

## Chair of the Faculty

### Faculty Policy Committee

The Faculty Policy Committee (FPC), chaired by professor Samuel Allen, examined a number of key governance issues impacting the Institute this year. The two areas to which the committee devoted most of its attention were MIT's leadership role in the online learning revolution, and the development plans for Kendall Square. The committee also charged subcommittees to assess the success of the September student holiday experiment and to consider imminent policy questions related to the proliferation of *MITx* subject offerings.

The Independent Activities Period (IAP) Policy Subcommittee, which began its work late in the 2011–2012 academic year, met throughout the fall and submitted a draft report in December and a final report in March. Although the nature of IAP has evolved over the years, especially with regard to an increase in for-credit academic subject offerings, the subcommittee largely expressed its approval of the new and interesting ways in which IAP has developed. However, the subcommittee expressed some concerns about the pace at which IAP is beginning to resemble a third academic term. The subcommittee offered several suggestions for strengthening the guidelines that the Committee on Curricula (CoC) uses to assess for-credit academic subjects taught during IAP, and to implement a schedule for reviewing IAP subjects once they have been approved. The only formal policy change that the subcommittee proposed was to extend the evening and weekend restriction on required academic exercises to IAP. A motion to this effect was offered and seconded at the March Institute faculty meeting and approved in April.

In November 2009, the faculty approved a proposal to initiate an experiment to move the September student holiday, which has historically fallen on a Monday, to a Wednesday in 2011 and to a Friday in 2012. The impetus for the experiment was to try to align the Fall Career Fair with the student holiday so that students could attend the fair without missing classes. With the experiment complete, FPC charged a subcommittee to assess its success and to recommend a plan for the future. After reviewing data, meeting with key stakeholders, and engaging closely with the Career Fair Executive Committee, the subcommittee recommended a move of the September student holiday from a Monday to a Friday. The subcommittee reported at the March Institute faculty meeting, proposing that the academic calendar and the *Rules and Regulations of the Faculty* be revised to reflect this change. The motion was approved at the April meeting.

The rapid development of online education is affecting the ways in which the Institute delivers educational content. To address questions having an immediate impact on curricular issues, FPC charged a subcommittee to recommend the standards and policies necessary to guide discussions and decisions regarding the Institute's residential education and degree programs in the context of digital learning. The subcommittee met during the spring and submitted a preliminary set of findings and recommendations in April. The subcommittee will continue to meet next academic year to finalize its recommendations and to address additional questions about the long-term impact of *MITx* on MIT's residential educational programs.

FPC also continued to engage with various corners of the Institute about the Kendall Square planning proposal. Faculty chair Professor Allen served on the Task Force on Community Engagement in 2030 Planning on Development of MIT-owned Property in Kendall Square, a body that the provost charged the previous summer. Professor Allen and the task force's chair, professor Thomas Kochan, engaged FPC both with the specifics of the Institute's development plan and the importance of broad faculty input and engagement. With MIT's rezoning petition now approved by the Cambridge City Council, FPC will remain engaged in ensuring continued faculty participation as the project moves into its next phase.

Among its guests during the course of the year, FPC met with the president, the provost, the associate provost, the vice president for research, the chairman of the Corporation, the executive director of the Office of Corporate Relations, and the director of Facilities Operations and Security.

At the May Institute faculty meeting, professors John Belcher and Susan Silbey were elected associate chair and secretary of the faculty, respectively, for the next two academic years. Professor Belcher and professors Elly Nedivi, John Fernandez, and Nazli Choucri will join FPC in 2013–2014.

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

During 2012–2013, the Committee on the Undergraduate Program (CUP) made decisions or recommendations on a number of matters related to MIT's undergraduate educational programs. CUP also heard updates and provided input on a range of issues that cut across faculty and institutional governance. For the second year, the committee was chaired by professor Timothy Grove and met on alternate weeks through the fall and spring terms.

Early in the fall and following spirited discussion of the rapidly evolving activities associated with *MITx*, CUP recommended to FPC and the chancellor that a faculty subcommittee be charged to address issues related to *MITx* and the Institute's residential programs. This subcommittee was charged in the spring, with professor JoAnne Stubbe serving as the CUP representative. In May, CUP heard some of the group's preliminary recommendations and observations, and it expects to hear more when meetings recommence in the fall.

Taking up work begun the previous year, CUP continued to focus on freshman advising, seeking to understand successes and challenges and to explore how the Institute might improve the quality of freshman advising. Together with the dean for undergraduate education, the faculty chair, and the chancellor, Professor Grove undertook a listening tour that included visits with the deans' group of the Academic Council and the five School councils. The goal of this tour was to hear reactions to the principles and priorities CUP had articulated regarding freshman advising, to understand more clearly some of the impediments to faculty participation in these activities, and to solicit ideas on how the Institute might effectively increase faculty involvement in advising first-year undergraduates. As the academic year concluded, Professor Grove, with the faculty chair, the dean for undergraduate education, and the chancellor, jointly published an

article in *The Faculty Newsletter* proposing that every freshman have a faculty member as an advisor or mentor. In conjunction with the article, CUP brought a resolution to the faculty, calling on MIT's administrative leaders to partner with CUP, the five School deans, and the deans for undergraduate education and student life to develop and implement an advising program that moves the Institute towards this end. The outgoing and incoming CUP chairs will meet over the summer with the new dean for undergraduate education to discuss the next phase of work in this area.

Following up on discussions in spring 2012, CUP reviewed detailed information regarding changes to Interphase Edge and Seminar XL, two of the academic programs offered by the Office of Minority Education. Subsequently, CUP made recommendations about assessment of Interphase Edge and the need for consultation with the Subcommittee on the Communication Requirement (SOCR) regarding the communications curriculum. CUP also regularized the existing credit-limit exception for first-term freshmen enrolling in Seminar XL and agreed that flagged students should be able to add Seminar XL registrations after Add Date for subjects in which they have been flagged.

