MIT Faculty Newsletter

in this issue we offer three pieces on MIT finances (beginning on page 6); an article expressing concern over a plan by the U.S. Secretary of Defense to support military-related research in the university (page 14); and an article reflecting on nominations and elections at MIT (page 16).

MIT Faculty Survey: It's About Time

Lydia Snover

"THE ONLY REASON FOR TIME," said Albert Einstein, "is so that everything doesn't happen at once." At MIT, our faculty seem to be challenging Einstein's observation by trying to do everything at once, at least according to the results of the 2008 Faculty Survey.

Time (or rather lack of it) is a major source of stress among MIT faculty. The lack of time to think and reflect and the lack of time for non-work activities are two of the top five stress-producers (see M.I.T. Numbers, back page). In responding to this quality of life survey, faculty comments included:

• "Time has become too scarce: time to think and write; time to spend with students; time to explore."
• "Too little time, too many responsibilities (for students and faculty alike).

Berwick, Lee, and Orlin Elected to FNL Editorial Board

RESULTS OF THE FIRST Institute-wide election by faculty are in, and the newly-elected members of the *Faculty Newsletter* Editorial Board are Prof. Robert Berwick (EECS), Assoc. Prof. Helen Elaine Lee (Writing and Humanistic Studies), and Prof. James Orlin (Sloan School).

Elections were held electronically (all faculty and professors emeriti were eligible to vote) and more than 20 percent of the eligible faculty participated. Voting took place between May 1 and May 7.

Following new procedures outlined in the *Policies and Procedures of the MIT Faculty Newsletter*, members of the Editorial Board are now elected by a vote of the faculty, replacing the volunteer method of member selection.

The new Board members will be officially welcomed at the FNL Editorial Board meeting later this spring.

Editorial
Financing Undergraduate Education

AS THE COST FOR ATTENDING college continues to skyrocket, the burden of funding deserving students is being shared by both the students' families as well as the university. Exacerbated by the weakened U.S. economy, traditional student funding methods often are proving insufficient in the short term and lacking an extended view that would improve them over the long term.

MIT finances are a key theme of this issue of the Newsletter. Articles include "Endowment Spending Policy at MIT" (page 6); "A New Approach to MIT's Financial Planning" (page 8); and "A Primer on Indirect Costs" (page 10). Continuing with that theme, in this editorial we offer a perspective on the current financial climate for undergraduate students and some thoughts on how to improve things in the future.

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Photo credit: *Page 1,* Wikimedia Commons

Financing Undergraduate Education
continued from page 1

Since World War II, MIT and most of our peer universities have followed a common path toward funding undergraduate education. Initially, the largest revenue source was tuition paid by the student and his or her family. As time passed, private universities developed additional resources through fundraising from benefactors, which yielded a flow of annual expendable gifts as well as the annual payout from ever-increasing university endowments. But even these revenue-generating sources are proving insufficient for raising the funds to enable the university to support the ever-increasing costs of undergraduate education.

Indeed, consider the current picture at MIT. Over the last 10 years we have increased our tuition and fees at an average annual rate of 4.2%; at the same time the financial aid budget has increased at an average annual rate of 9.1%. One consequence is that for students who qualify for MIT financial aid, the net tuition in real dollars has actually fallen by 15% over the last 10 years [President Susan Hockfield, letter to the MIT Community, February 29, 2008]. This is a truly remarkable accomplishment, demonstrating MIT's commitment to assuring access for all of our exceptional students. But is this sustainable? Can we continue to increase our financial aid budget at this rate? And do we need to do even more in light of the much more generous financial aid that Harvard and other universities are able to offer families in the $100K to $200K income bracket?

Even with these dramatic increases in the financial aid budget, we still know that for many families the cost to send a child to MIT is too much. Each year many students choose to go elsewhere due to the financial burden that their families would need to assume for an MIT education. Other families and students take on more debt so that the student can attend MIT, frequently requiring the student to begin repaying enormous sums upon graduation.

These challenges are by no means specific to MIT. The rise of the costs of higher education over the past few years and the accompanying rise of tuition have been well above the general inflation that the economy as a whole has faced. The rise has placed an increasing burden on families to support the educational expenses of their children. As noted by President Hockfield [President Susan Hockfield, letter to the MIT Community, February 29, 2008], many of our "affordable" public universities have had to raise their fees at even greater rates due to reduced state funding.

Over the past few decades a variety of means have been developed to reduce the burden of education on the families of students. These have included in general the elimination of the ability to pay as a criterion for admission. Many schools also promise aid packages that meet the "full need" of the student. But the need determination has often been predicated upon unrealistic assumptions about the student and his/her family's ability to pay. As a consequence, a large portion of this need is often to be met by a combination of work-study and loans, which greatly constrain the student's flexibility during school and post graduation.

An Old Idea for Financing an Education

More than 50 years ago, economist Milton Friedman argued for income-contingent loans as a way for financing higher education. The basic idea is that the repayment of a student's loan is contingent on the student's post-graduation income. For instance, in exchange for a loan, the student commits to paying a given percentage of his/her annual gross income for a set number of years. This concept has surfaced in a number of different forms. In 1967, a White House panel chaired by MIT Professor Jerrold Zacharias proposed the creation of an Educational Opportunity Bank. Although never adopted, the idea was that a student would repay on the order of 1% of gross annual income each year for 30 years for each $3000 of loans. In 1971, Yale actually introduced on an experimental basis a Tuition Postponement Option; upon graduation a student paid 0.4% of income for each $1000 of loans for 35 years. Nearly 4000 undergraduates participated in this program between 1971 and 1978. More recently Great Britain introduced an income-contingent student loan program called Pay As You Earn. Student loan repayments are 9% of any income in excess of an annual income threshold of £15,000 (~ $30,000), and repayments continue until the loan is paid off.

Perhaps this idea deserves revisiting. Such loans would help to shift the financial burden from the parents to the student, who receives the value of the education. Making the repayment contingent on income would allow students more flexibility in making their post-graduation choices; for instance, a student could take a low-paying community service position or continue into graduate school without an overwhelming repayment obligation. Furthermore, the repayment fraction could vary with income, as with a progressive tax rate, or vary with time since graduation, to reflect different stages of one's career. The system might also assist the Institute by allowing it to increase tuition closer to real costs, with the expectation that students would use income-contingent loans. In this way we might move closer to a system by which more and more of the Institute's revenues are tied to the income streams of the graduates, which arguably reflect the value added from the education.

Of course, in developing such a plan, the devil is in the details. An implementation plan would need to address many issues: how to secure the initial capital needed to launch such a program? what type of provisions to permit one to buy out from the repayment scheme? how to manage the potential problem from adverse selection? how to manage the collections?

Nevertheless, in light of the challenges of financing undergraduate education, new ideas are needed. We welcome other suggestions.

Editorial Sub-Committee

From The Faculty Chair

Bish Sanyal

Reconsidering the Value of Service to MIT

HAVE YOU SEEN THE 2008 MIT Faculty Quality of Life Survey? Or perhaps you are still somewhat unhappy that the survey was so long, and you don't trust the findings of such surveys, anyway. When the spring semester ends, and before you get into your summer writing schedule, glance through the survey once before you toss it out with the paperwork accumulated on your desk over the past nine months. You may notice what I noticed; or, you may read the survey totally differently.

For example, I read that 80.6% of MIT faculty are either satisfied or very satisfied with being a faculty member at MIT; but then, I was reminded by a colleague that 16% of the faculty are either dissatisfied or very dissatisfied [see page 23 of this issue of the *Faculty Newsletter*]. And, 3.5% of faculty have not made up their mind as yet: They are in the column of "neither satisfied, nor dissatisfied"! "Who are these faculty and why they are still sitting on the fence?" I ask myself. The survey does not provide any clue regarding the complexity of such undecided minds, but their presence is visible on most tables, barring a few where the faculty seems to have a very clear opinion one way or the other. One such table is on page 29 of the survey, which documents what the MIT faculty think their peers value in the tenure process [see page 24 of this issue of the *Faculty Newsletter*]. According to that table, 95% of the faculty think research/scholarly work is highly valued; 91.4% think that assessment by our peers outside of MIT is highly valued; and 85.3% think professional reputation is highly valued. In contrast, only 9.1% think collegiality is highly valued, and, more importantly – at least for me, the

Chair of the Faculty who is expected to manage MIT's faculty governance system – only 1.5% of the faculty think service to MIT is highly valued; and 52.5% – that is more than half of the faculty – think service to MIT is either valued slightly or not at all!

How do such perceptions of what is valued by the faculty affect MIT's faculty governance system? For one, this might explain why the faculty does not participate more widely in the various standing committees, and why it is so difficult to recruit even senior faculty to chair such committees. The Nominations Committee has raised this concern many times before, pleading for more volunteers to staff the various committees, but the rate of faculty participation has remained low, reinforcing the results of the Survey that faculty perceive that it is their professional reputation which really matters. Consequently, many faculty are unwilling to volunteer their time and energy for MIT's faculty governance system.

Which raises one intriguing question: Why do a small number of faculty continue to participate in the faculty governance system, volunteering their time and energy for tasks which are not regarded highly by their colleagues? One predictable response would be that the faculty who participate must be serving their self-interest in some way. A crude version of this hypothesis is that faculty who are unable to enhance their professional reputation through research/scholarly work, may consider service to MIT as the only way to feel as if they are contributing to academia. A more instrumental version of the same logic would be that faculty volunteering is a strategy to ulti-

mately secure a position in the academic administration, as if those faculty members have nothing else to offer through their research or teaching for which they had received tenure earlier.

Could there be an alternative explanation as to why a small number of MIT faculty volunteer their time and energy for the faculty governance system? Is it plausible that there could be some faculty members whose concerns are not limited to how they can further their self-interest? Is it plausible that some faculty members want to belong to a learning community by participating in its governance? Whoever designed MIT's faculty governance system must have assumed that MIT faculty could be both first-rate scholars and scientists and also contribute to MIT's learning community, not only through publishing which enhanced MIT's reputation as a leading research university, but by also contributing to its governance system. These two ways of contributing to the MIT community – research/scholarly work and participating in MIT's faculty governance system – need not be seen as an either/or proposition: After all, for our professional reputation to flourish, we need a well governed institutional setting to conduct research and teach the brilliant students who assist in that research. In that sense, the small group of faculty who continue to volunteer for faculty governance-related work, even though such work is not respected by their peers, actually contributes to knowledge generation in a significant way: They help to create the institutional settings whose stability and resilience we take for granted, to the extent that we barely notice its significance – as is evident from the 2008 Faculty Survey.

How should we acknowledge the contributions of the faculty who contribute to MIT's faculty governance system? Each academic year, at the end of the spring term, the President and the Chair of the Faculty host a reception at Gray House to thank the faculty, students, and staff who participate in the faculty governance system. Since this reception is held in mid-May, the garden at Gray House provides a beautiful setting for faculty to mingle and exchange thoughts about yet another academic year coming to an end. Although this event does provide a sense of respect to the faculty who contribute to the faculty governance system, it has very little impact on the perception of the faculty-at-large regarding the value of governance-related work. Which has led me to think that such work must be provided more visibility. The faculty need to notice and appreciate the contributions of those colleagues who help maintain the institutional infrastructure upon which professional reputations are ultimately built.

There are at least three ways to make the contribution of those who participate in the faculty governance system more visible. First, we could have the standing committees periodically present summaries of their deliberations at the monthly Institute faculty meetings. The current practice is to have only the Committee on Discipline present an annual report at a faculty meeting in the spring semester. We could build on that practice by requiring other committee chairs to present summaries of their committee activities. This will not increase the workload of the committee chairs, as they prepare such reports in written form already – reports which are currently compiled by the Faculty Chair for the President and other senior members of the administration.

