Chair of the Faculty

In 2015–2016, Professor Krishna Rajagopal (Department of Physics) served as chair of the faculty, Professor Leslie Kolodziejski (Department of Electrical Engineering and Computer Science) as associate chair, and Professor Christopher Capozzola (History Section) as secretary.

There were 1,110 faculty members during 2015–2016. Of these, 166 were assistant professors, 208 were associate professors, 677 were full professors, and 59 were professors, post-tenure.

Eight Institute Faculty meetings were held. These resulted in approval of several changes to *Rules and Regulations of the Faculty*, including disbanding the Committee on Outside Professional Activities and incorporating the currently relevant elements of its charge into that of the Faculty Policy Committee (sections 1.72, 1.73); revising the title "Professor Without Tenure (Retired)" to "Professor, Post-Tenure" (section 1.32); and creating a new degree type of master of business analytics (sections 2.81, 2.85, 2.85.7). The Faculty also approved the creation of four undergraduate majors leading to SB degrees in mathematical economics, management, business analytics, and finance, as well as one new master's degree (master of business analytics) and one new PhD program (social and engineering systems, run by MIT's Institute for Data, Systems, and Society). Other important issues presented to the Faculty included addressing the recommendations made in December 2015 by the Black Students' Union and the Black Graduate Student Association; the newly established Mind+Hand+Heart Initiative focused on well-being and mental health across the Institute; the Kendall Square Initiative and campus planning; and a new blended approach to professional master's degrees. In addition, the Faculty heard the standard annual reports on underrepresented minority faculty and graduate student recruitment and retention; tuition and financial aid; and the Committee on Discipline's caseload and disciplinary trends for the previous academic year. The Faculty received an update on fundraising activity and learned about arts programs at MIT and how faculty could become involved. In spring 2016 there were a series of presentations—over the February, March, and May meetings—on programs and activities across the Institute related to entrepreneurship and innovation.

In April, Associate Professors Katharina Ribbeck (Department of Biological Engineering) and Jesse Thaler (Physics) were recognized as the recipients of the Harold E. Edgerton Faculty Achievement Award. In May, Professor Eric Lander was named the winner of the James R. Killian Jr. Faculty Achievement Award. In the fall, the Faculty remembered two colleagues with memorial resolutions: Judith Layzer (Department of Urban Studies and Planning) and Mujid Kazimi (Department of Nuclear Science and Engineering).

On behalf of the Faculty, the three officers met monthly with the Institute's senior administration and conducted a variety of activities. The officers, together with Provost Martin Schmidt, continued the long-held tradition of hosting informal monthly dinners for Institute faculty, known as Random Faculty Dinners. With Dennis Freeman, dean for undergraduate education, Professor Rajagopal charged a study group with exploring the question of what "algorithmic reasoning" and "computational thinking" mean in

the context of the education of MIT's undergraduates across all five Schools, towards potential future advances in this educational process. The study group expects to report out to the community on its findings during the 2016–2017 academic year. Another key activity during 2015–2016 was the Faculty Quality of Life Survey, administered by the office of Institutional Research (IR) every four years. The three faculty officers worked with IR on the development of questions for the survey; they expect to report to the Faculty on the results of the survey during fall 2016. As chair of the faculty, Professor Rajagopal served as a member of the Academic Council, the Academic Appointments Subgroup, the Deans' Group, as well as serving on the standing Institute Committee on Race and Diversity, the Enrollment Management Group, and the MITx Faculty Advisory Committee.

Faculty committees are often referred to by acronym, as follows:

> Faculty Policy Committee: FPC
> Committee on Academic Performance: CAP
> Committee on Campus Planning: CoCP
> Committee on Curricula: CoC
> Committee on Discipline: COD
> Committee on Graduate Programs: CGP
> Committee on the Library System: CLS
> Committee on Nominations: CoN
> Committee on Student Life: CSL
> Committee on Undergraduate Admissions and Financial Aid: CUAFA
> Committee on the Undergraduate Program: CUP
> Subcommittee on the Communication Requirement: SOCR
> Subcommittee on the Humanities Requirement: SHR

Faculty Policy Committee

Chaired by Professor Rajagopal, the Faculty Policy Committee (FPC) met on 14 Thursdays during the fall and spring terms to conduct consultative, oversight, and policy-making activities.

The committee reviewed several curricular issues this year, including proposals to create a PhD degree in social and engineering systems within the Institute for Data, Science, and Society; a new graduate degree type in Course 15, master of business analytics; three new SB programs—management, business analytics, and finance—in Course 15; and a new SB program in mathematical economics in Course 14. FPC approved all of these proposals and forwarded them to Faculty meetings for further discussion and votes. FPC also heard from Professors Sanjay Sarma and Yossi Sheffi regarding integrating online and residential education in the supply chain management professional master's program. This briefing was informational only. The chair of the CGP attended the meeting and the relevant proposal was later reviewed and approved by the CGP. The FPC had a spirited discussion of the pros and cons of blended degree programs, seeing many pros in the context of a professional master's degree and many cons in other contexts, including undergraduate degrees and research-based graduate degrees.

In its role providing oversight of the faculty governance system, the FPC completed its discussion and review of the charge to the Committee on Outside Professional Activities (COPA), with the recommendations that the still relevant part of the charge be incorporated into FPC's charge and that COPA then be disbanded. Fulfilling this new addition to its charge, FPC received a briefing from the vice president for research and the Office of Sponsored Programs on current issues pertaining to outside professional activities and conflicts of interest. FPC also received its annual report from the Committee on Campus Planning (CoCP), including the development of the committee's principles and goals. A question for CoCP to discuss during 2016–2017 is whether to have undergraduate and graduate student representation on the committee. FPC also received briefings on changes to Committee on Discipline (COD) rules, the CUAFA Diversity Statement, and the results of the investigation of the Committee on Academic Performance (CAP) regarding undergraduate withdrawal and readmission practices—going forward to be called, respectively, leave and return.

In October, FPC charged an Ad Hoc Subcommittee on Sub-term Subjects in response to discussions and concerns expressed in recent years by the Committee on Academic Performance, the Committee on Curricula, and the Committee on the Undergraduate Program. The subcommittee examined the emergence of undergraduate and graduate sub-term subjects across MIT by collecting data and gaining an understanding of the overall trends and current situation, the motivating aspirations and goals, and the pedagogical value and effects of these subjects on student learning and life. The subcommittee's report includes a set of best practices and recommendations; the goal is to propose modifications to *Rules and Regulations of the Faculty* so as to standardize expectations and practices in the specific case of half-term subjects. The report was circulated to the community for comment in mid-May and specific proposed changes will be discussed in the above-mentioned committees and in the FPC during 2016–2017.

The administration referred several policy issues to FPC. These included the final version of updates to faculty appointment and tenure guidelines (previously discussed during 2014–2015) and the title of Professor Without Tenure (Retired). FPC provided feedback on the suggested changes to the offices of the general counsel and provost, respectively. The latter issue, after review by the Academic Council and approval to change the title to Professor, Post-Tenure, was forwarded to a Faculty meeting for discussion regarding corresponding changes to *Rules and Regulations of the Faculty*.

To develop broader context on Institute activities, the committee invited a number of reports and annual visitors. These included well-received reports on MIT's climate change action plan, the Environmental Solutions Initiative, and the newly launched Integrated Learning Initiative, as well as updates on strategy development for MIT's international activities and the progress of the Ad Hoc Task Force on the Future of Libraries. FPC members provided valuable input in these discussions regarding faculty engagement in each area. Other briefings included hearing from Institutional Research regarding the results of the 2016 Faculty Quality of Life Survey (the previous survey was done in 2012), from the Office of Corporate Relations regarding its activities and relevance to faculty, and from the dean for undergraduate education regarding MIT's

six-year retention rate. This last was of particular interest to the committee, and the FPC requested that the dean return periodically to provide updates.

In discussions with the president, provost, and chair of the MIT Corporation, the committee expressed continuing faculty interest in campus planning, conflicts of interest/outside professional activities, undergraduate advising, international collaborations and student exchanges, and MIT's budget and revenue lines, including federal research support and the private funding model.

Professors Nazli Choucri, John Fernández, and Elly Nedivi completed their terms this year. Professor John Belcher served for 2015–2016 as the former associate chair of the faculty. Professors Sandy Alexandre, Charles Harvey, and Haynes Miller, together with Professor Susan Silbey (chair-elect of the faculty), were elected to join the FPC in 2016–2017.

Krishna Rajagopal
Chair

Tami Kaplan
Faculty Governance Administrator

Committee on Academic Performance

The Committee on Academic Performance 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.

CAP also makes recommendations to the Faculty on academic standards, the academic calendar, examinations, degree requirements, and grading. Pursuant to this last set of responsibilities, CAP undertook during 2015–2016 a review of the policies and procedures for the withdrawal and readmission of undergraduate students, upon the request of the chancellor. The report of this review was shared with the community during the spring semester; the committee began implementing those recommendations contained in the report that are under its sole authority.

Petitions

CAP reviewed 506 petitions this year. Last year's number was 407 and the average for the past ten years is 324. We had hoped that increasing familiarity with the online add-drop process would reduce rather than increase the number of petitions. See an update in policies and procedures ("failure to click") below. Of this year's petitions, 433 (86%) were approved and 73 (14%) were denied. Ten-year averages are 281 approved (87%) and 40 denied (12%).

End of Term Academic Actions

In 2015–2016, 556 undergraduate students were flagged for review at the CAP's grades meetings, just over 12% of the student body. (As a general matter, a student is flagged for review if she or he has a term GPA of 3.0 or lower, or has registered for fewer than 36 units.) CAP issued 229 academic warnings as a result of these reviews. Last year's number was 218 and the average for the past ten years is 279. Students required to withdraw totaled 15. Last year's number was 26 and the average for the past ten years is 34. Details of this year's actions are given below.