Other CUP activity included approval of a permanent oversight arrangement for the Energy Studies minor that is consistent with faculty policies. This work was done in collaboration with CoC following the May 2012 conclusion of a three-year governance experiment. In addition, CUP was one of a number of standing faculty committees (and subcommittees) that was updated on reorganization of two units, Comparative Media Studies (CMS) and the Program in Writing and Humanistic Studies (PWHS), in the School of Humanities, Arts, and Social Sciences (SHASS). CUP also asked to consider a related proposal regarding numbering for the new unit. In response, members provided input to SHASS on various educational issues related to the reorganization and on a process for consultation. CUP anticipates further discussion regarding undergraduate education and the involved program(s) as the implications of the reorganization evolve.

In its role providing oversight of the General Institute Requirements (GIRs), CUP endorsed a proposal to add two new versions of 7.01 to the list of alternatives for satisfying the undergraduate biology requirement. The revised list was brought to the faculty in March and approved in April. CUP also endorsed a proposal to establish a new interdisciplinary minor in Atmospheric Chemistry and conveyed its support to CoC.

CUP heard updates or provided input on other activities as they intersected with the committee's purview or related to the undergraduate academic program. The committee continued its practice of meeting annually with the chancellor and, in September, members shared priorities and concerns with chancellor Eric Grimson. It reviewed a proposal to establish a master's in engineering degree in computer science and molecular biology and found no potential concerns related to undergraduate education. CUP heard plans for a pilot D-Lab (Development through Dialogue, Design, and Dissemination) study abroad program and provided input regarding how the program might be structured and evaluated. Several CUP members had been serving on an FPC subcommittee charged with reviewing IAP and making recommendations regarding IAP's role going forward, and CUP heard this subcommittee's report in the spring. The committee also received an annual update on the Humanities, Arts, and Social Sciences (HASS) Requirement from the Subcommittee on the HASS Requirement (SHR), and an annual update on the Communication Requirement (CR) from SOCR.

## Subcommittee on the Communication Requirement

During 2012–2013, CUP's Subcommittee on the Communication Requirement was cochaired by professors Lorna Gibson, Caspar Hare (fall), and William Broadhead (spring). The subcommittee engaged in a number of activities in its oversight of the undergraduate CR at MIT.

SOCR reviews all Communication Intensive in the Humanities, Arts, and Social Sciences (CI-H) and Communication Intensive in the Major (CI-M) proposals, including the review of new CI subjects and the relicensing of existing subjects. When appropriate, SOCR consults with SHR. This year, SOCR reviewed and approved proposals for 19 new CI subjects (11 CI-H and eight CI-M) and relicensing proposals for 24 CI-H and CI-H writing (CI-HW) subjects.

Since they were revised last year, the CI-H and CI-HW criteria are much more detailed than the CI-M criteria and include separate sections articulating desired outcomes and best practices. SOCR agreed that it would be useful to make some revisions to the CI-M criteria to make them more parallel to those for CI-H and CI-HW subjects, and made some general suggestions as to the scope of the project; this work will resume in the upcoming year.

In 2009–2010, the subcommittee gave its provisional approval of the CI-M program for the 16-ENG degree. This year, following an update from the Department of Aeronautics and Astronautics, the subcommittee gave final approval to the 16-ENG CI-M program and, in addition, approved the combination of the CI-M program for the 16-1 and 16-2 degrees, which the department was seeking to consolidate.

SOCR met with the instructors of 21F.222 Expository Writing for Bilingual Students (English Language Studies), a CI-HW subject required for some incoming freshmen and transfer students, to learn more about the support provided for this cohort of students and whether this one subject adequately meets their needs. While it is unclear what, if any, role SOCR might play in advocating for additional services, the subcommittee communicated its willingness to support the program's needs in the future.

SOCR heard an update from and provided feedback to the group developing enrollment management tools as part of Phase II of the online registration project. The cap on class size required for CI-H subjects has been managed largely through the HASS-Distribution (HASS-D) lottery because of the overlap between the two GIRs. Given the need to cap the size of CI-H subjects and the planned phaseout of the HASS-D subjects and lottery, the enrollment management project has prioritized a pilot to support the CI-H/HW subjects starting with preregistration in May 2014.

The subcommittee devoted some effort to two ongoing changes with possible implications for the CR. First, following the formation of a new CMS section from PWHS and CMS programs, the subcommittee discussed the stability of the CR-related interests (including CI-H, CI-HW, and CI-M subjects, and Writing Across the Curriculum). SOCR will continue to work with the SHASS dean's office and the new unit to address this issue. Second, the subcommittee reviewed and discussed the communication

component of the Interphase Edge summer program. SOCR was informed about the changes implemented last year and the proposed changes for the upcoming year. The subcommittee has asked for an update on the revised curriculum in 2013–2014 once the assessment of the program has been completed.

Finally, SOCR completed ongoing business, including the review of student petitions and attendant policy issues, the approval of a list of appropriate CI-M substitutions for the Course 8 flexible track, and a discussion of the policy on the use of writing advisors in CI-HW subjects.

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

This year, the CUP Subcommittee on the HASS Requirement (SHR) continued with regular responsibilities related to oversight of this GIR, questions of policy related to the implementation of the revised HASS Requirement, and experimentation with the HASS Exploration Program (HEX) (formerly known as the First Year Focus Program). The subcommittee was chaired by professor Christine Walley and met almost every two weeks during the academic year.

Oversight activities were varied. The subcommittee continues to monitor enrollments in HASS-D categories, HASS-D subjects, and concentrations. Over 100 petitions for subjects to count towards the HASS Requirement were considered in 2012–2013, and approximately one-third related to the HASS-D system. SHR reviewed over 100 new and revised subjects to count towards the HASS Requirement. Discussions on the current process and guidelines resulted in a decision to consider teaching unit, subject content, and instructor background when categorizing subjects. The subcommittee also agreed not to approve dual designations (i.e., arts and humanities) for new subjects and to encourage greater use of elective status for subjects that are truly interdisciplinary, in an effort to maintain clarity in categorization.

Members discussed the impact of a proposed common course prefix for subjects in the newly combined CMS and PWHS program. They endorsed the renumbering while raising some areas of concern about the impact of the merger on the teaching and student experiences with the HASS Requirement. D-Lab presented a proposal for a study abroad experiment including HASS subjects. The program was met with general enthusiasm and encouragement for experimentation with the HASS subjects that would address specific concerns about student preparedness and incorporation of independent studies.