A second way to provide more visibility to the work of the faculty governance committees is to publish their annual reports – perhaps one or two at a time – in the *Faculty Newsletter* (FNL). To make it interesting to the readers of the FNL, the committee chairs could be interviewed by *Newsletter* Editorial Board members who could ask questions regarding the significance of the various committees' work for research, teaching, and community building. Such interviews could focus on controversial issues, which always draw the faculty's attention.

A third way to change the perception of low respectability of committee-related work is to provide financial incentives for such work. True, the voluntary quality of the committee work should be respected and cherished, but it can be combined with some financial rewards for at least the chairs of the various committees. After all, let's face facts: Incentive structures do shape organizational cultures. If our goal is to change the perception of the faculty regarding the worth of governance-related committee work, why not demonstrate that the Institute values such contributions by financially rewarding the faculty who shoulder the burden of such work? It's my hunch that if the Institute were to implement such a policy, the percentage of faculty who consider themselves "either satisfied or very satisfied" would increase; and I wonder if such a policy would also have an effect on those faculty who are still undecided?! If publicized well, a policy that acknowledges the contribution of those who make MIT a vibrant learning community will certainly have some impact even on those faculty (30.3%) who are currently "neither satisfied nor dissatisfied" by committee and administrative responsibilities. ■

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Confidentiality in Faculty Recruitment, Promotion, and Tenure Reviews

MIT'S *POLICIES AND PROCEDURES* includes provisions designed to ensure that candidates for appointment, promotion, and tenure receive a thorough and fair review of their qualifications and accomplishments. Implicit throughout these provisions is the need for appropriate confidentiality of sensitive information. Among other things, P&P specifically says, "An essential component of the evaluation process at MIT is the solicitation of written assessments from persons familiar with the individual's character, research and teaching capabilities, and academic qualifications. In order to assure the most candid and useful evaluations, MIT has traditionally accorded such assessments the highest degree of confidentiality."

Honoring these policies is an obligation of everyone at MIT, but especially of faculty members. MIT requires all faculty members who participate in faculty recruitment and in promotion and tenure reviews, and all those faculty and staff who may otherwise come to know confidential information, to safeguard that information, including the identity of authors of such assessments and their specific content. Not only is a breach of confidentiality a serious violation of MIT policy, but without conscientious diligence, we will eventually find that this essential component of our process is unavailable or unreliable.

L. Rafael Reif, Provost
Bish Sanyal, Faculty Chair

Endowment Spending Policy at MIT

Seth Alexander
Ahron Herring

THE MIT INVESTMENT MANAGEMENT Company, or MITIMCo, coordinates the investment operations of the Institute. The department has the responsibility for the prudent stewardship of MIT's long-term financial assets to ensure that they support the work of both current and future generations of scholars.

Principal among the investment assets supervised by MITIMCo are the endowed funds of the Institute. The many individual funds, whether for departmental support, scholarships, or otherwise, are collectively referred to as the Endowment, and are invested in a common investment pool referred to as Pool A, a shared investment vehicle similar to a mutual fund. Besides the endowed funds in Pool A, the staff at MITIMCo also manages the investment assets of MIT's defined benefit pension fund, the Basic Retirement Plan, as well as a number of other significant pools of capital, including the Retiree Welfare Benefit Trust, the Life Income Fund gift program, endowed funds that invest separately from Pool A, and a number of operating funds of the Institute.

Management of MIT's Endowment

In managing the Endowment, MIT keeps two primary goals in mind: providing a significant and stable flow of funds to the operating budget, and maintaining the long-term purchasing power of the principal. The first provides resources for today's generation of scholars, while the second ensures that MIT will be able to deliver adequate resources to future generations of scholars.

To achieve its goals, MIT's investments must generate high real rates of return.

Unfortunately, high rates of return by their very nature often come with significant volatility. To reduce portfolio volatility without sacrificing return potential, MIT diversifies its portfolio by investing

> In managing the Endowment, MIT keeps two primary goals in mind: providing a significant and stable flow of funds to the operating budget, and maintaining the long-term purchasing power of the principal.

in high returning strategies and asset classes that are uncorrelated.

Over the last decade, MIT has significantly improved the diversification characteristics of the portfolio. While in the late 1990s two-thirds of MIT's investments were in U.S. stocks and bonds, today's portfolio has only 20% in these asset classes, with the rest allocated to investments in alternative assets such as international equities, real assets, marketable alternatives (hedge funds), real estate, and private equity (see chart, next page).

Spending Policy

Endowment spending policy determines the annual flow of funds from the Endowment to the operating budget. A well designed spending policy takes for its conceptual framework the two principal goals of endowment management: providing a significant and stable flow of funds to the operating budget over the short-term to provide resources to this generation of scholars, while at the same time maintaining the purchasing power of the endowment over the long term, thus

ensuring MIT will be able to provide adequate resources to future generations of scholars.

Unfortunately, achieving both these goals requires MIT to make trade-offs.

Satisfying today's scholars argues for consistent increases in spending unrelated to short-term Endowment performance to allow for steadfast programmatic support on an inflation adjusted basis. In severe bear markets, however, such a policy would result in disaster, as consistent spending increases would dramatically (and perhaps permanently) erode the purchasing power of the Endowment. It is also true that excellent Endowment performance could cause problems if spending is not linked to changes in Endowment value. One can imagine the legitimate complaints from unhappy campus constituents who hear about great financial performance but are unable to enjoy its benefits.

Satisfying future generations of scholars, on the other hand, argues for spending that fluctuates directly with Endowment market value changes. Under a policy following this consideration exclusively, declines in Endowment value would be immediately followed by declines in spending, preventing erosion in long-term purchasing power and protecting resources for future generations.

MIT Pool A Asset Allocation
Fiscal Years 1998 Actual, 1999-2008 Policy

Legend:
- Private Equity
- Marketable Alt.
- Real Estate
- Real Assets
- Int'l Equity
- U.S. Equity
- Fixed Income
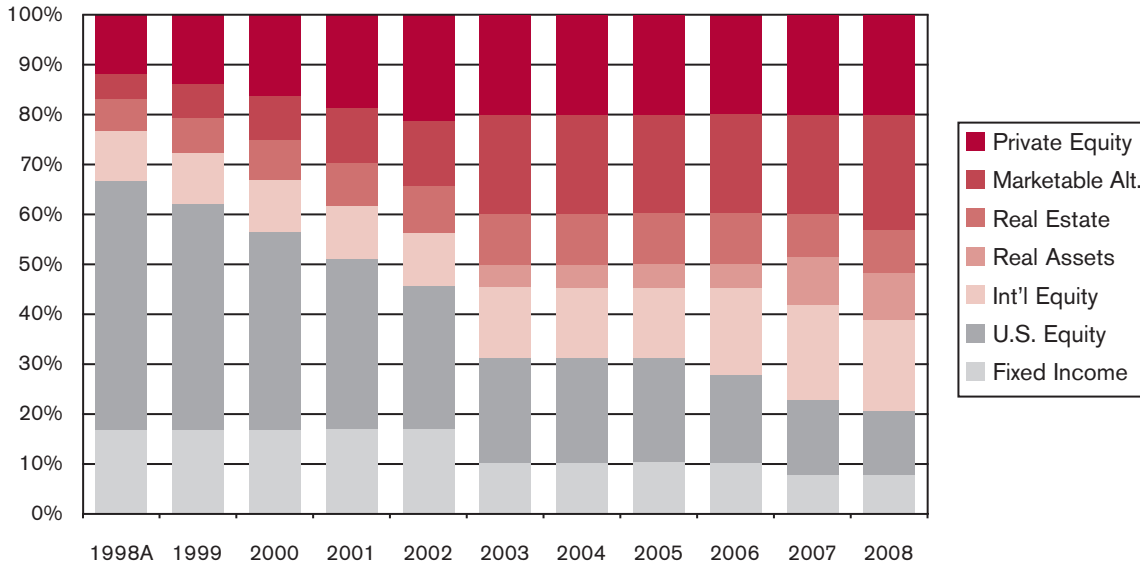
MIT Pool A Annualized Returns
Periods Ending June 30, 2007

	1 Year	5 Years	10 Years
MIT Pool A	22.1%	16.0%	15.3%
Cambridge Median	19.5%	12.9%	9.6%
Difference	2.7%	3.1%	5.7%

The combination of an increasingly well-diversified portfolio coupled with the strong performance of MIT's investment managers has enabled Pool A to perform very well on both an absolute and relative basis.

Unfortunately, this policy results in significant and disruptive volatility in the annual flow of funds to the operating budget and thus does not provide well for the current generation of scholars.

To balance the needs of all generations of scholars, MIT's spending policy should both be responsive to changes in Endowment value and minimize year-over-year fluctuations in spending. The ideal spending policy acts as a shock absorber, keeping short-term spending relatively stable but gradually allowing changes in Endowment values to filter into changes in spending. A properly functioning shock absorber allows MIT to pursue investment strategies that generate high returns over the long term without unduly worrying about the short-term impact on the operating budget and

allows the scholars of MIT to pursue educational and research work without unduly worrying about fluctuations in financial markets.

Until recently, MIT employed a spending rule that buffered spending volatility by averaging changes in Endowment value over a three-year period and by targeting a distribution rate that varied between 4.75% and 5.5% of that average. While that rule served well for many years, its ability to buffer the operating budget from volatility in financial markets was overcome in the market decline of the early 2000s.

As a result, MIT has changed its spending policy to that of a Tobin spending rule. Named for James Tobin, recipient of the 1981 Nobel Prize in Economics, a Tobin spending rule sets the annual distribution

in a particular year through a quantitative formula that has a "stability" term – the prior year's spending adjusted for inflation – and a "market" term – the long-term sustainable rate of distribution times the market value of the Endowment. By selecting the weighting between these two terms, the Institute can determine the pace at which variations in market value are incorporated into spending. A heavier weighting towards the market value term provides greater responsiveness to rising – but also falling – markets. Conversely, weighting the stability term more heavily increases the buffering effect, sustaining the spending rate in the face of market declines, but slowing the response in market rallies. The new rule is shown below. Over time, MIT may adjust the

Endowment Spending Policy
Alexander and Herring, from preceding page

inputs to best suit the Institute's needs. We expect the adjustments to be infrequent to allow for thoughtful budgetary planning.