Table 1: Committee on Academic Performance End-of-Term Action Summary, 2015–2016

Year	Fall 2015		Spring 2016	
	Warnings	Required Withdrawals	Warnings	Required Withdrawals
Freshmen	23	0	25	1
Sophomores	41	3	29	2
Juniors	29	2	21	1
Seniors	44	1	17	5
Total	**137**	**6**	**92**	**9**

The committee continued an initiative begun in 2013 by sending commendatory emails to students who completed their term on warning with an academic record well above minimum expectations—36 were sent for fall 2015, 62 for spring 2016.

Degrees

In 2015–2016, CAP recommended degrees as follows:

September 2015: 6 students, 6 majors
February 2016: 98 students, 111 majors
June 2016: 1,007 students, 1,168 majors.

For the second consecutive year, no departments requested single-deficiency degrees, that is, recommendation of a degree despite a missing departmental requirement. The committee hopes this trend will continue.

Readmissions

Deliberations related to the review of withdrawal and readmission policies resulted in a shift in how readmission applications (which were considered under the existing policies) were evaluated by the committee in 2015–2016. As a consequence, there was a higher approval rate for readmission applications this academic year, especially decisions made for spring 2016.

The team leader of Student Support Services reported readmission data to the committee in September and February as follows:

- The Readmission Committee received 97 completed applications for fall 2015. Of these, 78 (80%) were approved and 19 (20%) were denied. CAP met by conference call on July 31, 2015 to review and approve readmission for a student who had twice been required to withdraw. Returning after 20 years, the student has now successfully completed two terms.

- The Readmission Committee received 58 completed applications for spring 2016. Of these, 53 (91%) were approved and five (9%) were denied.

Policies and Procedures

Review of Withdrawal and Readmission

Between September 2015 and March 2016 CAP held nine meetings devoted to the review requested by the chancellor of undergraduate withdrawal and readmission policies and processes. As a part of that review, members also met with 17 groups of stakeholders among students, faculty, and staff; conducted site visits at peer institutions; and solicited input through *The Tech.* The resulting report provides details of this information gathering and data analysis.

Discussion in consultations and committee meetings was lively, reflecting the importance of these issues to many in the community. An early consensus reached by committee was to change the terms "withdrawal" and "readmission" to "leave" and "return," respectively. The committee also stated in the report that all undergraduate students, once admitted by MIT, remain members of the MIT community and are presumed to be eligible to return as students. Other recommendations included:

- A new streamlined status of "leave of absence," allowing students to take leave from the Institute of their own accord, returning through a streamlined administrative process.

- Improved academic, personal, and financial support for students on leave of any kind.

- Clear separation between the CAP's decision-making role on requests to return and Student Support Services' coaching of individual students as they submit requests.

- A clear statement of expectations to be met before a return will be approved, at the time students take medical or required academic leave.

- Improved timing of decisions and follow-up on requests to return.

During the information gathering phase of the committee's investigation, many community members expressed concern about involuntary medical withdrawals and psychiatric hospitalizations. These matters, which are related to issues of leave and return that are under the oversight of the committee, were beyond the scope of the study. The committee recommended that the chancellor convene a separate working group to review these complex processes; this group will commence its work at the

beginning of the 2016–2017 academic year. An additional working group is reviewing leave and return policies for graduate students.

Though the formal review of leaves and returns is finished, 2016–2017 will be a year in which CAP and all other stakeholders experiment with the best ways to implement the recommendations contained in the report.

"Failure to Click": Follow-Up on Online Add/Drop/Change Forms

The online add/drop/change form has now been in place for two full years. In 2015–2016, 147 petitions included a student statement that cited ignorance of the requirement that the form be sent to the registrar through a final step that was 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 2014–2015 was 176.

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. Based on that data, she and the CAP have decided not to make further changes to the online process at this time.

Online Submission of Petitions

After more than a decade of start-and-stop efforts and a year of intensive collaboration among the CAP's administrator, registrar's staff, and a team from Information Systems and Technology (IS&T), the online late add drop system (LAD) appeared on schedule in August 2015. Students began creating petitions for late add, late drop, and late change of status (grading, credit); their faculty advisors and instructors submitted statements online, indicating support or lack thereof; and the CAP administrator assembled these petitions into PDF documents for committee review. A few petitions (exceed credit limits, register late, continue on light load) are still on paper forms, but they represent a small fraction of the total.

LAD has been a success for students and faculty, with a few expected bugs repaired quickly. The system saves time and effort formerly devoted to moving pieces of paper around campus. The transition has temporarily increased the workload of the committee's administrator as he waits for IS&T to build more sorting tools to help prepare petition agendas for each meeting. LAD is not meant as a system of record: detailed petition information is imported to the CAP FileMaker database and print copies of the completed petitions are kept on file.

Modular/Sub-Term Subjects

In 2014–2015 the CAP chair relayed to the chair of the Faculty the committee's concerns about subjects lasting less than a full term. Students and instructors alike are confused about add and drop deadlines; some students also report increased stress with final exams and projects occurring midway through the term. In response, the chair of the Faculty appointed a subcommittee of the Faculty Policy Committee to review such subjects. Professor Scott Hughes represented the CAP on that subcommittee and presented his report at the CAP's June 2016 grades meeting. The subcommittee focused on subjects lasting roughly seven weeks, half of a regular term, while not ruling out shorter or longer subjects and modules.

The CAP endorsed the subcommittee's proposed primary scenario, which defines four half-terms (H1, H2, H3, H4) and sets add and drop dates and a final exam period for each. The proposal requires changes to *Rules and Regulations of the Faculty* and will move in that direction during 2016–2017.

Grade of D in Subject 18.01A

For many years the Department of Mathematics has offered an accelerated sequence, 18.01A Calculus/18.02A Calculus, that covers calculus I and II in the fall term plus during the Independent Activities Period (IAP), or six weeks in the spring term. In recent years, the department experimented with ways to support the small number of students (usually freshmen) who received a D for 18.01A when it finished at the end of October. Based on its experience, the department submitted to the CAP a proposal to regularize the procedure. At its September 11 meeting, the CAP approved the following:

- Students receiving a D in 18.01A will continue to be offered three options:

    –Attend 18.01 Calculus lectures and submit problem sets in the second half of the term but be registered for 18.01 in IAP and take the final then.

    –Repeat 18.01 in the spring term.

    –Follow a new procedure to complete 18.01 within the fall term.

- The new procedure requires students to submit individual late add petitions to the CAP, including the usual statements from student, advisor, and the 18.01 instructor.

- The CAP will review these petitions, probably administratively (approval by chair) and notify the registrar to add 18.01 to the student's fall registration. Such students may therefore take the December final exam and will receive a fall term grade.

- The CAP will continue to count 18.01A and this late-entry 18.01 at six units each for purposes of auditing the freshman fall credit limit of 54 units. The proposal does not violate the spirit of the limit.

- The CAP will review this procedure after two years for possible modification or affirmation.

Listener Status

In response to a 2014–2015 increase in petitions seeking to change subject status from "credit to listener" (as opposed to late drop) the CAP administrator convened a working group in summer 2015 to examine policies and statements about listener status. The group included staff from the Registrar's Office and the Office of the Dean for Graduate Education (ODGE). By the end of the summer, the Registrar's Office and ODGE's websites included a new web page defining listener status more clearly.

In Spring 2016 CAP approved ten late drop petitions from five students who discovered after drop date that they would be charged per-unit tuition for listener subjects because they were at less than full-time status. The timing of this discovery occurred because of a change in procedure in Student Financial Services. If such petitions arrive again, the committee may investigate more deeply.

Membership

The committee enjoyed a year of stable membership, with no changes during the year. 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 both fall and spring terms. Average attendance of the nine voting plus seven *ex officio* members at the withdrawal and readmission review meetings, scheduled at various times and on shorter notice, was 12.

Charles Stewart III
Chair

Stephen Pepper
Staff

Committee on Campus Planning

The Faculty Committee on Campus Planning (CoCP) was established in fall 2014 with a general responsibility to consider campus planning. The context of its formation was one of concern around the expansion of campus and the Kendall Square area in particular, and, more generally, what the voice of faculty can and should be as MIT engages in what is probably the largest expansion of campus since its arrival in Cambridge 100 years ago.

The CoCP's remit was intentionally loose, and one of the committee's first tasks was to establish the work of the committee in a manner that reflected sound principles, was adapted to institutional realities and aspirations and, finally, was concretely useful to shaping policy and its execution. Given the above, the committee first embarked upon an outward-facing campaign of fact-finding of the current state of campus planning at the Institute, both near and long term, along with an inward exercise in establishing our role.

The most important exercise was that of reflecting upon the role that the committee wished to establish for itself. This was informed by fact-finding (detailed below),

but required considerable internal discussion and examination. As the first Faculty Committee on Campus Planning, members were aware that their actions in this matter would impact the work of their successors. The CoCP distilled its mission to: "Fostering a healthy and vibrant living and learning community through the guiding principles of a campus that is attractive, affordable, and sustainable, and that provides sufficient space for living and learning." To enable the above, the committee's role is twofold. The first is to encourage a form of governance and project development that can explicitly follow the committee's guiding principles. The second is to ensure informed, continuous, and structured input from faculty on an all-campus plan. The following are the principles and goals the committee members arrived at:

Principles

- Create a healthy and vibrant living and learning community.

- Create a campus that is attractive and affordable and that provides sufficient space for community housing, childcare, and interaction.

- Ensure informed, continuous, and structured input from faculty on campus planning.

- Place sustainability as a key factor in campus planning.

- Create appropriate academic space to satisfy current needs, foster interaction across departments, and anticipate future requirements.

Goals

- Identify and communicate principles to the Faculty and to committees involved with planning decisions.

- Be a voice to represent and instantiate these principles in all relevant fora on both current and future issues.

- Create a set of key working issues, prioritize them, and focus on one or two per year.