A majority of the subcommittee's time was spent on assessment of the HEX Program and discussions of how HEX subjects might fit into the HASS GIR. SHR continued existing assessment activities, such as questions on end-of-term subject evaluations and HEX student surveys to collect longitudinal data and try to better understand the effect and role of HEX subjects. New activities this year included member-facilitated student focus groups (three) with undergraduates of different years; a survey of opinion from department/unit heads, undergraduate officers, and undergraduate curricular committee chairs; and a preliminary review of student audits reflecting fulfillment of the HASS Requirement under the revised distribution. SHR will continue discussions and assessment and make a final recommendation to CUP in fall 2013.

## Committee on Academic Performance

### Petitions and Academic Actions

The Committee on Academic Performance (CAP) reviewed 311 petitions this year. Last year's number was 271, and the average for the past ten years is 304. Of this year's petitions, 276 (89%) were approved and 31 (10%) were denied. Three petitions were incomplete at the end of the year, and nine had been withdrawn by the student.

In 2012–2013, CAP issued 272 academic warnings. Last year's number was 298, and the average for the past ten years is 306. Students required to withdraw totaled 42. Last year's number was 30, and the average for the past ten years is 41. Details of this year's actions are given below.

#### Committee on Academic Performance End-of-Term Action Summary, 2012–2013

Year	Fall 2012		Spring 2013	
	Warnings	RequiredWithdrawals	Warnings	RequiredWithdrawals
Freshmen	35	0	34	6
Sophomores	38	3	30	6
Juniors	40	4	22	9
Seniors	44	4	29	10
<b>Total</b>	<b>157</b>	<b>11</b>	<b>115</b>	<b>31</b>

### Policies and Procedures

During 2012–2013, CAP worked on several projects to improve its efficiency and fulfill a broader understanding of its mission resulting in:

- Further efforts toward better synchronization between the Web Student Information System (WebSIS) and Stellar, MIT's course management system
- Progress toward online submission of petitions
- Formal recognition of the end of a student's term on academic warning

### WebSIS/Stellar

Last year's report described a new collaboration between Information Services and Technology (IS&T) and CAP aimed at reducing the number of Late Add and Late Drop petitions based on student confusion between WebSIS and Stellar. In the third week of each term, IS&T generates lists that show subject mismatches between Stellar and the MIT student information system. The staff associate then relays to home departments the names of those students who need to submit an Add form; most undergraduate administrators are eager to reach out to their students.

Unfortunately, 2012–2013 data show an increase, rather than a decrease, in raw numbers of Late Adds and Late Drops—259 versus 234 in 2011–2012. Strict analysis of these petitions, to isolate WebSIS/Stellar confusion, has not been conducted, but the staff associate believes the confusion persists. CAP and IS&T’s Stellar group will continue their efforts to reduce the number of Late Add and Late Drop petitions while they await Stellar 2.0 and an anticipated real-time connection between WebSIS and Stellar.

The other goal of the CAP and IS&T collaboration, reducing the number of petitions for registration after hold, seemed in sight during the fall term, when that number dropped from one in fall 2011 to zero in fall 2012. However, the spring number doubled, from two in spring 2012 to four in spring 2013; it is not clear that the staff associate’s early contact of students in Stellar sites who are not yet officially registered for the term is sufficiently effective.

### **Online Submission of Petitions**

The staff associate continues to work with another IS&T team toward online submission of Late Add, Late Drop, and Change Status petitions. This multiyear effort (first discussed in fall 2008, and officially begun January 2011) is part of a larger project covering the Registrar, CR, Study Abroad, and other offices. Work in 2012–2013 focused on the “engine” that will drive all these forms; testing of forms specific to CAP is scheduled for 2014–2015.

### **Formal Recognition of the End of Academic Warning**

The CAP chair and Dean for Undergraduate Education (DUE) senior associate dean Julie Norman quickly took up the staff associate’s suggestion during the January 2013 end-of-term meetings that the committee recognize those students placed on Academic Warning for a previous term’s record who return to satisfactory performance in the next term. A brief letter was composed and sent by email to 74 such students on June 21, 2013, with copies to the academic advisor and the home department office.

### ***CAP Letter Recognizing End of a Student’s Term on Academic Warning***

Dear Student:

The Committee on Academic Performance recently reviewed your academic record for the past term. CAP is pleased to see that your performance has improved enough that you are no longer on Academic Warning.

We hope that you will continue to use resources to maintain steady progress toward your degree. Feel free to contact Mr. Stephen Pepper, Staff Associate for the Committee on Academic Performance (617-253-4164, Room 7-104, [spepper@mit.edu](mailto:spepper@mit.edu)), for additional help.

Best wishes for your continued success.

Sincerely,

Charles Stewart III

Chair, Committee on Academic Performance

cc: Advisor

Home Department

## Membership and Logistics

CAP enjoyed a full nine-member complement this year. Professor Merritt Roe Smith, of the Program in Science, Technology, and Society, whose term was set to expire June 30, 2013, stepped down in January to begin a sabbatical and was replaced by professor Annette Kim, of the Department of Urban Studies and Planning. Professor Charles Stewart, of the Department of Political Science, completed his first year as chair.

Average attendance at meetings was 7.78 in the fall and 7.67 in the spring.

In September, October, and November, the committee did not complete its petition agenda within the 12–1 pm meeting time, and for the spring term meetings were extended to 1:30 pm. The committee will continue to schedule 90-minute meetings for 2013–2014 to allow for policy discussions, as well as petition review.

