

Chair of the Faculty

Faculty Policy Committee

The Faculty Policy Committee (FPC), chaired by professor Thomas A. Kochan, started the year with several overarching agenda items: the Institute-wide Planning Task Force; maintaining excellence in a time of severe budget constraints; and long-term strategic planning. Among its guests during the course of the year, the committee met with the president, the chancellor, and the vice president for Institute affairs and secretary of the Corporation.

FPC spent a great deal of time discussing the work of the Institute-wide Planning Task Force, with particular regard to the review of budget reduction scenarios, communications strategies, and how to ensure that MIT maintains its highest level of integrity in adjusting to the current economic climate. Two particular areas of focus in committee meetings were the changes under way in the MIT Libraries and in MIT Medical. The committee met with Ann Wolpert, director of the Libraries, and with Dr. William Kettle, medical director and head of MIT Medical. Both are faced with adjusting the services that they offer in order to trim their budgets. The committee expressed concern about the impact of the changes on the MIT community and offered suggestions for alternate changes; how best to engage the students, staff, and faculty; and how to communicate the changes effectively to the community.

The committee was active in reviewing and discussing several major reports released during the course of the year. Aside from the Institute-wide Planning Task Force, the Initiative on Faculty Race and Diversity, the Student Support Services Task Force, and the Tenure Process Committee all released reports. The committee discussed how best to ensure accountability and how to incorporate the recommendations of the reports into the culture of MIT.

Two outstanding issues from 2008–2009 carried into discussions during the course of the year. First, the committee discussed a proposal to move the September student holiday so that it coincides with the fall Career Day. Because of concerns voiced about unintended consequences of such a move, a revised motion to approve the change on a two-year experimental basis was submitted to the faculty in November and approved in December. Under the terms of the experiment, the holiday will be scheduled on the Wednesday of Career Week in 2011 and on the Friday of Career Week in 2012. The chair of the faculty will present the results of the experiment at a spring 2013 faculty meeting and will either propose a permanent change to the Rules and Regulations of the Faculty or a return to the current calendar.

Second, FPC discussed pandemic planning at the Institute and what measures should be taken if the Institute needs to shut down and classes or exams are cancelled. In November, the faculty approved a proposal to allow the chair of the faculty, in consultation with the Deans' Group of the Academic Council, the registrar, and the chairs of the Committees on the Undergraduate Program, Graduate Programs, and Academic Performance, to declare a disruption and implement a series of temporary regulations without going before the faculty.

The committee reviewed a proposal to create a new flexible SB engineering degree in aeronautics and astronautics. The intention of the new degree is to enable students to gain a greater depth of understanding and skill in addressing multidisciplinary and interdisciplinary engineering programs. In a discussion with Subra Suresh, dean of the School of Engineering, and professor Ian Waitz, head of the Department of Aeronautics and Astronautics, the committee expressed support for the new degree. It was approved at the April faculty meeting. It seems likely that there will be an increase in interdisciplinary degrees proposed through the faculty governance system in the coming years.

The committee addressed several other policy issues, including a change to the Institute's policy on the release of hidden grades in order to ensure that its students remain eligible for federal financial aid grants and a proposal to adjust the policy on students returning to MIT after lengthy absences. The committee supported a proposal to clarify graduation requirements for students returning to MIT after absences of greater than 10 years. The resulting changes to the Rules and Regulations of the Faculty were approved at the April faculty meeting.

At the May faculty meeting, professor Samuel Allen was voted as the next chair of the faculty for the term 2011–2013. New members of FPC for 2010–2011 will be professors Paula Rizzoli and Caroline Jones.

Committee on the Undergraduate Program

During 2009–2010, the Committee on the Undergraduate Program (CUP) made decisions or recommendations on a number of matters and heard updates and provided input on a range of issues that cut across faculty and institutional governance. As in 2008–2009, CUP was chaired by professor Steven Hall.

Beginning in the summer of 2009, Professor Hall and Anna Frazer, assistant dean for the Communication Requirement and executive officer of the committee, began collaborating with the faculty officers to develop and propose procedures to address significant disruptions to academic activities as a result of an extended emergency. These changes were endorsed by CUP in September and forwarded to the faculty for approval.

Also during the summer, CUP took steps to charge a new standing Subcommittee on the Humanities, Arts, and Social Sciences (HASS) Requirement (SHR) that could provide oversight for the implementation and ongoing administration of the revised HASS Requirement. CUP approved the charge to the subcommittee in September, and the work of this group is reported below. The activities of CUP's standing Subcommittee on the Communication Requirement (SOCR) are also discussed in more detail below. SOCR visited CUP several times during the year, first to report on best practices learned from the three-year experiment with project-based Communication Intensive (CI) subjects that concluded in 2008–2009. In a subsequent visit, CUP approved the recommendation that oversight of CI-HASS (CI-H) subjects be transitioned to SOCR from the HASS Overview Committee (HOC).

CUP continued discussions from the previous year regarding its policy on the release of hidden grades for freshmen and the conflict present between MIT's policy and the federal requirements for determining eligibility for SMART grants and Academic Competitiveness Grants. The committee consulted with the Committee on Undergraduate Admissions and Financial Aid (CUAFA) and the Office of the Dean for Undergraduate Education (DUE) regarding practices at other institutions and the details of the federal requirements. After deliberation, CUP affirmed the current Institute policy regarding hidden grades for first-year students and expressed continued commitment to the core educational values that underlie this policy. The committee determined that the long-standing exception for medical school applications was no longer necessary and removed that option. At the same time, the committee saw no alternative to use of hidden letter grades in determining eligibility for SMART and Academic Competitiveness Grants programs, since such reporting is mandated by the US Department of Education. Therefore, the committee has revised the policy to allow the dean for undergraduate education to authorize such use in the narrowest possible way, and Professor Hall reported on these policy changes at the March faculty meeting.

