

MIT Faculty Newsletter

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

in this issue we feature commentary on the selection of the next President of MIT. In addition to the articles below, several of this issue's pieces make reference to an incoming new administration. We also offer "MIT's Ongoing Commitment to OpenCourseWare," (page 8) and "MIT:Rebuilding Community," (page 10).



From The Faculty Chair **The Search for MIT's Seventeenth President**

Samuel M. Allen

LIKE MOST OF THE MIT community, I learned by e-mail at about 9:00 am on February 16 that President Hockfield would step down. Two days earlier, I'd had a call from the office of the Chair of the MIT Corporation, John Reed, requesting to meet with me on February 16, but not indicating the purpose. When John arrived for that meeting, he greeted me by saying, "Well, I guess now you know why I wanted to see you."

Several colleagues have asked questions about the Presidential Search process, and specifically how the faculty membership on the Search Committee is determined.

Selection of Faculty to Serve on the Search Committee

John gave me a "crash course" on the process of selecting a new President. The

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MIT 2030: A Capital Planning Framework for the Future

Israel Ruiz and Martin Schmidt

THE NOVEMBER/DECEMBER 2011 issue of the *Faculty Newsletter* (FNL) featured a number of articles about MIT 2030. We appreciate having this opportunity to reflect on the engagement that has occurred to date, and to renew our commitment to fully engage the MIT community in this ongoing conversation.

In listening to the comments and concerns of the community regarding MIT 2030, we have heard a couple of overarching themes that we wish to address. We agree that it is of the utmost importance to ensure that MIT will pass on an outstanding physical campus and surrounding environment to future generations, and in doing this we are mindful of two principles moving forward:

1. Ensuring that the academic needs of MIT remain at the forefront of planning priorities;

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Editorial **The Next President of MIT**

THE UNEXPECTED ANNOUNCEMENT in mid-February of Susan Hockfield's decision to step down as MIT President is both a loss and an opportunity. Since she joined the Institute in December 2004, MIT has seen growth and expansion in a variety of areas, both academically and financially. From the establishing of the MIT Energy Initiative (MITEI) in 2006 through the recent *MITx* initiative, the Institute has maintained and expanded its preeminent position as a leading science and engineering university in the country (and, indeed, the world).

Still, as with many changes in leadership, the opportunity for an innovative perspective and for a unique approach should guide the selection of the next President of MIT. In order to attain a more varied view on whom or what type of person might be best to next serve in

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The Next President of MIT

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that capacity, this *Faculty Newsletter* has varied the usual editorial-writing process. Instead of restricting the writing of the editorial to the FNL Subcommittee for this particular issue, a request was sent to the entire *Newsletter* Editorial Board soliciting opinions on this question. What follows is an amalgam of the different ideas and viewpoints offered by the Editorial Board respondents.

“Moral rather than financial leadership is what matters to me. Someone who pays attention to the people at all levels on this campus. We need a President to protect the intellectual property that is our subjects and our research from those who would profit from them and who understands what a treasure our student body is.”

“In my personal view, the last great MIT President was Jerry Wiesner. We need someone like that: not only a great scientist and intellectual, but someone who has international prestige, who has managed large institutions, and has great fund-raising skills, already giving evidence that they can raise funds of a billion dollars (and more).”

“We need a person who is technologically savvy, particularly with regards to needed changes in teaching methods, subjects, and research.”

“We want someone who is a scientist or an engineer; not an administrator.”

“We need a President who will speak up against those who would pervert scientific findings or muzzle the scientific community for the sake of corporate contributions, and who will defend the truth even when it might look more politic to remain silent.”

“Someone who will help broaden MIT’s impact and involvement, particularly in reinvigorating U.S. technological and manufacturing prowess.”

“We want one who puts the best traditions of MIT – the disinterested pursuit of knowledge – above any other consideration, be it branding or marketing. We want the principles of science to prevail, not those of the business school.”

“We need a President who will make sure that the people in whose neighborhoods we sit will gain some advantage from our presence rather than any disadvantage.”

“We want someone who will do something to restore the collegiality that used to distinguish the way that MIT did business.”

“We need a person who has a good understanding of industrial relations and contact management. A leader who will bring people and ideas together that will lead toward cooperation and mutual support.”

“We want someone who will listen to his or her constituency.”

There were also a few specific suggestions of candidates from both inside and outside the Institute. From within they included:

- Tyler Jacks (Koch Institute);
- Eric Lander (Department of Biology and the Broad Institute);
- Susan Lindquist (Department of Biology and the Whitehead Institute);
- Rafael Reif (Provost).

Candidates from outside MIT (but often with MIT affiliation) included:

- Joseph Aoun (President of Northeastern);
- Lawrence Bacow (former President of Tufts);
- Bob Brown (President of BU);

- Robert Birgeneau (Chancellor, University of California at Berkeley);
- Alice Gast (President of Lehigh University);
- Mark Wrighton (Chancellor, Washington University).

Ultimately, the decision of who will be offered the next Presidency of MIT resides with the MIT Corporation. A joint faculty/Corporation Presidential Search Committee has been established, and input will be solicited from MIT faculty, students, and staff. The Committee’s recommendation(s) will then be forwarded to the entire Corporation, where a final decision will be made. For more information on how this process will proceed, please see the article by Faculty Chair Sam Allen, “The Search for MIT’s Seventeenth President,” on page 1 of this issue.

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The Passing of Alice Amsden

IT WAS WITH PROFOUND shock and deep sorrow that we learned of the sudden death of Professor Alice Amsden on March 14. A longtime *Newsletter* Editorial Board member and the Barton L. Weller Professor of Political Economy in MIT’s Department of Urban Studies and Planning, Alice was an innovative and vibrant presence on the MIT campus.

A contributor both in the pages of the FNL and behind the scenes, her most recent *Newsletter* article was “Rise of the Rest, Fall of the Best,” in the September/October 2011 issue. Calling upon her expertise in economic development, Alice wrote of the role the Institute could play in the return of American manufacturing prowess.

For a more extensive review of her career see the article in the MIT News (web.mit.edu/newsoffice/2012/alice-amsden-0316.html). As a colleague and friend she will be greatly missed. ■

Editorial Subcommittee

The Search for MIT's Seventeenth President

Allen, from page 1

MIT Corporation bylaws state that the Executive Committee of the Corporation recommends candidates for the Presidency, and the Corporation votes to determine the next President. Beyond that, there is no guidance on the process. But the bylaws make clear that the Executive Committee must first become informed about the Institute's current needs and the community's aspirations for the next MIT President, then execute a process for deciding whom to recommend for the position to the Corporation. There is, therefore, considerable latitude on how the Executive Committee actually organizes and conducts the search.

John explained how the previous search for a President was conducted in 2004. Two search committees, one of faculty and one of members of the Corporation, were established, on which 17 faculty and 18 members of the Corporation served. A separate Student Advisory Group was formed. Very early in the search process, it became clear that the faculty and Corporation committees should meet together, so as to avoid working at cross purposes. There was, in effect, a single search committee for the duration of the search. The Student Advisory Group met independently, and at several points during the search joined the Search Committee to provide the students' perspective. By all accounts, the Student Advisory Group's input to the Search Committee was extremely valuable.

At our initial meeting, John explained that for the new search he'd like to have a single search committee, consisting of faculty and Corporation members. Jim Champy, a member of the Executive Committee of the Corporation and Chair of the 2004 Search Committee, had already agreed to Chair the new Search Committee. John also asked me to begin to assemble a list of faculty who might serve on the Search Committee. He suggested I start by contacting the Deans of each of MIT's five Schools for their suggestions, and then augment that group as

appropriate to get a list of approximately 15 names from which the faculty committee members would be selected. In order that the final group could be determined expeditiously, John asked me to contact these 15 people to confirm their willingness to serve, if asked. He indicated that there likely would be about eight faculty

members on the Search Committee, and that John, Jim Champy, and I would meet to decide the final faculty membership.