## Committee on Curricula

The Committee on Curricula (CoC) acts on proposals to create, revise, or cancel undergraduate subjects, and to create, revise, or terminate undergraduate curricula; on student applications for double majors; and on petitions concerning the GIRs. During 2012–2013, the committee was chaired by professor Shankar Raman. The voting members consisted of seven faculty (including the chair) and four students. CoC met seven times during the fall term, five times during IAP, and six times during the spring term. During the academic year, the committee acted on 515 subject proposals, including proposals for 62 new subjects, and approved numerous minor changes to degree charts. The committee also approved the following major curricular changes:

- Course 6-7: In conjunction with the Committee on Graduate Programs (CGP) and CUP, approved a new master's in engineering program in computer science and molecular biology.
- Course 9: Approved significant changes to structure the degree program into a tiered format and to provide a greater foundation in statistics and computation.
- Course 12: Approved a new interdisciplinary minor in Atmospheric Chemistry in conjunction with Courses 1 and 5. Also approved significant changes to the degree program, which included an increase in core requirements and conversion of one of its CI-M subjects into two subjects.
- Course 16: Approved the merger of 16-1 and 16-2 into a single degree program, Course 16, which will allow students to pursue an option in information technology.
- Course 17: Approved a restructuring of the minor in Applied International Studies. The program will no longer be described using the four-tier framework typical of HASS minors. A new subject, 17.591, was approved to fulfill the minor's research seminar requirement.

- Course 20: Approved substantial revisions to the minor in Biomedical Engineering to further delineate requirements, particularly within the Biomedical Engineering and Applications component.
- Course 21M: Approved a restructuring of the degree program to require 11 foundational subjects plus a coherent program chosen in consultation with the advisor.

## Other Actions

- In conjunction with CUP, approved two new versions of Introductory Biology, 7.015 and 7.016, to provide students multiple options in both terms for fulfilling the biology GIR. CoC also approved the department's plan for managing enrollment in the 7.01x subjects via lottery.
- In conjunction with CUP, approved a pilot for spring 2013 for a D-Lab study abroad program that places students in the field for a full semester while taking a prescribed set of MIT subjects remotely, in real-time.
- The committee reviewed but did not approve a proposal to create a new course number, 21C, as the product of a merger between CMS and Course 21W (PWHS). CMS/Writing will function as a single administrative unit within SHASS; however, degrees and subjects will continue to be offered under separate prefixes.
- Approved a proposal to grant credit for Seminar XL LE, a new, late-entry version of Seminar XL for those who receive more than one fifth-week flag. Students who register for Seminar XL LE after Add Date will earn one unit of credit, and those who continue the program in IAP will earn an additional two units.
- The committee held conversations with science core departments and learning communities, Concourse and Experimental Study Group (ESG), about the management of alternative versions of science core subjects and their appearance on the transcript. Concourse and ESG subject numbers will carry forward on the transcript; as is current practice; 8.01L, 8.011 and 8.012 will display on the transcript under the corresponding mainstream number.
- CoC held several discussions concerning *MITx* and shared a summary of issues and concerns that surfaced in the course of those discussions with FPC and the director of Digital Learning. The committee will continue the conversation with the director of Digital Learning in 2013–2014.
- CoC took up the practice of licensing subjects, to be offered for one year, with departments reporting back to the committee at the end of the experiment to either permanently license the subjects or discontinue them. Licenses for 2013–2014 were granted to Russian language subjects, levels III and IV (21F.613, 21F.614), and Russian culture subjects (21F.616, 21F.617).
- Approved experimental versions of three subjects in Course 3 for spring 2013. The subjects involve a substantial online component designed to allow students to complete the subjects remotely and to enhance the experience of those taking the subjects residentially. Experiments included alternative versions of 3.044 and

- 3.15, taught under special subject numbers 3.S044 and 3.S15, respectively, as well as a new undergraduate version of 3.207, taught under 3.S086.
- Approved an experimental version of 6.02, offered as 6.S02, through spring 2014. This subject, which incorporates a substantial online component, offers half-laboratory credit toward the GIRs.
  - In keeping with its responsibility to seek reviews of interdisciplinary minors at least once every five years, CoC conducted reviews of the minors in Astronomy and Biomedical Engineering. The committee will formalize a set of guidelines surrounding the review process for sponsoring departments to follow moving forward.
  - Approved revisions to the subjects associated with the Undergraduate Practice Opportunities Program, thus consolidating the program into two subjects (from three) and reducing the total units earned for completing the program, from seven to two.
  - Two of CoC's faculty members and the executive officer served on the IAP subcommittee, which convened in spring 2012 and was charged with examining policies and procedures concerning IAP. After reviewing the subcommittee's final report (released in January 2013), CoC made recommendations to the chair of the faculty, including requests that the Registrar and the Office of Undergraduate Advising and Academic Programs compile and collect enrollment and scheduling data, on academic subjects and not-for-credit activities, respectively, for IAP 2014 and recent years; the committee will review the data in spring 2014.
  - A faculty member of CoC was appointed to the newly formed *MITx* subcommittee, charged with examining policies concerning the use of *MITx* in the education of MIT students. The subcommittee convened in spring 2013 and will continue into 2013–2014.
  - CoC received reports from SOCR and SHR concerning petitions received and reviewed by those committees.

### Committee on Discipline

Acting in accordance with its purpose of adjudicating cases of alleged student misconduct that are brought to its attention, the Committee on Discipline (COD) held 28 hearings involving 22 respondents (one student was heard for four incidents in a single set of hearings, another had two separate hearings, and a third had two cases heard together). Twenty-three pending cases are expected to be resolved in the fall 2013 semester; most are low-level party and alcohol allegations. Two represent more serious allegations of intimate partner violence. The hearings this year primarily involved issues of disorderly conduct, sexual misconduct, harassment, drug use and provision, and academic misconduct. Of the respondents in hearings, 21 were undergraduate students and one was a graduate student. The respondents were primarily men, with seven female respondents. In hearings where the student was found responsible, sanctions included removal from housing, suspension, and probation. Additionally, there were approximately 122 disciplinary warning letters created by or submitted to the Office

of Student Citizenship (OSC). Approximately half of these letters were from faculty addressing academic misconduct. Others addressed low-level behavioral misconduct, including parties, theft, drug use, and disorderly conduct. Two cases were also resolved via restorative justice practices, with good success in these early test cases.

The hearing caseload continued its trend of increasing from last year, nearly tripling this year. While this likely represents an improvement in reporting, many faculty, staff, and students have anecdotally indicated that many incidents are not reported to OSC. The office plans to continue outreach to increase the flow of reported instances, especially from faculty.