Distribution =

80% x (Distribution in Prior Year, Increased by Inflation)

+

20% x (5.1% x Market Value of Endowment)

Evaluating the effectiveness of a spending policy requires that we measure the interaction of the chosen investment portfolio and spending rule over time. Monte Carlo simulation is well suited to providing these metrics. For the particular policy portfolio and spending rule under consideration, a Monte Carlo analysis projects the expected distribution of possible future Endowment return and spending outcomes, and measures the percentage that fail to meet our dual objectives. The short-term stability measure employed by the Institute is the likelihood that market declines would translate into a decrease in spending of 10% or more within any three-year period, termed a Short Term Spending Drop, or STSD. Similarly, over the 50-year horizon of the analysis, we are concerned about the deterioration in the purchasing
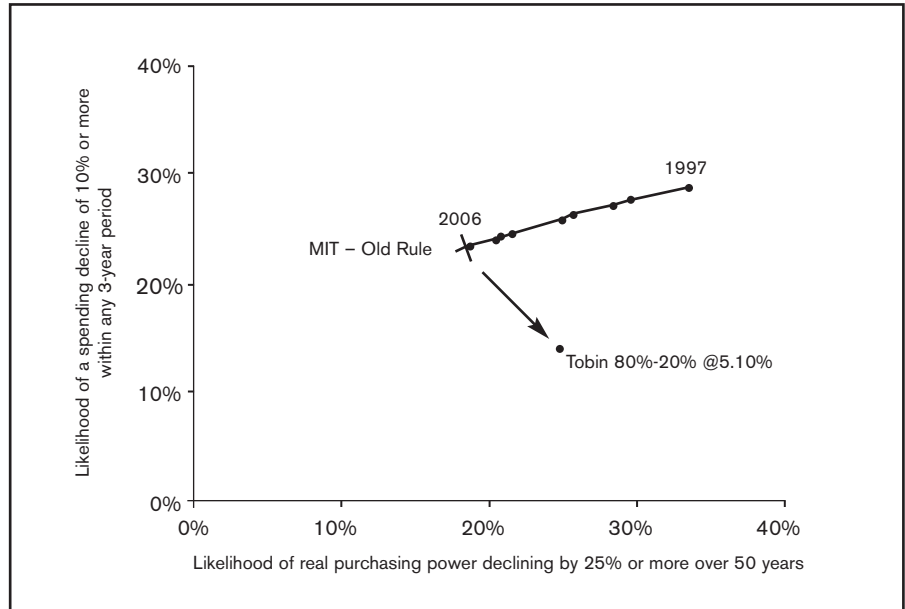
power of the Endowment by more than 25%, termed Long Term Spending Drop, or LTSD. These metrics give us some insight as to the likely performance of the portfolio-spending rule combination.

The chart above shows how the spending rule employed by MIT over the last decade looked in LTSD-STSD terms. Notice that as portfolio diversification improved between 1997 and 2006 – providing greater return per unit of risk – the likelihood of both LTSD and STSD declined.

The chart further illustrates that the adoption of a Tobin spending rule can

have a significant LTSD-STSD impact. We moved to the Tobin rule to reduce the historic volatility in the flow of funds to the operating budget. The analysis suggests that we have achieved this objective while "harvesting" the equivalent of only a few years of improved portfolio diversification. ■

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A New Approach to MIT's Financial Planning

L. Rafael Reif
Terry Stone

IN RECENT YEARS, THE PROVOST and the Executive Vice President's teams have been working with faculty leadership and the administration of the academic units to develop financial planning processes and policies which provide greater and more predictable support for the needs of the Institute. Based on this

ongoing work, a new Financial Framework has recently been adopted and discussed with faculty, department heads, Academic Council, the Executive Committee, and a full meeting of the Corporation.

The Financial Framework provides a financial planning platform for the

Provost's development of the annual General Institute Budget (GIB). Importantly, the Financial Framework sets the course for achieving a balanced GIB in 2009. In addition, the Framework provides the basis for informed future discussions about addressing the longer-term capital funding needs of MIT.

Due to investment returns exceeding 20% in recent years, Endowment payout has become a greater contributor to Institute funding. We estimate that support from Pool A will constitute 19.2% of GIB funding and 10.3% of total revenues in 2008; hence the importance of a greater degree of stability from this source for the GIB and for designated fund holders. A central component of this Financial Framework is

each academic unit in FY08 was at least the same as before. The significant increase in Endowment distribution the academic units will enjoy in FY09 will not undergo this rebalancing process and will add to the units' annual resources. The rebalancing strategy was only carried out in FY08. Please see "Financial Foundation of MIT's Future" in the *MIT Faculty Newsletter*, Vol. XIX No. 2, November/ December 2006 for greater detail.]

These two key steps involving Endowment payout – rebalancing in 2008 and adoption of the Tobin rule in 2009 – release significantly greater levels of Endowment returns for support of Institute endeavors. In addition, other funding policies and practices were examined and updated to create greater budgetary flexibility. For example, the costs of servicing Institute borrowing are now estimated more precisely and can be prudently reduced.

In both 2008 and 2009, recurring programs or needs that had been reduced or covered with one-time allotments are incorporated into the GIB (e.g., *Technology Review*). The restoration of $5M of previously reduced CRSP (Committee for the Review of Space Planning) funding in 2008 will be maintained in the 2009 GIB. In addition, the need to strengthen faculty and student competitiveness has been recognized in increased allocations for support of faculty mortgages and in increased student financial aid. The 2009 GIB will provide $4.3M of incremental research assistant funding as the RA tuition subsidy moves from 45% to 50%. Also, $2.0M in additional funding will be available to cover overhead (under-recovery) on foundation grants. Both of these decisions demonstrate a belief in the importance of research growth to MIT's mission.

> In 2009, MIT will increase the Pool A payout rates by 31%. This payout increase follows similar payout growth in 2008. . . .These two key steps involving Endowment payout – rebalancing in 2008 and adoption of the Tobin rule in 2009 – release significantly greater levels of Endowment returns for support of Institute endeavors.

the adoption of the new Endowment spending policy described in the preceding article by MIT Investment Company President Seth Alexander (see page 6). This payout approach, called the Tobin rule, is designed to provide a less volatile year-over-year pattern in Endowment funding to unit holders and to the GIB.

In 2009, MIT will increase the Pool A payout rates by 31%. This payout increase follows similar payout growth in 2008. These funds will not be subject to rebalancing. [Briefly, rebalancing is the "zero-sum" strategy MIT implemented in FY08 to increase the Institute's long-term financial flexibility. It consisted of the elimination of the *additional* Endowment distribution by increasing the *voted* Endowment distribution by an equivalent amount. Whenever possible and allowable, the additional funds that academic units received in FY08 from the increased voted distribution payout was exchanged with General Institute Budget funds. As a result, the aggregate funding (GIB and endowment distribution) to

The result of the 2009 payout will be $521M in distribution from Pool A. We will inaugurate this new policy at a payout level in the 5% range. In future years, the principal driver of year-over-year change in payout amount will be the Higher Education Inflation Index: HEPI inflation will determine 80% of the payout change. A lesser determinant will be the change in the value of the Endowment: 20% of the payout amount will be set at 5.1% of the Endowment value – whether greater or less than the previous year's level. This payout policy is described in detail in Seth Alexander's article.

The rebalancing effort in 2008 provided another key building block in strengthening the financial foundation of the Institute. The exchange of around $70M of funding between the academic units and the General Institute Budget was facilitated by the 31% Endowment payout increase in 2008. It is important to note that rebalancing did not affect research related funds, nor awards or funds for education.

Over the next few weeks, the Provost, in consultation with the deans, will finalize what will be the first balanced budget for the Institute in recent years. And, over the rest of the semester, the deans will be engaged in a visioning discussion with the Provost and the President about their priorities for the Schools and for MIT. The Financial Framework will be an important element in gauging the feasibility and timing for implementing those visions. ◼

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A Primer on Indirect Costs

Claude R. Canizares

AMONG UNIVERSITY FACULTY, *indirect costs* or *overhead* has about the same appeal as taxation among political candidates. So it seemed appropriate, soon after April 15 in an election year, for me to offer some information about indirect costs, where they come from and how they are computed.

Indirect Costs

The rules under which the federal government reimburses universities like MIT for the costs of sponsored research are governed by Circular A21 from the Office of Management and Budget, "Cost Principles for Educational Institutions" [*www.whitehouse.gov/omb/circulars/a021/a021.html*]. The principles apply to "grants, contracts and other agreements" and "are designed to provide that the Federal Government bear its fair share of total costs." A different set of rules applies to for-profit companies (a 2000 RAND study [Goldman, C. Williams, T., *Paying for University Research Facilities*, RAND, 2000] concluded that university overhead is lower than that of industry). The policy of A21 is to recognize and encourage the unique way each institution chooses to conduct research.

A21 distinguishes *direct costs* (faculty summer salaries, RA stipends, equipment, lab supplies, etc.) from costs associated with *facilities and administration* (F&A), also called *indirect costs* or *overhead*. F&A costs (operation and maintenance of buildings, capital depreciation, departmental and central administration, etc.) cannot be readily and specifically attributed to a given activity (e.g., instruction

vs. research), nor to a specific sponsored project. There are strict categories of allowed F&A costs and rules for allocating a fraction of these to *organized research*, in contrast, say, to instruction or other institutional activities.

Studies [Ibid; *Report of Working Group on Cost of Doing Business, Council on Government Relations*, 2003] have shown that the cost allocation rules generally favor the sponsors over the institutions, who end up absorbing a fraction of the expenses plausibly associated with organized research. One clear example, which affects many institutions, is an arbitrary cap set on the reimbursement of administration costs (the "A" of F&A; MIT's A rate has historically fallen below the cap anyway). That cap has not prevented the government from imposing a continually increasing load of regulatory, compliance, and reporting requirements on the grantee institutions.

The *organized research* category includes all research activities, whatever the funding source, that "are separately budgeted and accounted for." Any research effort with a budget, statement of work and/or deliverables, must be included in *organized research*. The fair

share principle then allocates F&A costs to each and every organized research activity, regardless of the source of funding. In other words, the federal government insists that each sponsor of organized research, including the university itself,

> Because indirect costs are assessed on a transaction-by-transaction basis for every relevant MTDC expenditure, there is a misconception that overhead is meant to cover the "back office" costs associated with that transaction. Instead, it operates more like the Massachusetts sales tax.

pays its appropriate fraction of the F&A costs, or rather that the government pays no more than its appropriate fraction (this can result in the phenomenon of *under-recovery* described below).

The single metric for allocating "fair shares" to various award sponsors is money. More specifically, it is the direct expenditures covered by that award less a few specific items (RA tuition, larger subcontracts, and capital equipment), yielding *modified total direct costs* (MTDC). Because indirect costs are assessed on a transaction-by-transaction basis for every relevant MTDC expenditure, there is a misconception that overhead is meant to cover the "back office" costs associated with that transaction. Instead, it operates more like the Massachusetts sales tax.

The allocation of indirect costs requires a long process of detailed accounting following the rules of A21 (this process, indeed everything described in this article, is frequently audited within

MIT and by federal and independent auditors). Every relevant expense is accounted for, put in the appropriate cost category, or *cost pool*, and then allocated

research – the off-campus rate is calculated independently).

The total of all indirect expenditure cost pools for MIT FY2007 was $456M, of

Administrative Indirect Costs (FY2007)

Library 5%

Administration 27%

General and Administrative 10%

Sponsored Programs 4%

Facilities 73%

Building Operations and Maintenance 43%

Department, Lab, and Center Administration 13%

Building and Equipment Depreciation 17%

Interest 8%

(the result fills a fat notebook of spread-sheets every year). The allocation of a fraction of a given cost pool to the category of *organized research* vs. other activity categories is computed using a specific metric that can be readily determined for that category, such as square footage (for cost pools associated with space) or relative expenditures (say, for departmental administration).

The total MTDC and indirect cost expenditures are computed exactly after the close of each MIT fiscal year. Rates for current and future years are based on detailed estimates and projections. For MIT FY2007, which closed on June 30, 2007, the total direct costs of research (TDC) was $408M and, after appropriate deductions, MTDC was $253M. (These and all of the numbers in this article refer to on-campus

which $180M (40%) was attributed to organized research (the other 60% is paid with general Institute funds). Of the $180M, $131M (73%) are costs related to facilities, of which $73M is for operations and maintenance including utilities. The administrative indirect costs attributed to organized research are $49M (27%). This, in turn, is roughly equally divided between central administration, including administration of sponsored programs, and administration of departments, labs, and centers (see chart).

