

MIT Faculty Newsletter

<http://web.mit.edu/fnl>

this issue features an editorial on “MIT and the Nation After 9/11” (page 3); the introduction of a new feature, “MIT Profiles” featuring Roe Smith (page 8); the story of a whistle-blower by Dave Wilson (page 12); and a piece on a photo-journal available on the Newsletter Website “Vietnam and Cambodia: Three Decades Later” by Jay Keyser (page 19).



Medical Task Force Releases Final Report

AFTER MORE THAN A year of work, the Task Force on Medical Care for the MIT Community released its final report in early November. The Task Force examined all aspects of medical care, medical insurance, and related educational and community support programs available to MIT students, employees, retirees, and post-docs through the MIT Medical Department, as well as through outside health insurance programs administered by Blue Cross/Blue Shield, Tufts Health Plan, and Delta Dental.

The Task Force concluded that the existing MIT model for providing health care and health insurance has performed well historically, that the MIT community is generally highly satisfied with it (see back page), and that it can continue to serve MIT well in the future if various reforms are implemented. The final

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The New MIT Museum: A Vision for the Future

John Durant

WHY DOES MIT HAVE a museum? What is it for? What is its mission? What audiences does it serve? And how should it go about serving them?

These are the sorts of questions I’ve been asking myself since I arrived as director of the MIT Museum in July 2005. With the help of a lot of other people – colleagues in the Museum, faculty across the Institute, and Advisory Board members – I’ve recently arrived at some clear answers to these questions; and in this short article, I’d like to share these answers with you and invite your support for the new MIT Museum we’re setting out to create.

First, the big picture. Today, the United States confronts critically important issues relating to the place of science and technology in national life. International challenges – for example in relation to

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From The Faculty Chair Scientific Integrity

Lorna J. Gibson

ACADEMIC INTEGRITY IS A core value of scientific research and of MIT. As faculty, we recognize that nothing is more essential than integrity in our educational, research, and service endeavors. More than a code of behavior, integrity imbues every fiber of the fabric of our community with the strength to keep our enterprise whole. It is therefore particularly painful to us as individuals and as a community when that integrity is challenged or violated. We must do all we can to make sure that our colleagues understand and share this core value, and honor those who embody it.

It is important for faculty to be aware of the Institute’s policies and procedures in handling matters of academic misconduct. Here, I summarize MIT Policies and Procedures 10.1 *Procedures for Dealing with Academic Misconduct in Research*

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Photo credits: Pages 1 and 19, Nancy Kelly; Pages 16 and 17, Beryl Rosenthal

Editorial

MIT and the Nation After 9/11

THE EVENTS OF 9/11 and their aftermath have influenced every aspect of American society. Government policies in response to these events have particular impact on institutions such as MIT, with its national and international roles in science, technology, and society. These policies have an impact on our teaching practices, our graduate programs, our professional lives, and our behavior as citizens. We need both to examine closely the consequences of post 9/11 policies on our students, faculty, and staff, and also to make our contribution to the broader national dialogue.

In the coming year, the *Faculty Newsletter* Editorial Board hopes to launch a broad discussion of these issues, focusing on specific examples of emerging dangerous trends or possibilities embedded in the relations between the academy and the government. We invite you to contribute articles, letters, and commentaries on these questions.

Some initial areas of concern are:

- Graduate programs. Is the harvest of graduate students in various departments different from the recent past in terms of nationality, ability to pay, country of origin? Have stringent post-9/11 immigration regulations affected the body of graduate students in MIT's programs? Might they?

- Professional interchange and communication. Have the Patriot Act and related legislation and regulations negatively affected scholarly conferences and meetings, as much anecdotal testimony from MIT professors suggests?

- Privacy and Security. Have government demands for access to MIT records violated legally protected rights to privacy?

What regulations are in place within MIT for answering this sort of question?

- "Deemed exports." Can our foreign students using our teaching or research for evil ends endanger us legally?

- Academic institutions have traditionally worked on the basis of trust. Students have accepted that faculty advisors have offered advice and discussed issues always with the benefit and improvement of the student in mind. Is that trust threatened through the creation of a legalistic environment due to new security concerns? If so, doesn't that threaten the very foundation of the university?

- Are we witnessing the remilitarization of basic research, for example in the shift of funds from biomedical research to bioterrorism?

- What are the effects on our students and staff of the replacement of national policies of diplomacy, negotiation, and development assistance, with policies of military aggression, confrontation, and abrogation of international agreements?

In the coming issues we hope faculty will speak to these questions with depth and candor.

Retirement: The Other Side of the Coin

RECENT ISSUES OF THE *Faculty Newsletter* have included articles on faculty retirement. These articles have raised some very important and serious issues, such as: financial arrangements, medical benefits, and accommodations that the Institute offers for post-retirement, in terms of office space, parking, and secretarial support. Although these are rather impor-

tant issues, the discussion is always one-sided, namely: What the Institute is doing or has to do to make life rather comfortable for faculty after retirement. The other side, which has so far been ignored, is what the retirees can do for MIT.

Many retirees have several remaining years with a great deal of potential professional contribution. There is also a substantial amount of knowledge, know-how, and experience that most would be willing to share with MIT for a good cause. It is unfortunate that the Institute has not systematically developed a strategy on how to exploit this tremendous reservoir of knowledge in an effective way. We believe the *Faculty Newsletter* is the proper medium to explore these various opportunities available to MIT.

One potential area could be in MIT's international involvement. There is substantial need in the Third World for such knowledge, know-how, and experience such as MIT faculty have to offer. The extensive development of information technology and the medium of the World Wide Web have reduced the need for physical travel, affording an even greater opportunity for MIT to provide access to this vast reservoir of knowledge for Third World university faculty or students. The mechanics would need to be worked out, but there are many international agencies, global enterprises, and philanthropic organizations that could provide financial support for such undertakings.

We encourage submissions of other ideas for the utilization of the wisdom and experience contained within our retiring faculty.

Editorial Sub-Committee

Scientific Integrity

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and Scholarship (available at web.mit.edu/policies/). Confidential advice about a particular situation can be sought from the MIT Ombuds Office (x3-5921) or from senior academic officers.

Recently, questions of scientific misconduct at MIT have received media attention. In one case, an MIT faculty member admitted fabricating and falsifying research data.

Once an allegation of possible academic misconduct is reported, the Vice President for Research appoints either a fact-finding individual or committee to conduct an inquiry to determine if an investigation is warranted. The inquiry produces a written report, submitted to the Vice President for Research, summarizing the process, the information reviewed, and the conclusions. The VP for Research then recommends to the Provost whether or not an *investigation* should be initiated. If the Provost concludes that an investigation is warranted, he or she directs the VP for Research to appoint an individual or committee to perform an investigation. The investigation submits a written report to the VP for Research who then delivers the report to the Provost along with a recommendation for disciplinary action. The Provost then *adjudicates* the case, imposing any disciplinary actions that are warranted. MIT's three-step process of inquiry, investigation, and adjudication mirrors that of the federal government for cases of research misconduct (see, for example, The Office of Science and Technology Policy, www.ostp.gov/html/001207_3.html, or The Office of Research Integrity of the Department of Health and Human Services, ori.dhhs.gov/).

Inquiries, investigations, and subsequent proceedings are to be conducted

promptly and in confidence. Confidentiality in the review process is important, both to protect the reputations of all parties involved during the inquiry and investigation, as well as to minimize interference with the review itself.

Recently, questions of scientific misconduct at MIT have received media attention. In one case, an MIT faculty member admitted fabricating and falsifying research data. The investigation determined that no one else in his research group was involved in the misconduct or was aware of it when it occurred. MIT made a public statement in this case to emphasize this finding. The courage of those who came forward with the allegation of misconduct in this case contributed to upholding our values of integrity and is to be applauded.

In the other case, of an allegation against two scientists at Lincoln Laboratory, the initial inquiry report was submitted to the Provost at the end of 2002. This report concluded that an investigation was warranted and posed a number of questions for the investigation. As required by federal guidelines, MIT then informed the Missile Defense Agency (MDA) that it intended to start an investigation of the case. In April 2003, MIT was informed by the MDA that the inquiry report contained classified information and that the proposed outside investigators would not be granted access to it or to other relevant classified documents. The MIT administration is moving on two tracks in this matter, as President Hockfield described in her letter to the community in September. As part of this

process, President Hockfield has sought advice several times over the last six months from a faculty group comprising an extended version of the Research Policy Committee (Professors Suzanne Berger, Claude Canizares, Alice Gast, Lorna Gibson, Dan Hastings, June Matthews, Martin Schmidt, Jeffrey Shapiro, and Sheila Widnall).

