

Dean for Graduate Students

Graduate Students Office

Six years ago, the Graduate Students Office (GSO) began to develop and implement a strategic planning process in support of graduate education at MIT. Emerging from that work has been a dramatic change in the conversation at MIT about graduate students and a new understanding about the need for balance at the interface between their academic and personal lives. This shift in perspective has been important for the individual student as well as for the entire graduate education enterprise at the Institute. Over the years, we have informed faculty and the MIT community about these developments through three annual articles in the *MIT Faculty Newsletter* and, most recently, in a monograph in the *Journal for Higher Education Strategists* (summer 2004) describing more fully this body of work.

In the past year, the GSO reached what we consider to be a milestone—that is, a point at which it became clear that the new understanding about our graduate students would not be a temporary phenomenon or merely a series of responses to particular crises.

Indicators of Change

One indicator of this milestone was the manner in which graduate student leaders participated effectively and persuasively in decisions that affect graduate life, addressing issues of health insurance finance, cost of living, and campus rent, among many other issues and concerns. They demonstrated their willingness to work productively with the administration to improve the terms by which they live their lives. Concurrently, bringing graduate students into the heart of such discussions spoke clearly to the interests of faculty and administration that our students can exist here comfortably and that we care about their overall welfare as much as we care about their productivity.

Another indicator is the extent to which the senior administration has come to rely on graduate student participation. Students brought their exceptional talents, technical skills, clear thinking, their passion, and their creativity to bear in ways that helped to move discussions forward. It is now axiomatic that our graduate student leaders are at the table.

Yet another indicator has been student response to new initiatives to promote student life. Given opportunities to interact with one another, students in increasing numbers recognized and took advantage of them. They more readily acknowledged opportunities to communicate with one another and to form long-term professional and personal relationships outside of departments and labs, as well as opportunities to educate themselves as citizens of the world. In short, they moved more assuredly toward becoming the kind of “scholar/citizen” (J. D. Nyquist, *Change*, 2002) that MIT has envisioned.

It is only fair to acknowledge that some of the steps taken forward over the past year were driven by unforeseen circumstances, but the manner in which the administration and graduate leaders collaborated to address them was another sign of an effective working partnership. In other cases, the Institute chose to take a bold step to improve the graduate experience. Some of the steps are discussed in the following section.

Steps Forward

With the dramatic rise in the premium for the extended student health insurance plan, the national trend in health care costs finally reached us last year, forcing the Institute to find a way to help subsidize some of that cost. The solution will almost certainly be a short-term fix, since the cost of health care insurance is expected to continue its skyward ascent. MIT will need to examine closely what services it can afford to provide to graduate students, as well as to other constituents, and at what cost. It is expected, also, that faculty research accounts will continue to bear a large share of the burden to help graduate students with the spiraling cost of critical health services. We will continue to be pushed along by health care factors that seem impossible to control without dramatic changes that threaten to damage the social contract between students and the Institute.

The newly adopted childbirth accommodation policy was a high point of the past year. In establishing this policy, MIT assumed national leadership and sent strong, positive signals to women graduate students on this difficult issue. Our former policy was little short of draconian in its impact on women students who expected to give birth, sending only negative messages about how we view such a life event. The new policy affirms childbirth and respects interests of graduate women in starting families without sacrificing their academic well-being. This has been an example of MIT at its best.

The past year also saw the maturing of the graduate student life grant process begun two years ago. At that time, the GSO used its allocation from the student life fee to undertake an experiment to establish a framework around which to evolve thinking about graduate student life. We looked to the graduate student community and its allies for ideas to help stimulate the development and strengthening of “community.” The grant process has served as a focal point for discussion of what “graduate community” means and has given clarity to that somewhat elusive concept. In the past academic year, a third round of grant proposals was initiated and included multiyear funding opportunities. Among the proposals received and funded were a number that the dean considered to be seminal, in that they were expected to have long-term impact on the graduate community. At the very least, the proposal process demonstrated the breadth and depth of interest in enhancing the graduate experience and has confirmed the creativity and thoughtfulness around this concept. At best, it has reinforced for all of MIT the need for venues, activities, and programs to permit each graduate student to find his or her unique balance point. A summary of funded proposals, with several of the more unique ones showcased, can be found at <http://web.mit.edu/gso/community/grants.html>.