- Create a partnership with the Office of Campus Planning to provide input in advance of major campus commitments.

- Help the Institute in its efforts to balance academic, financial, and civic goals in a manner that reflects the CoCP's core principles.

The committee's fact-finding brought members to connect with many of the numerous entities and people that shape the planning and building of MIT's campus. These interface in a variety of ways and respond to different needs. The Building Committee deals with issues ranging from considering details of plans to financing issues closely related to development. It works most closely with the Department of Facilities and the Provost's Office, and touches upon almost all aspects of MIT's administration. The MIT Investment Management Company (MITIMCo) manages MIT's real estate portfolio, with a view to providing the Institute with resources to advance its educational mission, and, particularly, to render financially possible the considerable maintenance and upgrades required by our buildings. The Institute Campus Planning Committee, formed

about the same time as the Faculty CoCP, is comprised of colleagues in fields related to the task of planning, primarily architecture and urban planning. They generously donate their time and specialized expertise to the Institute, support the Building Committee, and serve at the discretion of the president. Their role is consultative and ad hoc.

At the CoCP's inception, campus planning was in transition. Under the long, dynamic, and influential leadership of Robert Simha, the Office of Campus Planning (OCP) had an operational and strategic role that led the development of many of our campus's major projects. In February 2015, OCP was restructured with the hiring of Dennis Swinford. The role of OCP is to "examine how MIT's physical spaces can best support the academic goals and community life of the Institute" with a "focus five to 20 years into the future to recommend design and land use solutions that have the potential to provide the greatest long-term benefits to the Institute." CoCP members have determined that role to be closely aligned with the committee's own, as described below.

In the spirit of the principles delineated above, and informed by its fact-finding, the CoCP decided to consider how best to map its mission to the Institute's structure. For the committee's work to have enduring significance, it is evident that it must interact closely and regularly with OCP. The CoCP's current structure consists of six elected members of the Faculty, along with up to three members of the Faculty designated by the Provost. The committee recommends that its organization evolve, by appointing the director of OCP to serve *ex officio*; the committee hopes to bring this to the Faculty for a discussion and vote during 2016–2017. Mr. Swinford is willing to participate on the committee and to begin attending meetings as a guest in the interim. The CoCP also seeks administrative support from OCP. To establish a strong liaison with MITIMCo, the CoCP recommends at least an annual meeting with MITIMCo representatives. The committee will also meet at least once a term with only its faculty members in attendance.

The current state of campus planning and the CoCP's remit established, the committee is now able to envisage the major questions that affect planning. One main topic for the committee to consider is learning spaces and how they adjust to MIT's current and future needs. As teaching modes and modalities evolve, we require an examination of the suitability of our current space for teaching and attendant activities. This work, which calls upon our role as faculty and is central to the core educational mission of the Institute, requires reflection and information from all Schools and departments, and as such, the committee will be seeking detailed input from MIT's different academic constituencies.

As members of the faculty, committee members are aware that they also represent a wider polity, that of staff and students. As such, another area of consideration is that of living spaces. This topic is closely connected to the work of the Faculty Committee on Student Life, but also concerns members of the academic community, such as junior faculty and MIT's growing postdoc community. Accessibility, affordability, and availability are here the principal elements of planning.

In conclusion, the CoCP has spent its initial time together working to understand and define the role of the committee, creating a set of core principles and goals, and setting sound plans for advancing. Most importantly, we believe that our committee's role fills a need, but that, to be effective, its principles and goals must be embodied in the campus planning process. We hope that our suggestions will benefit the campus planning process.

Muriel Medar
Chair

Committee on Curricula

The Committee on Curricula (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 concerning General Institute Requirements. During 2015–2016, the committee was chaired by Professor W. Craig Carter. The voting members consist of six faculty (including the chair) and four student members. The committee met seven times during the fall term, five times during the Independent Activities Period in January, and eight times during the spring term. During the academic year, the committee acted upon 577 subject proposals, including proposals for 83 new subjects, and approved numerous minor changes to degree charts. The committee approved the following major curricular changes:

Course 1:	A new minor in civil and environmental engineering systems, and revisions to the department's two existing minors to align more closely with the available tracks within the 1-ENG SB program.
Course 4:	A new minor in design.
Course 6:	A new minor in computer science. Also approved major revisions to the Course 6-1, 6-2, and 6-3 SBs to establish a common set of degree requirements, and to provide majors earlier engagement with core EECS material by scaling back the introductory requirement.
Course 6-7:	Substantial revisions to add flexibility to the programming requirement.
Course 14:	A new interdisciplinary SB in mathematical economics (Course 14-2) to be administered entirely within Course 14. Approved a change of Course designation for the SB in Economics from Course 14 to Course 14-1.
Course 15:	Terminated the SB in management science (Course 15) and approved new degrees in management (Course 15-1), business analytics (Course 15-2), and finance (Course 15-3). Approved proposal to align minor programs with new

majors, including a new minor in finance, and to rename the management science minor to business analytics.

Course 20: Substantial revisions to the minor in biomedical engineering (BME) to further delineate it from the Course 20 major, reduce the size of the minor from eight to six or seven subjects, and relax the restriction on overlap with the student's major in proportion to the size of the minor (students must now take at least 36, rather than 48 units outside of the major). Students majoring in Course 20 will now be allowed to pursue the BME minor.

The CoC also approved two new interdisciplinary minors:

Entrepreneurship and Innovation. Jointly offered by the Schools of Engineering and Management. Administrative support will be offered by the MIT Innovation Initiative. The minor will receive academic oversight from a faculty advisory committee with representation from all five Schools.

Statistics and Data Science. Offered by the Institute for Data, Systems, and Society (IDSS). The minor will receive academic oversight from the IDSS Statistics Curriculum Committee, which is comprised of faculty from the Schools of Engineering; Humanities, Arts and Social Sciences; Management; and Science.

Other Actions

- Reviewed a proposal for a new joint SB in chemistry and biology (Course 5-7). Included with the new major was a proposal to divide Course 5's four modular laboratory subjects into discrete three- to six-unit subjects that would run for a third of a term, some of which could be combined for CI-M or Institute Laboratory credit. After extensive discussion and consultation, the CoC declined to endorse the proposal given that the FPC Subcommittee on Sub-term Subjects was in the process of examining, and forming recommendations on, these types of offerings. In providing feedback to the sponsors, the committee expressed its support for the concept and its willingness to consider the proposal for 2017–2018, after policy and practice surrounding sub-term subjects has been clarified.

- Consulted with EECS concerning a proposal to establish a new flexible engineering degree (Course 6-ENG). A revised proposal for 2017–2018 is expected during 2016–2017.

- In conjunction with CUP, approved revisions to the criteria for Institute Laboratory subjects published in the *MIT Bulletin*. The updated criteria aligns more closely with current practice and expands the language related to experiments to include hands-on research projects.

- Endorsed a proposal to establish an exchange program with the University of Tokyo for students in Courses 2, 3, and 22.

- Approved changes to the ROTC curriculum in naval science.

- Held several discussions concerning sub-term subjects. The CoC anticipates continued discussion in 2016–2017 based on recommendations emanating from the FPC Subcommittee on Sub-term Subjects.

- Received an update from, and provided input to, the project team involved in analysis of and revisions to MIT's subject structure.

- Continued to monitor developments with respect to IAP. The committee 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 (CGP, CUP, and FPC).

- Received reports from the Subcommittee on the Communication Requirement and the Subcommittee on the Humanities, Arts, and Social Sciences (HASS) Requirement concerning petitions received and reviewed by those committees.

W. Craig Carter
Chair

Joan Flessner-Filzen (fall) / Pam Walcott (spring)
Executive Officer

Committee on Discipline

Reported Cases

Acting in accordance with its purpose of adjudicating cases of alleged student misconduct and student organization misconduct, the Committee on Discipline (COD), chaired by Professor Suzanne Flynn, had 317 cases brought to its attention in academic year 2015-2016. 255 of those cases (80%) were complaints alleging misconduct by individual students, and 62 (20%) were complaints alleging misconduct by student organizations. These cases were resolved in a variety of ways. The following two tables provide a summary of types of violations for 2015-2016, compared to the previous year's totals.

Table 2. Complaints of Individual Student Misconduct

Academic Year Total – Incident Type	2014–2015	2015–2016
Academic Misconduct	**33**	**52**
Cheating	15	15
Plagiarism	6	8
Unauthorized collaboration	10	22
Other academic misconduct	2	7
Personal Misconduct Total	**193**	**192**
Alcohol	86	100
Other drugs	11	12
Assault	1	2
Harassment (other than sexual) and stalking	9	10

Property damage	1	2
Disorderly conduct	6	8
Theft	6	9
Unauthorized access, improper use of MIT property	25	25
Fire safety, arson	13	4
Weapons, dangerous objects	1	2
Residence hall security or guest violations	9	4
Hazing	9	0
Institute expectations of student behavior/integrity	*	6
Other	13	8
Sexual Misconduct	**9**	**11**
Sexual harassment	0	3
Stalking (including nonsexual stalking)	*	2
Nonconsensual sexual touching or penetration	*	6
Total	**235**	**255**

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

*Category not calculated in prior year. Institute expectation of student behavior complaints would previously have been listed in "other" and complaints under sexual misconduct would previously have been counted in the general total for sexual misconduct.