The F&A Rate

The F&A rate for a given year is computed by dividing the amount of indirect costs attributable to organized research by the total MTDC, (e.g., for FY07, $180M/$253M). Fluctuations in MIT's actual F&A rate can come from changes in both the numera-
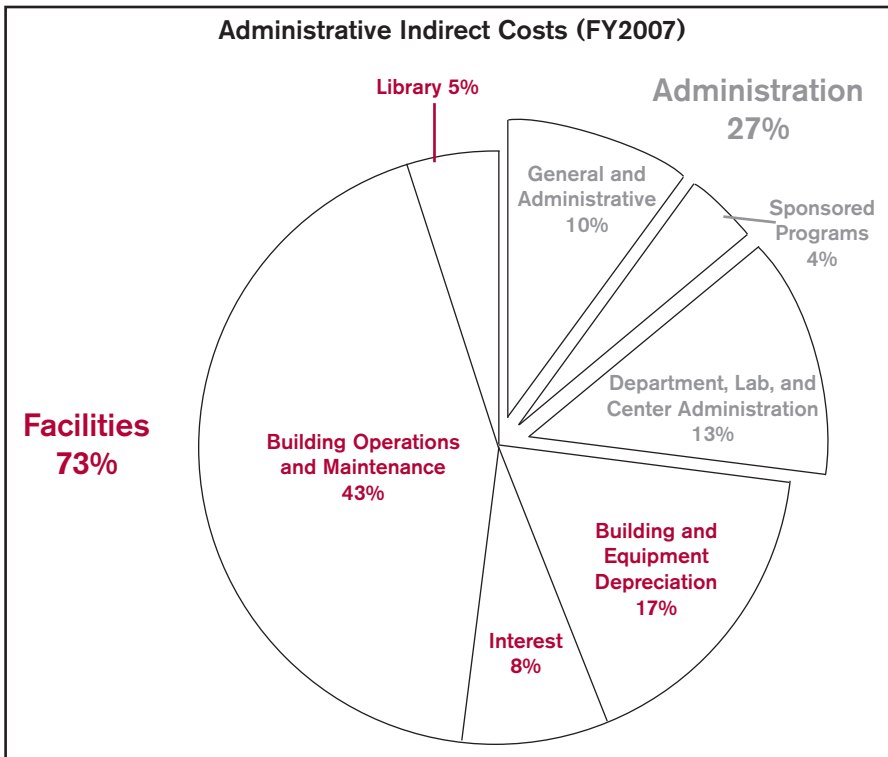
tor (costs) and denominator (MTDC). Over the past 10 years facilities costs have doubled, primarily due to rising energy costs and the expenses associated with new buildings and major renovations. In contrast, administrative costs grew by 26% over 10 years, six points fewer than the growth in the Consumer Price Index for that period. MTDC also increased through the first part of this period, but then stagnated for the past five years, reflecting the stagnation in federal research funding. The combination reduced the actual F&A rate in the early years of this decade, but then drove a steady increase from FY2002 to FY2007.

Computed retroactively for MIT FY2007, the actual F&A rate was 71.1%. This exceeds the 65% rate that was billed to sponsors during FY2007, which had been negotiated early in 2006 with our cognizant federal oversight agency, the Office of Naval Research (ONR). Our billed rate for FY2008 is 67% and the provisional rate for FY2009 is 68%. In total, indirect costs represent about 30 cents of every research dollar. Thanks in part to some changes in depreciation accounting and anticipated MTDC growth, the real F&A rate is expected to decrease and come more into line with the billed rate.

MIT is one of a small number of universities that can carry forward to future years the accumulated difference between the actual and billed recovery. This allows us to make moderate changes in the billed F&A rate that smoothes over the more rapid fluctuations in the actual rate. Over the years, the carry-forward has alternated between being positive and negative.

Under-recovery

Many foundations severely limit the amount of indirect costs they are willing to pay. Because the federal government understandably insists that it will not pay more than its "fair share," MIT is required to supplement such foundation awards to cover full F&A costs at the billed rate. In other words, when MIT gets an award without full recovery, desirable as that may be for many other reasons, it causes

us to "lose" F&A revenue whether or not the activity actually incurs extra indirect costs. As a simplified illustration, assume our MTDC and F&A costs were $200M and $100M, respectively, and all awards had full recovery at the computed rate of 100/200=50%. Now repeat the scenario but add one additional grant from Foundation X that pays $2.0M in MTDC, does not increase our actual indirect expenditures (this can only hold on the margins, of course), but pays zero F&A recovery. Because the total MTDC is now $202M the rate we can charge fully-paying sponsors falls to 100/202=49.5%, so we now recover only $99M from those sponsors. MIT must make up for the lost $1M from its own general funds. On average, of course, additional awards will increase indirect expenditures and will also affect the allocations of the cost pools, but the fact of under-recovery remains. In effect, MIT must provide $1M in cost-sharing to accept $2M from Foundation X.

Because under-recovery is a real cost, MIT policy requires that it be allocated to one or more faculty, department, School, or central budget. That means under-recovery support will inevitably compete with other priorities, including student financial aid, faculty start-up costs, renovations, and other educational or research initiatives. In recent years, the Provost has allocated more resources for under-recovery support, as have department heads and deans. In FY07, MIT spent over $5M to cost-share under-recovery.

Comparing to our peers

Although most universities are overseen by the Department of Health and Human Services rather than ONR, as we are, both agencies apply the exact same rules specified in A21. The one distinction is MIT's ability to carry forward shortfalls or overpayments in F&A to future years (A21 allows this but most institutions have agreed instead to accept a single, predetermined rate with no carry-forward).

Institutions do differ on how they talk about F&A recovery and sometimes employ language that might cause confusion. For example, while A21 mandates that universities can only recover costs actually incurred by the institution, some universities talk of "returning" a fraction of their recovery revenue to a unit or even

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a PI. In some cases, the unit (e.g., a medical school) paid the F&A costs, so the allocation is still reimbursement. In other cases, this is really a strategy for allocating general funds to a unit in proportion to its research activity. Such strategies are easier to implement in some state institutions, for example, where a fraction of indirect expenditures might be covered by separate budgets that do not require reimbursement, making the recovery look like new revenue.

Regarding awards from foundations, every institution has to cost-share the F&A shortfall exactly as we do. Unlike MIT, however, most of our peers choose to absorb the additional costs either centrally, or at the School level without explicit budgeting. Like MIT, most of our peers recognize under-recovery as an increasing drain on their general funds, and some are moving to set limits on how much they will accept. All of us are trying to educate foundation leaders about the reality of indirect costs, and some of us have policies for direct charging some F&A items, like the operation of facilities.

One thing to bear in mind is that, in comparison with peer institutions, MIT's total revenues from research are a larger fraction of our on-campus

annual operating budget, about 40% compared to ~30% for Stanford and UC Berkeley, and ~20% for Harvard (in 2006; excluding hospitals). The F&A recovery represents more than 10% of MIT's campus operating budget and is nearly equal to the net revenue from undergraduate and graduate tuition combined. So MIT has somewhat less leverage for applying general funds to offset shortfalls in F&A than do some of our peers.

The F&A rates of all universities evolve over time, with the episodic building of new buildings and facilities and the ebb and flow of large and small research activities. The combination of circumstances noted above have currently placed MIT's rate among the highest of our peers, something we are working hard to address. Luckily, other costs of research, like the employee benefits rate, are among the lowest, and we have just increased the RA tuition subsidy by five points.

Conclusion

As a long-standing PI supporting a research group in the face of declining NASA budgets, I well understand the pressure that our F&A rate places on faculty and research staff. The central administration has worked hard to control costs, make critical investments that will enhance research, and increase allocations for under-recovery. We welcome your comments and suggestions.

Claude Canizares is Vice President for Research and Associate Provost *(crc@mit.edu)*.

Changes in Engineering Education

Ernst G. Frankel

The cost of sacrificing fundamentals

ENGINEERING EDUCATION IN America has changed dramatically during recent years. Not only has the number of graduates in traditional engineering disciplines such as mechanical, civil, electrical, chemical, and aeronautical engineering declined, but in most of the premier American universities engineering curricula now concentrate on and encourage largely the study of engineering science. As a result, there are declining offerings in engineering subjects dealing with infrastructure, the environment, and related issues, and greater concentration on high technology subjects, largely supporting increasingly complex scientific developments. While the latter is important, it should not be at the expense of more traditional engineering.

Rapidly developing economies such as China and India, as well as other industrial countries in Europe and Asia, continue to encourage and advance the teaching of engineering. Both China and India, respectively, graduate six and eight times as many traditional engineers as does the United States. Other industrial countries at minimum maintain their output, while America suffers an increasingly serious decline in the number of engineering graduates and a lack of well-educated engineers.

While until quite recently American engineering firms dominated in global infrastructure projects and the development of new design and engineering solutions, they are now becoming minor participants and are quite often not even invited to propose and bid for important projects. Earlier last century we built structures such as the Empire State Building in fewer than 18 months, a feat which could not possibly be repeated today. American engineering used to be the global gold standard in infrastructure engineering and construction, while now the premier examples of major engineering projects are primarily developed abroad.

America increasingly lags not only in engineering research, development, and design, but also in methods of survey, construction materials handling, materials fabrication, site development, and more, again particularly in infrastructure engineering.

The results have caused American roads, rail networks, electric power, ports, airports, and other essential infrastructure to not only remain in ill-maintained states, but also to be quite often badly designed and constructed. There are many examples which parallel the shameful so-called Big Dig project in Boston, and there are now few major U.S. engineering projects that measure up to world standards, something that not only adversely affects our economy, but also our standing in the world. For example, much of the Katrina and similar disasters could have been prevented by more competent engineering. For too long, we have somehow failed to give the proper respect, recognition, and resources to engineering education, and now suffer the consequences which may affect not only our reputation but ultimately our economy and standard of living.

Engineering is the most essential of human disciplines. From early on it was the way humankind lifted themselves up from other creatures. It provides the wherewithal for all human physical advances and is as much – if not more – of an intellectual challenge as the sciences and other subjects that advance human standards. History has many examples where the decline of civilizations paralleled the lack of importance given to engineering. The Greeks, Romans, Chinese, and others built their civilizations largely on the foundations of engineering competence and advances. Their power, status, and standards of living rapidly declined as soon as they failed to maintain their superior engineering competence and developments. I would hope that we are able to learn from history, and not repeat it.

Engineering education should teach the effective application and use of scientific principles to the solution of real-world problems and the development of materials, tools, facilities, appliances, shelters, foods, and services to meet human needs and advance human living conditions, opportunities, and standards. It should probably be broadened to include engineering and project management, in addition to wider, more comprehensive courses in the application of science and technology to the solution to real-world problems – so as to assure that graduates hit the ground running, particularly after completing graduate studies. MIT has for long been the world leader in the application of engineering education, and should follow its success by furthering its study in this direction. ■

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Anthropologists Express Concern Over Government Plan to Support Military-Related Research in Universities

Jean E. Jackson

LAST SUMMER, FORMER MIT professor Hugh Gusterson, nine other anthropologists, and I co-founded the Network of Concerned Anthropologists (NCA), with the goal of examining the Pentagon's new policy of hiring social scientists for newly expanded types of military work – which goes far beyond conventional classroom teaching and the like. The Pentagon is aggressively recruiting social scientists for programs like the Human Terrain Systems, which embeds social scientists in combat teams in places like Iraq and Afghanistan. NCA asked anthropologists to sign a pledge not to do covert work or work in occupied territories:*concerned.anthropologists.googlepages. com/home.*

These new policies have attracted the attention of anthropology professional associations and others in related disciplines. In the summer of 2006, the American Anthropological Association established an Ad Hoc Commission on the Engagement of Anthropology in U.S. Security and Intelligence Communities. The Commission's charge was to develop modes of dialogue with security, intelligence, and military agencies, in order to communicate the AAA's perspectives on ethics and in order to better understand those agencies' interest in anthropology. The Commission produced a preliminary report in November 2007 (available at *www.aaanet.org*). Last November the executive board of the AAA formally discouraged its members from participating in HTS. (Contact me for sources on HTS.)

