

Chair of the Faculty

Faculty Policy Committee

In academic year 2004, the Faculty Policy Committee (FPC) oversaw those aspects of educational and academic policy that are the specific responsibilities of the Faculty and provided faculty input toward policy development at the Institute. The committee met twice with the president and twice with the provost. The FPC used these opportunities to convey faculty opinions on a variety of topics, including the Institute's budget, committee structure, and educational commons.

The committee also continued several discussions that occurred in AY2003, including the following:

- The Singapore–MIT Alliance
- Intellectual property
- MIT's operating budget for FY2005
- The Update from the Mental Health Task Force

Professor Bras, in his first year as chair of the Faculty, asked the committee to focus its efforts on one or two major Institute issues in order for the FPC to become more proactive instead of reactive. The committee focused most of its efforts on the Faculty governance system. This included the standing committees of the Faculty structure, the Institute Faculty meetings, and the roles of the Faculty officers.

The committee approved several new degree programs that were subsequently voted on by the Faculty. These programs included an SM in Course 10-B Chemical-Biological Engineering and a PhD in computational and systems biology. The FPC also reviewed Course 3-C Archaeology and Materials. This course, which had been an experiment for several years, will be voted on at the September 15, 2004, Faculty meeting.

Members of the FPC devoted several meetings to discussing the presidential search. Professor Bras served as the committee's liaison to the Presidential Search Committee.

The FPC wrote a white paper on the representation of minorities on the Faculty and in the graduate student body. This report, distributed to the Faculty prior to the May 19, 2004, Faculty meeting, helped to bring forward the "Resolution Concerning Underrepresented Minority Faculty and Graduate Student Recruitment and Retention" at the same meeting. Committee members agreed to continue the discussions surrounding Faculty diversity for FY2005 and to focus their efforts on becoming more proactive in the Faculty governance system.

Committee on the Undergraduate Program

The agenda of the Committee on the Undergraduate Program (CUP) during the 2003–2004 academic year was devoted to four main topics. The first order of business was to review two CUP-licensed experiments that were reaching the end of their experimental

period. The experimental major in 3-C Archaeology and Materials was reviewed and, based upon its success and quality, was recommended to the Faculty as a permanent program. The review of 3-C was the first to be informed by the new Guidelines for the Approval of New Undergraduate Programs, endorsed by the Faculty in spring 2003. The special freshman program in Media Arts and Sciences (MAS) was endorsed with the stipulation that a plan be developed for increasing the visibility and integrity of the program. CUP recommended to the Task Force on the Undergraduate Educational Commons that criteria and guidelines be established for special freshman programs and that the MAS program be reevaluated using these criteria.

The second issue involved two new undergraduate programs that requested temporary mechanisms to restrict enrollment as the programs are built up and resources deployed to them: a proposed minor in management and a proposed major in biological engineering. CUP endorsed the Sloan School's plan to use a lottery to allocate space in the minor on a temporary basis (for four years) and gave advice to the Biological Engineering Division as to what forms of allocation might be acceptable. A final proposal regarding the biological engineering major is pending.

Third, CUP has continued to monitor the implementation of various changes in the undergraduate program: the continued rollout of the Communication Requirement, the first year of experience with Exploratory Subjects, and the second year of changes to spring term freshman grading.

Finally, CUP has continued working with the Committee on Student Life on a new set of guidelines governing the advising and mentoring of upper-class students. The committees expect to present a report to the Faculty in early fall 2004.

Subcommittee on the Communication Requirement

During the 2003–2004 academic year, CUP's Subcommittee on the Communication Requirement (SOCR) continued work on issues associated with the implementation and oversight of the Communication Requirement. The subcommittee interacted with the Humanities, Arts, and Social Sciences (HASS) Overview Committee on matters pertaining to the Communication Intensive Subjects in the Humanities, Arts, and Social Sciences (CI-H) and collaborated with the departments in the ongoing development and implementation of Communication Intensive Subjects in the Major (CI-M). Working with the Committee on Curricula, SOCR approved for designation as CI-M subjects in several majors, for which the program had not yet been determined or curriculum changes had been proposed.

SOCR members considered an increased number of petitions from students seeking exemption to or adjustment of some aspect of the Communication Requirement. The most common petitions were those from students seeking to substitute a CI-M subject from another degree program for one in the student's major and those seeking a relaxation of the minimum pace of completion. Petitions that demonstrated extenuating circumstances or compelling educational cause were approved.