Additionally, a committee chaired by professor Robert Redwine submitted changes to the COD rules, which will generally be implemented, starting in July 2013. COD continues to work to address consistency in reporting and decisions by expanding training and providing members with more guidance in decision making.

This year, two faculty members who were scheduled to conclude their service on COD will continue in the fall to fill in absences: professor Alexander Byrne will fill in for professor Xavier de Souza Briggs, who is leaving his appointment early. Likewise, professor Martha Gray will fill in for professor Agustin Rayo, who will be on sabbatical in the fall. Professor Munther Dahleh will continue his service next year. There will be two new faculty and one new student member. Additionally, Sara Nelson will replace Michael Bergren as a dean's representative. Christine Anthony is leaving her position as director of OSC on June 7, 2013, and Kevin Kraft will take over that role.

### **Committee on Graduate Programs**

The Committee on Graduate Programs (CGP), chaired by professor Robert Sauer, consulted on a broad array of issues impacting graduate education. The September meeting set forth a list of potential agenda items for the 2012–2013 academic year, the majority of which were reviewed by the committee, among many others that emerged during the year.

CGP continued a long-running examination of the higher-level (H-level) subject designation (September 2012), a topic that the committee first took up in AY2010, and was discussed subsequently at several meetings during AY2011 and AY2012. Following the revision of the H-level definition during AY2012, the committee considered two remaining issues involving H-level subjects, namely 1) how to revise policy for H-level subjects with P/D/F grading, and 2) special subjects that grant H-level credit. The committee agreed with the view of the Registrar's Office that since H-level subjects can be used to meet degree requirements in one or more programs, subjects with this designation should not be graded as P/D/F. Similarly, the committee concurred with the Registrar's Office that since Special Subject courses often use "rubber numbers" that are re-used by departments and hence are not vetted as part of the annual subject review, these subjects should not be designated as H-level without a permanent subject number.

As a solution to the continuing issues involving the H-level distinction, the committee ultimately recommended ending the G/H-level distinction and having one single

graduate-level course classification. Most of MIT's peer institutions use a single system, which has the strong benefit of providing clearer guidelines for departments and students on subjects that count towards graduate requirements. Noting that abolishing the G/H distinction would have an impact on the processes of departments and programs who award master's degrees, which require a minimum number of H-level units, the committee surveyed all graduate departments and programs and received overwhelming support for abolishing the distinction. As this change in policy requires a review by FPC and a subsequent vote at a meeting of the faculty, the chair presented the proposal to FPC, where it was well received. There will be continued discussion with the Registrar's Office regarding practical implementation of this change and the related procedures for departmental degree audits before the proposal is brought before the faculty in the upcoming academic year.

The committee also discussed the broad and complex topic of how to define graduate programs as "interdisciplinary," relevant to course listings in the MIT Bulletin (course catalog), in a manner that is consistent among the Schools and departments (April 2013). Ultimately, a more robust content management system for the Reference Publications Office to use for this work may make it easier to cross-reference catalog sections and manage content changes.

CGP reviewed the spring 2013 report of the IAP subcommittee and agreed with its findings and recommendations (February 2013), and also approved a proposal to change questions asked on MIT's evaluation forms (October 2012), brought to the CGP chair by SHASS dean for curriculum and faculty support Diana Henderson, chair of the Subject Evaluation Advisory Committee (SEAC). SEAC recommended that the number of Institute-wide questions be reduced significantly to provide space for department- and instructor-specific questions, and it also drafted a set of new questions, which were brought to faculty governance for approval.

The committee heard presentations from professors Kai von Fintel (SHASS associate dean), James Paradis, and Nick Montfort regarding the proposed SHASS reorganization, which would include a merger of Course 21W (PWHS) and CMS (October 2012). The committee noted that this merger would impact graduate studies primarily in the context of the Graduate Program in Science Writing, which is among the top three programs of its kind in the US and holds strong name recognition. Considering that there would be no changes to curricula and that operationally the merger has already taken place, the committee had no concerns. Additionally, it had no objection to the proposed consolidation of subject prefixes 21A, 21M, 21H, and 21F under the new subject prefix "21C," as a way to avoid colisting of subjects.

In November 2012, the committee approved a request by the Harvard-MIT Division of Health Sciences and Technology to terminate the master of engineering in biomedical engineering program and the biomedical enterprise program due to lack of anticipated growth. Both programs have been in phaseout mode for several years while supporting their final cohorts. CGP also reviewed and approved motions to establish two new graduate programs: 1) master of engineering in computer science and molecular biology

(a joint program offered by Course 6 and Course 7), and 2) PhD in computational science and engineering, offered by the Computation for Design and Optimization Program in conjunction with the departments of Aeronautics and Astronautics, Civil and Environmental Engineering, Mechanical Engineering, and Nuclear Science and Engineering as a new interdisciplinary graduate program of study with its own thesis designation.

A proposal from the Operations Research Center for a new professional graduate degree, master of analytics, was also presented to CGP. The committee had considerable concerns about the proposed program's academic structure, especially during IAP and the summer term, as well the internship component and corporate sponsorship aspect. The committee withheld its approval of the proposal in its current form and offered constructive advice for revision.

The committee also discussed recommendations to revise the Guidelines for New Degree Proposals (December 2012), which were initiated and drafted by the Office of the Chair of the Faculty. The proposed changes would alter the flow such that proposals would first be brought to the chair of the faculty and presented to Academic Council, then routed to the faculty governance committees. CGP felt that the steps could use more clarification, in the interest of making the process as low-barrier as possible for emerging fields.

CGP graduate student members Eli Paster and Daniel Day delivered recommendations to the committee on the ways in which campus space could be designed and utilized to be most beneficial to the graduate student community (April 2013).

In May, the committee was briefed by dean for graduate education Christine Ortiz on the work of the Task Force on the Future of Graduate Education in the Context of *MITx*, of which she is the chair. The committee also learned about the preliminary findings and recommendations of FPC's *MITx* subcommittee from professor David Gamarnik (the CGP representative on the subcommittee). These updates encouraged the committee members to engage in a thoughtful discussion about the uncharted territory of massive open online courses (MOOCs) and their relationship to residential education at MIT. In response to several cases during the 2012–2013 admissions cycle, the committee also considered recommendations for how to handle graduate applicants with criminal backgrounds involving violent crimes.