The first track involves ongoing discussions by President Hockfield and others with several high government officials to identify a mutually satisfactory process for an investigation. As this matter is still ongoing, any future investigation should maintain as much confidentiality as possible. On a second track, at the October 19 faculty meeting, President Hockfield announced the formation of an *ad hoc* committee to “(i) identify the factors that have complicated and delayed the satisfactory resolution of the allegation of scientific misconduct by employees at Lincoln Labs, (ii) determine the implications, if any, for how the Institute should conduct itself in the future, and (iii) recommend any changes in policy and/or practice that would help avoid a recurrence.” This review would not address the specific allegation of research misconduct itself. The members of the review committee are: Professor Claude Canizares, Associate Provost, Institute Professor Millie Dresselhaus, Professor David Litster, former Vice President for Research, and Dr. Gerald Dineen, MIT Professor of Electrical Engineering (1971-1981) and former Director of Lincoln Laboratory (1970-1977).

As faculty, we share a strong interest in protecting the research environment in the most open, thoughtful, and inventive form possible. MIT's policies on academic misconduct, which have served the Institute well over many years, seek to maintain the integrity of the academic enterprise while preserving the rights of the accused. ■

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Medical Task Force Report
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report offers over 40 recommendations aimed at improving access to and quality of health care provided by the MIT Medical Department, improving satisfaction with health insurance options, reducing the cost of providing health care and health insurance, and enhancing “wellness” and related health care education initiatives. “We believe that some of these recommendations require urgent attention by the MIT Administration. Others are less urgent but should be part of a comprehensive longer term implementation strategy to ensure that our health care and health insurance policies are compatible with the pursuit of MIT’s primary goals for excellence in education, research, and service to society.”

Created by former president Charles Vest in September 2004, the members of the Task Force included faculty, staff, and students. It was chaired by Professor Paul L. Joskow, Elizabeth and James Killian Professor of Economics and Management. The Task Force was charged to examine all aspects of the costs and quality of medical services and health insurance coverage provided by MIT to its students, employees, retirees, and post-docs, to solicit the views of all segments of the MIT community, to examine alternative models for providing health care, to develop a vision for the future of medical care and medical insurance at MIT, and to make recommendations to realize this vision.

In response to this ambitious charge, the Task Force conducted analyses of the costs of providing medical care and medical insurance through the MIT Medical Department, the costs of care provided through outside insurance options, developed various comparative benchmarks of the quality of MIT’s health insurance benefits programs and their costs, conducted surveys of students, employees, and faculty retirees regarding their satisfaction with the health care and health insurance available to them. Members of the Task Force interviewed physicians and nurses employed by the

Medical Department (present and past). The task force received input from the MIT Medical Management Board and the Medical Consumers’ Advisory Council and received numerous confidential communications from employees, members of their families, and current and former staff of the MIT Medical Department.

“The Task Force recommends that MIT continue to support our longstanding existing basic model for medical insurance and medical care delivery. It has served the community well. It has been damaged somewhat by arbitrary and excessive budget cuts and imperfections in the way they were managed.”

Task Force Recommendations

An important component of the Task Force’s work was the consideration of alternative models for providing health care and health insurance to the MIT community. After careful consideration of the costs and benefits of alternatives and the views of the MIT community, the Task Force came to a unanimous conclusion: “The Task Force recommends that MIT continue to support our longstanding existing basic model for medical insurance and medical care delivery. It has served the community well. It has been damaged somewhat by arbitrary and excessive budget cuts and imperfections in the way they were managed. The focus should be on improving the quality and cost effectiveness of this model and MIT’s ability to put in place more effective financial management and governance arrangements.”

In arriving at this conclusion, the Task Force compared the costs of providing medical care by the MIT Medical Department through the MIT Health Plans to the costs of the Blue Cross/Blue Shield and Tufts Health Plans. Roughly 55% of MIT employees on the Cambridge campus belong to the MIT Health Plan, including nearly 80% of the faculty. The other 45% of MIT employees are enrolled in one of the Blue Cross/Blue Shield plans or the Tufts Health Plan. “The analyses

performed at the request of the Task Force suggest that on a risk-adjusted basis, the care provided by the MIT Medical Department is no more expensive, and may be less expensive, than care provided under the BC/BS and Tufts plans.” Thus, the perception that providing employee care through the MIT Medical Department is

more costly than the alternatives is not consistent with the facts.

The 40 recommendations made by the Task Force to improve the quality and cost effectiveness of the “MIT Model” include:

1. The MIT administration should express its confidence in and strong support of the MIT Medical Department and its goals. Events over the last few years have created uncertainty about MIT’s confidence in the Medical Department and the future of the MIT Health Plans for employees. These uncertainties should be resolved by a definitive support for the central role of the MIT Medical Department in providing health care to the MIT community.

2. There is an urgent need to add resources to the Medical Department’s budget quickly to improve access to care and to provide the time and resources required by caregivers to deliver high quality care. The Task Force did not want to micromanage the delivery of care by the Medical Department but identified several areas where consideration should be given to adding or redeploying some resources. These areas include: internal medicine, dermatology, OB/Gyn, pediatrics, urgent care, clinical staff support, and mental health care provided to employees. The Task Force recommends

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Medical Task Force Report
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that the Medical Department submit a plan to the administration within 60 days, along with a budget and evaluation of how any additional costs will be recovered.

The recommendation to add resources to the Medical Department should not be interpreted as a strategy of “back to the past.” The U.S. health care system is

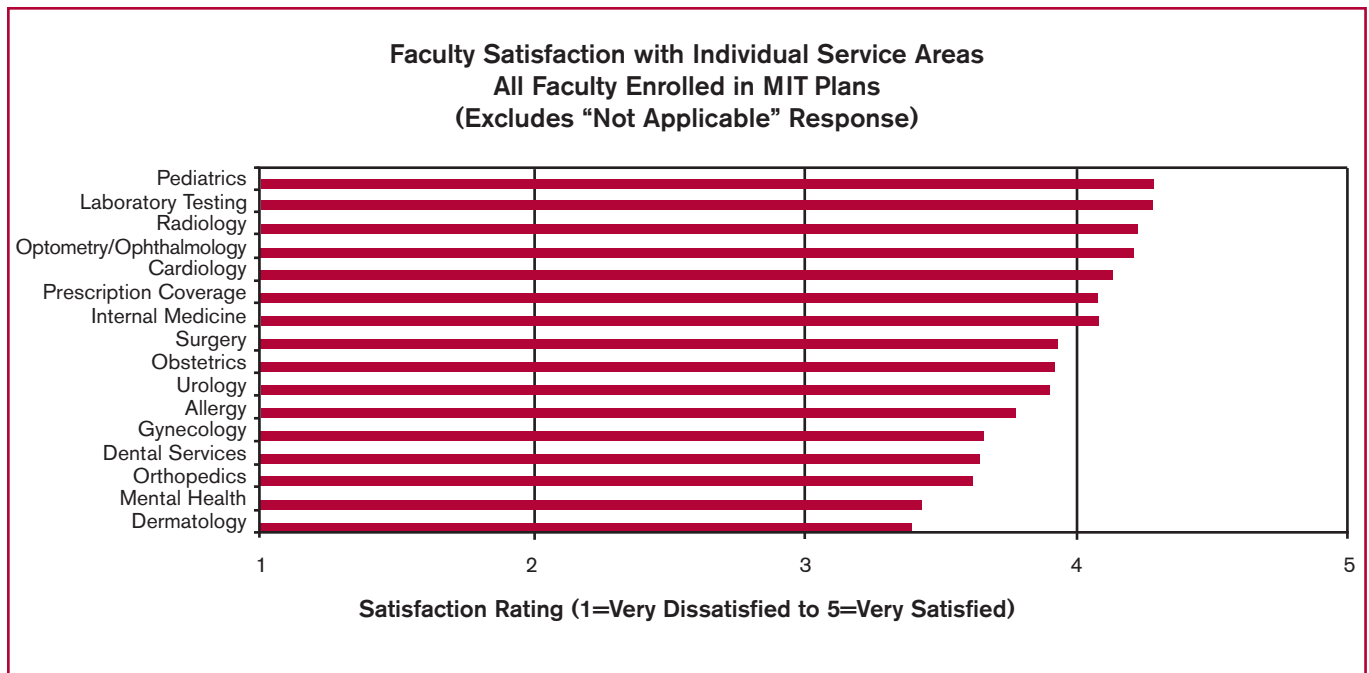
Complementary efforts to improve and integrate the MIT Medical Department’s internal budgeting and financial management systems and improved governance arrangements for the Medical Department are also recommended.

4. Continue efforts to identify and take advantage of opportunities for reducing costs or increasing productivity without reducing the quality of care in the Medical Department. Specific areas discussed in

programs can improve the quality of life of students, employees and retirees and reduce health care costs in the long run.

6. Evaluate whether and how MIT can make more effective use of the resources available in the Boston medical community by developing a closer partnership with one of Boston’s major hospital groups.

7. Improve education about the availability and effective utilization of mental



dynamic and is characterized by rapidly increasing costs. MIT must continue to adapt to these changes and to find ways to improve the cost effectiveness of care provided by the Medical Department as well as care provided through outside insurance plans.

3. Improve central MIT administration’s budgeting and financial management framework for the Medical Department. The Task Force concluded that the budgeting and financial management protocols applied by MIT to the Medical Department have serious deficiencies. The report outlines a new budgeting template for the Medical Department that it recommends the MIT administration use for budgeting and financing management purposes.