Committee on Academic Performance

The Committee on Academic Performance (CAP) reviewed 373 student petitions during this academic year, a decrease of 13.8% from AY2003. There was a 5% increase in the number of petitions approved and a 2% decrease in the number of petitions denied.

CAP End-of-Term Action Summary, 2003–2004

Year	Fall 2003		Spring 2004	
	Warnings	Required withdrawals	Warnings	Required withdrawals
Freshmen	62	0	50	10
Sophomores	39	4	47	7
Juniors	37	10	55	13
Seniors	38	4	19	4
Total	176	18	171	34

CAP placed 347 students on warning in AY2004, compared with 356 in AY2003. Students required to withdraw totaled 52, compared with 27 in 2002–2003. This is a significant increase (92%). The number of freshmen required to withdraw this year was 10, compared with 6 in 2002–2003. In many of these cases, especially with second-semester freshmen, CAP felt it best for the student to take time away from MIT rather than permit the poor academic situation to languish over several semesters.

The committee focused on several issues during its meetings. This included developing a policy for handling reported grades of I and O, reviewing student registration following a financial hold, working with departments who come to grades meetings unprepared, and working with the staff in the Counseling and Support Services Office to develop an effective means of communication that protects student privacy while at the same time giving meaningful input to the committee's decisions.

Committee on Curricula

The Committee on Curricula (COC) acts on proposals to create, revise, or cancel undergraduate subjects; to create, revise, or terminate undergraduate curricula; and on student petitions for second SB degrees and substitutions for the General Institute Requirements.

During academic year 2003–2004, COC conducted a preliminary review for a new SB degree in biological engineering as well as a preliminary review for a new minor in management in Course 15. The committee approved an interdisciplinary HASS minor in international studies and, in conjunction with the Committee on the Undergraduate Program, approved permanent status for the SB program in Course 3-C Archaeology and Materials, which will be voted on by the Faculty in fall 2004.

The committee also worked to standardize the Cambridge–MIT Exchange program subject offerings at MIT and met with the director of the Comparative Media Studies' undergraduate interdisciplinary program to ensure coherence between curricula and subject offerings.

The committee approved approximately 636 changes to subject offerings, 87 of which were new subjects. This included Course 12.105, an Institute lab, as well as eight CI-H subjects. The committee also reviewed and approved 22 SOCR–approved CI-M subjects.

Committee on Discipline

The Committee on Discipline held 11 hearings involving 12 undergraduate students (9 men and 3 women), reviewing charges related to plagiarism, computer misuse, theft, drugs, and failure to comply with disciplinary decisions.

When sanctions were imposed, they varied from formal probation through graduation, to suspension, and to withholding the granted degree for one term. In addition, faculty members sent the Office of Student Discipline warning letters advising that disciplinary action had been taken against 37 students, compared with 21 students during the previous academic year.

This year, the Committee on Discipline continued to work on the process of integrating various disciplinary systems under the committee. Professor Margery Resnick stepped into the role of chair effective June 16, 2004.

Harold E. Edgerton Award Committee

The Harold E. Edgerton Award Selection Committee reviewed a large number of nominations, all of outstanding quality. In the end, the committee could not select a single winner from the group. Instead, as has occurred three times before, the committee selected two outstanding colleagues for the award: Professor Catherine Drennan of the Department of Chemistry and Professor Muriel Medard from the Department of Electrical Engineering and Computer Science.

Professor Drennan is a biochemist who uses X-ray crystallography to solve the structure of enzymes critical to key metabolic processes; her work has implications for drug design and cancer treatment. While directing a highly productive lab, she also finds time to mentor many undergraduate and Undergraduate Research Opportunities Program students, and she is a talented teacher who insisted on teaching freshman chemistry, where she has done an outstanding job.

Professor Medard works at the intersection of information theory and network design. Her research integrates theory and practice, and she has developed novel designs for decentralized, randomly connected networks that can outperform traditional designs with central control—work that has already been implemented in real networks. She is not only an outstanding researcher, but also a dedicated teacher, mentor, and role

model. The committee was delighted to recognize the talent and accomplishments of these outstanding colleagues.

