cost-of-living survey that will presumably result in a relatively small increase in estimated student financial need and hence in financial aid. CUAFA also discussed where MIT stands relative to peer institutions. The average debt on graduation (of the 40% of MIT students with debt) is \$19,000. This figures comes from

students graduating in 2014. Few universities have lower amounts of debt, but those that do are among are our peer institutions.

The committee also discussed a "radical" proposal from an undergraduate who suggested that MIT stop using parental income to determine financial aid awards and rely instead on future student earnings. The idea was to relieve students' stress and broaden their choices of summer activities and careers. The proposal does not seem workable because it would require an elaborate system of collection. However, it points to the ongoing issue that MIT is making choices in social engineering no matter how it distributes financial aid.

### **New SAT**

The SAT will change starting in March 2016 from three 800-point examinations back to two 800-point exams. The mathematics exam will be largely the same. The critical reading and the writing exams will be combined into one examination called evidence-based reading and writing. This newly combined exam will include the multiple-choice elements of the current writing test, but not the student-written essay. Instead there will be a new, separate essay. Stuart Schmill, dean of admissions, must decide whether to require applicants to take this new essay test.

CUAFA has recommended that the new essay test not be required for several reasons. MIT's analysis and analysis by the SAT College Board shows that the former student-written essay test did not predict performance in humanities or writing classes, whereas the parts of the writing test that are retained do have predictive value. Furthermore, requiring more exams reduces access. It discourages students from applying, especially if they are not well off financially.

On the other hand, CUAFA recommends that MIT counteract any unintended message that MIT does not care about writing with an explicit statement on the Admissions website that mentions MIT's Communication Requirement. To help formulate such a message, Stuart Schmill is consulting with faculty members in the Humanities.

### **Early Action**

CUAFA approved one change in admissions for 2016, namely that international students be permitted to file Early Action applications.

### **Diversity Statement**

In 2013, in light of the US Supreme Court ruling in *Fisher v. Texas*, and after a briefing by the Office of the General Counsel, CUAFA considered the value of diversity to the educational mission of MIT. During 2013–2015, CUAFA prepared a draft statement, with the intent of communicating with faculty during fall 2015.

## **Edgerton Award Selection Committee**

Continuing the legacy of Professor Harold E. Edgerton, the MIT Edgerton Award honors achievement in research, teaching, and scholarship by a non-tenured member of the faculty. At the April 15 Institute Faculty meeting, the Edgerton Award Selection

Committee (chaired by Peter Child) announced that this year's winner was Kay Tye, Whitehead Career Development Assistant Professor in the Department of Brain and Cognitive Sciences.

A graduate of MIT, Professor Tye received a bachelor of science in Brain and Cognitive Sciences before completing a PhD in neuroscience at the University of California at San Francisco (UCSF). Following postdoctoral fellowships at UCSF and Stanford University, she returned to MIT in 2012. Since her arrival as a new faculty member, Professor Tye has established an internationally renowned research program, created a new undergraduate core class from scratch, earned excellent undergraduate teaching evaluations, and received rave reviews for her mentorship of graduate students.

She was nominated by a senior faculty colleague, who wrote, "Professor Tye has the integrity, passion, and vision that embody the best of MIT. She is a leader in systems neuroscience, known for exciting, groundbreaking scientific research. Her work seeks to understand how we assign positive or negative emotional associations to environmental stimuli—an ability that is both critical to survival and relevant to many psychiatric disease states." The Tye Laboratory applies cutting-edge approaches to visualize, manipulate, and represent how perturbations in neural circuits can lead to pathological behaviors such as anxiety, depression, and addiction. Her research has been honored with multiple awards, including the National Institute of Health Director's New Innovator Award. In 2014, she was named one of *Technology Review*'s Top 35 Innovators Under 35.

Professor Tye is equally recognized for teaching and outreach. This fall she offered a new class on neural circuits and neuromodulation for undergraduates; students applauded her energy and accessible teaching style. Her graduate students, citing an inclusive and inspiring lab culture, nominated her as one of the first faculty members recognized by the Office of the Dean for Graduate Education's "Committed to Caring" campaign. She has served on graduate and postdoctoral career development panels and is active with the Boston Brain Bee and Science Club for Girls, working with local public schools to create a chain of mentors in science, technology, engineering, and mathematics. Professor Tye has also been hailed for her commitment to balancing research and family.

## Killian Faculty Achievement Award Selection Committee

The Killian Award Selection Committee (chaired by Roberto Rigobon) selected Tyler Jacks, director of the Koch Institute for Integrative Cancer Research and professor of biology, as the recipient of MIT's 2015–2016 James R. Killian Jr. Faculty Achievement Award. With this award, the committee acknowledged the impact that multidisciplinary research and community effort can have on addressing society's greatest challenges. The Faculty honored Professor Jacks for his influence on the field of cancer research and his visionary leadership of the Koch Institute.

Long a leader in the MIT cancer research community, Professor Jacks was an early pioneer in genetically engineering mouse models that can closely replicate human disease. This achievement has allowed certain types of tumors to be studied with

greater reliability, and by the mid-1990s, Professor Jacks emerged as an international leader in this subfield of cancer research. Between 2000 and 2014, his laboratory published more than 180 research articles, including work on tumor suppressor genes and tumor initiation in lung and muscle. Today, the models he has developed are used in laboratories around the world, contributing to a better understanding of disease pathogenesis and progression, and enabling the testing of novel anti-cancer strategies.

Both in and out of the lab, Professor Jacks is described by colleagues as a bold and visionary leader. His nominators say that it takes a village of passionate and dedicated people to invent solutions for the many cancers that affect our society, and this is exactly what he has created in Building 76. Yet, as one colleague commented, "[s]uccesses like the Koch Institute do not just happen—they are created through dynamic leadership."

In 2001, Professor Jacks was selected to direct the MIT Center for Cancer Research. Seven years later, he transformed it into today's Koch Institute for Integrative Cancer Research. His game-changing goal was to bring together cancer biologists and engineers in a collaborative model to improve cancer diagnosis and therapies. Faculty and students cite his mentorship and his commitment to bridging the different cultures, languages, and research agendas of these two worlds. Less than a decade later, the Koch Institute houses dozens of faculty research groups and serves as an organizing body for more than 500 researchers across MIT. More than a dozen companies have been created through discoveries and patents from the Institute, new diagnostic tests and therapies have either been approved or are in clinical trials, and top cancer institutes are hiring MIT engineers as faculty members for the first time. The Koch Institute model is universally acclaimed.

Professor Jacks received BA and PhD degrees from Harvard University and the University of California at San Francisco, respectively, before joining the MIT faculty in 1992. In the years since, he has been recognized with numerous awards. In 2002, he was named a Howard Hughes Investigator. In 2005, he received the Paul Marks Prize for Cancer Research. In 2009, he was elected to the National Academy of Sciences and the Institute of Medicine. That same year, he was elected president of the American Association of Cancer Research, the oldest and largest cancer research organization in the world. In 2011, he was appointed chair of the National Cancer Institute's National Cancer Advisory Board, and in 2012, he was elected to the American Academy of Arts and Sciences.

Steven R. Hall
Chair of the Faculty
Professor of Aeronautics and Astronautics

Lynsey Fitzpatrick Faculty Governance Administrator