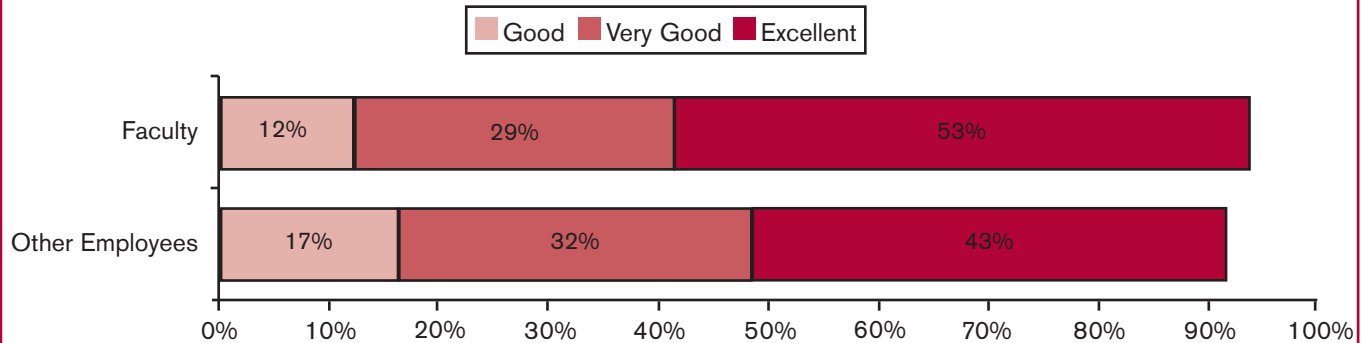
the report include the infirmary, medical laboratory, dental service, pharmacy, and the use of modern information technology. Increased investment in and use of modern information and communication technology in particular can improve the quality, expand access to care and reduce the costs of medical records, facilitate exchanges of medical information within the department and with outside providers, and help assessments of objective measures of the quality of care.

5. Expand the participation of the Medical Department in MIT’s educational, wellness, environmental, health and safety initiatives, and community outreach programs. MIT’s wellness programs are not up to best practice in industry. Good wellness and related educational

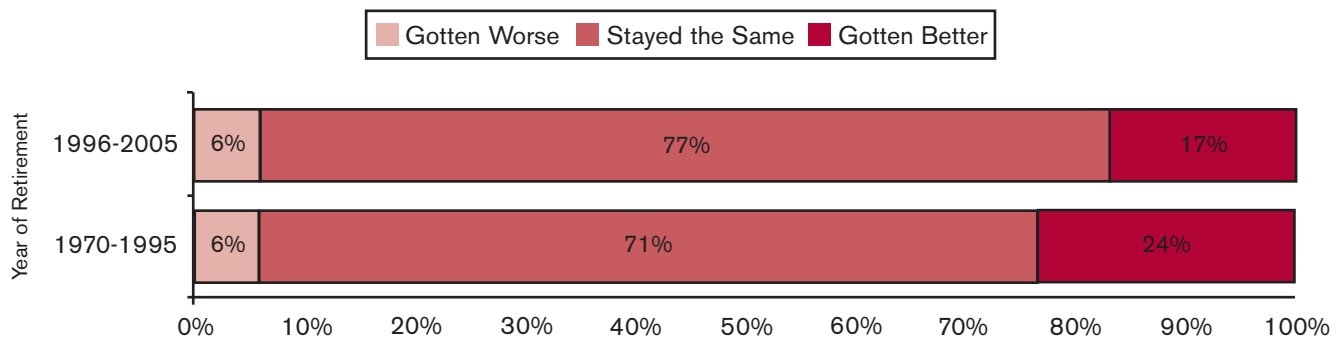
health care services for students and respond to some students’ negative perceptions and concerns about the mental health service. More generally, improve education about student medical benefits, the “smart use” of the MIT Medical Department and the external Boston area health care system for our students.

8. Strengthen MIT’s capabilities to implement its self-insurance strategy for setting insurance premiums and controlling the costs of care provided through the Blue Cross/Blue Shield plans, the Tufts Health Plan, and Medicare supplement plans. MIT spends (before employee contributions) over \$50 million per year on services provided through these plans. The costs of these plans require comparable attention to

**“What is your overall rating of the quality of services provided by your primary care physician?”
(Excludes “Not Applicable” Responses)**



**“How has the quality of care provided by the MIT Medical Department changed since you have retired?”
(Broken down by year of retirement)**



the costs of the Medical Department. More effective management can reduce costs.

9. Phase in changes in the way health insurance premiums are set consistent with the recommendations of the Strategic Review of Benefits Committee. The proposal to reflect improved risk pooling and adjustments for demographic differences across health insurance plans can be implemented as soon as possible. The proposals to create alternatives to traditional family coverage and wage-related premiums were more controversial and would benefit from additional analysis and consultation with the MIT community.

10. Consider offering a high deductible and high co-payment insurance option and a Health Savings Accounts program for employees.

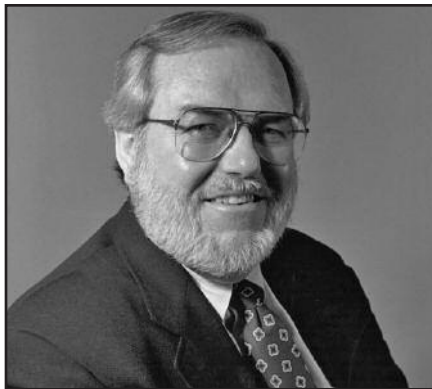
Conclusion

The entire final report of the Task Force on Medical Care for the MIT Community can be found at: web.mit.edu/task-force/medical. As is abundantly clear from both the surveys and many interviews, the availability of high quality and convenient medical care at a reasonable cost is important to all segments of the MIT community. Consistent with the conclusions of the Committee on Faculty Quality of Life (*MIT Faculty Newsletter*, March/April

2005, page 7), it is also clear that the vast majority of the MIT faculty place a high value on the availability of health care at the MIT Medical Department and that reducing the availability and quality of these services would be considered to be a major reduction in the quality of life of Institute faculty members. ■

Preparation of this article included contributions by Prof. Paul Joskow, Mandy Smith, and Janet Snover. Charts used were prepared by members of the Office of the Provost/Institutional Research, from surveys commissioned by the Task Force on Medical Care for the MIT Community. These online surveys were administered by Jag Patel and Jeff Schiller of IS&T.

MIT Profiles Merritt Roe Smith



Merritt Roe Smith is Leverett and William Cutten Professor of the History of Technology. His research focuses on the history of technological innovation and social change. His publications include *Harpers Ferry Armory and the New Technology* (nominated for the Pulitzer Prize in History) and, most recently, *Inventing America: A History of the United States* (co-authored with Pauline Maier, Alex Keyssar, and Daniel Kevles). He is a fellow of the American Academy of Arts and Sciences.

The following interview of Prof. Smith (**MRS**) by the *Faculty Newsletter* (**FNL**) was conducted on November 7, 2005.

FNL: Your new textbook is entitled *Inventing America: A History of the United States*. How did that come about?

MRS: The project started around 1991 when several colleagues in the history of technology and I were invited to visit the Sloan Foundation to discuss what it might do for the field of the history of technology. In the course of making my remarks

about the need for graduate student support, I happened to mention how disappointed I was in general American history textbooks because they gave so little attention to science and technology. I finished my presentation and the conversation moved to other subjects. Then, about two weeks later, I got a call from a program officer at Sloan who told me that if I would like to put together a team of scholars to write the kind of American history textbook I felt was needed, the foundation would be willing to support it. I just about fell off my chair because that was the last thing I was expecting. But that's how the project came about. From there I put together a team that included a technological historian (me), an early American political historian (my MIT colleague Pauline Maier), a historian of science (Daniel Kevles of Yale), and a twentieth-century social/political historian (Alex Keyssar of the Kennedy School at Harvard). We began writing in 1996. It was a long, tedious, and difficult process, but we finished the manuscript in 2001 and saw finished books the following year.

FNL: The book comes with a CD-ROM. How is that used?

MRS: The CD enables the user to project the text onto a computer screen and read it that way. In addition, there are extra visuals and study materials as well as interviews that each of us did at a famous historical site. For example, I went to the National Park at Lowell and did one on the nineteenth-century textile industry

and its implications for the advent of the industrial revolution in America. Pauline did one of Washington's Mount Vernon. They turned out well.

FNL: And was it really a lot of work?

MRS: I'll say so. I could have written two monographs in the time it took to write eight chapters of the textbook. If I had known how much work it was going to entail, I might not have done it. But I'm glad I did.

FNL: I would assume there isn't a huge financial payoff.

MRS: Not huge. American history is taught in virtually every college and university in the country, and as a result there are scores of competing textbooks available. So it's not like you're going to be driving a Ferrari if you author a textbook.

FNL: How widely distributed is it?