In other areas, CUP reviewed and endorsed proposals to establish an SB in engineering as recommended by the Department of Aeronautics and Astronautics and to revise policies associated with interrupted SB programs. CUP also discussed a proposal to pilot an advising center for first-year students, provided input into the assessment of the pilot program, and asked DUE to complement this pilot by making recommendations and proposals that would expand opportunities for faculty/student interaction outside of advising. With the close of the fall 2009 term, CUP concluded its experiment with enrollment management in the Course 20 major program.

In addition, the committee heard updates or provided input on a range of activities, including the work of the Faculty Advisory Committee on the Learning Management System; career and preprofessional advising of undergraduates; a proposal to establish a minor in environment and sustainability; registration design for the Next Generation Student Service System, which is now on hold; online subject evaluations; and the reports and recommendations of the DUE Visiting Committee and the Institute-wide Planning Task Force. The CUP chair and staff were also involved in discussions regarding oversight of interdisciplinary minors and a possible review of the academic calendar.

Subcommittee on the Communication Requirement

During 2009–2010, CUP's Subcommittee on the Communication Requirement was cochaired by professors Samuel Allen and John Ochsendorf. The subcommittee engaged in a number of activities in its oversight of the Communication Requirement (CR), one of the General Institute Requirements for undergraduates at MIT.

SOCR conducted a final review of the three-year experiment (AY2007–AY2009) to award CI subject credit for some project-based subjects and reported its findings to CUP. These subjects were naturally communication intensive in that students needed to be able to communicate about the design of a project at many different stages, to many different audiences. Enthusiasm for the projects seemed to lead to greater student (and faculty)

engagement. That said, overall these subjects were not deemed to be an appropriate substitute for CI subjects. They were mixed in their success with respect to instruction and practice in writing. They provided a good deal of attention to oral communication but did not always provide enough feedback for oral presentations. While the project-based subjects were a valuable freshman experience and a positive communication experience, in their current state they are not as valuable as a CI experience.

SOCR piloted three items related to students' CR experiences with the MIT online subject evaluation forms in eight subjects in the fall term and 24 subjects in the spring term. The three items were as follows: (1) My writing/speaking skills improved as a result of assignments (writing, speaking, revising) in this subject; (2) The instruction and feedback for writing/speaking assignments were helpful; and (3) The writing/speaking tasks contributed to my learning in the subject. These questions are meant to assess students' overall CR experiences in the course. It is SOCR's hope that this effort will provide valuable assessment data.

In response to concerns brought forward by a specific department, SOCR collaborated with the Committee on Academic Performance (CAP) to review and revise the communications around communication warnings. The two committees also discussed and reaffirmed the credit limit associated with CR-related warnings.

Throughout the year, the subcommittee continued to work with HOC to improve coordination between these two governance bodies, particularly in the review and designation of CI subjects. SOCR and HOC also met with the newly formed SHR to discuss governance in light of the revised HASS Requirement. As a result of these discussions, SOCR recommended to CUP that oversight of the CI-H subjects should be the direct responsibility of SOCR, and CUP agreed. The review and approval of CI-H subjects will move from HOC to SOCR in AY2011. This shift will allow for more comprehensive and cohesive oversight of the requirement as a whole.

SOCR completed ongoing business such as the review of student petitions and attendant policy issues, the review and approval of a trial substitution for a Communication Intensive in the Major (CI-M) program, authorization of a pilot portfolio review for the Cambridge-MIT Exchange, and the approval of CI-M subjects. SOCR worked with several departments to resolve ongoing concerns. Finally, SOCR reviewed and granted provisional approval of the CI-M program for the new School of Engineering flexible SB program in aeronautics and astronautics, which was approved by the faculty at its April meeting.

Subcommittee on the Humanities, Arts, and Social Sciences Requirement

The CUP Subcommittee on the Humanities, Arts, and Social Sciences Requirement was formed and charged in fall 2009. Chaired by professor Jeffrey Ravel, the subcommittee included faculty representatives from the School of Humanities, Arts, and Social Sciences (SHASS); the School of Engineering; the School of Science; and the School of Architecture and Planning, as well as two student representatives in the fall. In the spring, a faculty representative from the Sloan School of Management was added to the membership.

The subcommittee has a considerable charge that includes establishing criteria, procedures, and guidelines for the distribution or designation of HASS subjects that will satisfy the requirement and communicating these appropriately; redistributing subjects in accordance with the new criteria; determining at what time and for which population of students the revised HASS Distribution (HASS-D) should go into effect; reviewing and approving new or modified concentrations; engaging stakeholders; and overseeing assessment of the First Year Focus (FYF) subjects. To pursue this extensive charge, SHR members met weekly for most of the fall term. They engaged the community of HASS instructors from over 20 departments and teaching units to gain feedback on how subjects should be categorized and to draft definitions for the three distribution categories: humanities, arts, and social sciences. As a result of these discussions, the subcommittee classified more than 600 existing subjects and set guidelines and procedures for the designation of new subjects.

Once this work was completed, the subcommittee turned its attention to implementation and considered which cohort(s) of students would be subject to the revised requirement and which would remain under the HASS-D system. After much discussion and evaluation of data, SHR, in consultation with the Registrar's Office, determined that the revised distribution system would go into effect starting with students entering as freshmen in fall 2010.