NCA is continuing to monitor activities related to the role of anthropologists and the military. The Minerva Consortia Project, as recently outlined by Secretary of Defense Robert Gates, would fund university consortia to do military-related research in a significantly expanded fashion, sponsoring research in the social sciences and humanities. Gates' speech was given to presidents of leading research universities in a closed meeting. Space limitations prevent a comprehensive discussion of the initiative; a Chronicle of Higher Education article on the meeting can be found at: *chronicle.com/news/ article/4316/us-defense-secretary-asks-universities-for-new-cooperation.*

Upon hearing about the Pentagon's plans to fund university consortia, the NCA prepared the statement below. We feel that the Minerva initiative should not only concern social science scholars and professionals, both within and outside academia, but should be discussed by all faculty members in large research universities.

* * * * *

Some Concerns About the Minerva Consortia Project

IN A SPEECH ON April 14, 2008 (*www.defenselink.mil/speeches/speech.aspx? speechid=1228*) Secretary of Defense Robert Gates unveiled Pentagon plans to fund university consortia to do 4 kinds of work:

1) Create an archive of open-source documents in "Chinese military and technology studies."

2) Exploit documents captured in Iraq for "The Iraqi and Terrorist Perspectives Projects."

3) Research the relationship between terrorism and religion, especially Islam.

4) Engage disciplines such as history, anthropology, sociology and evolutionary psychology to produce new fields that might be as important as game theory and Kremlinology were in the cold war.

Gates promised that the new consortia would work in accord with academic freedom and would be open to "diverse points of view."

While these plans are at an early stage and will doubtless continue to evolve in ways we cannot predict, based on Secretary Gates' speech the Network of Concerned Anthropologists has these initial questions and concerns:

1) The U.S. university system is already highly militarized, that is, many universities take in a large proportion of their research funding from military sources. This is problematic for four reasons:

   a. The fields so supported are distorted by focus on issues of utility to war making. Whole fields of study hypertrophy and others shrink or

are never developed as researchers are drawn from one field into the other, Pentagon-desired ones. Nuclear and other weapons research related areas grow, at the expense of environmental research, for example. Moreover, theory, methodology, and research goals in such fields as physics, computer science, and engineering after decades of military funding now operate on assumptions that knowledge about force is paramount.

b. These research foci begin to structure what gets taught to students and what research projects students themselves see as the best options for their own work. A brain drain from other research directions occurs.

c. The dependence on single sources of funding with their own agenda tends to reduce intellectual autonomy in ways that go beyond the selection of subject matter for research.

d. The University becomes an instrument rather than a critic of war-making, and spaces for critical discussion of militarism within the university shrink.

2) While Secretary Gates indicated in his speech that research conducted through these consortia would not be classified, we wonder if it will be open to all faculty and students regardless of nationality. Will Chinese and Syrian graduate students, for example, be welcome to conduct research through these consortia? Will researchers with critical research on their CVs or histories of unacceptable political activity be discriminated against in the funding process?

3) Important questions arise as to what level of research is being commissioned. In the case of the Chinese and Iraqi archives in particular, is the plan to fund high order research questions or to outsource to low-wage under-

graduate or graduate students or other academics mundane tasks of data collection, sorting and analysis – in other words, low-level intelligence work – in a similar process to the outsourcing of other military work to private contractors? Is the reason this work is not to be outsourced to private contractors either or both that those contractors charge more than the universities will and that the university gives legitimacy and credibility to the results in a way that contractors do not?

4) Who will make funding decisions and on the basis of what criteria? When private foundations or government agencies (such as the National Science Foundation) fund academic research, they rely heavily on a network of academic peer reviewers and on panels of academic experts to adjudicate proposals according to strictly academic criteria. How does the Pentagon plan to evaluate applications for funding? What will be the role of military officers and/or Pentagon civilian officials in the evaluation of applications? How will the program's openness to "diverse points of view" be assured?

5) Why are these research needs being identified by the Pentagon as the most important ones? The research questions themselves contribute to creating more national and human insecurity by trafficking in the construction of a Chinese enemy image and of a connection between Islam and violence. In addition, we ask why evolutionary psychology, a field seen by many academics as disreputable pseudoscience, is being singled out for support.

6) A funding source introduces subtle but powerful biases into research: we now know that academic research funded by the pharmaceutical industry is more likely to find drugs safe and reliable than research funded through NIH, and research funded by the chemical industry is more likely to find new

compounds safe than independent research. Research funded by the Pentagon rather than through the National Science Foundation or the National Endowment of the Humanities is likely to show similar or more extreme differences. The Pentagon is an agency that lacks the historical commitment to more open debate and the freer pursuit of knowledge associated with, for example, NSF and NIH and many foundations, and university funds themselves.

7) In his speech, Secretary Gates appeals to universities to relax admissions criteria for military veterans, to allow ROTC to violate campus non-discrimination codes (barring discrimination on the basis of sexual orientation), to offer online instruction to military personnel not on campus, and to fast-track military students for graduation by giving them academic credit for military experiences. This amounts to remaking the university around the needs of the military and giving military students special status within the university. It also asks the university to subsidize and legitimate the military education needs of the Pentagon. Studies of a parallel process in U.S. high schools, the JROTC program, show that training high school students to prepare them for enlistment is advertised as a contribution to both national security and to the schools' budgets, when in fact it uses local school district resources, sometimes in amounts that exceed a half million dollars. If one adds to the Pentagon's formal budget the appropriations for the Wars in Iraq and Afghanistan, the cost of nuclear weapons, and other military costs budgeted through other agencies, the U.S. military budget is over $800 billion. Surely the Pentagon does not need educational institutions to provide further subsidies.

Also see: *www.insidehighered.com/ news/2008/04/16/minerva.* ■

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Reflections on Nominations and Elections for Faculty Officers and Committees at MIT

Michel DeGraff

THE OFFICERS OF THE FACULTY and the Standing Faculty Committees constitute the core of faculty governance at MIT. These positions and structures are the main venue for faculty to conduct Institute business, to promulgate the rules, policies, and procedures that govern MIT and shape its future. The Committee on Nominations, which I've been serving on for the past two years, is central to governance at MIT. Every year, at the April faculty meeting, it nominates a slate of candidates for Officers of the Faculty, and for the membership of all Standing Faculty Committees, to be considered for a vote by the faculty at its May meeting. Any flaw in the structure and operations of the Nominations Committee can ripple through MIT's entire governance.

The Committee on Nominations: History, Structure, Mandate, Rules, and "Standard Practices"

The candidates on the Nominations Committee's slate usually run for election totally unopposed. In no sense can these candidates be seen as having been elected. In effect, the Committee on Nominations appoints the Officers of the Faculty and the elected membership of all Standing Faculty Committees. As far as I can tell, only once was the process for alternative nominations, as outlined in *Rules and Regulations of the Faculty*, ever invoked. In 2005, a group of underrepresented minority faculty contested the slate submitted by the Committee on Nominations at the April faculty meeting. That challenge was motivated by the perception that the Nominations Committee's slate lacked diversity, and all three alternate

nominees were from the minority faculty ranks. This challenge resulted in the election of two underrepresented minority faculty to the membership of Standing Faculty Committees – one on the Faculty Policy Committee, the other on the Committee for Academic Performance.

The Committee on Nominations is the only Standing Committee whose members are determined exclusively by the President, a practice going back to 1907. There have been a few proposals over the years to change the way the Committee on Nominations is organized, giving to the Chair of the Faculty or to the faculty-at-large, rather than to the President, the responsibility for selecting potential members. According to some of these proposals, the faculty-at-large would play a more significant role in choosing the Officers of the Faculty and in deciding the membership of its Standing Faculty Committees, including the Nominations Committee. In one such proposal, which was attached to the April 1951 slate, the Nominations Committee explained the benefits of "competitive election" for committee membership. The fact that the *Faculty Newsletter* has now successfully run an Institute-wide election where the number of nominees exceeded the

number of slots to be filled shows that such competitive elections can be seamlessly accomplished, using technology developed right here at MIT. As it turns out, the number of voters for the *Faculty*

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Newsletter Editorial Board exceeded by more than four times the number of those usually present at the May faculty meeting where Officers of the Faculty and Standing Committee members are elected.

In a 2004 article in the *Faculty Newsletter* (Vol. XVII No. 1, September/ October 2004), Professor Rafael Bras, who was then Chair of the Faculty, described a proposal by the Faculty Policy Committee whereby the outgoing Chair of the Faculty would select the members of the Committee on Nominations. In response, Professors Lotte Bailyn, Stephen Graves, and Kim Vandiver, three former Chairs of the Faculty, chose to diffuse the power of appointment by proposing that "the president and outgoing chair work together to select the nominating committee" (*MIT Faculty Newsletter*, Vol. XVII No. 2, November/December 2004). But another former Chair of the Faculty, Professor Steve Lerman, endorsed Professor Bras' proposal to move the appointment of the Nominations Committee away from the administration:

"If nothing else, having the Nominations Committee formally independent of the administration would enhance the perception that the leaders of the governance system are representatives of the faculty." (*MIT Faculty Newsletter* Vol. XVII No. 3, January/February 2005.)

Yet, the President still appoints the Committee on Nominations and its chair. Therefore, the Committee must work carefully to ensure that the nomination process proceeds without undue influence from the Office of the President or from others from the administration. Any faculty member who has served on Institute-level committees can readily appreciate how extremely dedicated and helpful the support staff of these committees usually is. But the staff support for the Nominations Committee comes directly from the Office of the President. The line between providing support and exerting undue influence is often blurred – for example, through comments and suggestions that the support staff makes about the nomination process (including comments about particular nominees and suggestions regarding procedural details), and through meeting records that they take and distribute selectively.

This year, the Nominations Committee was subjected to notions of "standard practices" and "committee rules" from the administration, many of which the Committee had not been apprised of before or during its deliberations. Not one of these practices and rules could be found in *Rules and Regulations of the Faculty*. Much of this lore about "practices" and "rules" had the effect of curtailing the Committee's efforts to make the nomination process more transparent and inclusive.

The only rules for the nomination process, as stated in *Rules and Regulations of the Faculty*, are:

"a. The Committee shall nominate the following in the appropriate years: a Chair-elect, an Associate Chair, and a Secretary of the Faculty; and shall also nominate candidates for the elected membership of the Standing Committees.

b. The Committee shall circulate the list of nominees to all members of the Faculty not later than the April meeting of the Faculty.

c. The Committee shall have power to fill any vacancies that may occur during the year in the offices of Chair, Chair-elect, Associate Chair, and Secretary, and in the elected membership of the Standing Committees."

Rules and Regulations of the Faculty does not specify how the Nominations Committee is to arrive at the names of nominees, nor how many names should be put forth for consideration for any given slot. The Committee itself must come up with the most appropriate mode of nominee selection in order to create a list of candidates who can best serve the Institute's interests and goals as Officers of the Faculty and members of the Standing Faculty Committees.

There needs to be a more systematic way to develop a slate of potential candidates and to go beyond the Nominations Committee's natural but limited sources of names from networks of friends and colleagues. The Committee does rely on a database of answers to a faculty-wide committee-preference questionnaire that is circulated and maintained by the Office of the President. But this questionnaire needs to be revised by the Nominations Committee, with options for individual faculty to suggest others, besides themselves, for membership on Standing Faculty Committees and for positions as Officers of the Faculty. Such options would make the nomination process more inclusive.