MRS: It's done quite well. The last I heard from our editor, it had been adopted at over 200 colleges and universities around the country. One of the really pleasant surprises is that high schools are using it, especially advanced placement classes in American history. The City of San Diego, for example, adopted it for all of its advanced placement classes and it's being used a lot in junior colleges, too.

FNL: How does your textbook differ from other American history texts?

MRS: Basically what we sought to do was to take the traditional American history narrative format and show how the inclusion of science and technology reconfigured that narrative, without making it a history of science or technology text. In other words, this is a general American history textbook that has science and technology integrated into mainstream discussions of politics and society. It doesn't cover everything. We choose our shots and then we discuss their implications. It's our angle of vision, if you will.

We knew we wanted to bring science and technology to bear on American history because we felt that it had been neglected. But once we finished the text, we realized that we were advancing a common theme, viz., how innovative Americans have been as individuals and as a society. And so the title, *Inventing America*, conveys a double meaning: first, the country itself as an invention that keeps getting reinvented; and, second, the multitude of ways in which Americans have been inventive. Science and technology are an important part of this story, but not the only part. The textbook is entering a second edition in January, and we've expanded the innovation theme beyond science and technology to art, literature, music, politics, jurisprudence, and other components of American culture. I believe our approach enriches and deepens not only one's understanding of American history but also America's place in world history. Not all the story is positive, however. History is messy and complex, with bright sides and dark sides.

FNL: I know that some of the local high schools are attempting to integrate history and English classes to emphasize their interrelatedness, so that the kids are studying history while they're reading literature that relates to that history.

MRS: I'm really happy to learn this because it signals to me that teachers are becoming more willing to cross discipli-

nary boundaries and that learning is becoming more integrated. I think that represents the future in secondary and higher education. When I hear Susan Hockfield speak about the need for greater interdisciplinarity at MIT, I sense that her educational vision is for something much broader and interconnected than has existed in the past. I think there is a real opportunity here. MIT led the world in introducing what became known as engineering science. It integrated science and engineering years ago, and introduced a new way of educating engineers – for which it became justly famous. For the last 10 or 15 years MIT faculty have been concerned that “others are catching up” and thus asking “what's the next step for us?” I think the next step is a more pervasive form of boundary crossing – one that involves intersections not only between the schools of science and engineering but all the schools at MIT. The current discussions of the GIR, as difficult as they've been, seem to be moving in this direction.

Other boundary crossing activities exist at the Institute – for example, the Program on Emerging Technologies (PoET), which involves the Political Science Department, the Engineering Systems Division, and the STS Program and is supported by an IGERT grant from NSF. This graduate program brings engineering students together with social scientists and humanists in the classroom and on research projects about the uncertainties and impacts of new technologies. It has been fascinating to watch them interact and work together and, in the process, not only learn from their professors, but from one another. Although they retain a strong disciplinary focus in their dissertations, each is shaped by a multi-disciplinary experience. More informed and perceptive work is being produced as a result. As far as I'm concerned, this is the future. It's where MIT should lead in the twenty-first century.

FNL: I understand you are a housemaster. How did that come about?

MRS: One night at dinner several years ago I remarked to my wife, Bronwyn, that I'd been at MIT almost 25 years and could count on one hand the number of times I had been west of Massachusetts Avenue to an undergraduate student function. I said that “I am at MIT but I don't feel like I'm of MIT.” I didn't really understand what the student culture was like. I knew them as students in the classroom, not as people. I felt that there was a big gap in my life at the Institute. Thanks to a graduate student who was a GRT [Graduate Resident Tutor] at MacGregor House, I was invited to become a faculty fellow of Entry J. It was a wonderful experience. I really enjoyed interacting with the students on their turf and from then on, I knew that I wanted to become a housemaster.

FNL: So this necessitated you and your wife moving on campus?

MRS: Yes, we are at Burton-Conner where we're housemasters with some 350 undergraduate students.

FNL: Wow.

MRS: Wow is right.

FNL: I'm laughing because I'm envisioning you being in your office and in class, and then instead of going home and relaxing you're in the maelstrom.

MRS: It is in the maelstrom, to be sure, but it's also very interesting and very rewarding. By and large MIT undergraduates are special. We've grown very fond of them. They tend to work hard and, at times, play hard. It's the latter that concerns us. As a housemaster, you have to be prepared that any minute you'll get a phone call saying “we've got a problem” and you've got to drop everything and attend to it. It could be something rela-

Merritt Roe Smith

continued from preceding page

tively minor, or it could be something serious. We've experienced both. But the best thing about being a housemaster is the students. They're wonderful.

FNL: What would you say is the key to being a successful housemaster in an undergraduate residence?

MRS: I don't know that there is any one key. Activism is very important. You can't just live in a house and build a cocoon around yourself. If you do that, you're asking for trouble. I try to be as visible as possible. Every weekend I like to walk all nine floors and check in with everyone.

FNL: And what do you look for?

MRS: Nothing in particular. I just want to make sure that things are OK and let the students know that I'm around and available if they need me. Walking the halls also gives me a chance to meet students and strike up conversations. I also use these occasions to remind them not to endanger themselves or others. That's the number one rule of the house.

FNL: Would you recommend becoming a housemaster to other faculty?

MRS: I would definitely recommend it, but you have to have a certain temperament to be a housemaster. If you don't like loud music at all times of the day with stereo loudspeakers literally vibrating the floor above you, you're probably not going to like being a housemaster. Students like their music and they raise hell periodically. I don't mind it so long as they don't hurt themselves or anyone else. That's where I draw the line.

FNL: Don't you find it impinging on your space or quiet time?

MRS: Not really. My friends think I keep strange hours, but they work well with reference to my role as a housemaster. I usually take a nap early in the evening, then get up and watch the news, then work until four or five in the morning. The most active hours for Burton-Conner students are between ten in the evening and two or three in the morning. So I'm awake pretty much when the students are awake. I'm around when they need me to be around.

FNL: Does your wife work outside the Institute?

MRS: Bronwyn is a former editor who is very active in her church in Newton. She has long been involved in preparing meals for homeless people and other church-related outreach activities. During the past year she's been directing more and more of her energies toward Burton-Conner. Bronwyn turns out to be really good with young people who are having emotional and psychological difficulties. We make a good team because I tend to be more adept at dealing with inter-personal and disciplinary problems. One of the good things about being a housemaster are the excellent emergency, medical, and counseling resources that are available 24 hours a day. The people who provide these services are highly competent, which helps because we're not expert in student life matters. Our job is not necessarily to solve every problem but to know who to call when one arises.

FNL: That's improved a lot in the last several years.

MRS: It definitely has. I think MIT's administration has worked hard to make life a whole lot better for students than it used to be. MIT has come a long way and really puts serious effort into making sure students are well cared for. When they need help, they get it.

FNL: And what does it do for you being with younger people in that role?

MRS: It enlivens my life. I feel much more fulfilled about being a professor here than I did before. I feel like I'm much more a part of MIT – and not just with students. I actually meet more faculty and more people in the administration as a result of being a housemaster. It's nice, very nice.

FNL: A final thought?

MRS: When I first told my colleagues that I was going to become a housemaster, several looked at me and said "are you crazy; what in the heck are you thinking of?" So there is an attitude among some colleagues that housemastering is one of the last things an MIT professor should get involved with. And for some that may be true. But I do think, as I said before, that faculty need to become involved and better acquainted with students in their social settings. We just don't know enough about them as people.

FNL: What's interesting to me is the parallel between your interdisciplinary work, the *Inventing America* book, your advocacy of multidisciplinary learning, and the integration of faculty and students in a way that doesn't separate them as teacher and student. There's a similar theme here.

MRS: It is a convergent theme and I'm glad you've pointed that out because all of them are important to me. They are doubtless connected. I think interdisciplinary teaching and research represent the future and that MIT is on the ground floor. I sincerely hope that, despite all the challenges and uncertainties, the Institute will build in this direction. It's an area where MIT could make a huge contribution. I've seen enough in instances like PoET to know that it works.

FNL: Thank you, Professor Smith. ■

MIT Poetry

by David Thorburn

OF SUPREME IMPORTANCE

The instruction sheet for the Papco Flaring Tool
fits in your palm when folded and opens
to three inches by four and a half,
both sides densely printed.
It is protected in a plastic sleeve that's yellow now
and hard enough to cut your finger tips.
Two machinist's drawings and 304 words
name its parts -- including Body, Lever, Strap,
Strap Bushing, Eccentric Adjusting Screw,
Clamp Yoke, Indexing Ball, Cone Dowel Pin --
and explain the working of this plumber's hand-tool,
how the compression screw and swivel cone swing aside for clear
sighting, the hexagon clamp expanding or contracting
on calibrated gears that turn precisely after seventy years.
Papco Forge and Foundry, Dayton, Ohio,
machined the instrument between the two World Wars
and produced this tiny, illustrated bible
which lauds one virtue of the tool,
its ability to close-flare very short lengths of tubing,
as "of supreme importance to refrigeration men."