Table 3. Complaints of Student Organization Misconduct

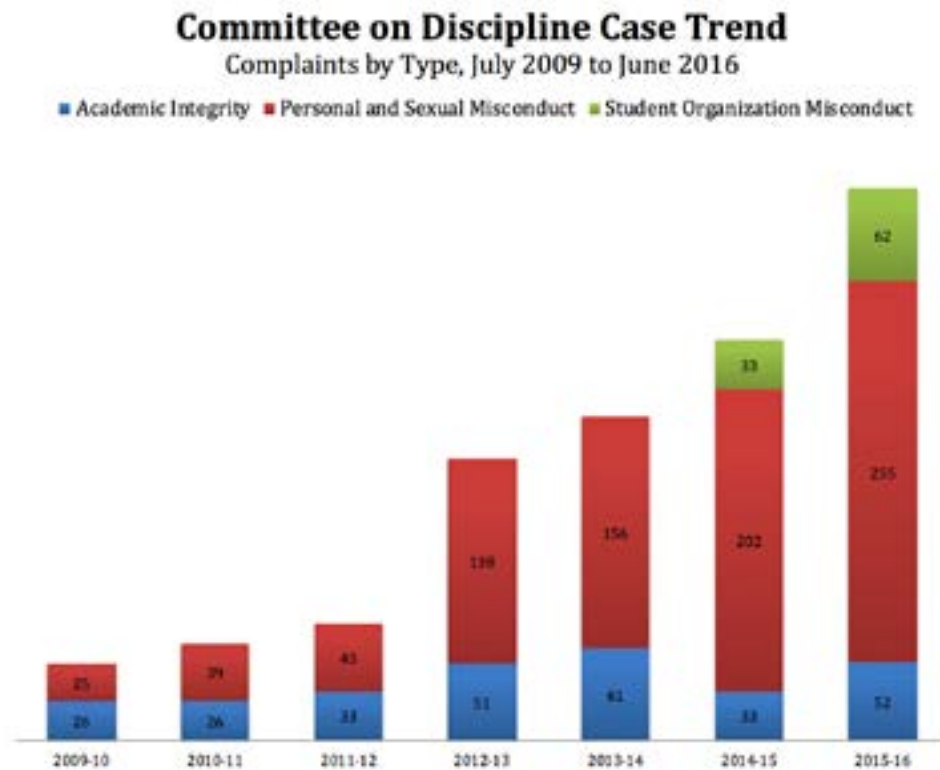| Academic Year Total – Incident Type	2014–2015	2015–2016
Alcohol	13	31
Other drugs	1	1
Exceeding occupancy	2	0
Fire safety	2	0
Hazing	6	5
Harassment (other than sexual)	3	0
Open air spaces policy/unauthorized roof access	3	3
Disorderly conduct (other than noise complaints)	1	3
Noise complaints	*	13
Recruitment violations	*	4
Other	2	2
Total	**33**	**62**

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

*Category not calculated in prior year. Noise complaints were recorded as disorderly conduct last year. Recruitment violations would have been counted in "other."

Case Trend

The total number of reported cases was 18% higher in 2015–2016 than it was in 2014–2015. Complaints against individual students increased 8.5% whereas complaints against student organizations increased by 88%.

The number of cases presented to COD has risen 521% over the last seven years, as shown in the following chart, titled "Committee on Discipline Case Trend, July 2009 to June 2016." This stacked bar chart shows that the number of cases reported to the COD increased from 51 in the 2009–2010 year to 317 in the 2015–2016 year. The chart shows a large rise in 2012–2013 and more gradual annual increases in all other years. Source: MIT Committee on Discipline.

Committee on Discipline Case Trend
Complaints by Type, July 2009 to June 2016

■ Academic Integrity ■ Personal and Sexual Misconduct ■ Student Organization Misconduct

Case Resolutions

The COD uses a variety of methods, 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 COD in 2015–2016 are presented below and compared to the previous academic year.

201–2016 was the third year that the COD had the sanctioning panel resolution method available. This method continues to be regarded as successful and is chosen by the strong majority of students who have the choice of going to either a sanctioning panel or a hearing. Three of the four COD hearings students opted for this year were in regards to sexual misconduct cases that were presented before the revised COD procedure for handling sexual misconduct cases was in effect.

2015–2016 was the second year that 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 assigning them to student-run judicial boards.

2015–2016 was the first year that the COD implemented its new procedure for handling sexual misconduct cases. Three cases were presented after the new rules were implemented. All three of those cases were handled by the new sexual misconduct hearing method.

Table 4. Case Resolution Methods Used by the Committee on Discipline

Academic Year Total – Resolution Type	2014–2015	2015–2016
COD administrative resolution	149	131
COD hearing	1	4
COD sanctioning panel	7	6
COD sexual misconduct hearing	*	3
COD sexual misconduct sanctioning panel	*	0
Faculty letters to file	18	35
Withdrawal of case/dismissal	4	20
Restorative justice/alternative dispute resolution	1	0
Case closed due to help seeking protocol	27	62
Non-adjudicative resolution	38	15
Delegated to student-run judicial mechanism	13	35
Cases pending (as of 6/30)	10	6
Total	**268**	**317**

*This was a new option in 2015–2016, so no cases were handled with this method in prior years.

Case Outcomes

The philosophy of the COD is that student discipline is one expression of the comprehensive education 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, etc.), the student learns to correct his or her mistakes and develops into a more mature person. A very small number of cases (1.9% in 2015–2016) require a student to be separated from the Institute, either temporarily or permanently, due to the Institute's need to ensure a safe environment. Ninety-eight percent of cases are resolved without suspension or expulsion. This table presents the outcomes assigned by COD in the 2015–2016 academic year as compared with the 20142015 year.

Table 5. Committee on Discpline Sanctions by Academic Year

Academic Year Total – Sanction Type	2014–2015	2015–2016
Expulsion	0	3
Suspension or degree deferral	5	3
Removal from Institute housing (house or FSILG)	1	2
Probation	38	35
COD letter to file	75	73
Substance abuse education or treatment	74	109
Restitution	6	3

Other educational sanctions or referrals	142	153
No contact order, directive to stay away from certain buildings	2	10
Faculty letter to file	18	35
Academic integrity seminar	15	15
Targeted community service project	10	2
Required abstinence from alcohol and drugs	6	6

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.

Additional Activity

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

COD Sexual Misconduct Task Force

The work of the Task Force on Institute Handling of Sexual Misconduct Complaints, chaired by Professor Munther Dahleh at the request of Chancellor Cynthia Barnhart, was completed during the 2014–2015 year. During 2015–2016, the COD implemented those recommendations by creating a subcommittee responsible for handling all sexual misconduct cases and by extensively updating the COD Rules and Regulations to create a new procedure for resolving complaints of sexual harassment, intimate partner violence, stalking, and sexual misconduct. After consultation with the Faculty Policy Committee, the revised COD Rules and Regulations were implemented in November 2015.

Academic Integrity

During the 2015–2016 academic year, the COD formed a subcommittee, chaired by Professor Martha Gray, to examine current trends, preventative activities, and other issues related to academic integrity. Several areas for further study and administrative action were identified. The work of this subcommittee will continue in the coming year and may result in recommendations to the Faculty.

Additional Updates to the COD Rules and Regulations

During the 2015–2016 academic year, the COD updated its Rules and Regulations once, in November 2015. Most of the changes were designed to implement the sexual misconduct task force recommendations, as noted previously. Additional revisions included providing more guidance on the circumstances under which COD will consider complaints alleging misconduct by former students and former student organizations, updating the procedure for taking interim action when doing so is necessary, and clarifying the options for students responding to faculty letters to file. Prior to making these changes, the COD consulted with faculty members who have experience on COD, faculty members serving in senior leadership positions, and the Faculty Policy Committee.

Increased COD Training

The Office of Student Citizenship 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 ever received before. The enhanced training included LBGT 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 increased training was well received by members of the COD.

Suzanne Flynn
Chair

Kevin Kraft
Executive Officer

Committee on Graduate Programs

The Committee on Graduate Programs (CGP), chaired by Professor Donca Steriade, consulted during 2015–2016 on a broad array of issues impacting graduate education.

New Degree Programs

The committee spent a significant amount time reviewing several proposals for new degree programs, two of which involved a blended online/residential education and a non-traditional admissions process.

At the first meeting of the year (September), the committee reviewed a proposal for a new path to the master of engineering degree in the Supply Chain Management (SCM) program. This proposed blended program would use an "inverted" admissions process by allowing students from around the world who earn top grades in a specified set of MITx courses in this field to earn a MicroMaster's Credential from MITx, and become eligible to apply to the SCM residential program. Students who gain admission will be able to apply their semester's worth of online coursework toward the SCM degree requirements. These students would spend the Independent Activities Period and the subsequent spring term in residence at MIT, completing additional course work to earn a master of engineering in logistics. Recognizing that a number of elements of the proposal were still being developed at the time of presentation, the committee approved the creation of the blended SCM track (referred to as "SCMb"), subject to several conditions—mainly that a fully fleshed-out proposal for the blended SCM program be presented to CGP for review by no later than November 1 of the calendar year preceding the start of the first fall admissions cycle to the SCMb track. Additionally, the mechanism for granting MIT subject credit for the MITx coursework requires revision to Section 2.31 of Rules and Regulations of the Faculty on Advanced Standing Examinations to allow graduate students to receive advanced standing credit through examinations. To this

end, at the March meeting, the committee made recommendations about changing the language of Section 2.31. The Faculty Policy Committee is currently reviewing these.

At its October meeting the committee considered and approved a proposal for a master of business analytics degree program offered by the MIT Sloan School of Management, with support from the MIT Operations Research Center. This proposal, which was approved by the MIT Faculty in February 2016 and by the MIT Corporation in March 2016, establishes both a new degree program and a new degree type: the master of business analytics (MBAn). This will be a fully residential program that spans 12 months, matriculating students in the fall term and awarding degrees the following September. The program will not require a thesis.

The committee reviewed a third proposal for a new master's degree program in April: the Program in Learning Sciences and Technology (LST), offered by the Department of Urban Studies and Planning. This program would also award a new degree type, the master of learning sciences and technology, and would involve blended online and residential learning, with an online MicroMasters component and "inverted" admissions process similar to the proposed SCMb degree. Like the MBAn degree, this program would not have a thesis requirement. Earlier versions of this proposed program have come to CGP and the FPC over the past several years; the previous version, presented in spring 2014 was approved by CGP but not by FPC. After the presentation in April 2016, the committee had questions for the authors of the proposal about course content, program length and workload, pace and timeline, student funding and housing, and commitments of budget, space, and faculty instructors. At the time of this report, the committee is awaiting responses to these questions and anticipates continued discussion during the upcoming academic year.