Each Dean provided three to five names of faculty from their Schools who they believed would make excellent Search Committee members. I also began to receive suggestions by e-mail and in person, resulting in a list of 66 names, quite a few of whom were suggested several times. To determine a "short list," I first included names that had been suggested repeatedly. I sorted the remaining names by School and began to assemble a list that, in my view, would have an appropriate balance across the Schools, while also allowing for gender and ethnic diversity. I contacted 17 faculty from the short list to determine their interest and availability to attend frequent Search Committee meetings during the spring semester. Several were not available, and the short list was down to 14. John, Jim, and I met twice to discuss the short list and ultimately decided to select 10 faculty members (see next page).

Twelve members of the MIT Corporation also serve on the Search Committee, including Chairman John Reed, Secretary of the Corporation Kirk Kolenbrander, and Search Committee Chair Jim Champy. The Committee had its first meeting on March 11, and will be meeting approximately weekly throughout the spring semester.

Going Forward

The Search Committee's first task is one of discernment: what challenges does MIT face, and how does that inform the qualities we desire in MIT's next President? To this end, the entire MIT community has opportunities to provide input. The announcement of the Search Committee

Each Dean provided three to five names of faculty from their Schools who they believed would make excellent Search Committee members. I also began to receive suggestions by e-mail and in person, resulting in a list of 66 names, quite a few of whom were suggested several times.

membership was accompanied by notice that a Search Website was established to allow anyone to contribute their thoughts to the Search Committee anonymously (web.mit.edu/president/search/). A series of community meetings with a variety of stakeholder groups is being led by members of the Search Committee through the week of April 9. Each of the five Schools and a number of departments have scheduled meetings with the Faculty. The Student Advisory Group is having five meetings to hear students' opinions. Meetings of the Working Group on Support Staff Issues and Administrative Council will provide a venue for members of the staff to communicate their views to the Search Committee. A meeting will be held at MIT Lincoln Laboratory. Ideas from these meetings will be recorded and brought to the Search Committee for discussion and synthesis. The Student Advisory Group will also be joining the Search Committee at least once later in the search process to provide their input.

Later phases of the Search Committee's work entail research to develop a short list of promising candidates; interviews of the most promising candidates; and deliberation and preparation of the Search Committee's recommendation to the Executive Committee of the Corporation.

There is no "time-line" for the Search Committee to conclude its work. "As long as it takes to find the best candidate" is the

principal response to all questions about the search's duration. The process is off to a quick start though: within slightly over four weeks the Search Committee was named and had held two meetings. President Hockfield will continue to lead MIT until her successor is chosen and ready to serve.

In my recent conversations with colleagues, there is general agreement that MIT (and other universities) face serious challenges, among them competition for finite resources, globalization of education, and the impact of technology on the residential educational experience. The outcome of the search for MIT's seventeenth President is extremely important. I urge you to make your concerns and priorities known to the Search Committee via one or more of the several routes described above. ■

Samuel M. Allen is a Professor in the Department of Materials Science and Engineering and Faculty Chair (smallen@mit.edu).

Faculty Members on the Presidential Search Committee

Samuel Miller Allen SM '71, PhD '75
POSCO Professor of Physical Metallurgy
Department of Materials Science and Engineering

Xavier de Souza Briggs
Associate Professor of Sociology and Planning
Department of Urban Studies and Planning

Peter H. Fisher
Professor of Physics
Department of Physics

Ann M. Graybiel PhD '71
Institute Professor
Department of Brain and Cognitive Sciences

Paula T. Hammond '84, PhD '93
David H. Koch Professor in Engineering
Department of Chemical Engineering

Thomas A. Kochan
George Maverick Bunker Professor of Management
MIT Sloan School of Management

Richard M. Locke PhD '89
The Class of 1922 Professor of Political Science and Management
Department of Political Science

Susan S. Silbey
Leon and Anne Goldberg Professor of Humanities
Professor of Sociology and Anthropology
Anthropology Program

Timothy M. Swager
John D. MacArthur Professor of Chemistry
Department of Chemistry

Patrick H. Winston '65, SM '67, PhD '70
Ford Professor of Engineering and MacVicar Fellow
Department of Electrical Engineering and Computer Science

Faculty Committee Activity: Spring 2012 Update

AT THE BEGINNING OF each semester, the chairs and staff of the Standing Committees of the Faculty meet to discuss key issues on their committees' agendas. In particular, these gatherings provide the opportunity for committee leadership to collaborate on topics that cut across the faculty governance system and require close consultation and coordination. In an effort to promote transparency and to engage the faculty more openly about committee business, the Office of the Faculty Chair will write a biannual piece for the *Faculty Newsletter* summarizing these discussions.

Among the issues on the committees' agendas for the spring semester, the Committee on Curricula (CoC), the Committee on the Undergraduate Program (CUP), and the Faculty Policy Committee (FPC) are collaborating to review a three-year experiment that the

CUP licensed in May 2009. The experiment, which was authorized in conjunction with the approval of the new Energy Studies minor, was undertaken to determine the feasibility of an alternative to the current governance model for interdisciplinary minors. As part of that experiment, the Inter-School Education Council (ISEC) was established to provide oversight for this new minor, whose curriculum spans five Schools. As the experiment nears its conclusion, the committees are working to determine the best approach for long-term oversight of Institute-wide interdisciplinary minors.

Several of the committees have been engaging the School of Humanities, Arts, and Social Sciences as the School refines its plans for reorganization of several units within Course 21. In the coming months, the committees will continue to review the

Aaron Weinberger

School's proposal to understand and advise on any implications within the purview of faculty governance, including those for the educational programs.

A number of committees have an interest in the development of MIT 2030, the Institute's framework for planning for the future of the MIT campus. Executive Vice President and Treasurer Israel Ruiz, Associate Provost Martin Schmidt, and Mr. Steven Marsh, Managing Director of Real Estate, will join the FPC later this semester for a discussion about the planned development of the campus and Kendall Square. The FPC has engaged in several discussions about MIT 2030 over the last two years. The committee is looking for ways to ensure broad faculty input as the plans take shape. In addition to the FPC's interest, the framework being

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Faculty Committee Activity

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established as part of MIT 2030 will impact issues under the purview of the Committee on the Library System (CLS) (e.g., space planning for the libraries) and the Committee on Student Life (e.g., dining and housing).

The CLS remains focused on continuing to keep scholarly materials accessible to MIT faculty and students. Especially in recent years, the CLS has devoted much of its effort to finding creative ways to openly disseminate the faculty's scholarly research and writing and to ensure access to the work of their peers. The committee has charged the Open Access Working Group to continue to strengthen Open Access, and remains committed to building partnerships with other libraries. In

January, the Libraries announced that they have joined with a number of peer institutions' libraries as part of the Borrow Direct Library Partnership, an agreement that provides Institute community members access to materials from other schools' libraries.

The Committee on Undergraduate Admissions and Financial Aid (CUAFA) is working closely with the Office of Admissions to incorporate faculty input more comprehensively into the admissions process. The committee is encouraging the Office of Admissions to engage faculty in conversations about the kinds of students who have the greatest intellectual impact on the Institute.

The introduction and planned expansion of MITx is a topic of great interest to the faculty committees. Throughout the academic year, the Provost has met with the

FPC, both to keep the committee informed and to solicit advice in determining the next steps for the initiative. The FPC will continue to meet with the Provost to offer guidance as MITx moves past the experimental phase and becomes incorporated further into the residential learning model.

The IAP Subcommittee of the FPC has started its work to review the changes that IAP has seen since its introduction 40 years ago. The subcommittee in particular is looking at issues of governance with respect to the sharp increase in the number of for-credit and required subject offerings. The subcommittee is soliciting feedback from a wide cross section of the Institute and hopes to present a preliminary report to the FPC at the end of the spring semester. ■

Aaron Weinberger is HR and Faculty Governance Administrator (aweinber@mit.edu).

New Open Access Working Group Formed: Formulating Response to Elsevier's Policy Change

IN 2009, THE MIT FACULTY passed the groundbreaking Open Access Policy (libraries.mit.edu/oapolicy), making faculty papers freely available on the Web. It was decided at the time that the implementation of the policy should fall to the Faculty Committee on the Library System. But it soon became clear that this was a major task, and that larger issues about open access also needed to be addressed. So when I stood down as Chair of the library committee last year, Janet Conrad, the incoming Chair, suggested that we form an Open Access Working Group. After a February call for participation, I am delighted to say that we now have a very strong group (see next page for a list of members). I am honored to take on the role of Chair, and I look forward to working with the group, and to getting as much input as we can from the whole MIT community.