-- *for Arthur Mattuck*

David Thorburn is Professor of Literature and
Director of the Communications Forum at MIT.

Tyranny Against a Whistle-Blower at MIT

David Gordon Wilson

THE FACULTY NEWSLETTER HAS taken the gutsy stand that Ted Postol's serious allegations should be examined ("Taking Responsibility," Vol. XVIII No 1, September/October 2005). What I am writing about now concerns another very unhappy matter: the cover-up of acts of appalling abuse by senior people at MIT against a whistle-blower, Jim Grinnell.

First let me give a little relevant background. I came on the faculty of Mechanical Engineering in February 1966, and was given a new-faculty chore: oversight of the undergraduate workshops for a couple of years. The safety conditions were deplorable, and I forced through, against staff opposition, a bunch of safety measures. When my period of responsibility ended, the conditions gradually slipped back to those pre-existing. When Jim Grinnell was hired in 1981 to teach drafting, he had his students work in the shops. I learned much later that at that time he asked repeatedly for the Victorian conditions to be made safer, without response, and after one of his students was injured in the shops, he reported MIT to OSHA (Occupational Safety and Health Administration), thereby unleashing a tyranny against him from his superiors.

I am writing this note because I have spent 10 years on this case. I have appealed to every possible official at MIT; from the dean of engineering to the president and the chair of the Corporation, to the chair of the faculty, asking for a commission of inquiry or an independent arbitrator to review this tyranny and the reasons why the incontrovertible evidence I produced has been dismissed without examination. I have been rejected at every step. The people I went to all apparently asked the foxes about the welfare of the chickens. After following a request by Grinnell's

attorney to attend a hearing on Grinnell's behalf which the attorney could not attend, I have been thrown out of court and threatened with imprisonment by Judge Hiller Zobell – undoubtedly my finest hour at MIT. (The MIT attorneys were smirking as I left.)

You may, and I hope will, read about the case, including most of the evidence, on a Website that Jim Grinnell and I have drawn up: mitwhistleblower.homepage.nu. I will not let it continue to be considered "case closed" on the word of people who lie and perjure with apparent impunity. Their actions brought about the near total destruction of Jim Grinnell, a loyal, dedicated, and absolutely honest employee, and of his family, and, in Jim's opinion, the suicide of one of Jim's former students. MIT's cover-up of this awful affair is exactly parallel to the cover-up initially instigated by the Catholic Church, the U.S. Air Force Academy, Enron, Arthur Andersen, WorldCom, and other organizations that were touted as tops in their fields. I am utterly revolted by it.

Jim Grinnell went to night school from 1970 to 1980 to earn his Master's degree in education at Fitchburg State College, and he was a tenured junior high school shop teacher in Norwell, MA, when he was hired to teach drafting at the Institute. Despite the totally false claim by his supervisor in a 1998 affidavit that Grinnell was hired to teach the required engineering course 2.70, transcripts and personnel records prove that he had no training or experience in mechanical design, calculus, physics, or engineering. This is relevant because part of the tyranny against Grinnell was to require him to supervise a section of a course for which he had no training or capability.

The case against Jim was based on lies and perjuries on the part of two senior colleagues and on the part of lawyers working for MIT. I have presented incontestable evidence of these appalling lies and perjuries many times, starting with a letter to my then department head on February 15, 1999, and copied to five senior officers at MIT including President Vest (these letters are all on the Website). No inquiry into the evidence I presented has been made to my knowledge. It is this aspect that needs an outside commission. The fact that no one wants to examine this problem forces me to label it as a major cover-up.

President Vest came across to me as a thoroughly nice and decent person. However, he was surrounded by and appeared to rely on mendacious people, especially the MIT attorneys. When Jim Grinnell asked me to help him in 1994 I was initially reluctant, because he was complaining of alleged actions by friends of mine. I found, however, that one of them had committed multiple perjuries in an affidavit; but he adamantly refused to discuss the case with me. I was drawn in deeper by a phone call on May 19, 1998 from Thomas Henneberry, then director of insurance and legal affairs for MIT, who told me that I must not "as an employee" work to help Grinnell except through the MIT attorneys (who were aiding in promulgating the perjuries and falsehoods). I told him that I was not an employee, being long retired, and that even if I were an employee I would help someone who seemed to be victimized. He then phoned my department head with the same message.

The department head invited me to meet him on May 29, 1998. He told me what turned out to be several appalling

lies about Grinnell, among them that Grinnell “had broken into departmental HQ and had stolen his records.” I checked into these accusations (the checking took many months) and brought evidence to my department head on February 10, 1999 that the allegations were totally untrue, and that he had been repeating these slanders, even though his assistant, Julie Drennan, had corrected him about them. He did not deny his repeated falsehoods, but said that Drennan “was no good: I fired her.” He didn’t: she left to have a baby and returned to work in the department in good standing. However, the department head wrote to the ME faculty repeating mendacities about Grinnell. I did not respond, because I thought that one of the many other senior people to whom I went would take action. They did nothing. They became part of the cover-up.

I have been repeatedly told that “there have been a number of examinations of Mr. Grinnell’s claims, including judicial proceedings in which he was represented

by counsel and in which he settled his claims against MIT.” In fact, Grinnell was seldom represented by counsel because the MIT attorneys and the department head in particular practiced a series of dirty tricks (like Henneberry’s above) starting with the naming of a three-person grievance committee that did not include a representative chosen by Grinnell (as stipulated by MIT’s policies) and that held its hearings without talking to Grinnell, who by that time had been hospitalized in a severely depressed state.

Despite these serious shortcomings, the grievance committee concluded that Grinnell had been treated badly, a finding not acknowledged by the department head nor by the MIT attorneys. While Grinnell was in the hospital and while his grievance was supposedly being investigated, the department head retroactively fired him. As a result, Grinnell’s pay and then his medical insurance were canceled illegally and without notice. When Grinnell tried to question these terribly penalizing conditions, he was told that no

discussion could take place so long as he had an attorney, so Grinnell fired him. Then an MIT attorney illegally obtained Grinnell’s psychologist’s notes about him. This type of action occurred throughout Grinnell’s agonies at MIT. The Social Security Administration determined that Grinnell was mentally disabled before he was illegally fired by our department head, and he has remained disabled to the present. At this time, Jim Grinnell is on long-term disability (although MIT is apparently trying to stop it); he has lost his house, his marriage, his career, and is nearly destitute. He also has a cancerous tumor near his spine.

At this stage it seems that the only means that will clean up the rotteness that is within some parts of MIT is public exposure through an independent commission of inquiry. It saddens me greatly to have to ask for this. ■

David Gordon Wilson is a Professor of Mechanical Engineering, Emeritus (dgwilson@mit.edu).

MIT Libraries Offer Metadata Support

GOVERNMENT-FUNDED GRANTS increasingly require investigators to electronically preserve and share research results. Providing quality metadata that organizes and describes research results can be essential to increasing the likelihood of securing funding and satisfying grant requirements.

MIT now offers an on-campus solution for metadata design and production. The MIT Libraries’ Metadata Service unit (libraries.mit.edu/metadata) provides a full range of support for digital production projects, including large grant-funded projects and individual faculty initiatives.

Metadata Services can help prepare your research for deposit in open-access archives and institutional repositories, like PubMed and DSpace.

Metadata Services is already playing an important role in several MIT educational technology initiatives. Their work leverages metadata to make MIT’s digital resources easier to find, use, and share.

For MIT OpenCourseWare, Metadata Services provides metadata design and production services to share educational resources used in MIT classrooms with the world. Metadata Services plays an integral part in the design of DSpace metadata and can offer expertise in preparing systems for integration with the institutional repository.

Metadata Services is also involved in ongoing projects with MetaMedia, The Singapore-MIT Alliance (SMA), The Center for Reflective Community Practice (CRCP), and the MIT Museum.

Find out more

Investigators in the process of writing grant proposals can contact Metadata Services to find out more about metadata solutions for dissemination requirements.

Metadata Services offers:

- Strategies to increase access to your research
- Consultation and project planning
- Development and implementation of metadata schemes and standards
- Instruction programs that teach metadata creation and use
- Expert, cost-effective metadata production services.

For more information, contact Robert Wolfe rwolfe@mit.edu or visit: libraries.mit.edu/metadata/. ■

On Values and a Caring Meritocracy for MIT

Joseph H. Saleh

An invitation to the MIT community

THERE IS A SIGN-POST one can find in France, at train crossings or in stations that reads as follows: “Attention! Un train peut cacher un autre.” Beware! One train might hide/be hiding another one. I often found the statement amusing, and useful. Taken figuratively, I imagined the sign to serve as an invitation to be cautious or mindful of potential negative side effects that can come in the wake of a commitment to an idea: whether one is watching a train coming his or her way, or riding a train heading in some direction, or designing the train and the tracks to head in some direction (an observer, a participant, and a designer respectively), that signpost stood as a reminder for me to be mindful, however attractive an idea or a direction might be, of the possible hidden trains or negative side-effects that can come in its wake. And to do something about them when I can. It is in this spirit that I write this piece, and the train that I want to both celebrate and participate in mitigating its possible negative effects is MIT’s commitment to meritocracy.