The increase in proposals for new types of professional master's degrees prompted a request from the faculty officers to the CGP to consider, and potentially develop, a proposal for an umbrella professional master's degree type for review by FPC in fall 2016. After discussion at its May meeting, the CGP concluded that settling on a name and requirements for this potential new degree type seemed premature when the Faculty has not yet had a chance to think about the long term impact of the anticipated size of such a degree type on MIT. The committee asked that the MIT Faculty be consulted on the anticipated cumulative effect of these new professional degrees on campus life, and on MIT's resources, before the committee proceeds with the adoption of a new degree type, citing concerns about possible dilution of requirements for MIT degrees, faculty and staff resources, funding structure of the professional programs, and housing and other student support systems.

Degree Program Changes

The CGP approved a request in May from the Institute for Data, Systems, and Society regarding minor changes in the curriculum requirements for their new doctoral program. These changes will accommodate students who are entering the program having already earned a master's degree, and whose prior work covers a substantial fraction of the doctoral program requirements.

In September, the committee also approved a proposal to change the name of the master of engineering in manufacturing degree program to master of engineering in advanced manufacturing and design, and proposals to establish new subject designations: Supply Chain Management, Engineering Management, and the Institute for Data, Systems, and Society.

Half-term and Online Subjects

The committee reviewed a proposal in October for a new half-term subject, HST.962, to be offered entirely online beginning in spring 2016 by Professor Michael Cima. Citing recommendations in the *Report of the MITx Subcommittee of the FPC* and practices of the Committee on Curricula, the CGP concluded that a compelling reason was lacking for offering a completely online subject and recommended that a revised version of HST.962 be offered with one hour of contact time, the form of which could be determined by the instructor.

Throughout the academic year CGP member Zoya Bylinskii served as the committee's representative to the FPC Subcommittee on Sub-term Subjects and provided updates on the group's work, with a summary of the final report and recommendations from subcommittee chair Professor John Fernández to the CGP in May.

Policy Regarding Awarding of Degrees

The committee devoted time at several meetings to considering a request from an alumnus who received an ScD in 1972 and wished to be awarded an SM degree based on work that was completed in the Department of Electrical Engineering and Computer Science (EECS) in 1969, prior to earning the doctoral degree. Though the committee was sympathetic to the alumnus's desire to receive formal acknowledgment of the SM degree work, it was not able to recommend a 2016 SM degree as the coursework completed by the alumnus in 1969 does not meet current SM degree requirements in EECS.

Graduate Policy and Procedure Regarding Student Registration Status

The committee reviewed a proposal from the dean of the School of Architecture and Planning to change current Graduate Policies and Procedures to allow increased departmental fellowship support for students on nonresident doctoral thesis research status. The committee approved one specific request from a larger list, namely that departments may cover health insurance costs for their students on nonresident status for the duration of this status. Current graduate policy does not permit this. This change to the nonresident status policy will be amended in Graduate Policies and Procedures and communicated by the Office of the Dean for Graduate Education to all departments and graduate programs.

Inclusion and Student Support/Wellness

In November the committee received an update from Chancellor Cynthia Barnhart on the focus of her office and the work of the Mind+Hand+Heart Initiative. In December the committee approved a proposal from LBGT@MIT to add a new question around sexual orientation to the graduate application.

Graduate Student Advising

CGP graduate student members Zoya Bylinskii and Ran Li conducted student focus groups during January IAP on advising, and shared with the larger committee their findings and research on advising structures in various departments. The committee also heard a presentation in March from Graduate Student Council President Michael McClellan on a study of graduate advising done by the Corporation Joint Advisory Committee on Institute-Wide Affairs.

Donca Steriade
Chair

Jessica Landry
Staff

Committee on the Library System

The work of the Committee on the Library System (CLS) was largely dominated in the past academic year by its relationship to and the work of the Ad Hoc Task Force on the Future of Libraries. The task force was created over the summer of 2015 to generate a broad ranging review of all aspects of the library system at MIT. Three members of the CLS also serve on the task force, including Professor Jeffrey Ravel and students Sophie Mori and Benjamin Tidor, and the Director of Libraries, Chris Bourg. The committee held two fall meetings, in October and November, but due to overlap with the task force and the anticipated report, it was decided to hold just one meeting in the spring semester, in April. The agenda and minutes for all meetings are available for review.

The October meeting was an introductory meeting for new members of the committee and was used to discuss the scope and organization of the MIT libraries, including new staff appointments and the MIT Press. The numeric context of the libraries was given in terms of 170 staff members and a total budget of about $22.3 million, this being significantly on the low end in comparison to many peer institutions. This was an issue of some concern and worthy of further investigation in 2016–2017. The charge of the newly formed task force was discussed, as well the suspension of the previously proposed Building 14 renovations pending the outcome of the report of the task force.

The November meeting saw the introduction of Greg Eow, the new associate director for collections. Chris Bourg provided an outline of the structure, timeline and working groups of the task force, and a general discussion developed over how the CLS can best support the work. The 'overview of the budget ask' for the current year's round of budgeting was introduced by Bourg and discussion was focused on the need to build capacity into the library system through a series of one-time funding initiatives. The issues around short- and long-term budgeting was raised by the visiting committee in spring 2016 and will likely be an important topic for CLS to assist with as the recommendations of the task force report emerge. The increasing demand to use library spaces for community building across MIT was raised by the library staff and there was a generally positive attitude to using space and to developing guidelines to support the social and cultural life on campus. The meeting concluded with a discussion raised by

library staff on extending open access fee fund eligibility to lecturers, research scientists, and postdocs.

The April meeting was convened to bring the CLS into the task force process, review progress to date, discuss the timetable for the report and recommendations, and identify the possible role of CLS in the future. Chris Bourg outlined progress and initiatives, including the idea bank, open forums, the meetings and lectures to discuss the library of the future (with architect David Adjaye, 2016 recipient of the Eugene McDermott Award in the Arts at MIT), and discussions with a number of groups across campus. The big themes that emerged were the role of physical versus digital collections, the use of space on campus, and the library as a platform for building new tools and as a strong advocate for open access. The committee raised the issue of prioritization of recommendations and overlap of priorities.

In summary, it has been a productive and engaging year for the committee, which expects to remain positively engaged in discussions of the future of the libraries at MIT during the next academic year. As the recommendations of the task force emerge, we anticipate that CLS will play a critical role in supporting new initiatives while also bringing insightful discourse to the table from both the faculty and student communities.

Andrew Scott
Chair

Committee on Nominations

The Committee on Nominations performed the majority of its work from November to February. In November, 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 five out-of-cycle (interim) appointments and nominated 30 faculty for appointments beginning on July 1, 2016, with the slate including nominees from 21 academic units across all five Schools, with approximately half of the nominees new to faculty governance. The committee also led a process to nominate Professor Susan Silbey (Anthropology) as chair of the faculty for 2017-2019. The slate was presented at the March faculty meeting and unanimously adopted in May.

Robert Jaffe
Chair

Tami Kaplan
Faculty Governance Administrator

Committee on Outside Professional Activities

The Committee on Outside Professional Activities (COPA) did not meet during 2015–2016. After a discussion at the Faculty Policy Committee on October 22, 2015, led by Professor Sheila Widnall (former chair of COPA), Professor Krishna Rajagopal (chair of the Faculty) presented a motion to disband COPA at the Institute faculty meeting on November 18, 2015. The motion was approved by unanimous vote at the Institute faculty meeting on December 16, 2015. The ongoing relevant responsibilities formerly held by COPA have been added to the responsibilities of the Faculty Policy Committee as clause 1.72 (e) of *Rules and Regulations of the Faculty*: "Keep informed of new problems of potential conflicts of interest and recommend appropriate modifications of policies and procedures to the Faculty." This responsibility will be discharged by regular briefings by the director of the Office of Sponsored Programs or the assistant provost on changes to policy or practice.

Committee on Student Life

The Committee on Student Life (CSL) 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: (a) exercising general attention for 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; (b) considering proposals to change or modify policies pertinent to student life and making recommendations to the Faculty and the dean for student life (DSL); (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 and student governing organizations and with the Schools, departments, etc., 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 DSL.

During 2015–2016, the committee was chaired by Professor Hazel Sive (Department of Biology), and comprised an outstanding set of faculty 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 16 meetings.

Agenda

The agenda of the CSL is set by the chair in consultation with the committee. To understand current concerns, the CSL invited student and senior administration to participate in committee meetings. Guests included student leaders from the Black Students Union and the Undergraduate Association, and senior administrators who have a focus on student life, including the chancellor, dean for student life, general counsel, chief of police, and the director and other representatives from MIT Medical, as well as heads of houses, the chair of the Faculty, the director of the Office of Student Citizenship, and Division of Student Life administrators responsible for campus dining.

Opinions and Projects

Revising the Role of the Committee on Student Life

The committee suggested changing the role of the CSL to bring it in line with other faculty governance committees that have an oversight role. These include CUP, CAP, CoC, CGP, CUAFA, and COD. Since CSL's mandate includes serving in an advisory role to the dean for student life, CSL should be placed in a role that advises on procedures and policies relating to student life. An oversight role that would contribute opinion to the DSL would directly involve faculty and students in decisions pertaining to student life. This change would incorporate faculty into student life governance in ways that align with other faculty governance committees. These suggestions would both increase the usefulness of the CSL and also make the committee easier to run. Lack of a feeder agenda gives the committee freedom to address topics that are considered important, but presently, the chair of the CSL sets the agenda and the committee's effectiveness is variable. A senior administrator should staff the CSL, with the charge of taking notes and assisting the chair in the organization of meetings, bringing CSL in line with other faculty governance committees in this regard as well. These points have been discussed with the chair of the Faculty, and will be pursued with the chancellor and incoming vice president and dean for student life.