### **Committee on Student Life**

This year, the Committee on Student Life (CSL) continued discussions on the general topics on student life, including health, career services, safety, housing, dining, orientation, and international student supports. CSL interacted with different administrative groups on campus, and helped to channel student comments to the appropriate department. CSL also worked with the Office of the Dean for Student Life (DSL) to understand its strategic plan, which helped student organizations to be synchronized with DSL's long-term development plans.

One of the key topics discussed was the role of CSL in campus life. Given that this year the members on the committee are mostly new, and that CSL has no decision power in most of the issues discussed, the committee focused on understanding its goal and specific actions it can take to make impacts, and to maintain its knowledge. To that end, Chancellor Grimson addressed the committee early in the school year, informed the committee of the upcoming events on campus, such as the launch of the MIT Together website, developments on edX, and the Quality of Student Life Survey. After this meeting, the committee also explored other ways to ensure the continuation of the committee's knowledge, including the use of a stellar site to record decisions on repeating topics, and to establish official committee documents.

The committee spent several meetings on health issues, including on-campus violence, mental health supports, and the current status of the DSL wellness program. The scheduled meeting on dining plans was cancelled due to a previously scheduled event, which left this series of discussions incomplete.

Another important issue CSL visited was the MIT 2030 plan and graduate student housing. This year, the agreement on the cap of 3.5% on dormitory rent increase expires. The new campus development plan also led to discussions on the difficulty for graduate students to find housing in Cambridge. There were two meetings on this issue—in one, Henry Humphrey, senior associate dean of residential life and dining, and Peter Cummings, senior director of finance, presented the current status of on-campus housing, the budget, and the latest developments; in the other, the Graduate Student Council presented survey data on graduate students' housing costs and the students' opinions on dormitory needs. The information was forwarded to management and used later in faculty meetings.

In conclusion, CSL visited most of the important issues regarding student life in general, and accomplished the goal of channeling the students' voices to the administration. The committee also experienced a lack of mechanism to follow up committee discussions with actions; CSL will focus on this issue in the future.

## **Committee on the Library System**

The work of the Committee on the Library System (CLS) in the last year has been dominated by three major themes: Open Access Policy, *MITx* support, and improvements to the MIT Libraries. Of these, the Open Access Policy effort is most developed, while *MITx* support is a rising issue. Most of the focus in 2012–2013 was on improvements to the Libraries, which included increased hours and development of a plan for renovations that tie the Libraries into the MIT plan for campus teaching and learning spaces. These issues are reviewed and discussed below, and indicate what is on the horizon for fall 2013.

### **Open Access Policy**

The Open Access Policy carries over from 2012 and continues to yield successes. The policy is now implemented and is receiving faculty support. An active Open Access Policy working group was established, headed by professor Richard Holton, and continues to spearhead the effort. MIT is a member of the Coalition of Open Access

Policy Institutions, which has more than 30 members and addresses issues within the academic community.

### *Support for MITx*

The role of the MIT Libraries in the *MITx* initiative is quite complex, and CLS is working to better define that role.

First, MOOC learning raises important questions about access to textbooks and licensed material. The Libraries are a gateway for distribution of intellectual material within the MIT environment. It is unclear how this extends into the MOOC environment, and work is being done with the Office of the General Counsel and the Office of Digital Learning to address this topic.

MIT Libraries staff are playing a leading role in a coalition to oppose agreements to pay royalties to textbook companies for access to material for MOOCs. The coalition includes Harvard University and several California and Texas universities.

Clarification of the responsibility of the MIT Libraries to edX classes beyond those which are designated *MITx* is needed. This is particularly relevant if *MITx* classes build upon prerequisite coursework within edX, but outside of *MITx*.

Other issues related to the methodology of *MITx* courses are also being explored, including what are the best pedagogical approaches to teaching library-based research within a MOOC.

The *MITx* initiative is very new. Over the next few years, the program will evolve, and the Libraries are working to maintain a flexible view throughout this evolution.

### **Restoring Library Hours**

Some library hours that had been cut due to the budget crisis were restored. Also, the Barker Dome is now open 24-7, and there has been an excellent student response to these new hours. The students have also appreciated the newly renovated dome space, which now has significantly more light.

### **Improving Library Spaces**

A very important initiative this year was the study of how to improve the Libraries spaces to better facilitate the goals of the Working Group on the Future of Campus Teaching and Learning Spaces. A report was commissioned from the architecture, planning, and design firm of Shepley Bulfinch that examined library spaces at MIT's peer institutions, and recommendations were made on how to better organize the MIT Libraries.

Central to this discussion was potential renovation of Hayden Library. Shepley Bulfinch is proposing that the ground floor of Hayden Library be renovated to be flexible student space, similar to the space available at The Link, at Duke University. This concept was

presented to the MIT administration, and a study of structural issues associated with Hayden Library has been commissioned as a first step to consideration of future uses.

### **Report of the Visiting Committee**

The MIT Libraries Visiting Committee met on campus on March 4 and 5, 2013. CLS hosted a faculty breakfast on March 5 to provide an opportunity for the visiting committee to hear directly from faculty regarding satisfaction with services and resources from the Libraries. The visiting committee reported that the sentiments of the faculty regarding the Libraries are that they are positive partners—helpful and integral to the success of the faculty, and CLS concurs.

### **On the Fall Horizon**

The committee has two issues that must be considered immediately in the fall. The first is examination of and contribution to the Library Strategic Plan, which is being developed this summer. The value of a good strategic plan was demonstrated during the recent economic crisis, and the MIT Libraries are continuing to be forward thinking in this way. The second is to keep abreast of the issues of sweeping changes to copyright laws, which are now being debated within the US government.

### **Conclusion**

CLS is pleased to report that the Libraries are functioning well. Those who manage the MIT Libraries have done an extraordinary job of guiding the system through the budgetary crisis in a way that minimized the impact on students and faculty, while maintaining momentum on important initiatives.