I feel privileged and grateful to be part of an institution committed to meritocracy.

Having come to the English language through a couple of language hops, I have often found it useful, in order to understand a new English word, to look up its antonyms. For meritocracy, I found nepotism, favoritism, preferential treatment, and discrimination: opportunities given to individuals based on other considerations than their personal merit. That, along with some personal experience of these latter attitudes, only strengthened my conviction of the merits of meritocracy, and my gratefulness for the opportunity to be part of an institution that shuns all these unpleasant dispositions, and proclaims that individuals will be evaluated

based on the content of their character and their merit, not what they have inherited or were born into (of wealth, of physical traits). This is one train I am happy to be on.

But then, that French sign-post comes to mind: “Attention! Un train peut cacher un autre.” And I find myself incapable of being unconditionally enthusiastic about meritocracy: in its wake, a few unpleasant things can tag along if one is not careful. I hope the following is seen as my meager attempt to make MIT a better, more caring place; I have a lot of affection for this wonderful place and the people who make it, and I hope this write-up is viewed as an attempt to start and enrich a dialogue on meritocracy.

Performance pressure and careless meritocracy

There is a wonderful work ethic among students, faculty, and staff at MIT. People work very hard at the Institute, and feel to a varying degree, but it is undeniably there, some performance pressure or work-related stress. Performance pressure in turn, while useful in small doses, when it spirals out of control, can become quite distressful and significantly compromise the happiness and well-being of an individual. Meritocracy, without further qualification, can be seen as a cold, impersonal system that order ranks individuals based on some performance metric(s), and may foster an environment of increased competitiveness among individuals, thus increasing performance pressure and work-related stress. This is not what MIT needs, increased emphasis on performance. Academic excellence and intellectual leadership are as intrinsic to MIT as the Infinite Corridor. And even when the Infinite Corridor moves out of MIT, aca-

demic excellence, I suspect, will remain. Instead, what I believe is most needed at MIT is the commitment from the faculty and senior administration to create a caring environment.

“Caring” is perhaps the most underrated characteristic of academic institutions and yet I believe it is one that is most useful and needed. Until social scientists prove me wrong, I will keep believing that people work better and more creatively when they are feeling happy and empowered than when they are feeling sad, depressed, or helpless. And should I be proven wrong, I would prefer to foster an environment in which people are happy rather than “better workers.” In a recent mental health survey at Berkeley, 12% of the respondents reported feeling helpless, 50% overwhelmed, 41% exhausted, 10% depressed, and 10% seriously contemplated suicide.

These are very sad findings! I cannot help but wonder what is the root cause of this, whether at Berkeley, MIT, or elsewhere, and what can be done about it. At the root of it, I hypothesize, there is the following dangerous mixture: significant performance pressure, coupled with a careless environment (e.g., a dysfunctional relationship between a student and his or her advisor, or between a junior faculty and his or her senior mentors). In order to do something about these numbers, and I take it for granted that we all feel a collective responsibility towards making MIT a better, happier place for studying and working, I invite the faculty and administration to slightly shift the emphasis from (valuing only) the performance of an individual to the well-being of each individual. Let me propose the following compromise: instead of talking about meritocracy, perhaps our

administration can promote a “caring meritocracy” instead.

Meritocracy without empowerment can be a scary system

Despite my previous concerns, I remain enthusiastic about meritocracy, and even more so if it were a “caring meritocracy,” and feel privileged to be part of an institution committed to meritocracy (the anti-nepotism, favoritism, and discrimination).

Still, that French signpost comes again to mind. And I see another potential problem with meritocracy. Let me tell you a story to illustrate my point. I recently learned that in my home country, sometime during the 1950s, a group of villagers came to their representative, a member of a rich and powerful family, and asked to him to intercede with the government in order to build schools for their communities. That person replied that that should not be necessary since “I am sending my son to school for you, so that he can later care for your interests.” After my disgust subsided, I imagined that the son, in a meritocracy, would most likely have a leadership position in his community, simply because others less privileged did not have an opportunity to attend school and later compete with him. This is the other potential problem with meritocracy: it can promote the privileged and lock those who had less fortunate initial socio-economic conditions out of the system.

It seems one problem with meritocracy revolves around the timing of meritocracy: when should it start? And when should the promotion of inclusiveness and egalitarian ethics prevail? I have no ready answer for this, but I have a slight preference for inclusiveness and diversity before the race for performance begins (e.g., when recruiting new students or faculty). Only afterwards, can and should the same performance standards apply to all. I am sure different groups would want to be evaluated according to the same standards and figures of merit as everybody else.

I know the social structure in this country is very complex and I will not venture an opinion on this vast subject. I

only hope that MIT has some thoughtful policies in place to overcome legacies of past discriminations before a meritocracy is committed to.

Meritocracy implies transparency and consistency on what constitutes “merit”

Despite my previous concerns, I remain enthusiastic about meritocracy, and even more so if it were a “caring meritocracy” that first includes and empowers a diverse group of individuals before it sets up to evaluate them based on some performance measure.

But whichever way I look at it, meritocracy remains ill-defined until one articulates what constitutes “merit” in an environment, and what are the figures of merit that are being evaluated. It is also only fair that these figures of merit be explicitly stated and made known to everyone on the starting blocks (not mentioned later during the race, or kept hidden with the evaluators).

Transparency of the figures of merit is a necessary condition for a meritocracy to actually be one. Without this transparency, favoritism and even discrimination can be cloaked in a meritocratic mantle. So what are the figures of merit in the meritocracy that MIT is committed to? I hope the administration will articulate to the MIT community what constitutes “merit” (and I hope fostering a caring environment will figure in the figures of merit for faculty). What goes without saying goes even better by saying it.

Consistency: In addition to transparency, when I think about meritocracy, I associate with it the word “one-ness.” One meritocracy for all, at all times. A meritocracy becomes suspicious when it is temporarily or locally suspended (pockets of unmeritocracy). Let me tell you another story before I continue this line of thought. There is an interesting ritual in the space industry before a new satellite is launched: the operators get together before the launch date and think very hard about all the ways they can imagine to break the satellite. Once they have done that, they use what they have come up

with as the list of what they should absolutely not do when flying the satellite. I feel on a similar list for a meritocracy, there is inconsistency: different performance standards applying to different people, some of the time. One guaranteed way for breaking a meritocracy is to have different figures of merit for different individuals.

Consistency and transparency on what constitutes merit are necessary conditions for a meritocracy to actually be one.

On meritocracy and values

My last point is not really a new one. I have already alluded to this concern in the last two sections: that performance measures will drive, to a certain extent, some corresponding behavior in individuals, and perhaps curtail other behaviors. For example, if in a galaxy far far away, a university president claims that rudeness is the measure of merit in his or her establishment, such a statement will most likely encourage rudeness at this university and curtail respectful interactions among its members. It is also likely to attract and retain rude people. More seriously, my point is that meritocracy requires that we first articulate what constitutes “merit,” and what constitutes merit in turn should reflect 1) our values, 2) what kind of people we want to attract and retain, and 3) what kind of behaviors we want to promote and encourage. So while talking about meritocracy, perhaps even better while talking about a “caring meritocracy,” we can also talk about our shared values at MIT.

I hope that my take on meritocracy is seen as my meager attempt to make MIT a better, more caring place; I recognize meritocracy is a delicate topic and any expression of opinion about it may be subject to misinterpretation. I am happy to further clarify points I raised in this write-up, to further discuss it, or to be convinced of different views on the subject. I hope this write-up is viewed as my attempt to start and enrich a dialogue on meritocracy. ■

Joseph H. Saleh is Executive Director of the Ford-MIT Alliance (jsaleh@mit.edu).

The New MIT Museum

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energy supply, global climate change, and health care – are being faced at a time of both increasing international competition and increasing public unease about the ethical and social implications of particular developments. In this context, there is widespread concern about the state of science and technology education in the schools, about the supply of scientists and engineers into the work force, and about the prospects for preserving a climate of public opinion that is conducive to pioneering research and innovation.

As a pre-eminent center of excellence in science and technology, MIT has a particular responsibility in relation to these challenges. Historically, MIT has always recognized an obligation to serve the nation. Today, such service needs to embrace deep commitment not only to research and innovation, but also to closer engagement with the wider communities that have a stake in the nation's future with science and technology. It would be idle, however, to pretend that MIT does not also face difficulties in this area. As President Susan Hockfield has observed on more than one occasion, MIT appears to be one of America's best-kept secrets. The greater part of the Institute's research is "invisible" to the general public; the campus itself is notoriously hard to navigate; and while there are a number of outreach initiatives, in the main these appear to be ill focused and uncoordinated.