The Committee on Nominations should not rely on information labeled as "off the record," especially when "off the record" comments may effectively exclude potential nominees by means of hearsay

or confidential faculty-personnel issues. Such comments should not go beyond that nominee's personnel review committee, especially since the potential nominee may not even be privy to many of these comments.

The Alternative Nomination Process
Is the aforementioned alternative nomination process, as outlined in *Rules and Regulations of the Faculty*, a reasonable way to bring about a representative list of nominees for Officers of the Faculty and Standing Committee members? Indeed, the alternative nomination process, when invoked, entails an electoral contest

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between nominees for particular slots, as it did in 2005 with the election of two underrepresented minority faculty to the Standing Faculty Committees. Yet, the structure and timeline of this alternative process are stacked against the alternative nominees and their nominators. Witness the following clauses:

"Nominations alternative to those circulated by the Committee on Nominations may be made *either at the April meeting of the Faculty or in writing to the Secretary of the Faculty by the Wednesday following the April Faculty meeting,* provided in all cases that the consent of the nominee has been obtained. For each candidate for any *contested* committee, information on the departmental affiliation and prior Institute service should be made available to the faculty *at least two weeks prior to the May Faculty meeting.* Candidates for *contested* committees may optionally submit a short statement to be circulated to the Faculty at the same time." (emphases added).

In other words, in cases when there is dissatisfaction with the Nominations Committee's slate when it's put forward at the April meeting, alternate nominees and

their nominators have at most one week after that April meeting to decide and prepare to run for elections in May, and at most two weeks before the May meeting to provide additional information regarding Institute service (the latter requirement was added after the April 2005 alternative nominations). In contrast, the Nominations Committee has about seven months to look for nominees and prepare its slate for the April meeting, and it need not provide any additional information about any of its nominees that are not contested.

It seems to me important that the faculty be informed of the qualifications (e.g., prior Institute service) of each faculty on the nominations slate, whether or not the Nominations Committee's slate is contested. Yet, it is only when the alternative nomination process is invoked that the Nominations Committee must provide additional information about its nominees – information that in any case may help the faculty cast their votes in a responsible manner.

The above asymmetries do not encourage the use of the alternative nomination process.

If the Nominations Committee were to solicit nominations – for both Standing Faculty Committees and Officers of the Faculty – from the faculty-at-large early in the nomination cycle and include those nominations in their April slate alongside the Committee's own nominations, the entire faculty would have much more significant input into the regular nomination process. Such a procedure would incorporate into the mainstream of faculty governance the major objective of the alternative nomination process, while removing the latter's structural handicaps. This would also make both the regular and alternative nomination processes more legitimate and representative, thus decreasing the risk of making alternate nominees – actually, any nominee – look controversial as they are voted upon and as they fulfill their appointments if elected.

The idea of having the faculty-at-large suggest nominees early in the nomination cycle so that all duly nominated candidates (from both the Nominations Committee and the faculty) be put on the same slate goes back to a suggestion made by Professor Bras as Chair of the Faculty at the November 2005 faculty meeting. This proposal has never been implemented.

At any rate, MIT is still far from any fair and transparent process that would

Half a century later, our main source of input from the faculty regarding the nomination process still comes from a preference questionnaire that is basically an outdated form seeking self-nominations for the Standing Faculty Committees.

allow the Officers of the Faculty and the elected members of Standing Committees to broadly represent the faculty-at-large.

Nomination of Officers of the Faculty
The Chair of the Faculty serves, ex officio, as chair of the Faculty Policy Committee, determines the leadership of each Standing Committee (except for the Committee on Nominations), plans faculty meetings with the administration and other faculty officers, and sits on Academic Council and on various Standing and Special Committees. The Chair of the Faculty, the Associate Chair of the Faculty, and the Secretary of the Faculty all must be able to represent and advocate for the faculty as a whole, in all its diversity and complexity, and to remain relatively independent of the administration, while being able to work with it. Therefore, the nomination of the Officers of the Faculty is perhaps the most important task of the Committee on Nominations.

The ad hoc procedures used to nominate members of the Standing Faculty Committees are inadequate for that purpose, but they are even more inadequate for the task of selecting the Officers of the Faculty. As a member of the Committee on Nominations, I have come to a similar view to that of the Editorial Board of the *Faculty Newsletter*, namely:

"Officers of the Faculty should be openly nominated and elected by the faculty, in a process that allows candidates with differing views and priorities to run for the office on a public platform." (*MIT Faculty Newsletter*, Vol. XX No. 4, March/April 2008.)

This proposal is similar in spirit to the Faculty Policy Committee's opinion, as reported in the aforementioned *Faculty Newsletter* article by Professor Bras in 2004, that it is the faculty as a whole who should provide nominations for Standing Committees and for the Chair of the Faculty position.

Pending the implementation of such proposals, the Nominations Committee already has the license to find and nominate candidates for Officers of the Faculty based on their qualifications, prior service, preferences, and so on. The Committee must be careful not to fill the Officers of the Faculty positions as stepping-stones to positions into the upper administration.

In one recent case, the Chair of the Faculty resigned in the middle of her term to become Associate Provost, leaving the small group of three faculty officers gutted. The Committee on Nominations appointed her replacement as Chair of the Faculty, following the *Rules and Regulations of the Faculty*, without going through any semblance of an election. This appointment, in turn, gave the selected faculty member two simultaneous and conflicting roles over several critical months: Chair of the Faculty and chair of a major tenure grievance committee. The grievance in question implicated the academic unit of the then-chair of the Nominations Committee. An open election of the Chair of the Faculty at that time may have uncovered these issues, which affected both faculty governance

and the handling of the drawn-out grievance case.

So, for many reasons, there is an extra need for the nomination of the Chair of the Faculty to be protected as much as possible from direct or indirect influence from the administration.

Here is yet another instance of undue influence by the administration on the Committee on Nominations. The Office of the President has pushed the view, as established practice, that the nominees for Associate Chair and Secretary of the Faculty, though submitted by the Committee on Nominations, are to be handpicked by the Chair of the Faculty, rather than independently chosen by the Nominations Committee. This view is not supported by the procedure and authority outlined in *Rules and Regulations of the Faculty*.

There's more, still related to this year's nomination cycle: In January, the Nominations Committee moved to make our selection procedures more sensitive to the interests of a diverse and complex faculty, and to give the nomination process more legitimacy – through more transparency and more fairness. We stopped this effort, however, after the chair of the Nominations Committee consulted with the Office of the President, with other members of the administration, and with past chairs of the Committee on Nominations. We were planning to solicit

input from the faculty-at-large about candidates for the Chair of the Faculty, but were told that such a "change of procedure" did not conform with "established practice" and would require prior discussion at an Institute-wide faculty meeting. In my opinion, such input from these and other undisclosed sources undermined the independence and the integrity of the nomination process. Besides, such a directive finds no basis in *Rules and Regulations of the Faculty*.

As far as I can tell, when the first faculty committee-preference questionnaire was introduced in the late 1950s, it was not previously discussed at any faculty meeting. After the Committee on Nominations discussed the advantages and disadvantages of such a questionnaire, it enthusiastically approved the procedure as one way to ensure wider faculty participation in governance. It was within the mandate of the Committee on Nominations, in accordance with *Rules and Regulations of the Faculty*, to mold the nomination process to achieve its goal of maximizing faculty input into the choice of nominees.

Half a century later, our main source of input from the faculty regarding the nomination process still comes from a preference questionnaire that is basically an outdated form seeking self-nominations for the Standing Faculty Com-

mittees. This questionnaire only provides loose guidance to the nomination process. There regularly are cases of faculty who are not offered the nominations they prefer, as well as cases of faculty who are offered nominations for which they didn't state any preference. As for the Officers of the Faculty, there currently is no established mechanism whatsoever for broader and systematic faculty input with respect to determining candidates for these positions. Yet these positions are of utmost importance for representing the faculty in issues that are central to Institute business.

One piece of good news is that the Committee on Nominations now seems committed to seriously examining the issues raised in this article, to learning more about the history of governance at MIT, and to improving the nomination and election process, including the mechanisms whereby the Nominations Committee is appointed and structured within MIT's overall governance system. In a related vein, the proposal of a Faculty Senate in the previous *Faculty Newsletter* deserves ample consideration as one way to help increase the transparency and integrity of our entire system of governance. ■

Michel DeGraff is an Associate Professor of Linguistics *(degraff@mit.edu).*

Provost Announces Faculty Renewal Program

Editor's Note: As we went to press, Provost L. Rafael Reif announced in an e-mail to all faculty the initiation of a Faculty Renewal Program. We excerpt from that e-mail below.

I AM PLEASED TO ANNOUNCE that the Executive Committee of the Corporation has approved the establishment of a Faculty Renewal Program at MIT. Participation in the program is completely voluntary and enables eligible senior faculty members to retire with a choice of retirement incentives.

Below are key facts about the program:

Eligibility
Tenured faculty who are age 68 and above by June 30, 2008 and have accumulated at least 10 years of MIT service at the time that they retire will be eligible to participate in the program.

Incentives
Eligible faculty may choose one of the following two options:

1. A financial incentive upon retire-

ment equivalent in value to one academic year salary.

2. Release from regular classroom teaching responsibilities (but with normal research, advising, and administrative obligations) during the final year leading to retirement, while continuing to receive full pay and benefits.

A detailed description of the plan will be mailed to eligible faculty and be posted on the Faculty Renewal Website: *web.mit.edu/facultyrenewal/.* ■

Initiative on Faculty Race and Diversity: Research Team and Effort Launched

Paula Hammond

THE INITIATIVE ON FACULTY RACE and Diversity has been very active over the past academic year. This effort seeks to investigate the experiences of minority faculty at MIT and identify issues inherent to MIT and to the academic community that impact faculty recruitment, development, and retention. It will generate a set of recommendations that address core issues dealing with equity and diversity amongst the faculty. This process will take place in stages, beginning with a planning stage, followed by an extensive qualitative and quantitative study of minority faculty in all five Schools, the development of recommendations and solutions, and the implementation of those recommendations.

After creating the initial general outline last summer for the major undertaking of the research, the fall term was spent addressing the details of the study. Discussions of the Initiative's efforts took place at an Institute faculty meeting and at several Minority Faculty Caucus meetings during this time, including discussion of the means and methods used to understand the minority faculty experience at MIT. An Advisory Board was selected consisting of a diverse group of professionals with a broad range of experiences in the management of diversity issues in academia, industry, and the public sector. The Board includes those who have conducted similar studies at other universities, prominent social and physical scientists and engineers with direct experience with these issues, and those with business experience who can help to inform on matters that have been of similar concern in industry.

A number of Board members have MIT backgrounds as alumni of the Institute, including two current Corporation members who will help to bring the issues and discussion brought out by the Initiative to the Corporation. On the other hand, several members have had no direct experience with MIT, and bring new perspectives from state and private universities and organizations in different regions of the country. This Board acts as an independent advisory body that both interacts directly with the Initiative team and is also able to communicate concerns or address issues directly with the Provost and President. The Advisory Board provides critical advice and insights to the Initiative team with regard to both the study and large-scale efforts of the Initiative.

Questions were developed, discussed, and added to the 2008 Faculty Quality of Life Survey that was administered to the general faculty in January through February. The survey response rate was high – 69% – and the response rate for African American and Hispanic faculty was high as well, at 80% and 61%, respectively. The Initiative research team is currently analyzing the results of the survey, which will be a critical component of the Initiative's study.