The subcommittee was equally productive during the spring term. Members continued to meet weekly for the first few months and then convened every two weeks. Discussions focused on FYF subjects and concentrations. The subcommittee considered whether students should be required to take one FYF subject as part of the HASS Requirement. Instructors from several of these experimental subjects were invited to share their experiences and thoughts. Subcommittee members familiarized themselves with concentrations, reviewing the numbers of students completing each concentration and recent HOC reports on individual concentration programs. Representatives from Economics spoke to SHR about including 14.01 Principles of Microeconomics and 14.02 Principles of Macroeconomics in the distribution and about the economics concentration. The subcommittee evaluated several concentrations that might be categorized as including race and diversity and considered how to increase the visibility of these programs or organize them to better meet student needs.

In addition to outreach to teaching units involved in delivery of the HASS Requirement, SHR updated the MIT community on its work throughout the year. On behalf of the subcommittee, the chair published an article in the MIT Faculty Newsletter announcing the change to the HASS Requirement in October. He also updated the SHASS Council and reported to CUP twice in the fall on subcommittee activities. A progress report was given to the faculty at its February meeting, and in March an email went out to all faculty and undergraduate administrators detailing the implementation of the change. A final report was given to CUP in April.

Committee on Academic Performance

Petitions and Academic Actions

The Committee on Academic Performance reviewed 302 petitions this year. Last year's number was also 302, and the average for the past five years is 300. Of this year's petitions, 252 (83 percent) were approved and 40 (13 percent) were denied. Two petitions were incomplete at the end of the year, and nine were withdrawn by the students.

In 2009–2010, CAP issued 329 academic warnings. Last year's number was 308, and the average for the past five years is 314. Students required to withdraw totaled 44. Last year's number was 38, and the average for the past five years is 43. Details of this year's actions are given below.

CAP End-of-Term Action Summary, 2009–2010

Year	Fall 2009		Spring 2010	
	Warnings	Required withdrawals	Warnings	Required withdrawals
Freshmen	56	1	42	7
Sophomores	60	4	48	6
Juniors	44	4	28	7
Seniors	32	5	19	10
Total	192	14	137	30

Policy Issues

CAP discussed several policy issues this year. These included:

- Single-deficiency degrees
- Academic calendar review
- Interaction of Communication Requirement and CAP processes
- Overlapping responsibility with the Office of the Dean for Graduate Education (ODGE) for MEng students
- Student Support Services and the readmission process
- Internal procedures: administrative approval of petitions, Spring Freshman Credit Limit, and required withdrawals

Single-Deficiency Degrees

Sparked by a request for a single-deficiency degree at the September 2009 degree meeting that had some unusual features, the committee reviewed existing policy statements and procedures regarding such degrees. The [Academic Guide for Undergraduates and Their Advisors](#) states, in language unchanged since the late 1980s:

Under certain circumstances, the CAP is authorized to recommend a degree for a student who has a single deficiency in a departmental requirement in the final term - even though the deficiency results in fewer than the required number of units beyond the GIRs (180-198) specified for the particular Course. The term “deficiency” refers to a grade of F, O, or OX in a single subject, excluding thesis, for which the student is registered **during the final term**.

This appears to be the only current statement of such a policy; the committee and its staff found no authority for it in the Rules and [Regulations of the Faculty](#) or elsewhere. The Academic Guide also specifies that requests for a single-deficiency degree must come from appropriate academic department officers, as opposed to students, and states criteria for the requests. The relevant section concludes by stating:

The committee views any deficiency in a subject that is a General Institute Requirement as a very serious matter. The CAP rarely recommends such a candidate for a degree, even under circumstances under which CAP might recommend a candidate if the deficiency were in a departmental requirement.

Committee discussion revealed that approval of single deficiency degrees is noted only in internal records, not on the transcript and diploma or in the commencement booklet. Given the recent rarity of single deficiency requests, the committee decided not to make any changes in procedure. It did ask that the relevant section of the Academic Guide be omitted, to clarify that these requests are an internal matter between departments and CAP. This request to the Office of Faculty Support (which maintains the Academic Guide) remains pending.

Academic Calendar Review

Ex-officio member and associate registrar Ri Romano asked the committee on October 9, 2009, to consider recommending a general review of the academic calendar. She noted that it had been many years since the last such review and reported an increasing number of inquiries and concerns about the calendar raised by students and faculty members in recent years. Specific issues included the suggestion by the Institute-wide Planning Task Force that the drop date be moved (possibly so as to coincide with the add date), as well as a Graduate Student Council effort to link the September student holiday with the annual Career Fair.

A working group consisting of committee members professor Margery Resnick and Emily Obert was formed to explore this possibility further with Romano and staff associate Stephen Pepper. The Committee on the Undergraduate Program and the Committee on Graduate Programs (CGP) were also consulted, in accordance with faculty rules that assign this responsibility to these three committees. Pepper met with both CUP and CGP. Both committees subsequently voted to recommend a review of

the calendar to the chair of the faculty. The chair of the faculty raised the issue with the provost and reported that the topic will be revisited in 2010–2011. At the Institute faculty meeting held November 18, 2009, a motion was passed that links the September student holiday with the Career Fair in a three-year experiment beginning in 2011.

Communication Requirement and CAP Process

Professors Sam Allen and John Ochsendorf, cochairs of CUP's Subcommittee on the Communication Requirement, and Kathleen MacArthur, assistant dean for the Communication Requirement, met with CAP chair David Pesetsky and Stephen Pepper on November 20 to discuss several current issues of joint concern to the two committees. Dean MacArthur presented statistics on the number of students not complying with the Communication Requirement and related CAP actions since fall 2003.