A Proposed Initiative

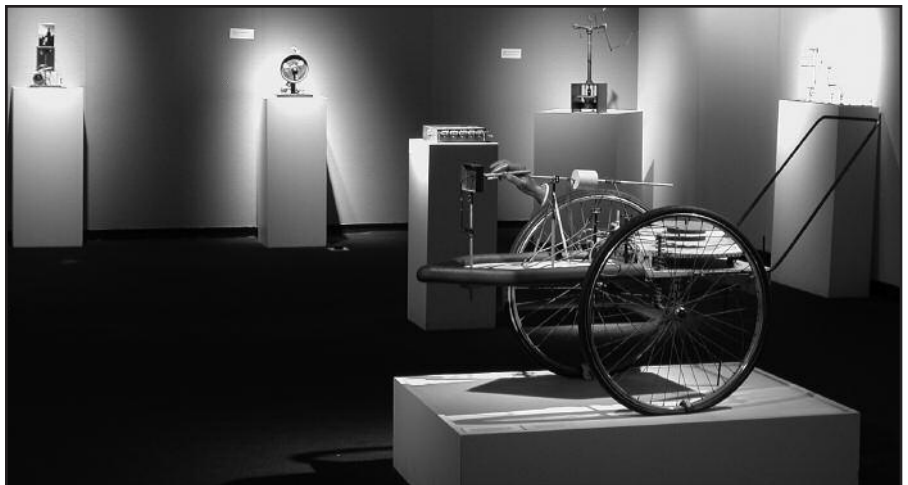
What, then, is needed? MIT has a unique opportunity to take a lead – locally, regionally, nationally – in raising the public profile of the scientific and technological research conducted in the nation's great research universities. I propose an Institute-wide Initiative in Public Engagement with Science and Technology. This initiative will embrace: research and teaching in the public dimensions of science and technology and science communication; museum collecting and exhibiting in relation to current

scientific and technological research across the campus; new educational, adult and community programs aimed at facilitating public engagement with the latest scientific and technological research; multi-media outreach to MIT's global community; and last, but not least, the creation of a new "Gateway" or portal to the MIT campus for visitors of all kinds.

Naturally, the New MIT Museum will be situated at the center of this Initiative. Strategically relocated within the new Gateway facility, the Museum will become a primary point of reference for visitors who wish to know more about science, technology, and other areas of scholarship at MIT. Through its extended presence across the campus, the Museum will engage visitors with the creative life of the Institute; through its traveling exhibitions

access to cutting-edge research and innovation. Virtual "port-holes" will allow visitors to see into labs across the campus; and even more radically, research and innovation projects will be conducted right inside the Museum, in purpose-built public laboratories where visitors will be able to interact directly with scientists and engineers as they go about their work.

Impractical, you think? Not at all. Some science museums in Europe and North America have already piloted research in the galleries; and a new science museum in Tokyo actually combines a visitor attraction and a research laboratory in one facility. We shall build on these pioneering initiatives and take them to the next stage by opening up the whole of MIT's research and innovation to various forms of public access. An initiative



Arthur Ganson Kinetic Sculptures (current museum exhibit)

and electronic outreach programs, it will connect audiences worldwide with the significance of MIT's work; and through its partnerships in research and teaching, it will be an international center of excellence in public engagement with scientific and technological research.

I see the New MIT Museum as a new *kind* of museum; not only a place for celebrating the achievements of the past (though of course we shall do that) but also a place for participating in the challenges of the present and the immediate future. To be sure, the New MIT Museum will have important historical collections and galleries; but it will also provide direct

already in its early stages in the MIT Museum points the way. The Collaborative Mapping Project aims to reinvent the entire Institute as an extended electronic "museum without walls": visitors will use satellite navigation technologies combined with electronic hand-held devices to take "virtual tours," discovering the history and contemporary practice of science and technology at the Institute as they explore the campus.

A Strategic Plan

The New MIT Museum won't be created overnight. Our new 5-Year Strategic Plan identifies a series of key steps that will



Artist's Rendering of Redesigned Street Level Entrance for Current MIT Museum

steadily move the Museum closer to our long-term goal. Early steps involve radical new programs that will help open up MIT's research to the wider community in Cambridge and Boston. The first of these is *Soap Box*, a series of mid-week, early evening salon-style conversations about topical issues in science and technology. Organized in partnership with *The Boston Globe*, *Soap Box* events will comprise: a profile of a chosen researcher and research issue in the Health and Science section of the *Globe* on the Monday; a *Soap Box* event featuring the chosen researcher and issue in the MIT Museum on the Tuesday or Wednesday evening; and the posting of the event on-line via the MIT Website and Boston.com later that same week. The first *Soap Box* took place at 6:00 pm on Tuesday 15th November, when Broad Institute Professor David Altshuler discussed the ethical and social implications of the International HapMap Project.

A second, even bolder program initiative on which we're working is the creation of a Cambridge Science Festival. Imagine that MIT, Harvard, and other key players were to collaborate with the City of Cambridge in organizing a regular celebration of science and technology over a period of a few days or a week at a well-chosen time of year. The Festival program would include hundreds of different events – concerts, debates, demonstrations, exhibitions, lectures, plays, poetry readings, street theater, etc., etc. – and a smaller number of key city-wide events. Perhaps one such event could be an "Open House" day, on which every

science and technology institution in the city (including every department and center at MIT) opened its doors to visitors. Cambridge is Science City; it deserves a Science Festival.

A Higher Profile

We're working to give the MIT Museum a much higher profile in the community. One major problem is that we're currently tucked away on the second floor of our main building at 265 Massachusetts Avenue. Fortunately, an opportunity has arisen for us to occupy a key part of the ground floor of the building. If we secure this space we can bring a new, dynamic Museum presence – not just our entrance, but also fast-changing news & views exhibits, educational and adult programs, and a much-needed café – right onto Massachusetts Avenue. We're even talking with WGBH Boston about filming science and technology shows for broadcast in this new space! Radically improving our visibility as well as our offer to visitors, this move will increase visitation to the Museum by at least fifty percent. Without doubt, it's the single most important short-term initiative that we intend to undertake to move the Museum in the direction it needs to go.

I could go on. Following the expansion onto the ground floor of our present building, we plan a series of high-profile temporary and traveling exhibitions and a period when the MIT Museum will go "on the road" in the lead-up to the opening of the New MIT Museum in its brand new facility.

A Dream

Rather than continue to describe our plans, however, I'd like to close with a dream:

It's 2011, MIT's 150th anniversary year, and one of East Cambridge's best-known and most distinctive historic buildings is opening to the public in a completely new guise. Situated at the heart of the MIT Campus, the Metropolitan Warehouse has been renovated and repurposed as a magnificent gateway to MIT.

The Main Entrance and Lobby of the Metropolitan Warehouse on Massachusetts Avenue welcome all of MIT's many different visitors. A Central Information Desk provides orientation and offers an electronic hand-held guide to the campus; surrounding exhibits tell the MIT story; an electronic bulletin board provides daily campus news and views; and a cafe and restaurant provide attractive places to pause and take everything in.

From the Main Entrance, visitors access all parts of the Metropolitan Warehouse, including: "gateway" functions (e.g., information center, student admissions, community relations); academic functions (e.g., Center for Public Engagement with Science); archival functions (e.g., the new Gehry Archive); and teaching facilities (e.g., 1000-seat auditorium).

The new MIT Museum is the centerpiece of the Metropolitan Warehouse. Accessed directly from the Main Entrance, the Museum introduces visitors to some of MIT's most important and intriguing work – past and present. In state-of-the-art galleries and program spaces, the Museum provides unique access to what MIT does best – innovative cutting-edge research applied to the solution of practical problems in the real world.

Some galleries display the Museum's historic collections; others are devoted to key scientific and technological subjects – brain and cognition, genetics and genomics, robotics and artificial intelligence, etc; and yet others feature fast-changing temporary exhibitions – on emerging technologies across the Institute; and on topical issues at the interface between science, technology, and society.

continued on next page

The New MIT Museum

Durant, from preceding page

Linked to the main galleries is a suite of innovative hands-on facilities designed to support direct public engagement with the research process. Live webcam “port-holes” provide direct access to research sites and staff across the campus; and a “live science” laboratory supports research projects on the gallery floor. At the heart of the new Museum lies The Forum, a central theater in the round designed to facilitate a wide range of deliberative programs – Soap Box events, debates, town-hall meetings, etc.

The new MIT Museum is a test-bed for new communication techniques and tech-

nologies. Associated closely with it, the Center for Public Engagement in Science supports cutting edge research on public understanding of and engagement with science, serving as a bridge between the academic work of the Institute and the practical efforts of the Museum.

The Grand Opening Ceremony of the new MIT Museum @ The Metropolitan Warehouse is presided over by President Susan Hockfield and attended by past presidents, senior officers of the Institute, distinguished alumni, senior figures in the Cities of Cambridge and Boston, and representatives of the wider academic, commercial, educational and political communities.

The new MIT Museum @ the Metropolitan Warehouse goes on to attract 150,000 visitors in its first full year – the largest number ever by a factor of 3. For the first time in its history, MIT has a public place that lives and breathes its distinctive spirit of creativity, innovation, and entrepreneurship; at last, MIT is truly “on the map” for the wider community.