A full research team has been assembled to address the quantitative and qualitative research. The team includes research analyst Dr. Mandy Smith, and two newly hired research fellows, Dr. Siomara Valladares and Dr. Carol Wright. Dr. Valladares and Dr. Wright have come to MIT after an extensive search process, to execute the qualitative aspects of the research effort. These two researchers bring past interview and qualitative research experience in the area of diversity and education at both public and private institutions. Biographies of each of the members of the research team can be found on the Initiative Website, *web.mit.edu/raceinitiative*. The research team has created the protocols necessary for in-depth interviews, and is currently undertaking the first pilots. Interviews of minority faculty will take place during the summer and fall terms.

Five minority faculty forums were held from February through April, with the fifth added to accommodate faculty who had expressed interest, but were unable to attend on the other dates. These discussions were very fruitful and illuminating, helping to pinpoint key thematic points among junior and senior faculty, as well as formulating ideas on how to approach some of the barriers in the recruitment and retention of minority faculty. Notes from these forums are being compiled by the Initiative, and will be used to emphasize important areas to address in the recommendations and solutions phase of the study. Some of the ideas will be shared and discussed with the Associate Provosts for Faculty Equity, as well as deans and other administrators, as the Initiative prepares to examine the results from the study and seek solutions that can be implemented most readily. During this process, input will also be sought from the MIT community in faculty meetings, as well as from other caucus groups and administrators on campus during the upcoming academic year.

We welcome comments on any and all aspects of the Initiative. ■

Paula Hammond is a Professor of Chemical Engineering and Chair of the Initiative on Faculty Race and Diversity *(hammond@mit.edu).*

MIT Poetry

by David Thorburn

THE MAN I KILLED

was in his early 30s, rosaceous,
pocky, the Checker
on a Newark pier. He said

*I'll be respected
by New Jersey turds
like you reporters*

*and these Hoboken wankers
still wearing bog shit.
Don't you get it?*

I said No pictures.
Later, off the wharf
the camera guy

used a telephoto lens
as I pointed, for my byline story,
Wildcat Strikers

Shut Port Newark.
The next week they found him
floating near a buoy

dead in Bayonne harbor
in a mess of bootleg whiskey
and my story in the paper.

LISE

Seeing the MGM lion roar
Lise complains she's seen this show before.

My father-in-law's live-in caretaker,
Haitian, *tout douleur*,

She knows Seventh Day Adventist lore
The perfidy of men, how to cure

Oppressive itching. Her
Cooking doesn't please him any more

But he likes her lilting French, her hair
And gentle hands, her living soapy spoor.

Creating a Culture of Communication: Assessing the Implementation of the Undergraduate Communication Requirement

Samuel Allen
Tania Baker

AT THE END OF MARCH, the Subcommittee on the Communication Requirement (SOCR) began to present the findings and recommendations from the assessment of the implementation of the undergraduate Communication Requirement (CR). In the May/June 2006 issue of the *Faculty Newsletter*, the current SOCR chair, Suzanne Flynn, announced the launch of Phase One of the assessment. The assessment study is now complete, and a full final report will be posted to the Communication Requirement Website in May (*web.mit.edu/commreq*).

SOCR was charged by the faculty with assessing the implementation of the CR. This assessment study, launched in fall 2005, was not designed or intended to measure student communication skills per se, but rather the implementation of the new CR. The assessment also sought to obtain information about the experience of the communication-intensive (CI) classes from both faculty and students.

Three survey instruments designed by MIT's Teaching and Learning Laboratory (TLL) were used to collect data: the Communication Requirement Experience Survey or CRES (administered to all MIT undergraduates in December 2006); a senior survey (administered to the Class of 2006 in May 2006); and a faculty survey (administered in May 2006). The report also draws on data gathered from individual interviews and moderated roundtable discussions. TLL and MIT's Office of the Provost/Institutional Research performed the data analysis. Preparation of the assessment report was a collaborative effort between staff in TLL (report body)

and members of SOCR (discussion and recommendations).

Beginning with the Class of 2005, the new CR replaced a narrower writing requirement that asked students to demonstrate competency in writing at two levels. Under the current CR, all MIT undergraduates must fulfill a Communication Requirement (CR) by completing a program of four CI subjects that integrate substantial instruction and practice in writing and oral communication. Two of the required CI subjects are chosen from a group of designated humanities, arts, and social sciences subjects (CI-Hs) and provide students with generally useful skills in expository writing and speaking in the context of the subject's focus. The other two required CI subjects are taken in the students' major departments (CI-M subjects) and prepare them for effective communication in their discipline. As a consequence of this structure, a wide spectrum of communication-intensive subjects is offered in 34 majors across all five Schools throughout the Institute. Currently, there are approximately 121 CI-H subjects and 134 CI-M subjects encompassing a number of formats, including laboratory classes, seminars, senior theses, and independent research projects.

The assessment found that MIT students and faculty place a high value on communication skills and expertise, and students recognize their CR experiences as contributing to the development of these skills. Students and faculty generally agree that the four CI-subject structure of the CR is satisfactory. Furthermore, faculty are supportive of incorporating commu-

nication instruction and practice as part of their CI-M subjects. Faculty and students expressed little concern that this instruction is included at the expense of discipline-specific content. Students report that disciplinary content and communication experiences are generally well integrated in their CI-M subjects. They also report that CI activities facilitate learning in the disciplines, and seniors particularly value their CI-M experiences. The one caveat to these reassuring findings is that some students find that the CR unduly constrains their choice of subjects.

We found that MIT students clearly perceive a benefit to their instruction in communication skills. More than two-thirds of seniors reported in the senior survey that their communication skills improved over their four years at MIT. Within the CR, students placed the highest value on writing instruction in the CI-Hs and on instruction on oral presentations in the CI-Ms. Within these findings we were surprised to find that the students who enter MIT with weaker writing skills and who were required to take a CI-HW (CI-H subjects with particular emphasis on writing) retained "writing process" habits and continued to value peer and instructor and/or tutor feedback on written work as they proceeded through their undergraduate years. This finding merits further study by SOCR.

There is a broad range of instructional support across the CI subjects, e.g., writing instructors from Writing Across the Curriculum, departmental or School-based specialists, and CI-H Writing Tutors. In all, 29 percent of CI-H subjects and 50 percent of CI-M subjects receive

additional instructional support. More than 70 percent of the faculty respondents agreed that using instructors and tutors is an effective way to improve student writing. However, students and faculty reported different levels of satisfaction with these collaborative teaching efforts. Faculty who reported high satisfaction also reported being well matched with an instructor or tutor. In contrast, no single issue emerged in the responses from faculty who were less satisfied. It is important to note that SOCR and TLL did not survey this cohort of teaching staff for the current report. SOCR plans to study teaching collaborations between faculty and other teaching staff to identify what models promote effective collaboration.

The findings from the assessment present SOCR and the Institute with challenges and opportunities for the CR in the

next phase of its development. As a result of this assessment, SOCR would like to emphasize the importance of these recommendations:

• Maintain the paced, four-subject structure of the CR.

• Move toward criteria for designation of CI subjects that focus more on educational objectives and may allow faculty more flexibility in designing CI subjects and integrating CI content.

• Inventory best practices for teaching communication skills and share this information with CI instructors and the MIT community.

The 1995 Report of the CUP Subcommittee on the Writing Require-

ment indicated that, "[t]he present culture at MIT does not encourage attention to communication skills." The CR assessment documents significant improvements in the culture of communication here at MIT. We are pleased to recommend that the key components of the existing CR be retained and that areas identified for improvement be addressed. With this strong foundation in place and this assessment as a benchmark and guide, SOCR and the MIT community should work to continue to improve the CR experience, faculty support, and student learning. ■

Samuel Allen is a Professor in the Department of Materials Science and Engineering *(smallen@mit.edu);*
Tania Baker is a Professor in the Department of Biology *(tabaker@mit.edu).*

M.I.T. Numbers
from the 2008 Faculty Survey

Satisfaction with . . .

It's About Time
Snover, from page 1

'Drinking from a fire hose' is a nice phrase, but I don't think anyone actually does drink from a fire hose."

• "Pace is too high (and this is coming from someone that likes a fast pace) resulting in too little time to reflect and think deeply about problems."

In early 2008, MIT faculty and other instructional staff were invited to respond to this survey which asked about a broad range of issues including workload, work and personal stressors, pedagogy, work

climate – especially within academic units – mentoring, and the tenure and promotion process. A majority of MIT faculty (69%) responded to the survey.

The survey incorporated a core set of questions that are also being used in similar surveys at other research universities including Harvard, Yale, Northwestern University, Washington University in St. Louis, and Boston University. Comparative data will be available in the near future, and MIT faculty responses will also be compared with results from a similar survey administered in 2004.

Overall results reveal that MIT faculty are quite satisfied with their life at the

Institute, as they are with their home lives as well. The problem arises when they try to integrate their work and personal lives (see chart, p.23).

A key element of the survey were a set of questions about tenure and promotion. As can be seen from the charts below, there are sometimes significant differences between faculty perceptions of items valued in the tenure process and what they feel about the appropriateness of the value placed.

Additional results are available at *web.mit.edu /ir/surveys/ faculty2008.html* ■

Lydia Snover is Director of Institutional Research *(lsnover@mit.edu).*

Extent Items are Valued in Tenure Process
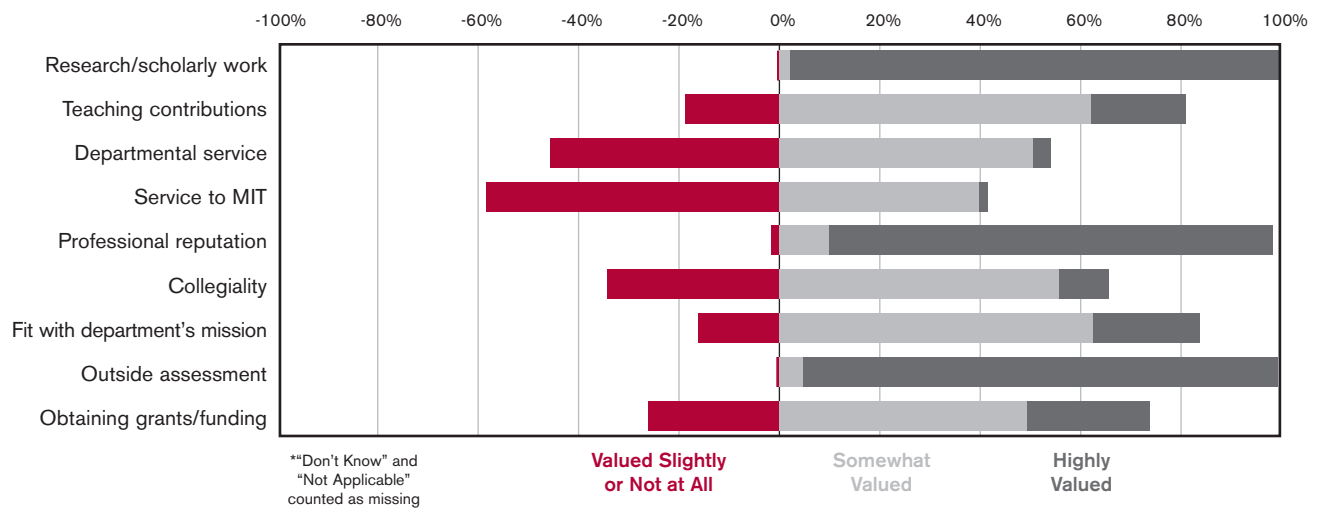
Appropriateness of Value in Tenure Process