The same group met with CAP on December 4. The committee declined the group's first recommendation to increase the credit limit associated with the C notation (Communication Requirement Warning) from 48 to 60 units along with an appropriate CI subject. CAP endorsed the group's two other proposals:

1. Each term, on the day immediately preceding registration day, the advisor of each student with a C, CC, or WC Communication Requirement notation will be requested not to sign a registration form that does not list an appropriate CI subject.
2. The letters sent by CAP reporting the C, CC, and WC notations should be revised and strengthened.

Both recommendations were put into effect. Staff associate Pepper alerted advisors the day before spring registration day. Templates for letters reporting C, CC, and WC votes were revised, and these revisions were reflected in the letters reporting decisions at the fall 2009 end-of-term meetings.

Overlapping Responsibility with ODGE for MEng Students

A question arose at the March 12 meeting concerning satisfaction of the Communication Requirement by an MEng student who had not yet received the SB. Recent CAP practice had been to exclude MEng students flagged for end-of-term review, assuming that they were being reviewed by the Committee on Graduate Programs. Chair David Pesetsky corresponded with CGP chair Stephen Graves and dean for graduate education Steven Lerman, and they came to an agreement that in the future CAP would take note of MEng students flagged for end-of-term review and notify the Graduate Academic Performance Group (a subgroup of CGP) about these "dual citizens." During spring 2010, there were no such students.

Student Support Services and the Readmission Process

Background

Responding to a June 2009 administrative reorganization of Student Support Services (S³) within the Division of Student Life (DSL) that included the layoff of a senior dean, the full faculty membership of both the 2008–2009 and 2009–2010 Committee on

Academic Performance, along with two former CAP chairs, expressed their significant concerns in an open letter to chancellor Phillip Clay. This letter called attention to the fact that “S³ plays an essential role in the functioning of the Committee on Academic Performance” and noted that “the detailed information that S³ provides about individual students is important to our decisions, and often decisive.” The CAP letter was just one of several expressions of faculty concern over the status and future of S³, which prompted the chancellor and the chair of the faculty to convene a special Student Support Services Task Force. The task force presented its report on November 25.

In response to one of the task force’s recommendations, S³ was transferred from DSL into the Office of the Dean for Undergraduate Education, where it now forms part of the Office of Undergraduate Advising and Academic Programming (UAAP). This move occurred in January 2010 and has prompted several innovations and policy changes, as described below.

Revision of Readmission Procedures

The final report of the Student Support Services Task Force included the following recommendation to CAP:

For students who have withdrawn from MIT, whether because CAP required it or for personal reasons, readmission to MIT requires formal approval. The Task Force notes that the readmission process (by Rules and Regulations) is the responsibility of CAP. Nonetheless, many other parties have an interest in the process, including departmental administrators, faculty advisors, residential life staff, and others. Comments from numerous parties suggest that the process is unclear (at least to some). We recommend that the CAP examine the process, determine appropriate stakeholders to participate in case discussions, and refine the actual mechanisms to be used.

As noted by the task force, the Rules and Regulations of the Faculty (section 1.73.5) already charge CAP to “act with power” on undergraduate readmissions. However, the committee had traditionally delegated most of this function to S³ and its predecessors. The Committee on Curricula (CoC) worked closely with CAP and CUP during spring 2009 to update sections of the regulations related to readmission applications and degree requirements for readmitted students. CoC’s proposed legislation aimed to reaffirm CAP’s continuing responsibility for oversight of readmissions “after a voluntary, medical, or required withdrawal.” CAP approved this proposal, along with an addition to section 2.84 that reads as follows: “A student who does not graduate within ten years of entry will normally be expected to fulfill the requirements of the class with which he or she graduates.” Both proposals were approved at the March 17 faculty meeting.

At the same time, responding to the recommendations of the task force, S³ and UAAP, in collaboration with CAP, began reviewing and revising readmission protocols in the context of a strategic planning group. This group, composed of students, staff, and faculty (including the CAP chair), met throughout the spring term and presented its report to dean for undergraduate education Daniel Hastings in June 2010. The proposal developed in the group was further refined by a CAP/UAAP working group including the current and incoming CAP chairs. CAP discussed and approved the new readmission guidelines at a special meeting on April 30.

The new procedure establishes a Readmissions Committee within S³ that will evaluate all applications for readmission (consulting with departments and other groups as appropriate) and communicate its recommendations to CAP, which retains decision-making power. The CAP chair is granted the authority to approve S³'s recommendations on behalf of the full committee. Recommendations with which the chair disagrees will be referred to the full committee for discussion and vote, and the chair may render a decision on a readmission in the case of a split committee in S³. The chair may refer any decision to the full committee, as deemed appropriate. A vote of the full committee is required on all applications for readmission after a second required withdrawal, continuing current practice.

End-of-Term Discussion of First-Year Students

At the spring end-of-term meetings, it was noted with approval that the new placement of S³ within UAAP, which serves as the academic department for freshmen, had permitted a streamlining of the process by which CAP evaluates freshman academic progress. Before the spring meetings, S³ and freshman advising deans had already met to coordinate recommendations for freshmen whose records had been flagged for CAP discussion. This permitted a significantly more informed and efficient discussion on the part of CAP.

Internal Procedures

Administrative Approval of Petitions

Prompted by the change from biweekly to monthly meetings, the committee expanded its delegation of certain petition approvals to the chair. The chair may now administratively approve:

- Late adds during the current term, before the drop date. In this case, "current term" includes the previous summer during the fall term and Independent Activities Period (IAP) during the spring.
- Late drops (in any term) when it is clear that the student never attended.