A central issue that the group needs to address concerns publishers' responses to the MIT Policy. Some publishers – MIT Press is a shining example – have sup-

ported it from the beginning. Some were wary at first, but have now found ways to accommodate the Policy's requirements; examples here include *Nature* and Springer. Others haven't yet said much.

One publisher, Elsevier, has, however, taken a very different tack. They issued a revised author contract that indicates authors "must obtain an express waiver" from the MIT policy in order to publish with them. And last year they put in place a new Posting Policy, i.e., a policy governing how their authors can publish their pieces on the Web. The new Posting Policy states that in general authors are allowed to post their articles on their Websites, but then adds a caveat saying that this does not extend to repositories with "systematic posting mandates."

"However, our policies differ regarding the systematic aggregation or distribution of AAMs [Accepted Author Manuscripts] to ensure the sustainability of the journals to which AAMs are submitted. Therefore, deposit in, or posting to, subject-oriented or centralized repositories (such as PubMed

Central), or institutional repositories with systematic posting mandates is permitted only under specific agreements between Elsevier and the repository, agency or institution, and only consistent with the Publisher's policies concerning such repositories." (The full text is available at: www.elsevier.com/wps/find/authorsview.authors/postingpolicy.)

The wording is very unclear; no one is quite sure what a "systematic posting mandate" is. Duke, for one, who has an open access policy very much like ours, has concluded that such policies aren't "mandates" since they allow people to opt out, and hence that they are not covered by the new Elsevier posting policy. But it is clear that Elsevier is trying to do what it can to undermine such policies, and to confuse faculty about what they are and are not allowed to do. Certainly that is the interpretation of the Coalition for Open Access Repositories, who, in their response, "strongly oppose the changes made by Elsevier to its article posting policies" and "join the research community in

Richard Holton

condemning Elsevier for its recent business practices and lobbying that undermine policies and activities promoting open access to scholarly literature.”

Of course Elsevier appears to leave the door open: they say that they are prepared to enter into “specific agreements” regarding such repositories. Sometimes such agreements require that papers be embargoed for lengthy periods. Sometimes they involve additional payments to Elsevier. An example of the latter approach can be seen in the agreement that they struck with the Wellcome Trust. Elsevier accepted the Wellcome requirement that articles written under their grants be freely available, but levies a charge of \$3000 per article, “to help offset the cost of peer review and other publishing costs.” This is hard to justify, given that the peer reviewing is done by academics for free, and that Elsevier is still charging the same very large sums for the journals in which the articles appear. Were there no “systematic posting mandate” Elsevier would allow the Wellcome authors to post their articles freely on their own Website. But since there is such a mandate, they impose a \$3000 tax per article on the Wellcome Trust. I suggest that the Wellcome Trust have rather more important things on which to spend their money.

I’m not alone in objecting to Elsevier’s behavior: outrage at their policies has sparked an Elsevier boycott. This was launched as a result of a posting by Fields medal-winning mathematician Timothy Gowers, which cited Elsevier’s pricing practices and their support of the Research Works Act (which would make the NIH Public Access Policy or any similar policy illegal) as his motivation for declining to review or edit for them, or to publish in their journals. He suggested that a public Website be created, which a volunteer did a few days later. The site, “The Cost of Knowledge,” now has around 8000 signatures, including at least 45 from MIT. The more signatures, the greater the pressure will be. So great is Elsevier’s domination, that in some areas publishing in an Elsevier journal is close to inescapable, especially for junior faculty

Members of the Open Access Working Group

Scott Aaronson (EECS)
Hal Abelson (EECS)
Janet Conrad (ex officio, as Chair of the FCLS) (Physics)
Sasha Costanza-Chock (Writing and Humanistic Studies)
Kai von Fintel (Linguistics)
Eric von Hippel (Sloan)
Richard Holton (Chair) (Philosophy)
John Lienhard (Mechanical Engineering)
Anne Whiston Spirn (Urban Studies & Planning)
George Stephanopoulos (Chemical Engineering)

who need to get their work noticed. But the boycott petition allows for this; if you feel that you cannot undertake not to publish with Elsevier, but are sympathetic to the aims of the boycott, you could sign up not to referee or to do editorial work. (And yes, you will see my name there.)

Scott Aaronson (EECS), one of the Working Group members, argues that this boycott has been a long time coming. “I’ve simply been waiting for what I saw as the inevitable moment when a critical mass of academics would ‘wake up’ to the issue” that the existing publishing model, with ever-increasing prices, was ‘unsustainable,’ he says. “Now that one of the greatest mathematicians on earth (Timothy Gowers) is spearheading the boycott movement, and dozens of other leading figures in the mathematical community have declared their support, that moment may have arrived.” Seth Teller, also from EECS, cites access concerns: “I signed the petition simply because I believe that if taxpayers fund research, they should have access to the results of that research without going through a paywall.” And Kai von Fintel (Linguistics), another Working Group member, in addition to signing the boycott, has announced his own personal manifesto, which would exclude publishing in Elsevier journals or any others that don’t allow “authors to deposit at least the final manuscript version in an open access repository (such

as MIT’s Dspace or the Semantics Archive), without any embargo.”

Some have questioned whether Elsevier is really worse than other publishers. Their response to open access policies is one area where they clearly are worse. There is a growing sense that some response is needed, and the new Working Group is planning to consider what, if any, response should be made. One of the premises of the MIT Faculty Open Access Policy was that it would make it possible for “MIT” to be at the table for discussions, rather than leaving each MIT faculty author responsible for negotiating their author rights alone. We hope the Working Group will offer an efficient means of arriving at principled positions to take to Elsevier and other publishers. Elsevier has reacted to the boycott by withdrawing their support from the Research Works Act; we hope that they will reconsider their attitude to open access more generally.

The commercial journals provide an important role in ensuring quality control and we expect The Libraries will go on subscribing to them. But we need to make the articles available to those who don’t have access to a major university library. Many individual faculty members already post their articles on their own Websites. What the Policy does is to bring some order to this process: the copyright status is made clear, then the library collects the pieces, gives them stable URLs that will persist even if the faculty member moves or retires, and makes sure that they are visible to Google Scholar, and so on. The results of this speak for themselves: the collection of papers gathered under the MIT Faculty Open Access Policy sees 26,000 downloads per month, originating from all around the world.

The Working Group would welcome your thoughts on a response to Elsevier, or other matters that we should take up on behalf of the faculty, in relation to the Open Access Policy. Please feel free to contact me or other members of the group. ■

Richard Holton is a Professor and Department Head, Department of Linguistics and Philosophy (holton@mit.edu).

MIT's Ongoing Commitment to OpenCourseWare

Hal Abelson
Shigeru Miyagawa
Dick Yue

WHEN WE FIRST PROPOSED MIT OpenCourseWare (OCW) 11 years ago, we did so in part because we felt the time was not right for MIT to enter into the online education space. Technologies were crude at the time, costs were high, and it was not at all clear that MIT could succeed. Rather than attempt large-scale online education, we proposed, let's use the Internet to share the materials used for our classroom-based education. The MIT faculty, in adopting the proposal for OpenCourseWare, made a commitment to fostering social good rather than generating profit. The outcomes of that effort bear out our decision.

Each month more than 1.2 million people from around the world visit OCW, and traffic continues to grow. Since inception, 125 million people have accessed MIT OpenCourseWare materials to better understand how MIT teaches its students, to download our materials and modify them for use in their own classes, and a surprising number have used the classroom materials to support independent learning. We've seen a vibrant open education movement grow around our efforts, with more than 250 universities around the world sharing educational materials from over 17,000 courses in the OpenCourseWare format.