Committee on Faculty–Administration

The Committee on Faculty–Administration (CFA) dealt with the issue of MIT governance. In meetings with the chair of the Faculty, and then when meeting independently, CFA discussed the suggestion that the MIT administration had been making major decisions about the Institute without due regard for Faculty opinion. Ultimately, it was concluded that the CFA was an inappropriate forum for the Faculty governance discussion. The chair of the Faculty appointed an ad hoc committee comprised of the chairs of the standing committees of the Faculty to review this issue.

Killian Award Committee

The 2004–2005 Killian Award Committee announced that Professor Wolfgang Ketterle, the John D. MacArthur professor of physics, received this year’s highest faculty achievement award. Professor Ketterle’s nomination noted his work on the Bose-Einstein condensation in dilute gases of alkali atoms. This research resulted in Professor Ketterle being one of three recipients of the 2001 Nobel Prize in physics. Bose-Einstein condensates are a new quantum fluid, and the interactions among the atoms make them an intriguing many-body system. Professor Ketterle’s specific interests are sound, superfluidity, and the properties of miscible and immiscible multicomponent condensates.

Committee on the Library System

The Committee on the Library System (CLS) met five times during the course of AY2004. Discussion throughout the year revolved primarily around the crisis in scholarly communication caused by the high cost of journal subscriptions, as well as copyright and publishing issues for faculty as they relate to ownership of intellectual property.

Carol Fleishauer, associate director for collections, brought to the attention of the committee the current constraints on the collections budget and the impact on the information resources offered to the MIT community. Budget cuts, in combination with the rising costs of journal subscriptions and the nature of the electronic journal-purchasing environment, made it necessary for the Libraries to cancel a significant number of its journal titles, specifically with two of the biggest publishers, Elsevier and Wiley. The Libraries’ decision-making process was informed by a comprehensive journal use study conducted in the fall and financial analysis of print versus electronic journal subscriptions, in concert with Library staff discussions with faculty. A plan was created to communicate to faculty, which included a letter to deans and department heads, a FAQ on the website, and an article in the *Faculty Newsletter*.

The committee had repeated discussions regarding copyright and publishing, with particular focus on advisement for faculty with regard to publishing agreements and ownership of intellectual property. The committee’s goal was to become educated about

the issues and prepare a position paper to distribute to the MIT community, outlining problems and suggesting actions or alternative solutions.

CLS also addressed the issue of the significant budget restrictions in light of the current economic environment and the consequences on not only collections but services in the Libraries. Cost reductions taken by the Libraries include the closing of the Schering-Plough branch, holding vacant positions open for a minimum of six weeks, utilizing fewer hours of student labor, increasing fines and fees, reducing library hours, and assuming no multiyear subscription renewals.

CLS also wrote a letter to the Faculty Advisory Committee to the Corporation on the Presidential Search requesting that two issues of long-term importance to MIT's Library system be brought to the attention of presidential candidates. The first is the construction of a new combined Engineering and Science Library and renovation and expansion of an integrated Humanities and Social Sciences Library in Building 14. The second is the crisis in funding of Library resources caused by the excessive cost of print and electronic journal subscriptions combined with severe budget constraints. It is the hope of the committee to bring these issues to candidates for their opinions and for discussion of possible actions they might take on them as MIT president.

Committee on Nominations

This year's Committee on Nominations was comprised of an incumbent chair, three returning members, and three new members, representing all five Schools. The committee's first concern was to recommend a nominee for chair-elect of the Faculty. Suggestions were solicited from many quarters of the Institute and each was considered individually; the chancellor was consulted twice for his input on the resulting shortlist. The committee was unanimous in its selection of Professor Lorna Gibson, who has appointments in three departments and has been active in many areas of Institute and Faculty governance, faculty and student life, and women faculty issues during her tenure at MIT.

Thirty-seven nominations for appointment or reappointment to vacancies among the 12 standing committees of the Faculty were next decided. The slate of nominees was presented at the April 21 Faculty meeting and approved without change at the May 17 Faculty meeting. Considerable efforts were made to balance gender, discipline, and School when selecting nominees. Of particular concern was the representation of women in those committees dealing directly with individual students and their personal issues (viz., Academic Performance, Discipline, Student Life, Undergraduate Admissions and Financial Aid, and the Undergraduate Program). The Nominations Committee encountered the chronic difficulty that the proportions of women and minority faculty members at the Institute significantly trail behind the proportions represented within our student body, with the consequence that women and minority faculty members are asked with disproportionate frequency to serve on Institute committees. The committee was pleased at its success in recruiting many highly experienced woman nominees. All but one of these committees, the Committee on Academic Performance, includes one or more female faculty members. CAP fortunately has nonfaculty women members

presently representing the dean for undergraduate education, the registrar, and the medical director. All committees but one enjoy representation from each of MIT's five Schools. The Committee on Discipline currently lacks representation from the Sloan School.