As in the past, no petition can be denied by administrative action. The chair and staff associate will periodically report to the committee the number and type of such administrative approvals.

Spring Freshman Credit Limit

Last year the committee discussed with dean Julie Norman, who oversees freshman advising, the possibility of raising the Spring Freshman Credit Limit to 60 units to accommodate students who narrowly miss qualifying for early sophomore standing and others with sound educational reasons for attempting five subjects. The committee noted the difficulty of crafting language that would allow some to exceed the limit while not seeming to encourage students on such a path. It was also noted that a change in the credit limit would require a recommendation from the Committee on the Undergraduate Program and the Faculty Policy Committee, followed by a faculty vote. In the end, the committee decided not to pursue the matter.

In January, the committee received several petitions to exceed the Spring Freshman Credit Limit by three units to allow credit for participation in the Freshman/Alumni Summer Internship Program. The committee declined to adopt a proposed blanket approval of such petitions; it will continue to review each individually.

Procedures for Students Facing Possible Required Withdrawals

S³'s revised readmission guidelines include new procedures for withdrawal from MIT. Because required withdrawal involves a vote by CAP, the committee approved the relevant section of S³'s withdrawal procedures on April 10 and a revised paragraph on June 16, 2010:

A Required Withdrawal voted by the CAP will supersede a student's request for a Medical or Voluntary Withdrawal. For this reason, in the normal case, no Voluntary or Medical Withdrawal will be processed for any student facing a possible Warning or Required Withdrawal action by CAP, as voted at end-of-term grades meetings. In rare cases, however, CAP may authorize an exception to this rule. This action does not preclude the CAP from placing the student on Warning (or Required Withdrawal if the Voluntary or Medical Withdrawal was not processed) during the deferred action meeting.

This partly codifies recent practice, according to which S³ stops initiating voluntary or medical withdrawals on the last day of classes in each term, but also allows for exceptions when warranted, an option not previously available.

Timing of Notification of Required Withdrawal Decisions

The impending closure of MIT Medical's inpatient unit, reduced on-campus evening presence of mental health clinicians, and summer closure of some dormitories also prompted the committee in June 2010 to change its timetable for reporting required withdrawal decisions. In order to maximize availability of support for students being required to withdraw, the committee will now delay reporting such decisions until the morning after each deferred action meeting. Housemasters and departments will be notified at the same time concerning students in their dormitory or department. The registrar will post required withdrawal notations to the MIT Student Information System only after notifications have gone out the morning after the second deferred action meeting.

Early Designation of Incoming Chair

Because of the unusual number of issues affecting future CAP procedures that were considered by the committee this year, outgoing CAP chair Pesetsky requested that the chair of the faculty designate his successor earlier than is the norm, to ensure the smoothest possible transition. (In practice, new committee chairs have generally been appointed close to the end of the academic year.)

In February, continuing member professor Krishna Rajagopal was asked and agreed to serve as 2010–2011 chair of CAP. During the course of the spring, Professor Rajagopal participated in several important meetings concerning proposed policy changes (especially readmission procedures) and rendered exceptionally valuable service as incoming chair.

It is recommended that early or midsemester be considered as the optimal time to appoint incoming chairs in future years as well.

Committee on Curricula

The Committee on Curricula acts on proposals to create, revise, or cancel undergraduate subjects or to create, revise, or terminate undergraduate curricula; on student applications for double majors; and on petitions for second SB degrees and substitutions for the General Institute Requirements. During 2009–2010, the committee was chaired by professor Robert Berwick. The voting members consisted of six faculty (including the chair) and four student members. The committee met eight times during the fall term, six times during IAP, and seven times during the spring term. The committee acted upon 1,021 subject proposals during the academic year, including proposals for 58 new subjects, and approved numerous minor changes to degree charts. The dramatic increase in the number of subject proposals—more than double the number reviewed in 2009—was attributable to two major developments: the implementation of the new HASS Requirement, which required reclassification of all HASS subjects to fit the new distribution rules, and the reconfiguration of all “meets with” clusters in which a graduate subject had been designated as the administrative (master) subject. The committee also approved the following major curricular changes:

Course 4—Approved a new HASS minor in visual arts.

Course 12—Approved a revised degree program. To meet students’ needs for more flexibility and to accommodate the interdisciplinary focus of faculty research, the department replaced the highly proscribed tracks within the SB program with a more open structure. The revised program included the addition of four new subjects, one of which was a capstone experience.

Course 16—Approved a new flexible SB program that will operate within a new administrative structure developed by the School of Engineering. The committee expects to receive similar proposals from other departments within the School during the next two or three years.

SHASS— Approved the removal of the interdisciplinary minor in European studies.

The committee also devoted several meetings to considering a proposal by the Faculty Environmental Network for Sustainability to establish a new interschool minor in environment and sustainability. The review is expected to continue during the 2010–2011 academic year.

Other CoC actions are as follows:

In consultation with CAP, SOCR, CUP, and FPC, CoC sponsored amendments to the Rules and Regulations of the Faculty to establish guidelines for determining the General Institute Requirements that must be completed by readmitted students. The proposal was approved by the faculty at its meeting on April 21, 2010.

In consultation with SHR, CoC developed standards for representing HASS subjects in degree charts beginning in 2010–2011. The two committees also adopted new procedures with regard to managing student petitions for substitutions in the HASS Requirement.

On November 10, 2009, the committee met with registrar Mary Callahan and senior business lead Jo Anne Stevenson to discuss curriculum management within the framework of the Next Generation Student Services System project. The committee extended its discussion of several key issues (such as modular subjects, subject numbering, cross-listed subjects, and electronic petitions) into IAP and provided written feedback on the scope document.