OCW has given MIT time and space to both have a significant educational presence online and also wait for online education approaches to mature. Generally, much more is known about online learning now than when OCW was proposed. There is now a significant body of research regarding online learning and the tools supporting computer-based instruc-

tion grow ever more sophisticated. We've seen the focus of the open education movement shift from the provision of mainly classroom-based content as OCW has done to materials specifically designed

The recently announced online learning effort, *MITx*, has generated significant excitement outside of MIT and significant discussion inside the Institute Given our experience in developing OCW, we believe *MITx* is an idea whose time has come, and MIT's decision to pursue the project was the right one.

for online learning. We've witnessed the growth and success of efforts to support open interactions and learning experiences via online community spaces and open credentials such as badges and certificates. The rate of change in the field of online and open education has increased dramatically even in the past few months, and there is no doubt that these changes will begin to impact residential education in the near future.

The recently announced online learning effort, *MITx*, has generated significant excitement outside of MIT and significant discussion inside the Institute, as evidenced by the recent edition of the *Faculty Newsletter* (Vol. XXIV No. 3). Given our experience in developing OCW, we believe *MITx* is an idea whose time has come, and MIT's decision to pursue the project was the right one. A new generation of online learning projects are emerging – Khan Academy and the Artificial Intelligence course at Stanford last fall have received the most attention, but there are hundreds of others – all offering learning that is more scalable, personalized, and demonstrably effective than ever

before. These tools and approaches will fast become the expectation of a new generation of students. MIT cannot afford to sit on the sidelines in this environment – we must position ourselves to better

understand these new learning approaches and how they will impact our on-campus education, and we must be open to incorporating what we have learned into our current practice.

OpenCourseWare, as a repository of our teaching materials and a publication reflecting MIT's pedagogical practices, is a vital part of MIT's open education portfolio. As teaching approaches at MIT change, MIT OpenCourseWare will document and disseminate our work, maintaining MIT's position as global educational innovator, and helping to fulfill MIT's broader mission to advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world.

MIT OpenCourseWare fulfills a vital role for the millions of visitors that come to our site. OCW serves as a reference and a repository that supports a broad range of formal and informal educational activities not addressed by online courses. Faculty at universities around the world access our site to support curricular and course development. University students

globally access our site to supplement the materials they've received in their classes. Entrepreneurs and professionals worldwide use OCW as a just-in-time resource for solving business challenges and updat-

MIT OpenCourseWare fulfills a vital role for the millions of visitors that come to our site. OCW serves as a reference and a repository that supports a broad range of formal and informal educational activities not addressed by online courses. Faculty at universities around the world access our site to support curricular and course development. University students globally access our site to supplement the materials they've received in their classes.

ing their knowledge. And these users are overwhelmingly satisfied with the content they are accessing: 90% of users report satisfaction with the breadth, depth, and quality of the materials on the site, and 92% report satisfaction with the currency of the content with respect to the current state of knowledge in their field.

The global community continues to indicate the value they find in OCW through direct support. OCW has recently welcomed two new major corporate sponsors together providing \$500,000 of support in the current fiscal year; OCW generated \$350,000 in small gifts last fiscal year and is on target to reach a similar number this year; and grant funding for innovations such as our new OCW Scholar courses also provides significant support for core publication activities. Investments such as these are a clear sign that OCW continues to be a project generating significant global benefit.

The OCW site is also an invaluable piece of the academic infrastructure here at MIT. It serves the faculty and students alike as an in-depth advising tool. Nearly half of the MIT student population use the OCW site to select classes, and 53% of faculty agree that students have better advising information available to them through OpenCourseWare. Students use the site to look forward to courses and concepts they will study in subsequent years, look back to review concepts covered in previous years, and look

broadly across the curriculum to understand how the interdisciplinary challenges they face – whether in studying cancer, climate change, or energy – are being addressed in other disciplines. Faculty

likewise use the site to better situate their courses in the curriculum with respect to the teaching of their peers, both within departments and across them. The MIT community also reports high levels of satisfaction with the currency of materials on the site, with more than 83% of faculty reporting satisfaction in surveys.

There is little doubt that we are entering a period of change and uncertainty for higher education, where the topics addressed are increasingly complex and the teaching methods we use will be in flux. Through OCW, MIT has built a tool that will help manage that change and share the fruits of our ongoing educational innovations. As teaching innovations are developed through programs like *MITx* – and the work of individual faculty members across the Institute – OCW will build awareness of educational innovation at the Institute and help our educational community and the world understand how all of these projects relate to the overall MIT experience.

This winter, the OCW Faculty Advisory Committee has been working with the OCW staff to shape a new OCW initiative that will share not just the content that MIT uses in teaching – the original OCW model – but also explicit information on how we teach at MIT. This will potentially include pedagogical statements from and interviews with participating faculty, links to exemplary teaching practices, showcases of educational inno-

ventions, and other framing information that places the content shared in context of our teaching philosophies. We expect that this effort will serve the Institute very well in the coming years as we continue to understand the impact of digital technologies on the educational process.

Maintaining the breadth and currency of OpenCourseWare will require the ongoing commitment of the MIT faculty to share the content we produce for our courses. The OCW staff has done a remarkable job over the past 10 years of supporting the participation of most of the faculty in publishing their material, and the site currently contains content from about 75% of the tenured and tenure-track faculty. Most participating faculty report spending five hours or fewer in work related to publishing their course content on the site, and find publication to be very rewarding, both in having their materials nicely formatted for the site and in the feedback they receive from site users and peers around the world.

As we move forward with *MITx* and other pedagogical experiments, we urge members of the faculty to maintain their commitment to MIT OpenCourseWare and continue to share the course content that has made OCW the premier open educational resource in the world, as well as a unique and invaluable resource for the MIT community. For those interested, we invite you to take the further step of joining the Advisory Committee's proposed effort to build a deeper view into the pedagogies in use at MIT, making MIT OpenCourseWare even more valuable for the world and the Institute. The OCW staff will be reaching out to faculty about this initiative in the coming months, but we also welcome suggestions for innovative ways to share MIT's teaching approaches at ocw@mit.edu. ■

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MIT: Rebuilding Community

O. R. Simha

AS THE INSTITUTE CONSIDERS a change in its leadership, it would seem like a good time to consider the issues and opportunities that will confront the next generation of administrative leaders. These will certainly include securing the resources necessary to sustain the kind of institution that MIT has been, wants to be, and can be. It will require that we recognize that while we necessarily dwell on quantitative measures for much of our work, our ultimate success will be measured by our ability to recapture and rejuvenate the close human and intellectual relationships among faculty, students, and staff that have been the hallmark of the MIT learning community. This has been a quality marked by respect and civility, inclusiveness and support for the fact that MIT's greatest successes emerge when the leadership of the Institute devotes itself to ensuring that resources are gathered and directed for the benefit of the faculty and students, the Institute's primary source of initiative and creativity.

One hopes that the next administration will focus on the vision that there can be a seamless and rich connection between work and personal development. We should expect that it will have the skill and ability to build and sustain a community where social, physical, and governance mechanisms can be devised to make the most of our talents.

The Chair of the Faculty, Professor Sam Allen, has spoken eloquently about the need to rebuild the relationships between individual faculty members and students through direct interaction and collaboration. Professor Woodie Flowers has spoken about the high value of build-

ing intellectual capital and shared values through communal effort; and Professor Sherry Turkel has written about the dangers of relationships that are too remote, engendered by too much dependence on electronic media. Their observations suggest that we need to think more clearly and act more vigor-

For almost a century MIT has tried to build a residential community worthy of its students and faculty; one that recognizes the special character and needs of our diverse community. Building such a community, however, has always seemed to present both a financial and organizational challenge.

ously to create opportunities for direct physical interactions between faculty and students in both the academic and residential setting.

For almost a century MIT has tried to build a residential community worthy of its students and faculty; one that recognizes the special character and needs of our diverse community. Building such a community, however, has always seemed to present both a financial and organizational challenge.