### **Committee on Nominations**

The Committee on Nominations met weekly from October 26 to February 22. The committee began the year by expanding its search process in various ways: adding a place on the survey where participants could suggest names for faculty officers; directly contacting deans, department heads, and committee chairs for suggestions; and gathering meeting time information from the committee chairs (in anticipation of questions from prospective committee members). The committee contacted about 45 people for service on 30 positions coming open, with a success rate of about two-thirds. Seven interim appointments were also made. Starting from a list of 70, the committee nominated Professor Belcher as associate chair of the faculty and Professor Silbey as secretary of the faculty. The slate was presented in the March faculty meeting and voted in without changes in May.

### **Committee on Outside Professional Activities**

The Committee on Outside Professional Activities did not meet during the course of the year.

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

The Committee on Undergraduate Admissions and Financial Aid (CUAFA) had an unusually intense year. The major issue was the impending Fisher v. University of Texas

ruling regarding the use of race in admissions. That issue dominated the year as CUAFA received input from MIT legal and other experts. The second issue was to recommend any changes in MIT's policy to not admit undocumented students, given that it was discovered that two students had unintentionally been admitted—it was learned at the point of visa checking that they were undocumented

### **Diversity at MIT and Fisher v. University of Texas**

In anticipation of the US Supreme Court ruling in *Fisher v. University of Texas*, a case that challenges the use of race in college admissions, the dean of undergraduate education charged CUAFA with undertaking a study of the benefits of racial and ethnic diversity for the educational mission of MIT, and the availability of effective race-neutral alternatives to achieve that mission. CUAFA met with the MIT legal staff, reviewed some of the literature on diversity, examined MIT policy statements regarding the educational mission and the role of a diverse student body, and examined surveys of MIT students and alumni, including two recent surveys in which CUAFA was able to insert new items to examine the impact of diversity. Although the recent ruling does not limit MIT's ability to use race in admissions, there is every indication that there will be continuing challenges and narrowing of the circumstances under which race can be used in college admissions.

MIT seeks a robustly talented and diverse student body that can enhance the living and learning environment for its students, in order to provide preparation for careers and citizenship in a complex and rapidly changing global society. The research literature suggests that both majority and minority students benefit from having or even anticipating diverse interactions, including producing more innovative and effective ideas. In the 2013 MIT Alumni Survey, over 70% of MIT alumni from six different graduating cohorts, spanning 1984–2008, said that their ability to work effectively with people of different races or ethnicities in their professional lives was “essential” or “very important,” and this result held for all cohorts and all racial groups. Other questions in the same survey show that the more frequently alumni report engaging in multicultural settings while at MIT, the more they report being able to effectively engage in multicultural settings and to successfully adapt to change, two skills included among MIT's long-held educational goals. The same relationship extends to self-reported skills in leadership, engaged citizenship, innovation and creativity, teamwork, communication, and conflict management and negotiation. This is also supported by results on a survey of Undergraduate Research Opportunities Program experiences, showing a relationship between working in a diverse research team and students' perceived improvements in their ability to work in a diverse and collaborative environment. The 2012 Senior Survey also reveals that those students who often had conversations with students of other racial and ethnic groups report more development of analytical, scientific, and project management skills at MIT.

MIT's undergraduate student body currently is at least 22% underrepresented minorities (URMs). Analyses of the application pool and yield data, as well as a review of the impact of state laws that forbade the use of race in admissions, led to estimates that, without use of race as a consideration, MIT would have an undergraduate student body of 4–6% URMs, possibly less. CUAFA considered the possibility of increasing the

proportion of URM students by admitting more lower socioeconomic status students, admitting the top student from any high school, and/or increasing recruitment of URMs, and found that none of these methods would increase student body racial diversity significantly or sufficiently.

In light of the above analyses, CUAFA made two recommendations. First, there should be continuing discussion of these issues within the MIT community, building on the presidential initiatives on diversity at MIT. These discussions should engage senior administration, relevant faculty committees (e.g., the Committee on Race and Diversity), and students and alumni. Second, to enhance MIT's ability to provide evidence regarding the impact of diversity on the educational mission and campus life in general, MIT should encourage the creation of an enhanced suite of measures, building upon the items introduced into recent surveys. Along with student and alumni surveys, it would be helpful to have more objective evidence about the diversity of student settings (classrooms, team projects, living groups, clubs, etc.) and the relationship between exposure to diverse settings and a range of cognitive and social skills.

### **Undocumented Students**

MIT is now admitting a larger number of international students living in the US following a change of admissions policy two years ago. Previously, it would have been much more difficult for undocumented students or any international students living in the US to be admitted. Visa status is not systematically asked for in the admissions process, so undocumented students have not been detected during admissions. For next year, MIT will include a question on visa status and then ask additional questions of undocumented students.

Given that MIT is the only one of its peer universities not to admit undocumented students, and that there was a Presidential request to the Department of Homeland Security to delay deportation of undocumented students attending college, and after discussion of various options, the consensus recommendation from CUAFA was to allow admissions of undocumented students without restriction (i.e., in the same manner as domestic students). However, in considering issues of financial aid, CUAFA also recommended that these students be strongly encouraged to seek deferrals and work permits—while it is likely they will have high need, parental income may not be verifiable through tax returns. MIT accepted this recommendation from CUAFA.

### **Admissions and Financial Aid**

The admissions process this year went smoothly and produced an extremely talented group of students. Yield is the highest ever, at 73%. The change in Numeric Index (NI) in 2009 appears to have had the desired results. There are more freshmen admitted with sophomore standing eligibility and fewer CAP actions with freshmen (which is predictive of fewer problems throughout students' time at MIT).

Now the attention is shifting to modify the personal ratings. CAP actions are typically around personal and mental health issues. The applicant pool is stronger, and there are more science fairs and competition. The faculty survey from summer 2012 provided inputs regarding the qualities of the best MIT undergraduates. It is now possible to

realign the personal ratings to be clear about academic preparedness, academic promise, and personal qualities. The new personal ratings would be the average of three rated features: drive to learn, fit to MIT culture, and contribution to the community. This is unlikely to have major impact on decisions, but will make the process more clear, more consistent, and easier to enact and to train new raters.