Our challenge going forward will be identifying those projects that appear to be seminal and in finding a way to institutionalize them. In some cases, this may require ongoing

budget support from the GSO, while in other cases, departments or other administrative offices may need to build resources into their budget plans.

Strategic Collaborations

The Collaborative Network, a coalition of administrative colleagues with shared interest in supporting graduate students, continues to help the GSO leverage the resources and time of our small organization for greater impact on the graduate experience at MIT. Members continue to meet on a regular basis to share information, engage in business planning efforts, to consider new ideas to improve graduate life, and to increase mutual understanding of the graduate experience. In the past year, two members of the Careers Office, John Nonamaker and Hannah Bernstein, refined a conceptual model of the stages of graduate life and presented a framework for understanding points of intervention, possible balance points, and milestone events in the experiences of many students. The model served as another focal point for discussion among graduate students about shared experiences and perspectives and for faculty and administrators as a vehicle for examining where we might change perspectives, programs, policies, or infrastructure to further improve graduate life.

The GSO's collaboration with the Association of Alumni and Alumnae continued, pursuing our mutual interest in outreach to MIT's growing graduate alumni population. The dean gave presentations to graduate alumni at events in Washington, DC, New York, Boston, and Palo Alto, California. In every case, the presentation was the first ever given by a graduate dean, and it raised the visibility of graduate affairs and the interest of graduate alumni in participating as engaged members of the larger MIT family. Now that the majority of all living MIT alumni have graduate degrees only, the outreach effort has stimulated dialogues that may benefit development efforts in the years ahead.

The Institutional Research Office expanded the amount of useful data to inform decisions about graduate life. There is now in place an ongoing series of surveys about the quality of graduate life, about mentoring, and about future academic and work plans. The MIT Data Warehouse is increasingly used as the definitive repository and resource for collecting data about all of our students. Along with comparative analyses of internal, peer, and national data, there is an increasingly rich information set from which to draw. All of this reflects the heightened commitment to gather and analyze data about and in the interest of graduate students. The Graduate Student Council (GSC) has also been an active player in gathering data to contribute its own perspectives to discussion. For example, the GSC conducted its own cost-of-living survey, now effectively adopted and updated annually as a basis for annual consideration of research and teaching assistant stipend rates. In the past year, the GSC worked closely with the GSO and Institutional Research to standardize how the survey will be updated for ongoing use.

Renewed Commitment to Graduate Student Diversity

The GSO's assistant dean for graduate students, Roy A. Charles, was accepted to a doctoral program at the University of North Carolina at Chapel Hill. We wish him well

and thank Roy for his years of service on behalf of graduate departments and degree programs. Much of his time and effort was devoted to recruiting students from underrepresented and disadvantaged groups. In too many cases and for far too long, however, Dean Charles' devotion to that cause was ill matched by genuine departmental attention to diversity.

Once again, our students have been instrumental in helping to define a possible way forward. A number of minority graduate student leaders became active within the GSC over the past several years, crystallizing its diversity agenda and strategizing about ways to gather support. The GSC representative to the Corporation Joint Advisory Committee (CJAC) engaged that group's advocacy for MIT to improve its diversity profile. For much of the past year, CJAC leadership, including the president of the Association of Alumni and Alumnae, raised awareness that MIT could improve and, indeed, could work to establish national prominence in addressing the issue. At the end of the year, a remarkable Faculty-driven initiative gave cause for renewed optimism and added momentum to that movement for change. At the meeting of the Faculty in May, a resolution, drafted by minority faculty and supported by the Faculty Policy Committee, was adopted urging MIT leadership in the recruitment and success of minority faculty and graduate students in science and engineering fields. The resolution also charged the provost to report annually on progress.