Drug and Alcohol Policies

The committee discussed drug and alcohol policies in the broadest sense, including a revised Good Samaritan Policy (GSP). The following is a summary of three recommendations made to the chancellor:

1. Drug and alcohol education should be expanded. Present drug and alcohol education at MIT should be reviewed. It is noted that currently there is virtually no drug education for MIT students. Expanded education programs that include both drugs and alcohol should be required for all students. Discussion of research into the mechanisms of drug action should be an integral part of the education.

2. Help for addicts should be available at MIT. Help and support for addicts should be made available through MIT Medical on the MIT campus as is feasible. These measures would include drug testing and treatment programs. Addicts should be able to seek help as a medical issue, with associated confidentiality.

3. There should be a single (unified) Good Samaritan Policy. The Drug and Alcohol Good Samaritan Policies should be combined into a single, concise policy. The following should be included and stated clearly: The GSP is an emergency policy to ensure the safety of students. The purpose of the policy is to encourage students to call for help when it may be necessary. It is the responsibility of the MIT community to help a member in distress. Neither caller nor bystanders will be disciplined for making an emergency call if a student is in distress due to drug or alcohol use. A student who needs help will not be disciplined due to the use of drugs or alcohol that resulted in the emergency call. The outcomes of help-seeking should be transparent. Each case is an opportunity for education and medical help. A student who receives emergency help in one or more situations

for a drug or alcohol emergency will be required to receive education through the Office of Community Development and Substance Abuse and encouraged to obtain medical help. If a crime against property or another person is associated with the drug or alcohol emergency, a student must be helped, but may not be exempt from discipline. MIT has a culture of support. Any student seeking help due to a drug or alcohol-related emergency will be helped. However, MIT does not condone drug or underage alcohol use.

A revised policy should have the support of and be communicated by a member of the senior administration, presumably the chancellor.

Student Experience in Disciplinary Procedures

It was recommended that the student experience with disciplinary procedures be reviewed, including those that proceed through the Office of Student Citizenship (OSC). OSC makes recommendations to the Committee on Discipline regarding outcomes and further proceedings. It was noted that only two people staff the OSC, which last year dealt with almost 300 complaints. Perhaps as a result, students report long delays and disorganization in OSC process. However, conversely, if a student misses a meeting with OSC, the threat of blocking enrollment for the next semester is raised. A report is filed by OSC after an initial meeting and students are asked for input. However, students feel their input is not taken into consideration and the report may be one-sided. Some students have reported coercive requests by OSC to admit to transgressions they did not commit. A parent complaint and recommendation regarding OSC process was made during 2015–2016 to Costantino Colombo, dean for student life. A satisfaction survey is offered to students after an OSC meeting; however, some students feel this is done in a non-confidential way and that it may be coercive. The CSL several times requested blank or prototype forms to understand OSC and COD procedures, but these were not forthcoming. There is general concern with drug use and disciplinary approaches that are mostly outside the purview of the OSC.

The CSL suggests a reexamination of OSC mechanisms, including the transparency of OSC processes, in order to ensure fair treatment of the student and to improve OSC efficiency.

Mural Policy: Input and Oversight

In the chancellor's ad hoc Freedom of Expression Committee (spring 2015), CSL was suggested as the arbitrator for unresolved issues pertaining to murals in residences. CSL agreed that this role was appropriate but might not require the full committee. An arbitration panel would include the Title IX Coordinator and other personnel dealing with issues such as race or sexual orientation as relevant. Since arbitration is likely to be infrequent, training should be given as needed. Students felt that a panel comprising both faculty and students would send a welcome message that the arbitration process is not mediated by the administration. It was suggested that mediated discussion within a living group could obviate the need for decisions on murals. Mediators could be from within MIT or come from outside the Institute. Other experts Could be brought into the discussion within a living group as needed. The ability for students or others within a living group to make confidential complaints regarding murals must continue to exist.

Action items from CSL discussions led to a modification of the revised Mural Policy so that it is acceptable to use mediators to help resolve a dispute, including personnel with expertise relevant to the specific dispute, and requiring that input regarding a mural may be given confidentially. These modifications were made and approved by MIT counsel. The complete revised Mural Policy will be implemented by the DSL.

Recommendation on Faculty Engagement in Student Life

The committee believes that a key challenge for the incoming vice president and dean for student life (VP/DSL) will be to include faculty in aspects of student life. Beyond heads of houses, faculty members are effectively excluded from non-academic aspects of student life, yet have been reprimanded for not being sufficiently involved with students. Attempts to include faculty in student life are often well meaning but awkward or ineffective (for example, one-time engagements such as a meal with groups of students and faculty). Faculty members are not informed of basic aspects of student life including where students live, the housing process, dining, student government, and issues faced by students in traversing MIT. However, students place very high value on engagement with faculty. The CSL encourages the DSL to incorporate faculty into decision making. Key points for the DSL to understand include: Who are the faculty? What is the relationship of faculty to students? What is the job of a professor with regard to student life? What do faculty members not know about student life? How do students view faculty—and how do they *want* to view faculty?

'Know Your Student'

A project of the CSL during 2014–2015 was a website designed to assist faculty understand student life. A draft website was initiated and is in the 'placeholder' stage. In the past, the chancellor, dean for undergraduate education, dean for graduate education, and Institute community equity officer have been enthusiastic and supportive. 'Know Your Student' will be a good tool to inspire junior and senior faculty members to engage more deeply with student life, and it would also be a useful addition to the Faculty webpages. The committee has put the project on hold until the new VP/DSL is in place.

Fifth Week Flag

CSL members agree that the Fifth Week Flag serves a useful purpose. However, the tone of the note from the Office of Freshman Advising after two flags was considered to be alarmist and to have the potential to make a student feel unworthy of a place at MIT. It was noted that most students who receive flags go on to complete their degrees. The tone of the note should be friendlier and more encouraging. The best way for a student to proceed is to meet with his/her faculty advisor or course instructor. There was agreement that such a meeting should be required immediately after a fifth-week flag is received. The committee raised this issue with CUP and CAP. The CUP has added this topic to its list of considerations.

Personal Freedoms versus MIT

At the request of the chancellor, the CSL discussed how personal freedoms of students could be balanced with the interests of MIT where these come into conflict. The committee felt that the term "personal freedoms" was too broad, and that productive

conversation would need to involve a more focused topic. Subsequent discussion focused on drugs and alcohol (see above).

Graduate Student Dining

The CSL considered whether graduate student dining at MIT is optimal. Graduate students often live off campus and need to eat locally during the day. Since they often work late hours, food is needed late at night. A comfortable atmosphere in which to eat is desirable and healthy. Action items from the discussion with MIT dining representatives included improving communication between MIT dining and graduate students; increasing awareness of dining options and mechanisms; and considering specific graduate student dining room(s) on campus.

Hazel Sive
Chair

Committee on Undergraduate Admissions and Financial Aid

During the 2015–2016 academic year, the Committee on Undergraduate Admissions and Financial Aid (CUAFA) had the following agenda: (1) publish a formal statement on the role that diversity plays in the undergraduate admissions process; (2) propose financial aid enhancements that are practical and in tune with the times; (3) craft, vet, and disseminate guidance on upcoming changes to the SAT; (4) oversee implementation of early-action admissions for international students; and (5) perform a high-level analysis of the impact of Campus Preview Weekend on students and faculty.

Statement on Diversity

CUAFA worked for two years to craft a statement on the value of diversity at MIT and to explain how the admissions process acts as an enabler to create a diverse student population. MIT's numbers are impressive. We have nearly equal representation of male and female undergraduates, approximately one-quarter of our students come from underrepresented minority groups, and we host a disproportionately large number of students from financially challenged backgrounds. Moreover we work hard to create an environment in which all students feel welcome and included. Nevertheless, MIT did not have a formal statement associated with the Admissions and Financial Aid Office that presented how much we value these factors and how they are taken into account as we build each incoming class. CUAFA worked with some urgency this past fall to complete a diversity statement because, during fall 2015, a landmark case, Fisher v. the University of Texas, was being heard by the US Supreme Court. During the fall and early spring CUAFA finished the statement and vetted it with key Institute stakeholders: the Chancellor, the Enrollment Management Group (EMG), the MIT Faculty Committees Group, the Faculty Policy Committee, the Office of the General Counsel, the Academic Council, the Institute Community and Equity Officer, and the MIT Corporation. Minor edits were suggested and the final document was voted on affirmatively by CUAFA. The CUAFA diversity statement is as follows:

Statement on the role of diversity in MIT's undergraduate educational mission

A diverse student body is and has long been critical to the educational mission of MIT. We are committed to providing our students 'with an education that combines rigorous academic study and the excitement of discovery with the support and intellectual stimulation of a diverse campus community.'*

Our goal in forming the student body might simply be to select students who are, individually, excellent. Indeed, this is essential to our practice: every student we admit has demonstrated academic and personal excellence that placed them at the top of our applicant pool. But we strive for more than just individual excellence. Because our students learn so much from one another, our goal is to form a student body that is, collectively, excellent: an excellent group of excellent students who will surprise, challenge, and support one another.

Our educational approach, reflected in the MIT motto *mens et manus*, engages students directly in the process of innovation—hands-on work, often carried out in groups, that requires creativity as well as camaraderie. Our students' success depends on their exposure to many viewpoints and their ability to trust peers to provide both support and criticism. Moreover, the experience of working with a diverse set of peers at MIT prepares our students to work effectively in the world outside MIT: it opens their minds and attunes them both to the variety of strengths and the variety of concerns of others.