CoC and CGP adopted guidelines to ensure that undergraduate subjects that meet with graduate subjects will be administered in accordance with the faculty rules governing undergraduate subjects. The new guidelines will also ensure consistency in how all “meets with” and equivalent subject clusters are represented in the Curricular Information System.

The committee initiated an examination of special topic subjects, which have proliferated substantially since the concept was introduced in the early 1990s. The review will continue into the next academic year.

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 10 hearings involving 10 students, with an additional three complaints involving three students that will not be heard by COD before year’s end. The cases this year involved issues of academic misconduct, assault, academic misrepresentation, theft, alcohol policy violations, marijuana possession, reckless endangerment, unauthorized access (hacking), vandalism, and one case that originated in 2006 involving possession of child pornography. Of the respondents, four were graduate students and one was female. In cases where the student was found responsible, sanctions included letters to file, community service, educational assignments, probation, suspension for one semester or more, and two expulsions. In addition, approximately 40 disciplinary warning letters were created by or forwarded to the Office of Student Citizenship.

The majority of the reported incidents this year were academic misconduct cases. The number of reported incidents remains high, but the Office of Student Citizenship anecdotally reports that there are still numerous cases that do not get reported. Many cases of misconduct involve students who have committed acts in the past. The more we know about acts of academic misconduct, the better we can respond. The committee continues to work to increase the transparency of the process and, in partnership with the Office of Student Citizenship, will have much more information available online. Also, COD continues to participate actively in current efforts to address the issue of academic integrity at MIT.

Many faculty changes occurred this year, since three members have completed their three-year service and one will go on sabbatical. Of those, one will be serving an additional three years, so there will be a total of three new faculty members, two new dean's representatives, and two new student on the committee. The current chair of the committee, Institute Professor Sheila Widnall, will be stepping down and will be replaced by professor Robert Redwine.

Committee on Graduate Programs

The Committee on Graduate Programs, chaired by professor Stephen Graves, consulted on a broad array of issues impacting graduate education. As background, the committee received briefings on the ODGE agenda for the year, on the priorities of the Graduate Student Council, and on the recommendations brought forward by the budget task force. It also initiated the practice of receiving summaries of the graduate administrator roundtables throughout the year.

CGP reviewed two motions that were later brought before the faculty. The first involved provisions in the event of a significant disruption to the Institute (September 2009), which the committee viewed as a positive outcome of last year's discussions on emergency preparedness. It also supported the second motion, which proposed a change to the timing of a fall student holiday (November 2009).

With a representative from CoC, CGP examined the treatment of H-level graduate subjects (October 2009), reviewing a proposed formal definition and how it might be applied consistently. The committee opted to gather data from departments on how the implementation might impact their current practice. It also reviewed the treatment of "meets with" subjects and clarified the guidelines of how they are listed and scheduled.

Committee member Clarice Aiello presented her study of the correlation between International English Language Test (IELTS), Test of English as a Foreign Language (TOEFL), and MIT English Evaluation Test (EET) scores (October 2009). While the study seems to support the earlier thesis that the IELTS has greater merit than the TOEFL, and that its broad use may render the EET unnecessary, there are still too few data to draw a firm conclusion. However, the committee renewed its encouragement that departmental programs accept the IELTS as an alternative to the TOEFL. This topic will be revisited in coming years.

One recommendation from last year's budget task force review had been the exploration of a unified graduate admissions system to replace the current decentralized standard. The committee discussed the topic with representatives from the Department of Architecture and the Department of Electrical Engineering and Computer Science (EECS), learning about the admissions system that has been developed by EECS. This system currently supports the admissions processes of EECS as well as several other departments (December 2009). It is expected that a group will be formed next year to examine more carefully the possibilities for a unified system.

The committee also debated the necessity of creating another category of student leave for personal reasons (November 2009) and the advisability of conducting a review of the

academic calendar (February 3). It was generally supportive of both measures, although it was recommended that any group examining the academic calendar be formally appointed and charged with a well-defined mission.

As part of MIT's compliance with the Higher Education Opportunity Act of 2008, CGP was briefed on a plan for textbook information provisioning (March 2010) and provided feedback on its implementation. Other briefings touched on the Graduate Community Fellows Program (February 2010) and how MIT Medical is addressing student mental health issues (March 2010). In a session with a representative from the Center for Work, Family, and Personal Life (April 2010), the committee offered suggestions on the reallocation of existing resources to better serve graduate students with children.

The Academics, Research and Careers Committee of the Graduate Student Council presented preliminary findings from its recent survey on advisor-advisee relations, including four high-impact recommendations (May 2010). Discussion of these outcomes and potential implementation will continue into next year.

Committee on Student Life

The Committee on Student Life, chaired by Muriel Medard, generally met every two weeks for two hours during 2009–2010. The committee's work was done in an open fashion, as befits a committee whose role is consultative and informative. The unredacted minutes of committee meetings are available at <http://studentlife.mit.edu/about/initiatives/csl/minutes/>. The minutes, edited only for accuracy, were approved by the committee. The committee invited many guests topically.