President Maclaurin, with his memories of Cambridge University college life, included in his plan for the new MIT a vision of undergraduate residential quadrangles on the new campus in Cambridge. Beginning with Senior House and his own residence on Memorial Drive, the seeds of a residential community were planted. President Karl Compton saw the need to provide housing for graduate students when he came to MIT from Princeton, where graduate life thrived in their gradu-

ate center. The reports of the Lewis, Hrones, Ryer, Bush-Brown, and McBay Committees all pressed for a greater commitment to building a residential community. Indeed, in the 1960 Second Century Fund Campaign, a major element was the development of a graduate center and a goal of housing 50

percent of the graduate community in Cambridge. While some progress has been made to meet that goal, the net additions have fallen short, almost always due to a lack of traditional financial resources.

Several attempts have also been made to create a residential community for faculty and staff that would help fulfill the dream of bringing students and faculty together more easily outside the classroom. These efforts included the successful development of 100 Memorial Drive that created rental housing close to the campus, as well as the unsuccessful effort to create a faculty-housing coop in the early 1960s. Later, MIT established the Northgate Community Corporation that was to be a mechanism for developing faculty housing in Cambridge. It did not survive, but the dream did not die. Most recently, an initiative by MIT faculty and staff members to create a cooperative residence in Kendall Square has been only partially successful.

Overcoming Impediments to a Residential Community

Given the rocky road this persistent aspiration has traveled, we might ask why have there been so many impediments to building a residential community at MIT. They seem to boil down to three themes: The place of housing in MIT priorities; land availability; and financial resources. In the face of these difficulties, is it possible to resolve or overcome impediments so that we can move the community building agenda forward?

We can start by rethinking the mechanisms and assumptions we have used in the past. We can explore other models and evaluate their relevance to our situation. We can review our present policies and, where appropriate, shape new strategies and programs. In all of this, we need to return to a tradition of engaging our faculty in shaping the enterprise and committing to nurturing it to maturity. We need to recruit passionate leadership who will have the authority and responsibility to keep the program on course. While this may mean more demands on our time, it has the makings of a richer and more satisfying life at MIT.

For example, our graduate students, a community that continues to ask for creative solutions to their housing and community needs, provide an ideal opportunity for fresh thinking and new approaches to community building.

Looking back over 50 years of involvement with MIT's planning for housing graduate students and faculty, I realize that we only made progress when two things were in synchronous orbit: The leadership of the Institute felt it was desirable for the well-being of the community, or they believed there was a crisis, either generated by local political concerns or by competitive challenges.

The constraints on progress have always been the availability of financial and physical resources. With the exception of the original graduate housing at Senior House championed by President MacLaurin and Ashdown House established by President Compton, all graduate housing has been debt financed. In the

aftermath of the Second World War, we housed veterans and their families on the West Campus by using the federal public housing program. In the 60s and 70s we used the low interest, College Housing Loan Program. When that was closed out during the Reagan Administration in the 1980s, we developed the Graduate Housing Fund, which would be used

One example of a creative response to student housing that may be instructive exists just a few metro stops from the center of Paris.

exclusively to build and/or rehabilitate housing for graduate students. The source of the fund was a subvention from student rents: a decision that graduate student leaders supported because they saw that it was in the long-term interests of graduate students.

With the exception of the Tang family gift for a portion of the cost of Tang Residence Hall, we have not sought nor received significant gift funds for graduate housing. Furthermore, there was a view on the part of some in the administration that raising funds for graduate housing would be in direct competition for funds needed for academic and research purposes. As a result, recent graduate housing has been financed either by the Graduate Housing Fund or through debt financing. The expectation is that rents will cover the cost of operations, amortization, and interest. Based on a study prepared by the Graduate Student Council last year, the cost of housing in Cambridge now represents 54% of a graduate student's pre-tax income.

A New Plan for Graduate Student Housing

As we think about our hopes for a vibrant research program attracting the best students from around the world, the special relations we have established with various countries, from Singapore to Russia, and our desire to build a community of diversity and hospitality here in Cambridge, we need to confront the challenge that our housing and financial policies have not

kept up with our aspirations. It is a problem that calls for fresh solutions.

One example of a creative response to student housing that may be instructive exists just a few metro stops from the center of Paris. In the aftermath of the First World War, there was a great concern for improving international understanding through cultural exchange as one way

to reduce international misunderstandings. At that time in Paris, there was a great surge of young people from all over the world, seeking higher education at the city's institutions – students who hoped to build a new world of understanding and peace. However, Paris then faced a housing shortage as a result of these new pressures, but a small group of government officials and private businessmen came up with a creative response to the challenge.

The principal author of the new student-housing plan was Andre Honnorat, French Minister of Public Education. Honnorat proposed the creation of a foundation to establish a residential quarter for students: A University City "Cité internationale universitaire de Paris" (www.ciup.fr/en/www.ciup.fr/en/) where students would live and study with other students from all nations and persuasions, establishing relationships that could make for lifelong personal connections and contribute to international peace and understanding.

A public foundation to undertake the enterprise was established. Land close to the city center was purchased with funds from philanthropists and building sites were offered on leasehold to national governments and private donors who would sponsor both the building of residential pavilions and an endowment to ensure their long-term financial viability. Sixteen pavilions were opened within seven years. There are now 37 such residences at the

continued on next page

MIT: Rebuilding Community
Simha, from preceding page

site, financed by countries all over the world. From time to time, the foundation offers opportunities for the development of additional pavilions. China and Russia are among the recent candidates.

The buildings are fully funded by the donor countries and or other sponsors. The donor countries are also required to establish endowments to support the administration, cultural programs, and rental subsidies where needed. The residences are required to limit their own nationals to 30 percent of the occupants to ensure that the original aspiration of integration and diversity is met. The national residences offer programs and dining options representing their culture to all members of the University City. The buildings include designs by famous national architects. Best known is the Swiss pavilion, designed by Le Corbusier; but many others are elegant representatives of national architectural traditions.

The overarching foundation provides coordination and services to all the individual units. It also provides some central facilities. Funded by the Rockefeller Foundation, they include cafés, athletic facilities, a library, childcare, etc. A member of the Conseil d'Etat, France's

supreme civil court, is the chair of the foundation. Each residence has a board that is responsible for ensuring the continuing financial support of the residence.

To put this example in an MIT context, there are 7-10 opportunities or sites designated for graduate and staff housing that MIT controls both on and adjacent to the campus that could be put to use in our version of such a program. The sites provide for different scales of development, so that there can be variety in the size of these buildings and their capital and operating costs. The development of these sites, set out in the campus plan published in 1998, could go far in meeting the long-term housing needs of the graduate and, in part, the faculty community. At an average size of 200 beds, the capital investment would require about \$25 to \$30 million, plus an endowment of ~\$5-10 million. At this scale, many countries and individuals could afford to participate in this program. A country would gain a presence on the MIT campus, some guaranteed housing for their students, and an opportunity to mount programs that could celebrate their cultural gifts with the entire MIT community, thereby contributing to the kind of cultural offerings that would bring new strength and meaning to our goals for diversity.

MIT has over 2400 graduate students from abroad this year. China, India, and Korea top the list. But there are also 10 other countries with more than 50 graduate students at MIT today. If one were to look at the countries that have profited over the years from having their students enjoy an MIT education, one could easily see that there are a number of countries that might welcome the opportunity to participate in this program.

One could envision establishing a campaign that would recruit prominent MIT graduates from abroad to assist in the fundraising effort and to perhaps serve on the board of the foundation. Graduates like Kofi Annan, former Secretary General of the UN, and other prominent MIT alumni would give this effort the visibility and prominence it deserves.

In this brief review, I have tried to suggest that there are different ways of looking at the financing and development of housing for graduate students at MIT.

I hope that the next administration will engage the faculty and alumni in pursuing this or other initiatives so that we may expand the ways in which we can build a more vibrant, diverse, and self-supporting community at the Institute. ■

O. R. Simha is a Research Affiliate in the Department of Urban Studies and Planning, and former MIT Planning Director (*simha@mit.edu*).

letters

On the Creation of MITx

To The Faculty Newsletter:

HERE WE ARE WITH another major directive from the top down. Apart from whether or not this is a good idea, what has happened to the idea of open debate in a faculty meeting? Does the adminis-

tration really believe that it has all the answers?