This is, of course, a dream. But with the Institute’s support, your help and lots of hard work, I believe it can be a reality. ■

John Durant is Director, MIT Museum; Adjunct Professor, Program in Science, Technology & Society (jdurant@mit.edu).

letters

The Benefits Game

To The Faculty Newsletter:

BENEFITS HAS ALWAYS BEEN a stealth topic at MIT. There is the story about Karl Compton assigning the MIT treasurer, Horace Ford, I think, – after all, this is only gossip – the task of writing Slater’s large monthly salary check and giving it to him privately when Compton induced Slater to take over the Physics Department. And there is democracy like that in Italian universities. When I asked why the Italian full professors were on strike by themselves, saying was there no democracy? Of course, there is democracy, democracy among full professors, was the reply.

After a couple of attempts at getting benefits by asking my administrative superior I concluded that effort was beneath my dignity and that of my supervisor. One request was for a sabbatical leave to write a book. I was told that at MIT professors wrote books during their

regular service. One other request was turned down with the explanation that one did not ask for that at MIT. But I did get the benefit the next term. So to preserve the dignity and friendship of my colleagues I gave myself the benefits I needed using my consulting practice income.

I do feel sorry for the younger professors who have not developed good traction on the career treadmill to play this game that goes on now between the academic who must generate a good offer from another university and the retention package they talk about that they received from their department. It would be nice to think of administrators generously rewarding a professor with what he is really worth. But in a system in which professors are assumed to have great administrative skill, this is not achieved. I ran a business once, and it took me a couple of years of intense study weekends to learn the skills needed for the job. It has always seemed to me that at MIT those skills are

assumed to be passed along with the passing of the key to the front office, though the Sloan School seems to say it takes years of study.

Sincerely yours,

M.W.P. Strandberg
Professor of Physics, Emeritus

From The Editor

In the September/October issue of the *Faculty Newsletter*, we published a letter from Prof. Hugh Gusterson commenting on MIT’s response to Prof. Ted Postol’s allegations of scientific fraud at Lincoln Labs. In that issue, we inadvertently omitted the information that Prof. Gusterson is a colleague of Prof. Postol in STS and that his wife is a member of Prof. Postol’s research team.

Vietnam and Cambodia: Three Decades Later

Samuel Jay Keyser

A photo-journal available on the Newsletter Website

I AM NOT A traveler by nature or inclination. My wife, Nancy Kelly, on the other hand, is a travel addict. I am sure this has something to do with the division of our species into risk takers and risk avoiders. I am four square in the latter camp. Nancy's feet are firmly planted in the former. When we married, I had no idea that "for better or for worse" meant following her to Kenya (twice), Tanzania (twice), Botswana (twice), South Africa (twice), Zimbabwe (twice), Malawi, Zambia, Egypt, Sicily, Turkey, Australia, Tasmania, Indonesia (twice to Bali), New Zealand, Italy, Vietnam, Cambodia, Laos, Thailand, Japan, South Korea and, in the coming months, the Marquesas, Tahiti, Easter Island, Morocco, and Papua New Guinea. In retrospect it is better that I didn't know. It would not have affected my decision to marry. It would merely have made it agonizing.



Killing Fields Memorial, outside Phnom Penh, Cambodia



Traffic in Ho Chi Minh City (Saigon), Vietnam

Nancy wants to make each trip last as long as possible. This she accomplishes by taking photographs. On our Vietnam/Cambodia trip, for example, she took 7,200. I took up journal writing as a way of coping with the anxieties travel visits upon me. As Rabbi Israel Bal Shem Tov, the founder of Chasidism, wrote in *Keter Shem Tov*, "Where a person's thoughts are, that is where he is." It was inevitable that Nancy and I would hit upon the idea of combining her photographs and my journals.

While traveling, we rarely coordinate what we are doing, she with a camera, me with a keyboard – not surprising since our motivations are so different. Even so, our ways of looking at things are remarkably alike. In the end our photo-journals provide the interested readers and viewers with an account of how we cope with our demons, mine the demon of not wanting to be there, Nancy's the demon of never wanting to leave.

The photo-journal *Vietnam and Cambodia: Three Decades Later* is a case in

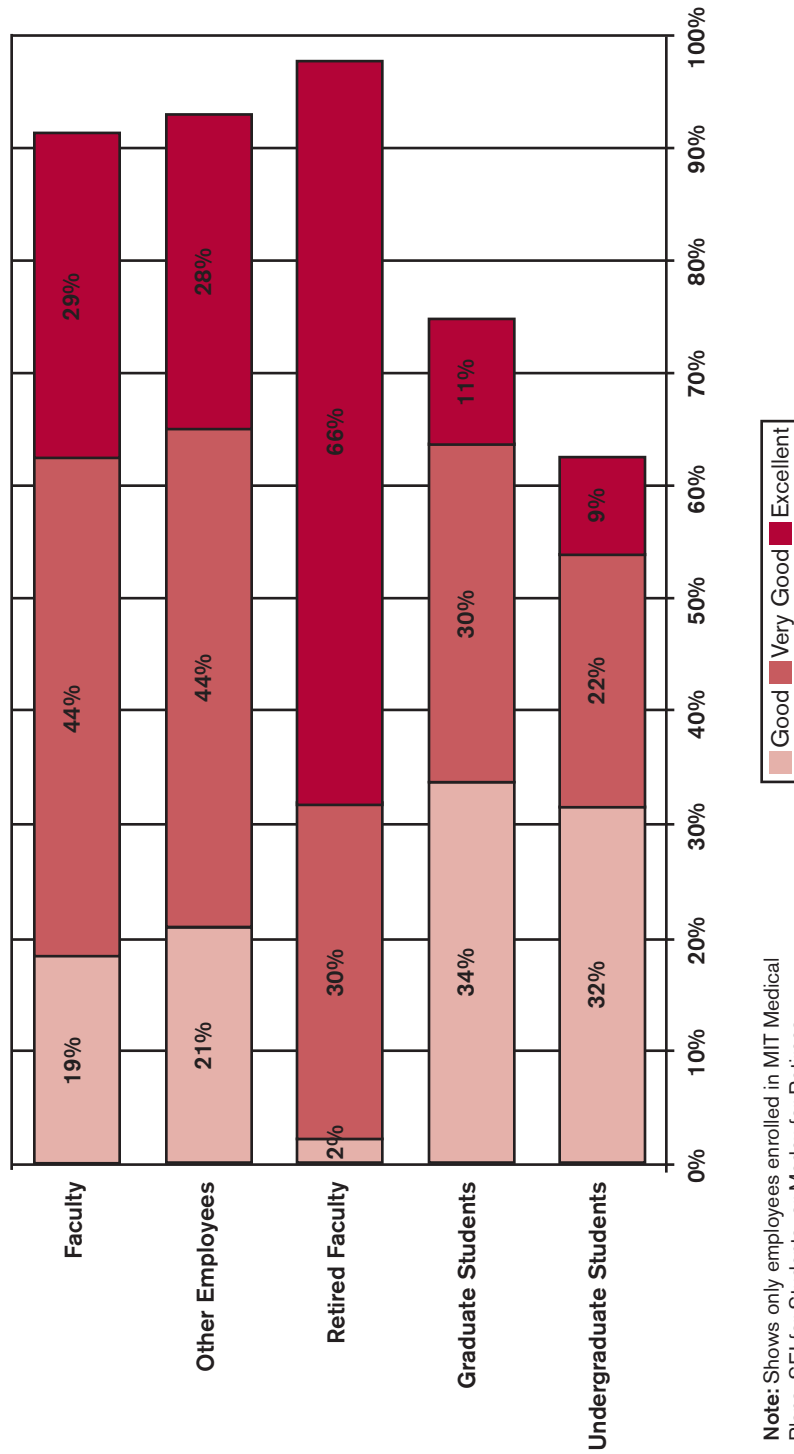
point. From September 20 through October 2, 2004, Nancy and I hosted a trip to Vietnam and Cambodia. The journey, sponsored by the MIT Alumni Travel Program, started in Hanoi, proceeded to Ho Chi Minh City, with a stop at the incredible Cu Chi Tunnels, and ended with a seven-day boat trip up the Mekong River into Cambodia, Siem Reap, and Angkor Wat. The resultant photo-journal offers a glimpse into the daily life of two nations for whom until 1972 war was simply one more way of life. The beauty of their ancient past, the ferociousness of their recent past, and the vibrancy of their present are here only in part. Still *Vietnam and Cambodia* may offer a hint of what to expect should your own destinies – welcome or otherwise – take you there. ■

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Ed. Note: Visit the Newsletter Website web.mit.edu/fnl to view and listen to the entire photo-journal.

M.I.T. Numbers

Percentage Rating the Quality of the MIT Medical Department “Good,” “Very Good,” or “Excellent” [from the 2005 Medical Survey]



Note: Shows only employees enrolled in MIT Medical Plans, SEI for Students, or Medex for Retirees

Source: Office of the Provost/Institutional Research