Diversity of viewpoints is derived from a diversity of backgrounds and experiences along many dimensions, among which are gender, race, ethnicity, culture, and socio-economic background.

How much diversity is necessary to achieve our goals? Every student should feel that "there are people like me here" and "there are people different from me here." No student should feel isolated; all students should come into contact with members of other groups and experience them as colleagues with valuable ideas and insights. It is through this experience of the richness and diversity of interests, strengths, viewpoints, and concerns of their fellow students that our students become open-minded intellectuals and innovators, primed to pursue the MIT mission of the betterment of humankind.

*From MIT's mission statement.

The statement is published on the chancellor's and admissions' web sites and is currently being adapted for use by some graduate departments (graduate admissions is run by departments and not via the undergraduate Admissions Office).

Proposed Financial Aid Enhancements for 2016–2017

Over 90% of incoming MIT students receive some form of financial aid. Part of CUAFA's mission is to evaluate financial aid practices and keep them in touch with the times and to use MIT's offers of financial aid to help students make the informed decisions that we hope will result in the student's decision to come to MIT. Using 2014–2015 numbers, approximately $130 million in need- and merit-based financial aid is typically given out, including over $90 million in MIT scholarships. Despite these positives, students

graduate with an average debt of almost $24,000, which is undoubtedly a factor in a student's decision whether or not to attend MIT. This year CUAFA addressed a specific demographic group that yields more poorly than we would like. While MIT yields especially well with students from low- and higher-income backgrounds, our yield in the $150,000 to $250,000 upper-middle income bracket shows a slight but significant dip. In the recent past we expanded our home equity exclusion from $100,000 to $150,000, which partially addressed the dip but did not eliminate it; our adjustments in financial aid policy occurred at the same time as financial aid adjustments by our principal competitors (Harvard University, Yale University, Princeton University, and Stanford University), making it hard to predict how variables we introduce will influence our yield.

This year CUAFA suggested to the EMG three strategies that we believed would benefit all students, with a specific eye on the $150,000 to $250,000 income group. The EMG took our recommendations and adapted one of them, taking into account many issues that are traditionally beyond the purview of CUAFA. After their proposal worked its way through the system, we ended with a 10.4% increase in the financial aid budget—the largest dollar increase in MIT's history; in addition, we removed consideration of home equity above $150,000 (as indicated above, two years ago we were capped at $100,000) and we reduced the parental contribution expectation for all families by $2,000. Overall we estimate that the average overall financial aid award will go up to $44,591 and we estimate that one-third of our students will pay no tuition. These positive measures should benefit all students and, certainly, will enhance our goal to recruit a diverse student population.

It is too early to tell if our financial aid enhancements were successful but our yield for the class entering in 2016 was 74%, which is the highest ever. We will have a class that is 46% female, 23% underrepresented minority, and 16% first-generation to college. Of significance is the observation that the number of students appealing their financial aid offers was down. We held our ground with regard to yield in the $150,000 to $250,000 demographic, but we did not erase the dip mentioned above; we will continue to study the factors that influence students in this bracket to select MIT or other schools.

Change in Policy Regarding the Critical Reading and Writing Component of the SAT

The SAT and ACT exams periodically change in content, and CUAFA was asked to examine how a revision that went into place in March 2016 would affect the guidance we give to current high school students regarding preparation for our admissions process. The new SAT is based on a 1600 (rather than 2400) composite score (800 points in math and 800 points in evidence-based reading and writing). Among other additions or adjustments, it also includes an optional essay section. The question we considered was whether or not to include the optional essay as a requirement. Writing is important; nevertheless, after much discussion, we decided not to recommend the optional essay. The essay as given previously has not proved to be predictive of success at MIT in humanities or writing courses. We do find, however, that the "evidence-based reading and writing" section is indeed predictive. Other factors against adopting the optional section include the associated extra cost in money and time—it costs $12 for the essay

and takes an additional 50 minutes at the end of an already long exam. We suspect that these costs may create a barrier, hindering access to MIT by underrepresented groups. Although CUAFA decided not to require the exam, we decided to get the input of the Faculty Subcommittee on the Communication Requirement (SOCR) before making our final decision. The dean of admissions and student financial services and the CUAFA chair met with SOCR and received its input and endorsement. In brief, SOCR advised us to acknowledge the wide range of writing experiences that a student has at MIT. Taking their views into account, the following passage was added to the MIT admissions website:

> While MIT will not require either the ACT or SAT optional writing section, MIT does value writing and communication highly. The MIT curriculum is organized around the belief that the development of effective writing and speaking is an integral part of undergraduate education at the Institute. Students in any field should learn to write prose that is clear, organized, and eloquent, and to convincingly present facts, data, and ideas. As such, all MIT students must fulfill a communication requirement that integrates substantial instruction and practice in writing and speaking into all four years and across all parts of MIT's undergraduate program.

Admission of International Students via the Early Action Process

This year MIT received a total of 19,020 applications and admitted 1,511 students (a 7.8% admission rate), including both early action and regular decision round applications. Ten percent of the approximately 1,120 incoming first-year students are international, with the balance being US citizens. In the past, international students were admitted only in March during the regular decision round of the admissions cycle. This year we decided to allow them to apply for early action and received 1,012 applications from international students in November, for an admission decision in December. We admitted 38 international students through early action, 21 of whom live overseas, with the balance currently in residence in the US. Evaluation of the 1,012 additional applications in the early admissions pool created an increased workload for the admissions officers, but the process was manageable.

Evaluation of Concerns Regarding Campus Preview Weekend

Campus Preview Weekend (CPW) is primarily managed by the Office of Admissions and Student Financial Services, with significant contributions from the Office of the Dean for Undergraduate Education as well as other groups. For the most part, undergraduates are the workforce for the largest number of events. Twenty years ago, CPW was a small vehicle that helped MIT recruit underrepresented minority students and women but, with the decision to have all first-year students live on campus in the late 1990s, it has increasingly, but not officially, become an introduction of students to our living groups. Three issues were brought to CUAFA. First, event proliferation has resulted in difficulties managing many hundreds of events, large and small. Second, faculty members and departments have expressed concerns that students use the work demands required to put on a successful CPW as an excuse to put off academic deadlines. Third, at least one department complained that the use of classrooms for evening CPW events limited the use of those rooms for evening exams and other

academic exercises. CUAFA listened to these concerns and will approach the chancellor for advice. From the CUAFA perspective, with due consideration to the aforementioned problems, we view CPW as a critical factor in our very high admissions yield. Accordingly, CUAFA would like to be part of any process that considers any aspect of CPW.

John M. Essigmann
Chair

Committee on the Undergraduate Program

During 2015–2016, 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 Anne McCants and met on alternate weeks through the fall and spring terms.

The committee reviewed and approved a large number of new academic programs this year. It approved five new SB degree programs: finance, management, business analytics, mathematical economics, and chemistry and biology, and two new interdisciplinary minors—statistics and data science, modified from the version proposed in AY2016—as well as entrepreneurship and innovation, modified from the version proposed in AY2015. Due to a transition in the School of Humanities Arts, and Social Sciences dean's office, members heard proposals for new and revised HASS programs in American studies (new minor and alignment of concentration and major option curricula) and ancient and medieval studies (revision to HASS concentration, minor, and major option curricula), and recommended that these programs move forward.

The Department of Chemistry proposed renumbering some of their subjects, currently taught in a modular fashion, so that each module would be designated with a separate course number. As one of these subjects is designated as an Institute Laboratory (LAB) subject and these newly named courses would not meet the definition of a LAB found in *Rules and Regulations of the Faculty*, the CUP engaged in discussion about running an educational experiment with the LAB that would accommodate a different configuration of the required units from the current configuration, which allows only a 12-unit subject or two 6-unit subjects. The committee proposed that a small group, including members from the CUP, the CoC, Course 5, and the Teaching and Learning Laboratory continue discussions to plan such an experiment over the summer and fall.

The Department of Electrical Engineering and Computer Science came to the committee with a proposal to run an experimental online version of *6.002 Circuits and Electronics* for MIT residential students. With a few caveats, the committee supported this experiment and looks forward to a report from Course 6 after the first offering.

The committee heard from Professor John Fernández, chair of the FPC Subcommittee on Sub-term Subjects, and discussed the subcommittee's findings and recommendations. Overall, CUP supported the idea of collaboration with departments to create greater

transparency around half-term subjects through consistent organization, scheduling, and regulation. Members were specifically in favor of designating start/end dates and specifying add/drop dates for these courses.

In other efforts, CUP engaged in discussions around advising and mentoring and the oversight of exchange programs. While no changes in policy were proposed, members had some good ideas to take back to their respective departments. The committee had conversations with several guests this year including Melissa Nobles, the new dean of the School of Humanities, Arts, and Social Sciences; and Sanjay Sarma, the vice president for digital learning, and John Gabrieli, director of the MIT Integrated Learning Initiative. In addition, the committee engaged in annual consultations with the chancellor and with the CUP's Subcommittee on the Communication Requirement.

Anne McCants
Chair

Genevre Filiault
Executive Officer

Subcommittee on the Humanities, Arts, and Social Sciences Requirement

The Subcommittee on the HASS Requirement (SHR) was not convened during the 2015–2016 academic year. The CUP and its chair attended to urgent issues and many of the regular oversight responsibilities of the subcommittee, including questions of policy related to the HASS requirement. CUP approved a new HASS concentration in legal studies on behalf of SHR. The chair of the Committee on the Undergraduate Program considered 58 petitions for subjects to count towards the HASS requirement in 2015–2016; of these, 25 were for subjects taken at Harvard through cross-registration. On behalf of SHR, the CUP reviewed 20 new and 53 revised subjects to count towards the HASS requirement.

Two meetings of instructors involved with the HASS Exploration (HEX) Program were convened on behalf of SHR. These meetings provided an opportunity to consider the state of the HEX Program and the possibility of additional outreach activities to encourage development of new subjects.