There is a broader issue at stake than just MITx. Has the faculty completely lost any control of academic decisions?

This is a different MIT. ■

Steven R. Tannenbaum
Underwood-Prescott Professor of Toxicology
Professor of Chemistry

Over-Schooled and Under-Skilled

Ernst G. Frankel

THE RESULT OF AMERICA'S college addiction, driven largely by government and politicians' encouragement and fostered by the development of a huge for-profit college industry, will haunt America's economy and social structure for years to come.

A larger percentage of high school graduates continue with a four-year college education in America than in any other developed country, and most obtain a liberal arts or related education that, in general, does not qualify them for a career. In parallel, skill education, particularly in engineering and technology areas is quite deficient and consists largely of ill-funded community colleges and squandered vocational training facilities. At the same time, in professions such as medicine, it is recognized that there is an urgent need for well-qualified medical professionals who are not doctors, with six to 10 years of study and training. Physician Assistants or PAs have become a popular profession, and PAs are qualified to perform a large range of treatments and procedures, relieving the strain on doctors and hospitals.

There is an urgent need to establish a similar level professional in engineering, science, and technology areas if America is to regain its industrial and manufacturing competence and ability. America's renowned major technical universities, such as MIT, could lead this effort and introduce a one- to two-year technical competence program to which high school graduates are admitted, and which consists of 6-8 hours/week of classroom instructions and 20-30 hours/week of workshop or laboratory training under supervision of qualified instructors. After a two-year period, participants would be examined in both theory and practice in their chosen area of technology, engineering, science, or management.

There is an urgent need for skill building in America and no better place than the workshops and laboratories of major universities and research labs to do it. Here young people can learn not only how to use tools and convert concepts into meaningful products and solutions, but also how to organize the realization of concepts and ideas. Labs and workshops of universities and research institutions would also benefit. Recent history shows that many, if not most, new concepts or inventions were advanced and often developed by non-experts not afraid of raising the "why not" questions.

It is important to recognize that new blood, thought, and questioning minds are often the seed for scientific, technological, and management advances. We should have both the courage and patience to consider the approaches and concepts of completely novel ideas. Similarly, classes will be informal and use remote and electronic methods to permit students to review subject matter at their leisure, but should include rigid testing and competence reviews. Most importantly, students should be kept to a rigid work and study discipline and expected to properly contribute to workshop and lab work.

Program in Certificate of Competency in Engineering and Science

Unlike other professional areas such as medicine, legal, and others, there is no intermediate skill training or certification available in science or engineering. However, there are many jobs where an academic degree is neither required nor particularly useful.

We are now in such a situation in science and engineering, urgently requiring an intermediate training program that prepares science and engineering professionals without the need for a four- to six-

year academic curriculum. America lags behind countries like Germany, Japan, and others in professional training, and there is a profound need for formal science/engineering apprenticeship training at reputable universities or other institutions that leads to a formal certificate of competence in engineering or science disciplines. Our community colleges and similar institutions are inadequate in dealing with these challenges, and our college-for-all strategy is wasteful and inefficient, as it often wastes students' time in learning subjects that contribute little if anything to the development of the knowledge and skills required in modern industry and services.

Institutions such as MIT could start large-scale certificate of competence programs in which students work in the Institute's labs and workshops and also receive several hours of classroom instruction, leading to a "Certificate of Competency" in a branch of engineering, science, or management. Combining practical and classroom training and establishing real face-to-face mentoring would help develop an urgently needed new workforce for America's reviving manufacturing and service industries.

America urgently needs young, committed, and well-trained engineers and scientists to serve its industry and economy. It is important to recognize that many of our most imaginative and advanced science and technologies were not developed by people with lofty degrees from renowned institutions, but by thinkers who acquired basic science and engineering skills, without lengthy classroom attendance. ■

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MIT 2030: A Capital Planning Framework
Ruiz and Schmidt, from page 1

2. Engaging the campus community in MIT’s planning efforts is critical to our long-term success.

MIT 2030 is intended to be a framework to assist the Institute in making thoughtful, well-informed choices about development and renewal in the years ahead for both the campus and the innovation district close by. It is intended to be flexible and responsive, to provide structure without limiting possibilities, and to accommodate new strategic initiatives, as yet unknown, that will need to be supported in the future.

While five projects have emerged as early areas of planning focus: nano materials, structures and systems (nMaSS), energy and environment, and the renovation of E52, Walker Memorial Hall and sections of Building 2 – this is only the beginning of the many opportunities that can be addressed within the MIT 2030 framework.

These five initial priorities resulted from an extensive planning effort that began with an academic visioning process in 2008. It continued as we worked to translate the vision into the physical needs of the campus, assessing building conditions, and projecting space needs based on programmatic requirements and available campus capacity. During calendar year 2010, close to 50 discussions took place to engage the community about campus and Kendall Square planning efforts. These meetings involved Academic Council, an open faculty forum, numerous discussions with Deans and Department Heads across all five Schools, and planning sessions with School of Architecture and Planning faculty. All of MIT’s senior leadership were engaged in the planning process. Moving forward, we see many opportunities to engage the faculty more broadly in refining and developing this framework, and we are committed to seeing that happen. Please refer to the MIT 2030 engagement timeline (next page).

While MIT 2030 is all about looking forward, we believe that the instincts that

drive it are as old as the Institute itself. MIT has long used its physical space not merely to allow for teaching and research, but also to inspire. The Great Dome is there for a reason: its architect, William Bosworth, wanted a focal point for the campus that would have us all setting our sights upward. Nearly 100 years after the dome went up, the glass walls in the Media Lab invite fascination, and the composition of the Koch Institute for Integrative Cancer Research – half life scientists and half engineers – is its own breathtaking statement about MIT’s belief in the power of convergence. The campus has always been an inspiring place, and guided by MIT 2030, we will seek to keep it that way.

Accelerating the Power of Innovation

The recent FNL articles may have suggested that MIT’s academic campus and our investment properties are in competition, or that we may be losing sight of the primacy of our academic mission, but we believe that the two work together to enhance innovation and opportunity. The area around MIT is almost unique in having MIT as the center of gravity that attracts innovative talent and companies, from startups to established research enterprises, to the neighborhood. The lines between academic disciplines, between academic and industry research, are more porous than ever.

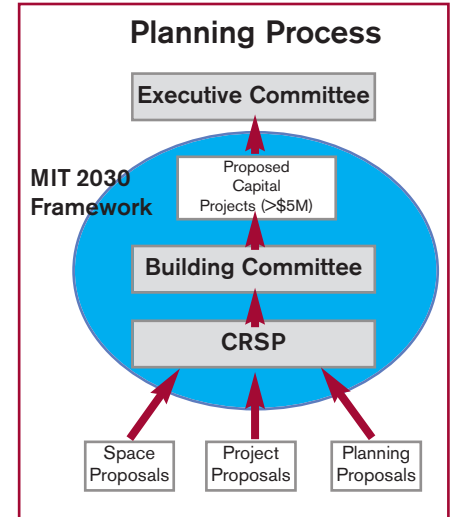
Four themes express the vision of MIT 2030. (Visit the MIT 2030 Website to learn more about these themes: web.mit.edu/MIT2030/.)