Ensuing discussion about graduate student diversity, led by the provost, suggested specific goals of doubling the number of minority graduate students within the coming three years and more successfully recruiting from our own undergraduate students. The most likely source for rapid enrollment gains appeared to be through substantially improving the yield from the pool of admitted minority students. As the year ended, plans were being made within the GSO to search for a new assistant dean credentialed in science or engineering, to refocus the job toward helping departments improve yield, and to focus external recruitment efforts on a more limited set of presumed "feeder" institutions identified with departmental input. Plans were also under development to define data needs to assess progress in recruitment, yield, and graduation and to collect that information centrally in preparation for annual updates to the Faculty.

Another sign of renewed commitment to diversity was in the developing plans for an activity called *Converge*. Organized primarily by graduate students in the School of Engineering, with staff support from the Office of the Provost, the Office of the Dean for Engineering, and the Graduate Students Office, *Converge* will identify promising potential minority applicants and recruit them assiduously to MIT's graduate programs. The pilot program is being planned for early in the fall term 2004. Significant faculty involvement in selecting participants, in meeting with them, and in encouraging their applications is likely to generate positive outcomes.

With concerted central and departmental efforts on the recruitment front, followed by focused efforts to improve the yield, the Institute is poised to make genuine progress toward graduate student diversity goals. In the context of dramatically reduced applications from international students, this reinvigorated minority recruitment agenda comes not a moment too soon.

Conclusion

In the sections that follow, the major offices, programs, and groups comprising the GSO summarize their major accomplishments and future plans. It will be clear that the past year was productive. Despite the challenges presented to each area, it can be said that the year was a very good one for graduate affairs in general. In some ways, it is remarkable how far we have come in establishing trust and partnership with graduate student leaders, in setting the stage for a lasting commitment to improving the graduate experience at MIT, and in reshaping the implied contract between this institution and its largest student constituency regarding the terms and conditions of their tenure here. I am certain that the coming year will present a new set of vexations to challenge us in the graduate arena, but I am equally certain that MIT is better positioned to bring the collective resources of its students, staff, and administration to bear to develop innovative solutions.

Isaac M. Colbert
Dean

More information about the Graduate Students Office can be found on the web at <http://web.mit.edu/gso/>. Graduate data are available in the "Grad Facts" section at <http://web.mit.edu/gso/reports/gradfacts.html>.

Other Strategic Collaborations

Our office partnered with the Career Services Office to provide a unique opportunity for graduate students to learn "How to Feel as Bright and Capable as Everyone Seems to Think You Are." Dr. Valerie Young, professor, author, and nationally renowned speaker, helped students examine the reasons many high achievers are ambivalent about success and discover how to stop the procrastination and perfectionism that can undermine their success. Following Dr. Young's lecture, the GSO hosted a reception where Dr. Young was able to meet and talk with graduate women students.

For the first time, the Power Lunch series of seminars was sponsored jointly by the GSO, the Black Graduate Students Association, and the GSC. This demonstration of shared responsibility for success and commitment to diversity on the part of the larger student community resulted in increased student attendance and faculty participation throughout the academic year.

Over the past three years, the GSO has partnered with *MentorNet* to increase the participation and success of women in scientific and technical careers by providing access to mentors. *Mentornet*, an online mentoring service for engineers and scientists, added mentors from the academy to their extensive pool of industry-based mentors. With this new service, the participation by MIT's graduate women students doubled. One graduate woman student wrote: "*Mentornet* made all the difference to me, to be able to finish my PhD, to transition onto a life in another foreign country and to think about

the job search and what I really wanted to do with my career. Please continue to support this wonderful program, so that other students may have the opportunity that I had, to have someone else to support and guide them.”

Finally, the dean and the provost hosted the fifth annual reception called “Celebrating Graduate Student Women.” Participation by women students and faculty in this anticipated annual gathering continued to grow, which encourages the senior administration to continue this kind of recognition and celebration.