Committee on Student Life

The Committee on Student Life (CSL) focused on two major topics: student–faculty interaction and student family health care.

Student–Faculty Interaction

A large majority of MIT students would like more interaction with faculty. Students realize that faculty can guide them through and beyond MIT onto a career path, through advice and recommendation letters. CSL has defined faculty–student interaction as a continuum that begins in the classroom, extends into formal advisor–advisee relationships, less formal mentoring programs or interactions, and more casual social interactions. With this in mind, CSL focused on the three following initiatives to promote student–faculty interaction. A description of these CSL initiatives was published in the April 2004 *Faculty Newsletter*.

- *Upper-Class Advising.* While freshman advising at MIT is excellent, upper-class advising is variable across the Institute and there is a strong impression that it could be improved. CSL has worked with CUP on a report detailing issues and formulating ideas that will improve upper-class advising. CSL will emphasize this issue next year.
- *Departmental Best Practices.* Part of the CSL initiative to improve upper-class advising and mentoring requires that we understand what good (or bad) practices are in place at MIT. CSL therefore wrote and distributed (to administrators) a survey probing best practices in upper-class advising and mentoring.
- *Student–Faculty Interaction: A New Website for Students and Faculty.* CSL has worked with the Office of Student Life (OSL) to build an interesting new website that will facilitate faculty–student interaction at MIT. Many opportunities exist for student and faculty interaction at MIT, but they are presently very difficult to sort through. The site brings these opportunities together. It also offers faculty profiles that include a research focus and some personal information. This information will encourage students to contact those faculty with whom they share interests. The site also contains new “how-to” guidelines that discuss effective ways for students to interact with faculty (and vice versa) in both formal academic and more social settings. The site will be operational by August 2004.

Student Family Health Care

CSL explored the issue of health care for MIT graduate and undergraduate students with families because we felt that the health-care issue had largely gone unnoticed. Our hope was to increase dialogue among faculty, students, and administration regarding

the philosophy and pragmatics of health care for students with families. We worked closely with physicians and administrators at MIT Medical, the Committee on Family, the International Students Office, the Graduate Student Council, and Chancellor Clay, as well as deans Colbert and Benedict. A report will be filed with OSL.

Provost Brown's recent announcement that health insurance premiums for students with families will be substantially lower next year and that the copay deductible will also decrease is welcome news and a very positive step for the Institute. CSL is proud to have contributed to raising awareness of this issue and will contribute to longer-term discussions regarding the future structure of student health care.

Committee on Outside Professional Activities

The Committee on Outside Professional Activities made significant progress in drafting a "note to all MIT faculty" concerning the norms and procedures surrounding outside professional activities. Given the recent influx of new faculty, the committee believed that completing such a note was an important goal. A final version of this note should be available by the start of the fall 2004 term.

Members agreed that the committee should seek to learn more about the degree to which the boundary between "outside" and "for MIT" activities may be blurring as MIT offers compensation for activities such as executive or undergraduate teaching. Members plan to draft a note of inquiry to the relevant deans and department heads to explore the issue.

Committee on Undergraduate Admissions and Financial Aid

Admissions yield and financial self-help dominated the agenda of the Committee on Undergraduate Admissions and Financial Aid (CUAFA) this year. The two are linked insofar as the committee believes that financial concerns have a major impact on yield. In this regard, the committee has continued to advocate that the self-help level be lowered. Furthermore, there is some evidence that the newly implemented mix of uniform self-help and terraced summer earnings expectations seems to be achieving its goal of removing impediments facing freshmen in their transition from high school to MIT. As members of the Enrollment Management Group, CUAFA representatives expressed their support for raising the size of the freshman class while not resorting to crowding and continuing to offer housing to transfer students.

On the admissions front, in response to changes put in place last year, this admissions cycle saw a continuation in the rise of the following types of students: hands-on engineering types, first generation to attend college, and children of middle-income families. Recruitment of target groups remains an ongoing concern and will likely require additional resources.

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