- Innovation and collaboration
- Renovation and renewal
- Sustainability
- Enhancement of living and learning

The theme of innovation and collaboration is the foundation of our campus planning, and continues MIT’s longstanding relationship with industry, which has helped to transform Kendall Square and had a great impact on the Cambridge landscape with developments in Technology Square and University Park. Kendall Square has become a magnet for talented people and innovative companies who understand MIT and want to collab-

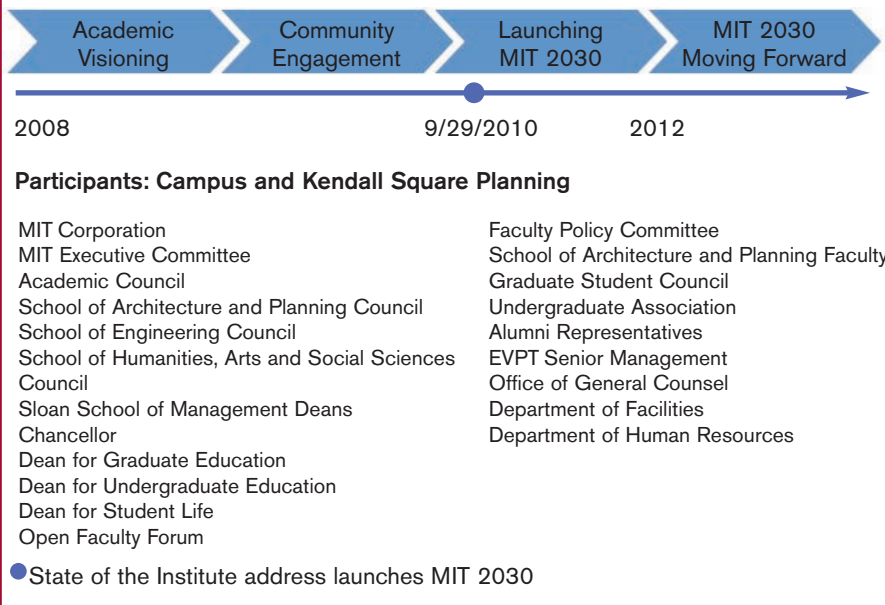
orate with us. The result is an innovation district able to accelerate the power of invention and innovation with an ecosystem of small inventive companies and larger research-intensive organizations that are perfectly aligned with our mission. Together, this ecosystem provides opportunities for advancing the mission of MIT, entering into promising research collaborations, offering internship opportunities, and opening employment options for our graduating students.

It should be noted that all parcels that about the campus under consideration for development, whether for academic or investment purposes, require the same oversight process through our governance structure. This includes review and endorsement by the Committee for the Review of Space Planning (CRSP), the Building Committee, and the Executive Committee, and this process is followed rigorously to ensure that academic interests are protected.



Working together with the Building Committee over these past decades, and with the oversight of MIT’s leadership, we have been able to meet the needs of our faculty and students for the most advanced laboratory settings and research environments. Over the years and after careful analysis of available parcels and academic needs, we have been able to offer some land in close proximity to campus for development by industry over a well-defined timeframe, without seriously limiting

MIT 2030 Engagement Timeline



opportunities to transfer leased property back to the academic plant when needed.

Engaging Each Other in the Conversation

We share the belief that MIT 2030's success depends on it being a true collaboration between MIT's faculty and administration. We also believe that student participation is critical.

As we work to keep pace with the Institute's evolving needs, the guiding principles that steered us through the recent financial crisis will continue to guide us here.

We personally know how well MIT does when we bring people together to solve problems, having served together as co-chairs of the Institute-wide Planning Task Force, formed in response to the financial crisis of 2008. The Task Force of over 200 members of the MIT community was dedicated to finding creative solutions to the problem of cutting spending. MIT met the challenge successfully because it relied on its collective wisdom, with the principles of transparency and inclusiveness assuring an open dialog.

In addition to the five initial areas of focus, we have begun planning for how to invest in capital renewal, and we look

forward to engaging the community in this process. We will work to ensure that all areas of student life are considered, and that academic and student priorities are met. The Chancellor and the Dean for Student Life, as well as the academic and education deans, will be integral to this process that will allocate \$250M for accelerated capital renewal over the next three years, so that we may begin to address the overall deferred maintenance backlog. Moving forward, we want to renew and expand our commitment to ensuring that engagement occurs around specific charges and questions that are important to the Institute and its planning efforts, and that we all benefit by everyone's collective input, ingenuity, and creativity. As we work to create ongoing opportunities for greater input we will also find better ways to share the input we receive.

MIT 2030: Moving Forward

In reading the recent FNL and editorials in *The Tech* we understand that our faculty and many of our students have a profound interest in MIT 2030, and we welcome the input and collaboration from all aspects of our community. Over the near term faculty and student input will be especially important as we begin

the planning process in the areas of teaching and learning, residential life and open space, and as we continue to work to revitalize Kendall Square.

The Working Group on the Future of Teaching and Learning Spaces at MIT, chaired by Professor John Brisson, has been convened to create a strategic plan for educational space needs at the Institute as envisioned by the faculty. In addition, Eric Grimson and Chris Colombo have initiated a study of future renovation needs for existing student housing, including related opportunities for informal learning and discovery.

We are also working with the Chair of the Faculty Samuel Allen to create opportunities to engage the Faculty Policy Committee and the broader faculty at monthly Institute faculty meetings or other venues. We will pursue opportunities for dialog at Deans and Department Head meetings, and will communicate about ongoing efforts through future issues of the *Faculty Newsletter* and increased coverage from the MIT News Office.

We will also work to engage students in these discussions. The editorial in the February 10 edition of *The Tech* urges students to take an active interest in 2030, and we echo that sentiment. We will work with the Chancellor and Deans for Graduate Education, Undergraduate Education, and Student Life, as well as student leadership to create opportunities for students to get involved.

In closing, we want to affirm our commitment to creating increased forums for open dialog and fruitful engagement with the MIT community about MIT 2030 concepts and future directions for our campus planning activities. We embrace the opportunities to draw upon the expertise of the faculty in the planning process and to incorporate student input in the design and character of our campus, and we look forward to continuing the conversation. ■

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lynda.com Training Scores Big at MIT: Gets Personal With lyndaCampus

Robyn Fizz



A LITTLE OVER A year ago, Information Services and Technology (IS&T) launched an initiative to make lynda.com's popular catalog of online training courses freely available to MIT faculty, staff, and students. This initiative met with stunning success – in the first six months, members of the MIT community went to the lynda.com site more than 24,000 times to view courses. By year end that figure topped 52,000.

What accounts for lynda.com's popularity? Its training library of over 1,300 courses focuses on up-to-date computing skills, with new courses added each week. Topics include, but aren't limited to:

- Windows and Macintosh operating systems
- Microsoft Office suites
- Design software, including Adobe Creative Suite
- Web + Interactive applications
- Social Media
- iPhone and iPad

While many of the courses are useful for the everyday user, lynda.com also has advanced offerings for designers, photographers, programmers, and Web developers. The format of the training videos also appeals to viewers. Courses are taught by industry experts who convey concepts

clearly, and each course consists of multiple short videos that can be watched and replayed at any time.

To access lynda.com at no charge, connect through the MIT-specific URL: *lynda.mit.edu*. As an MIT community member, you will be authenticated auto-

While many of the courses are useful for the everyday user, lynda.com also has advanced offerings for designers, photographers, programmers, and Web developers. The format of the training videos also appeals to viewers. Courses are taught by industry experts who convey concepts clearly, and each course consists of multiple short videos that can be watched and replayed at any time.

matically through Touchstone and can then take lynda.com courses whether you are on campus or off.

New Year, More Features: Welcome lyndaCampus

On January 5, IS&T introduced lyndaCampus to MIT, an enhancement that provides each student, faculty, and staff member with his or her own profile on lynda.com.

Now when you log on at *lynda.mit.edu*, you are greeted by name. From the new **my training** menu, you can:

- View your lynda.com history (for courses taken on or after January 5, 2012);

- Create bookmarks for courses and modules of interest;
- Receive a printable, mailable Certificate of Completion for any course you've viewed in its entirety.

More Information

lynda.com is about keeping things simple, so feel free to dive right in. You can also learn about lynda.com and lyndaCampus by visiting IS&T's lynda.com eLearning for MIT page (<https://ist.mit.edu/services/training/lynda>) or watching the IS&T video about lyndaCampus (ist.mit.edu/news/videos/lyndaCampus).

If you have questions or comments about your experience with lynda.com, send e-mail to IS&T's Training Manager, Mark Wiklund (mwiklund@mit.edu), or call him directly at 617.253.0686. ■

Robyn Fizz is IS&T News Coordinator (fizz@mit.edu).