Blanche Staton
Associate Dean

Graduate Fellowships

During the past year, the Graduate Fellowship Office and Graduate Students Office continued to help those remarkable young men and women who were awarded the National Science Foundation (NSF) and National Defense Science and Engineering Graduate Fellowship to pursue their graduate degrees.

Continuing in its leadership position, MIT remains the university most commonly selected by NSF fellows. Last year, 87 fellows declared that they would attend an MIT graduate program. Stanford University and Berkeley were runners-up in this category, with 71 and 57 fellows, respectively. Out of approximately 1,600 nationally, MIT currently enrolls 252 NSF fellows.

William Bradshaw, who decided to attend MIT graduate school on his fellowship, described his fellowship as a real bonus. “Now I don’t have to take an RA or TA position or even an outside job,” he said. “The fellowship will allow me to concentrate on my research, which is the whole point of the award.”

Other Activities

Dean Colbert, Ed Ballo, and I again participated in the implementation of the Graduate Teaching Workshop to support teaching effectiveness at MIT. This annual workshop, offered in the fall term and followed by additional seminars during IAP, continues to be a valuable resource for new and continuing teaching assistants.

In February, the Annual Tax Workshop was held for US citizens and permanent residents sponsored by the Graduate Fellowship Office. In addition, the Graduate Student Council organized tax workshops for international students. Working through the student organization, a number of graduate students became trained in tax preparation and offered their advisory services to those with specific needs.

From July 14 to 20, 2003, I attended the Department of Energy's Krell Institute Annual Conference in Washington, DC. The objective of the conference was to provide Krell fellows a valuable opportunity to learn from other researchers and experts and to increase the visibility of these fellowships within the research community. Three MIT Krell Institute fellows presented papers and two presented posters.

In conclusion, I will continue to work effectively with our administrators, fellows, and students in the year ahead to provide the leadership and dedication expected.

Brima Wurie
Fellowships Administrator

Programs and Services

MIT Summer Research Program

For the past year, the MIT Summer Research Program (MSRP) operated in a new format that accommodated more guests than ever before and more participation from the School of Engineering. Twenty-two students were hosted, representing 17 different colleges and universities.

The Department of Biology hired a recruiter, Mandana Sassanfar, whose principal responsibility was to identify and recruit minority interns who might best fit the admission profile of the department's graduate students. The department hopes to use the MSRP more closely in its overall recruitment plans, which is a welcome development. We look forward to Dr. Sassanfar's collaboration with the GSO in this effort.

For more than a decade, the Howard Hughes Medical Institute (HHMI) has been a generous funder of the MSRP, via a large ongoing grant to the Biology Department. Last year, HHMI promoted a new partnership opportunity called Exceptional Research Opportunities (EXROP), designed as an outreach program to provide research experiences for disadvantaged undergraduate students. Several members of the Biology faculty were among the 20 who received EXROP grants, which were used to bring five students to MIT for the summer. The MSRP hosted those EXROP students and looks forward to continued collaboration with their faculty hosts.

Two students were sponsored by the Systems/Software Engineering Research Laboratory in the Department of Aeronautics and Astronautics. We have renewed hopes to expand participation from engineering areas, since there is significant interest among MRSP applicants but few placement possibilities. Specifically, hopes were high for a grant proposal from Mechanical Engineering, which would have funded five or more interns for summer 2004. Although the proposal was not successful, we expect to

intensify efforts to collaborate with engineering departments in the coming year in anticipation of the next cohort of summer interns.

In addition to 11 students recruited through the standard MSRP application process, the MIT Genome Center independently recruited two interns and brought them to MIT as program guests. We have been very pleased at the growing interest of departments and programs in recruiting their own interns from disadvantaged and underrepresented groups. This is a good sign that these areas increasingly view summer internships as recruitment vehicles for attracting minority and disadvantaged students into their graduate programs.

Roy A. Charles
Assistant Dean