The Vision Thing

Alison Alden

The Vice President for Human Resources offers some thoughts about the Institute now and in the future
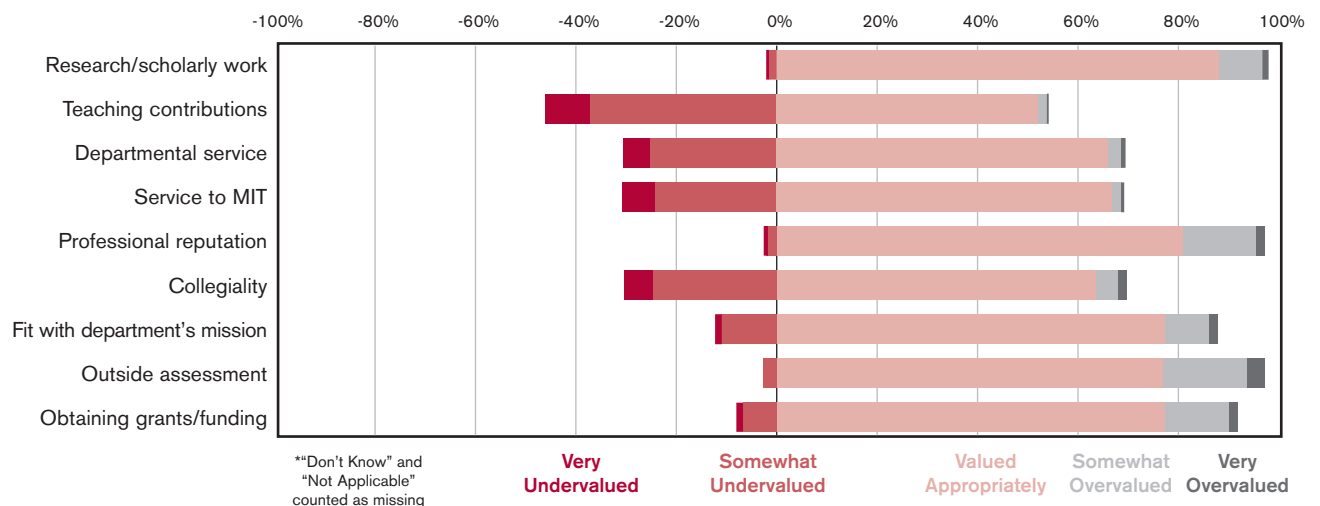
I HAVE BEEN AT MIT a full year now, enough time to experience and appreciate the full depth of your, the faculty's, commitment to MIT's world-class teaching and research. You may wonder, what is the link between that and the head of Human Resources? In my view, we all live in the MIT work space. If our employees – who are crucial to keeping the wheels moving in your departments – are trained, engaged, and valued, we all benefit and MIT's mission can be further attained. My vision is to have a world-class work community that parallels and supports the larger MIT mission.

Today, our work community has many strengths, but there are always opportunities for improvement. Diversity among the faculty ranks continues to be a challenge. Having the resources to attract junior faculty remains a key goal. Providing support for faculty who transition to administrative roles is another area that needs more attention. Retaining excellent administrative and support staff is critical. Providing support in your role as managers could make your life easier.

With a year under my belt, I will continue to reach out to broad groups across the campus, the better to understand their needs. HR has progressed beyond the "personnel office" to a group that is building relationships with faculty, deans, department heads, and assistant deans. Our focus is on improving service, solving problems through strategic program development and consulting, and responding to community feedback. I am happy to share some of these tangible efforts.

We have enhanced our benefits program based on feedback from faculty and staff. In line with maintaining our family-friendly structure, a new Adoption Assistance Program is now available at MIT. We are also beginning to look at ways to extend our childcare benefits, another issue important to faculty. Last January, we addressed rising health care costs by offering new coverage tiers, and we are currently exploring a lower-cost health plan for 2009. We are also investigating homeowner and car insurance to be offered at bulk premium rates. Finally, we have increased our benefits communication so you receive the information in a timely manner, through multiple means. Our goal is to facilitate your decision-making so you can move quickly to your work at hand.

Going beyond benefits, we are focusing on remaining competitive for faculty and staff salaries. To do this, we periodically review market data to help us both retain and attract the top talent.

Another issue HR is tackling is filling jobs quickly, with the highest quality candidates. By better coordinating candidate information among different areas, we have reduced the number of open positions and placed staff more promptly. We

are increasingly collaborating with faculty in the hunt for executive directors, administrative officers, and program coordina-

> Diversity among the faculty ranks continues to be a challenge. Having the resources to attract junior faculty remains a key goal.

tors. We have also focused on hiring administrative assistants in the DLCs – another position pivotal to a smooth running workplace. By pre-qualifying candidates, the number of open jobs is down by 50 percent.

Lastly, as you know, administrative officers (AOs) are invaluable in supporting your research. To show our commitment to their professional development, we have piloted an AO Users Group. The AO Development Program, which will begin next fall, has evolved from this pilot program. The Program will target support and administrative staff who are interested in becoming an AO – with the goal of building our AO pipeline and thereby strengthening departments across the Institute.

I look forward to discussing how we are building a vibrant and diverse work community in upcoming issues of the *Faculty Newsletter*. In the interim, feel free to e-mail me with any questions or comments. ■

Alison Alden is Vice President for Human Resources (*aalden@mit.edu*).

letters

To The Faculty Newsletter:

I READ WITH INTEREST Professor Jonathan King's article on the Spellings Commission and the issue of standardized testing (*MIT Faculty Newsletter*, March/April 2008). I've been following the Spellings Commission – and the fallout – closely as one of the main functions of the Teaching and Learning Laboratory is to help faculty assess the effectiveness of their pedagogical and curricular innovations (without the use of standardized tests, however). My sense is that Secretary Spellings has backed off from the concept of standardized tests. For example, the *Chronicle of Higher Education* (2/1/08) quoted her in a speech to the National Press Club in December as saying, "All colleges should be allowed to describe their own unique missions" and be judged against that. She went on to say, "That is totally within the jurisdiction of each institution."

Dean Daniel Hastings, along with and other staff members in the Dean for Undergraduate Education's office and the Office of Institutional Research, has been involved in the assessment issue both as it affects MIT and nationally. For example, Dean Hastings was MIT's representative to a task force of the National Association of Land Grant Universities and Colleges (NASLGUC), which created the Voluntary System of Accountability (VSA). A university that agrees to abide by the VSA, among other things, is required to administer one of three standardized tests. We advised Dean Hastings not to agree to the VSA because of the requirement to use a standardized test. In addition, Dean Hastings is the chair of a Consortium on Financing in Higher Education (COFHE) working group that is writing a white paper on assessment.

With that said, we have agreed to participate in an experiment to administer the Collegiate Learning Assessment (CLA) to a small number of our students as part of a FIPSE (Fund for the Improvement of Post Secondary Education) research project to see what data the CLA generates. We have also consented to pilot two new instruments being developed by the National Academy of Engineering (NAE) that are similar to the National Survey of Student Engagement, but specifically for engineering students. (The NAE would also like us to pilot a faculty version.) However, we will not agree to any content-based standardized tests for the reasons Professor King mentions in his article.

I hope this provides the readers of the *Faculty Newsletter* with additional information on the issue of standardized testing and assessment.

Lori Breslow
Director, Teaching and Learning Laboratory

Lerman Now Dean for Graduate Education

PROF. STEVE LERMAN has had a change of title. As of March 31, 2008, the Dean for Graduate Students (Prof. Lerman) is the Dean for Graduate Education. The office reporting to the Dean is now known as the Office of the Dean for Graduate Education, or DGE, formerly known as the Graduate Students Office, or GSO.

According to Provost Phil Clay, these new titles do not signal any change in the breadth of involvement of the office nor in its goals. Rather, the changes are consonant with titles in sister institutions and parallel those for the Dean for Undergraduate Education and the Office of the Dean for Undergraduate Education (DUE) here at MIT.

letters

Who Should Be Allowed to Speak at Faculty Meetings?

To The Faculty Newsletter:

I AM WRITING TO COMMENT on the amendment to the motion presented at the April faculty meeting that would allow speaking privileges to professors emeriti. In reviewing the proposed amendment I wondered why this opportunity is only being granted to Professors Emeriti faculty and not expanded to others such as Adjunct, Senior Lecturers, or Professors of Practice.

I was informed by colleagues that one reason for not granting speaking opportunities was concern that in broadening the definition of who can speak there is a risk of having others ask for the same privilege and leaving the faculty without a reasonable framework for deciding who should or should not be granted speaking privileges.

I believe there is another way to look at this issue. For me the primary question is as follows: Why would any group think its best interest is served by limiting which members can provide the group with information and knowledge?

During my eight years at MIT I have noticed an increased emphasis on behalf of the Institute to teach students the importance of inclusion and the necessity of listening to and learning from those who hold different experiences, world-views, and ideologies. How then can we justify a policy that says that the same members of the faculty who are entrusted with providing for the education of students and the advancement of knowledge should not be allowed to voice their experience at faculty meetings just because they are not part of the "regular" faculty?

There is nothing in the passage from adjunct or part-time to associate of full professor with tenure that alone makes one wiser. Nor does it make one the sole holder of information or knowledge that should inform the rules that the faculty of this institution follow in fulfilling their responsibilities in research, education, and service. Quite the contrary. The collective body of faculty at MIT has an extensive range of experiences that is relevant in defining policy in the Institute and needs to be seen as such. By enabling any rule that silences any part of our collective knowledge we are limiting ourselves and turning our backs on our most precious value: knowledge.

> For me the primary question is as follows: Why would any group think its best interest is served by limiting which members can provide the group with information and knowledge?

Currently, I am on partial leave from MIT running an organization called Dropping Knowledge. The goal of the organization is to support free and open exchange of knowledge especially among those whose voices are often neglected or purposefully silenced. The premise in our work is that the world improves because people are able to raise their voices and name their experiences in the world and to ask questions as to why something is so. I think this is an apt perspective for us to consider. Just as we lead in research and teaching innovation, we can also effect change in how decisions are made. We can believe that an open exchange of ideas and full engagement with each other is necessary for us to discern the best road to travel.

Towards that end I wish to offer a friendly amendment to extending speaking privileges to Professors Emeriti. It would read as follows:

"That all individuals who are entrusted with the privilege and honor to engage in the education of students also be granted speaking privileges at faculty meetings regardless of rank or duration of service."

Should the same privileges be expanded to include voting? I don't know, but when we open the floor to all faculty we will have to discuss who and what representative structure makes discussions and sets rule on behalf of the entire faculty.

I hope that in this case we can make new history for MIT and connect ourselves to the global history of the struggle for voice and inclusion.

Ceasar L. McDowell
Professor of the Practice of Community Development
Department of Urban Studies and Planning

M.I.T. Numbers
from the 2008 Faculty Survey

Sources of Stress Over Past 12 Months
(sorted in descending order by % Extensive)

Extensive

Somewhat

Not at all

* "Not Applicable"
counted as missing

Categories (left to right):
- Secure funding for research
- Scholarly productivity
- Lack of time to think and reflect
- Lack of time for non-work activities
- Managing a research group or grant (e.g., finances, personnel)
- Committee and/or administrative responsibilities
- Review/promotion process
- Departmental or campus politics
- Childcare
- Teaching responsibilities
- Managing household responsibilities
- Inability to pursue outside interests or avocations
- Cost of living
- Care of someone who is ill, disabled, aging, and/or in need of special services
- Advising responsibilities
- Timing of departmental meetings and functions
- Bias/discrimination/unfairness in procedures
- Your health