The issue of college cost is emerging as a national issue; one CUFA member commented that it “may blow up in our face.” Thirty percent of MIT’s students come from well-off families, roughly equivalent to its competitors, and this percentage has been increasing in the last few years. The applicant pool is skewed toward the wealthier, in part because of the correlation of qualifications with wealth. Two years ago, the admissions process was changed as a result of a policy to raise academic preparedness (standardized test scores, grades, and quality of high school) and a policy to recruit more student athletes, both of which have led to wealthier students being admitted. MIT does not want this trend to continue, believing that diversity is an important feature of the incoming class. Accordingly, the number of first generation college students enrolled this year was increased as a result of paying more attention to their applications. The admissions staff will monitor this and continue to discuss what to do.

CUFA also considered an issue raised by Elizabeth Hicks, executive director of Student Financial Services, regarding independent (emancipated) students. There are a handful of students each year who declare independence from their parents, and the financial aid repercussions are dealt with on a case-by-case basis. The committee discussed whether or not change is needed in the current process and agreed that the professional judgment of Ms. Hicks’ staff should continue to be of primary importance.

### **Edgerton Faculty Achievement Award Selection Committee**

The Edgerton Award Selection Committee, chaired by professor Emma Teng, announced at the April Institute faculty meeting that the winner of this year’s Harold E. Edgerton Faculty Achievement Award is Graham Jones, assistant professor of anthropology.

A cultural and linguistic anthropologist, Professor Jones received his PhD from New York University in 2007. He was awarded a prestigious, three-year postdoctoral fellowship at the Princeton Society of Fellows, following which he joined the MIT faculty in 2010. During his first three years at MIT, Professor Jones has excelled in teaching, research, and scholarship, and has already made a deep impression on his students and colleagues. Professor Jones’s scholarship focuses on knowledge and rationality in practice, performance, and interaction, and follows two main strands of research: cultures of expertise and secrecy as enacted in the world of French magicians, and computer-mediated communication, primarily among users of text messaging. His first book, *Trade of the Tricks: Inside the Magician’s Craft* (University of California Press, 2011), has been hailed as one of the richest and most explicit accounts of the secretive subculture of modern magicians.

Professor Jones’s most recent work, which has been funded by the National Science Foundation (NSF), is entitled “MOOCs and the Ethnography of Media Socialization.” He will study the engineers designing *MITx*, the online discourse of students enrolled in

MITx courses, and the internet discourse about MOOCs. He has become a central player in the group organizing to study the variety of student experiences and learning through MITx and edX.

Professor Jones is not only an exemplary scholar, but also an exemplary teacher. Embodying the spirit of *mens et manus*, his classes combine lecture and discussion with practice-based activities that provide students with hands-on experience of ethnographic research methods. In the Introduction to Anthropology class that he taught in spring 2012, Professor Jones achieved an overall teaching rating of a perfect 7.0 on his student evaluations, a nearly unheard of aggregate score for a lecture course with so many students. As one student wrote, “Professor Jones presented engaging and provocative material in a highly thoughtful, articulate, and knowledgeable way, and with an infectious enthusiasm like none I have ever seen.” Another wrote, “If you could give Professor Jones a key to the city and appoint him honorary mayor, you should.”

The Edgerton Award recognizes Professor Jones for his commitment to excellence and his embodiment of the values espoused by professor Harold E. Edgerton.

### **Killian Faculty Achievement Award Selection Committee**

The Killian Award Selection Committee, chaired by professor Michel Goemans, selected Stephen Lippard, Arthur Amos Noyes professor of chemistry, as this year’s winner of the James R. Killian Jr. Faculty Achievement Award.

Professor Lippard is widely acknowledged to be one of the founders of the field of bioinorganic chemistry. This field is concerned with the role of inorganic molecules, especially metal ions and their complexes, in critical processes in biological systems. Professor Lippard’s pioneering contributions include understanding the mechanism of action of the clinically important anticancer drug cisplatin, and the rational design of new variants to combat the problems of cytotoxicity and resistance. Among many achievements, his group discovered the first metal complexes that intercalate into DNA. His groundbreaking work has pushed back the frontiers of inorganic chemistry, while simultaneously paving the way for improvements in human health and the conquering of disease.

After completing his PhD degree in chemistry from MIT in 1965 and spending a postdoctoral year here as an NSF Fellow, Professor Lippard joined the faculty of Columbia University as an assistant professor in 1966. He returned to MIT as professor of chemistry in 1983 and was appointed the Arthur Amos Noyes professor in 1989.

Professor Lippard served as the head of the Department of Chemistry from 1995 to 2005. He has published over 800 peer-reviewed papers in journals such as *Science* and *Nature*, and has recorded nearly 30 patents. With Jeremy Berg, he published *Principles of Bioinorganic Chemistry*, which is recognized as the definitive text in the field.

In addition to his exceptional work as a scientist, Professor Lippard has excelled as a teacher and mentor, fostering the training of a generation of leading young scientists in the field of bioinorganic chemistry. He has trained more than 100 PhD students and an

even greater number of postdoctoral associates. After years of great science, scholarship, and service, Professor Lippard still projects a wonderful youthful enthusiasm when discussing new research results, or when teaching freshman chemistry to new MIT undergraduates. Among the many awards he has received, Professor Lippard may be most proud of the little-known Cold Iron Award, which was conferred on him in 2010 by the many women he has mentored, with an inscription that reads, "In recognition of more than 40 years of inspiring, training, promoting, and encouraging women in chemistry and steadfast support of their career advancement."

Professor Lippard's contributions have also been recognized with the Linus Pauling Medal, the UK Royal Society of Chemistry Centenary Medal, the Ronald Breslow Award for Achievement in Biomimetic Chemistry, the Alfred Bader Award, and the National Medal of Science. He has been elected to the National Academy of Sciences, the National Institute of Medicine, and the American Academy of Arts and Sciences.

**Samuel M. Allen**  
**Chair of the Faculty**  
**POSCO Professor of Physical Metallurgy**

**Aaron R. Weinberger**  
**Faculty Governance Administrator**