Kathleen MacArthur
Executive Officer

Subcommittee on the Communication Requirement

During 2015–2016, the CUP's Subcommittee on the Communication Requirement was co-chaired by Professors Eric Alm and James Buzard. The subcommittee engaged in a number of activities in its oversight of the undergraduate Communication Requirement (CR) at MIT including the review of 104 student petitions and attendant policy issues.

SOCR reviews all CI-H (Communication Intensive in the Humanities, Arts, and Social Sciences) and CI-M (Communication Intensive in the Major) proposals, including the review of new CI subjects and the relicensing of existing subjects. When appropriate, SOCR continues to consult with SHR. This year SOCR reviewed proposals for 18 new CI subjects (13 CI-M and five CI-H) and relicensing proposals for 15 CI-H subjects. The subcommittee worked closely with Course 5 to better understand the modular structure of its existing CI-M subjects (5.36 Biochemistry and Organic Laboratory and 5.38 Biological and Physical Chemistry Laboratory), and to consider the implications of renumbering these subjects.

Much of SOCR's work this year was devoted to the review of CI-M programs for new or revised degrees, including management (15-1), business analytics (15-2), finance (15-3), mathematical economics (14-2), revisions to the EECS curriculum (6-1, 6-2, 6-3), and preliminary review of a new SB in chemistry and biology (5-7).

SOCR met with representatives from the Committee on Undergraduate Admissions and Financial Aid regarding the College Board's implementation of a revised SAT this year. Unlike previous tests, the new SAT does not require the essay exam. In considering MIT's policy, CUAFA considered the value of the essay exam to the admissions process, how the decision affects access, and the message the decision sends about MIT's values. CUAFA and SOCR agreed that MIT should neither require nor recommend the SAT essay exam, and added additional language to the admissions website regarding the importance of communication to the MIT undergraduate curriculum.

Eric Alm
Co-chair

James Buzard
Co-chair

Kathleen MacArthur
Executive Officer

Edgerton Award Selection Committee

At the April 20 Institute Faculty meeting, the Edgerton Award Selection Committee announced two winners of this year's award: Katharina Ribbeck, Eugene Bell Career Development Professor of Tissue Engineering in the Department of Biological Engineering; and Jesse Thaler, Associate Professor in the Department of Physics.

Katharina Ribbeck

Professor Ribbeck obtained her diploma and PhD degrees in biology at the University of Heidelberg. She did postdoctoral research first at the European Molecular Biology Laboratory in Heidelberg and then at the Department of Systems Biology at Harvard Medical School. From 2007 through 2009, Professor Ribbeck held a Bauer Fellowship at the FAS Center for Systems Biology at Harvard University, establishing an independent research program there. In 2010, the Department of Biological Engineering

enthusiastically welcomed Professor Ribbeck to the MIT faculty. One of the two senior faculty colleagues who nominated her wrote: "Katharina is truly an exemplary faculty who combines scientific creativity with research leadership and… a passion for making a difference in the lives of students. If I had to select a single person at MIT who serves as a role model for our students and faculty it would be Katharina."

Professor Ribbeck has established a new field of interdisciplinary research on biological hydrogels—mucus in particular—that has the potential for direct impact on human health. The Ribbeck Lab explores the basic mechanisms of mucus barriers—how they prevent or permit passage of different molecules and pathogens—as well as the mechanisms pathogens have evolved to enable them to pass through these barriers. In 2013, Professor Ribbeck was awarded a highly competitive grant from the Burroughs Wellcome Fund's Reproductive Sciences Program to research the properties and functions of cervical mucus associated with preterm birth. In 2014, she was named one of *Popular Science*'s Brilliant Ten, which honor "the brightest young minds reshaping science, engineering, and the world." She has also received the John Kendrew Young Scientist Award from the European Molecular Biology Laboratory and an NSF CAREER Award. In addition, Professor Ribbeck led one of the three interdisciplinary research groups that won an NSF Materials Research Science and Engineering Center award that contributed to the successful renewal of MIT's Center for Materials Science and Engineering, an unusual role for a junior faculty member given the competitive nature of the process.

Professor Ribbeck is equally well recognized for teaching and outreach. She has had a significant impact on MIT's teaching program in bioengineering through her innovative efforts and was selected by the Engineering Council to receive the 2015 School of Engineering's Junior Bose Award for Excellence in Teaching. She has served as a residential scholar at Simmons Hall since 2011 and as a freshman advisor since 2013, developing in the latter capacity an innovative freshman seminar on mindfulness and stress reduction in partnership with MIT Medical staff members. Professor Ribbeck has also shown an energetic and deep commitment to public outreach, including a TED-Ed video for a lay audience and a children's book, both of which explain how mucus biomaterial is intimately involved in myriad facets of health and disease.

Continuing the legacy of Professor Harold E. Edgerton, this award honors achievement in research, teaching, and scholarship by a non-tenured member of the faculty. The selection committee recognizes Professor Katharina Ribbeck for her pioneering work in biological engineering, innovative approaches to teaching, and education and public outreach.

Jesse Thaler

Professor Thaler received a BS in mathematics/physics from Brown University, going on to complete a PhD in physics from Harvard University. He then undertook postdoctoral research at the Miller Institute for Basic Research in Science at the University of California, Berkeley and Lawrence Berkeley National Laboratory. Professor Thaler joined the MIT faculty in 2010. As nominated by a senior faculty colleague, "Jesse's key strengths include his bold and deep originality, vivid intelligence, conceptual depth, and

the care he puts into educating undergrads, inspiring and guiding graduate students, and mentoring postdocs into successful career trajectories."

Professor Thaler's research has already had a significant impact in three major areas of physics, through: (1) the development of novel techniques to study jets at proton-proton colliders like the Large Hadron Collider, (2) the creation of innovative models for dark matter, and (3) significant theoretical advances in the study of supersymmetric field theories. He is a leader in the global jet substructure community and his creativity as a theorist bears directly on what experimentalists are able to measure—and hence on what physicists can learn about the laws of nature. Professor Thaler's research has been recognized with an Early Career Research Award from the US Department of Energy in 2012, a Presidential Early Career Award from the White House in 2012, and a Sloan Research Fellowship from the Alfred P. Sloan Foundation in 2013.

Particularly notable in Professor Thaler's research program is his involvement of undergraduates in his research: two of his most frequently cited papers were written with a UROP student who has accepted a postdoctoral position at the Institute for Advanced Study in Princeton. More broadly, he cares deeply about his students—both undergraduate and graduate—and postdocs, advising, guiding, and mentoring them as they navigate the academic landscape at MIT and beyond. His teaching evaluation score for 8.06, advanced undergraduate quantum mechanics, has not been exceeded in the 17 years that this subject has been taught. The Department of Physics honored Professor Thaler with the Buechner Faculty Undergraduate Advising Award in 2013 and the Buechner Faculty Teaching Award in 2014.

Continuing the legacy of Professor Harold E. Edgerton, this award honors achievement in research, teaching, and scholarship by a non-tenured member of the faculty. The selection committee recognizes Professor Jesse Thaler for his creative and inspirational work in theoretical physics and for his infectious enthusiasm and compassion in teaching and mentoring.

Robert Griffin
Chair

Killian Faculty Achievement Award Committee

The Killian Award Selection Committee selected Eric S. Lander, president and founding director of the Broad Institute and professor of biology, as the recipient of the 2016-2017 James R. Killian Jr. Faculty Achievement Award.

Professor Lander's contributions to science are deep and wide-ranging, including scientific discoveries, writing of crucial science policy, leadership in both the local and global research communities, and a long history of inspiring a love of biology in students. In addition, under Professor Lander's leadership, the Broad Institute is internationally recognized as a leading model of interdisciplinary and cross-institutional collaboration.

He is widely known for his seminal work in mapping the human genome, which changed how biological research is pursued. This effort yielded the complete inventory of human genes, as well as catalogs of human genetic variation and conserved genetic elements. It launched new fields of research – including the discovery of thousands of genes underlying human diseases and the global effort to understand their biological functions. From its inception, Professor Lander was key to the project, which built on methods for genetic mapping that he co-developed with David Botstein at MIT.

Professor Lander has influenced public policy through his writing, most notably in an amicus brief that was a critical factor in the Supreme Court's decision to make genes non-patentable. He also serves as co-chair of the President's Council of Advisors on Science and Technology (PCAST) to which he was appointed in 2008 by President Barack Obama. Under Professor Lander's co-leadership, PCAST has produced dozens of reports on major topics such as antibiotic resistance, flu preparedness, and advanced manufacturing, many of which have translated into executive orders or major policy initiatives.

Professor Lander is also a highly regarded teacher. For over two decades, he has taught an incredibly popular Introductory Biology course at MIT, whose registration is limited only by the seating capacity of 26-100 – just over 550 seats. In spring 2013, he brought this course to the edX platform, and it has become one of the most popular courses online. Professor Lander has been honored by his students with the Baker Award and by the Class of 1960 Fellows Award for outstanding teaching.

His achievements have been recognized with over 70 awards and honors, including the MacArthur Fellowship, the AAAS Award for Public Understanding of Science and Technology, and the Dan David Prize. He is a member of the American Academy for the Advancement of Science, the American Academy of Arts and Sciences, the Institute of Medicine, the National Academy of Sciences, and the Royal Swedish Academy of Sciences Class of Biosciences – among others.

Unlocking the information in genomes has been one of the defining scientific revolutions of the past quarter century. With the Killian Award, the committee acknowledges the transformative effect Professor Lander has had on the study of biology and medicine. We honor Professor Eric S. Lander for these extraordinary contributions, and for his roles as a gifted leader, teacher, mentor, and public advocate for science at the highest levels.

Janet Sonenberg
Chair

Krishna Rajagopal
Chair of the Faculty
Professor of Physics

Tami Kaplan
Faculty Governance Administrator