Much of the work of the committee revolved around issues considered by the Institute-wide Planning Task Force. In particular, the committee provided feedback on each of the main proposals that emerged from the task force before the end of the period for comments, as requested by the task force chairs and the chair of the faculty. The committee was generally positive about the main proposals, such as improving summer dorm utilization and revising the policy on visiting students. For both of these topics, the committee considered not only the initial proposals at the beginning of the school year but also updates on implementation at later meetings. The committee advised that the guarantee of four-year dormitory residence was important, which led to revision of the final report of the task force. The committee also considered dining issues and recognized both the need for and difficulty of adjustments in the dining system. In particular, the committee considered the issue of the discrepancy between self-reported cost of food for students inside and outside the dining plan. In the area of sports, the committee expressed its desire that options for sports activities remain available to students and consulted with the athletics director. In particular, the chair of the committee met with the chairs of the Department of Athletics, Physical Education, and Recreation (DAPER) and CoC to make sure that, particularly after the reduction of varsity teams, students are not simultaneously affected by a reduction in the offering of physical education classes and increases in DAPER fees.

The committee considered issues related to mentoring, particularly the interaction between graduate and undergraduate students, which the committee felt could be

strengthened considerably to the benefit of both groups. The committee considered initiating its own program but decided to wait for the program development that will occur in this domain by the Division of Student Life. The committee considered issues affecting fraternities, sororities, and independent living groups (FSILGs), especially in terms of occupancy. The committee in particular considered long-term effects of having freshmen on campus and the possible impact on on-campus housing of absorbing students from FSILGs that might close. The committee also considered issues relating to international students, who form a large proportion of our graduate population and almost the entirety of our visiting student population.

In summary, the committee considered that the state of student life at the Institute is generally quite healthy and was pleased to see the willingness of different members of the community to aid the committee's work. It was able to determine that the recommendations of the Institute-wide Planning Task Force would not be detrimental to student life. The committee also identified some topics that will require ongoing attention.

Committee on Nominations

The 2009–2010 Committee on Nominations was made up of six faculty members; the committee chair, professor Jesus del Alamo; and staff associate Peggy Peterson. Our slate was assembled considering the preferences expressed by the faculty in response to a form that was distributed at the beginning of the year. The committee also consulted with current committee chairs and staff assistants regarding upcoming topics of discussion in their respective committees. In an effort to broaden the range of faculty considered for service in faculty committees, we compiled a list of faculty who have never served, as well as a list of recently tenured faculty. In addition, we actively sought to consider junior faculty when appropriate.

We strived for balance across the slate and in each individual committee in terms of gender, ethnicity, and school affiliation. To help us in this endeavor, we used a list of all female and minority faculty (self-declared). Enhancing diversity in the faculty committees was not always easy as many faculty members from underrepresented groups are often overrepresented in terms of the service that is asked of them. Due to the high level of service of many of these individuals, our requests for additional service were often turned down and understandably so.

Our slate (30 faculty for 12 standing committees of the faculty along with one faculty officer) was approved unanimously by all members of the Committee on Nominations. The slate was presented at the March faculty meeting. This follows last year's break with tradition (the slate had been introduced in the past at the April meeting) in an effort to expand the tight timetable associated with the alternate nominations process as specified in the Rules and Regulations of the Faculty. In the judgment of the Committee on Nominations, the narrow time window of the traditional approach for alternate nominations leads to a potentially acrimonious process. In spite of the less compressed timetable, this year no alternate nominations were submitted. The slate was approved unanimously by those present at the May meeting.

Committee on Outside Professional Activities

The Committee on Outside Professional Activities (COPA) met twice, once in December 2009 and once in January 2010, to discuss various issues, to acquaint members with its recent activities, and to consider whether any changes in general policy issues should be discussed. The MIT Policies and Procedures sections related to COPA activities were reviewed.

The committee reviewed a draft of the report from the Ad Hoc Faculty Committee on Managing Potential Conflicts of Interest in Research, chaired by professor Sheila Widnall. This committee was appointed by the provost and reports to MIT's administration. The report is now available on the Institute website to give faculty an opportunity to respond. Professor Widnall presented the report at a faculty meeting in May. COPA supports the recommendations in the ad hoc committee report and will remain in contact with Professor Widnall in the event that policy issues arise during discussions. COPA also met with professor Charley Cooney, who is chairing the Ad Hoc Faculty Committee on Technology Transfer in the 21st Century. At the time of the meeting, a draft report was not available. Professor Cooney outlined the range of issues that were under discussion by his committee, and an overview of the report was presented at the May faculty meeting. COPA thanked both Professors Widnall and Cooney for their service to the Institute and the interesting briefing.

A case was forwarded to COPA that raised questions about the use of the Institute's facilities in a faculty member's research program, and that also addressed questions of the clinical effectiveness of treatments by devices and software originally invented by the faculty member's past research. Recommendations related to ensuring that these relationships were transparent to both MIT and funding agencies were reviewed. The policy issue of the nature of clinical research that MIT should approve was discussed. COPA suggests that clinical research testing the effectiveness and/or safety of discoveries or inventions of MIT faculty that are not aimed at gaining Food and Drug Administration approval is an important area for the research portfolio of MIT.

Committee on Undergraduate Admissions and Financial Aid

The Committee on Undergraduate Admissions and Financial Aid (chaired by professor Duane Boning) considered a number of potential changes to MIT's financial aid policies during the fall semester, in response to the changing economic landscape both within and external to MIT. The committee supported proposals to make modest changes in financial aid rather than large-scale adjustments at this point in time. These changes included updates to summer earnings and self-help, treatment of outside grants and awards, and adjustments to student expense allowances. A survey was conducted to gather information from sophomore and junior students about their typical expenditures on travel, food, books, and incidental expenses, to help inform the student expense budget update. CUAFA also made recommendations related to phasing in these changes across the existing and incoming classes.

Over the spring semester, CUAFA developed a set of principles and values to guide investigation of and decision making on longer-range strategic changes to MIT financial aid and admissions policies. These principles and values include meritocracy

(strongly embodied in need-blind admissions); egalitarianism (strongly reflected in need-based financial aid and access to a full range of educational opportunities for all enrolled students); excellence (emphasizing the depth of quality of our students, faculty, and staff); responsibility to community, nation, and world; diversity; accessibility (ability of all students, including those from low-income families, to attend); affordability (sacrifices to attend should be reasonable and reflect a shared commitment to a student's education); sustainability (long-range financial viability of MIT); and competitiveness. The committee also reflected on issues related to transfer and international undergraduate students in light of these principles and values. The committee recommends that transfer students be treated equally with freshmen admits in terms of access to housing, choice of major, and financial aid. CUFAFA strongly reaffirms the policy of need-blind admissions for international students; changes to the treatment of international students applying from US high schools could be a positive step. Expansion of admissions recruiting to a wider set of students and additional ideas for yield enhancement were also recommended.

Edgerton Award Selection Committee

The Edgerton Award Selection Committee received nine nominations for the award and met on March 1, 2010, to select the winner.

The committee announced its award recipient at the April 2010 Institute faculty meeting: Markus Buehler, who, appropriately, is the Esther and Harold Edgerton career development associate professor in the Department of Civil and Environmental Engineering. Professor Buehler received his PhD in 2004 from the University of Stuttgart and has been on the MIT faculty since 2006.

Professor Buehler is a truly outstanding instructor who regularly teaches a core sophomore subject in engineering mechanics to rave reviews from students. He has been committed to advancing the educational mission of MIT and has done so while crossing departmental boundaries.

Professor Buehler is a theoretical-computational materials scientist. He is the recognized expert and a pioneer in the field of deformation and fracture behavior of protein-based materials. He has assembled an army of undergraduates, many of them Undergraduate Research Opportunities Program students, to help with his research and has been an outstanding mentor to his graduate and undergraduate students.

Professor Buehler is an outstanding young professor who appears destined for tremendous educational and research accomplishments.

Killian Faculty Achievement Award Selection Committee

The 2010–2011 Killian Award Selection Committee, chaired by professor Alan Oppenheim, announced its nomination selection at the May 19, 2010, Institute faculty meeting. The committee selected professor Ronald Rivest, the Andrew and Erna Viterbi professor of electrical engineering and computer science.

Professor Rivest is recognized for extraordinary contributions in computer science. He is one of the founding fathers of modern cryptography, especially of public key cryptography and digital signature methods. The basic concept of a public key system, articulated decades before the World Wide Web, allows any user to register a public key and retain a private key. Through the use of mathematical functions that are easy to compute but difficult to invert, messages can be encrypted and sent over a public channel with digital signatures attached, but only the intended recipient has the information to decrypt the message. It was the work of Professor Rivest and his colleagues Leonard Adelman and Adi Shamir that led to the design of a public key system, now known universally as the RSA system after its inventors, that was robust to sophisticated attack. It is also the first known algorithm that supports both encryption and digital signing to authenticate the sender. While the code for RSA is deceptively simple, it has not been broken in the more than four decades since its invention.

At the time of publication of their fundamental papers, the practicality of any cryptosystem seemed remote, and the RSA system was perceived as an important theoretical contribution with limited practical implications. Now it is a widely used standard, playing a critical role in the widespread use and success of the Internet and Internet-based commerce. The RSA code is a wonderful example of elegant and abstract theory eventually having immense practical impact.

Professor Rivest's contributions to the impact of RSA move from deep fundamental inquiry to practical development and technology transfer as the active founder of two of the most successful Internet security companies. As noted in one of the nomination letters, "Ron has the cultural background required to perceive the larger influence of scientific innovation, and the moral strength, energy and eloquence necessary to drive it towards its proper use."

While Professor Rivest is most widely known for his work in cryptography and security, he has made important contributions in many other areas of computer science, including computer-aided design of integrated circuits, data structures, and computer algorithms. He is also acknowledged as an early contributor to the field of machine learning.

Throughout his career, Professor Rivest has received numerous awards and honors for his scholarship and contributions. Particularly notable are the Turing Award and the Marconi Prize. The Turing Award is generally regarded as the most prestigious award in computer science. The Marconi Prize, established in 1975 by the Marconi Society, "annually recognizes a living scientist whose work in the field of communications and information technology advances the social, economic and cultural improvement of all humanity."

Professor Rivest is also a dedicated and legendary teacher, mentor, and educator. His textbook *Introduction to Algorithms*, coauthored with professor Thomas Cormen and professor Charles Leiserson, grew out of the undergraduate and graduate courses on computer algorithms. This text reflects Professor Rivest's dedication to teaching and to finding elegant ways of explaining complex ideas. It is currently the second most cited reference in all of computer science. As a mentor, he has been an inspiring role

model for his students and colleagues. His wisdom and insights are continually sought by students and colleagues, and, as commented in the nomination letters, he is always extraordinarily generous with his time. Among his many contributions within MIT have been his guidance, wisdom, and leadership as cochair of the committee for the reorganization of the Artificial Intelligence Laboratory and the Laboratory for Computer Science. The new combined laboratory, CSAIL, is now the largest laboratory on the MIT campus.

It is with great pleasure that we announce the choice of Professor Rivest as the recipient of the 2010–2011 James R. Killian Jr. Faculty Achievement Award for his outstanding accomplishments as a scholar, teacher, mentor, and leader internationally and within our community.

Thomas A. Kochan
Chair of the Faculty
George Maverick Bunker Professor of Management

Aaron R. Weinberger
Faculty Governance Associate