Travis Merritt and the Founding of Charm School

Eve Odiorne Sullivan

MIT'S OWN CHARM SCHOOL was featured on “CBS Sunday Morning” on March 4 (bit.ly/yi75ZU) and the spotlight covered the usual sessions on table manners, first impressions and handshakes, and dressing for success, with a brief snippet on “How To Tell Somebody Something They’d Rather Not Hear.” (The segment’s focus was, unfortunately, on things [dishes, clothes] rather than on honoring and enhancing personal interactions, which are the essence of charm.) The late Dean Travis Merritt founded Charm School in 1993 as a one-day event at the end of IAP. It has become a tradition – which I have happily been part of since 1994 – and I was curious about how it began.

When I contacted former MIT President Charles Vest to ask him what he remembered of the origins of Charm School, he responded, “Travis explained to me, and presumably to others, that he continually noticed MIT students walking down the Infinite Corridor looking at their feet rather than interacting with others. Wondering how to help them move beyond this sent him down a path of thought that led him to the idea of Charm School.”

Travis was on the Literature faculty of MIT and he specialized in Victorian prose – and in particular the prose of Walter Pater. Although he talked about the style of the prose, what he was addressing was its civility, in the fullest sense of that word. Like Pater, he wanted to preserve the art and the humanity of civilization.

I contacted Dr. Vest because of what he wrote about the murder of Yngve Raustein on our campus in September 1992, “For many of us, one of the deepest wounds has been to our sense of commu-

nity, to our faith in civility and in basic human decency.” I thought at first that Travis Merritt’s idea to create Charm School was a direct response to that tragedy, but apparently it was not.

For many years I have taken paying guests in my home, almost exclusively MIT visiting researchers. Many of my guests remark on how cold the social atmosphere is in their work groups or labs. Their comments . . . make it clear that the problem is not limited to student life.

Nonetheless there was a real connection. Raustein’s death and others on campus (those from suicide, drinking, or accidents) obviously represent huge tears in our social fabric and cannot be mended. But if we notice the little worn places, the small rips, can we re-weave the fabric so that it is more resistant to the large tears?

For many years I have taken paying guests in my home, almost exclusively MIT visiting researchers. Many of my guests remark on how cold the social atmosphere is in their work groups or labs. Their comments, such as “Most people eat at their desks” and “So few people take time to say hello,” make it clear that the problem is not limited to student life. If MIT is rightly noted for “inventive wisdom” we ought to be able to build out from the cornerstone that is Charm School and create a community coalition to address the social and emotional vacuum that some of us seem too busy to notice, until it is too late.

Charm School, as Travis designed it, is a light-hearted event with a lot of dramatic presentations. “Tie-ing Ties” is still on the schedule, but missing from this year’s agenda was “Buttering Up Big

Shots,” “Telephone and Email Manners” (add social media manners to that session?), “Merriment: telling a joke, engaging smiles, contagious laughter, etc.,” and “Small Talk” . . . all on the 1994

program that I saved. Linda Patton, Director of Off-Campus Housing, who now coordinates “How To Tell Somebody Something They’d Rather Not Hear,” recalls that one year there was a very popular session on laundry sorting and another time one on bathroom etiquette. Who knew the things we didn’t know we needed to know?!

Alana Hamlett, Assistant Director of Student Activities, and her colleagues did a terrific job this year and the event truly honored Dean Merritt’s memory. Could we take it a step further and create a broader coalition to address these issues regularly throughout the year? This effort is not only about being nice, it’s about being real, being present emotionally with one another.

With MIT searching for a new President, this seems like the ideal time to raise the issue of social climate and seek a leader willing to address it. There is a saying, “It’s nice to be important but it’s more important to be nice.” I imagine that Travis Merritt would also agree that it’s nice to be smart, but more important, it’s smart to be nice. ■

Eve Odiorne Sullivan is Senior Editorial Assistant, *Annals of Physics* (annals@mit.edu).

MAP Program: Calling All Faculty

JoAnne Yates

AS FACULTY MEMBERS AT MIT, most of us have had mentors at some point in our careers. Those individuals have surely been invaluable in our own development. Formerly recipients of this great gift of mentoring, we should now be taking on that role for others.

You are probably mentoring, formally or informally, faculty members junior to you, or graduate students in your department or lab, and you know how rewarding it can be to serve in this role. The pipeline to these positions starts much earlier, however. Undergraduates, too, have great mentoring needs, and too few of us are involved in mentoring at that level. The Mentor Advocate Partnership (MAP) Program run by the Office of Minority Education is an excellent opportunity for you to guide an undergraduate student in his or her introduction to academia.

Studies show that students who are integrated and involved in both the academic and social mainstream of campus life are more likely to graduate and have greater satisfaction with their collegiate experience – especially those reporting strong ties with faculty. MAP is a volunteer mentoring program seeking to foster the student's holistic development along academic and non-academic dimensions.

Mentors have the opportunity to guide MIT freshmen and sophomores, known as Protégés, through building relationships, monitoring academic performance and personal well-being, offering encouragement, or providing a proactive support network. You will know you have had a positive impact on a Protégé when you hear them say “Thanks – that was really helpful,” or “You gave me an outlet –

someone to talk to about things that were going on in my life – both the good and the bad.”

MAP is a volunteer mentoring program seeking to foster the student's holistic development along academic and non-academic dimensions. Mentors have the opportunity to guide MIT freshmen and sophomores, known as Protégés, through building relationships, monitoring academic performance and personal well-being, offering encouragement, or providing a proactive support network.

Based upon the number of fall 2011 applicants, we anticipate serving approximately 100 protégés (a 14% increase) in the 2012-13 academic year. With 93% of freshmen protégés requesting faculty mentors and only 22% of our mentors being faculty, we need your support!

As a mentor, you can offer a number of benefits to your protégé, including 1) improved self-confidence; 2) eased discussions around academic and social difficulties; and 3) personal and professional development. As a mentor, you will ultimately have the opportunity to become a supporter, connector, champion, and friend.

MAP partnerships are designed to extend for two years, but the Program's aim is for the connection between mentor and protégé to continue after the “formal” period. The estimated time commitment for a mentor with one (1) protégé is 6-8 hours per semester. This includes three (3) hour-long meetings throughout the academic semester, time for e-mails and/or phone conversations, and attending MAP events, including the end-of-year celebra-

tion, whenever possible. MAP aims to provide a community of support among the network of mentors and protégés at

MIT, and is designed to complement the current undergraduate advisor system.

This program clearly has some structure, but it also makes time for plenty of fun. To build a strong community where protégés and mentors can find resources in a close-knit group, MAP also holds events off campus, such as a “Night on the Town” and a competition in which MAP participants are encouraged to deliberate the finer points of local ice cream shops.

As faculty, we are the most valuable resources to our students. If you are interested in getting involved, please contact Program Coordinator Antonio Perry (acperry@mit.edu) with any questions or fill out a mentor application online at ome.mit.edu/programs-services/mentor-advocate-partnership. The Early Deadline for applications is May 1, 2012, while the Final Deadline is August 1, 2012. ■

JoAnne Yates is Deputy Dean and Professor, Sloan School of Management, and is a MAP Mentor and faculty liaison to the Office of Minority Education's Faculty Advisory Committee (jyates@mit.edu).

Workshop: Leadership Skills for Engineering and Science Faculty

MIT PROFESSIONAL EDUCATION will be holding a workshop entitled “Leadership Skills for Engineering and Science Faculty” on June 18-19, 2012.

Who should attend: This hands-on workshop can provide significant insights to junior faculty, senior faculty, department heads, and higher administrators involved in technical research and teaching. Non-academics and students may not attend.

Focus: Human-centered strategies for leading effective teams in technical academic environments. Through a series of interactive role-playing activities, self-assessment instruments, and group discussions, you and your colleagues will develop a repertoire of techniques for addressing issues that commonly arise within technical research groups and among teaching staff.

Participant outcomes: An appreciation of how your own leadership style affects research, education, and the learning process. You will gain insights into:

- emotions in the workplace
- communicating effectively with people who think differently from you
- how to foster creativity
- dealing with conflict
- giving effective feedback
- how different situations call for different leadership strategies
- student motivation
- self-understanding as a leader

Pedagogy: The workshop promotes awareness of the participants’ own styles of leadership and offers them new approaches to explore. Since leadership styles are highly individual and situational, the instructors do not judge styles

as “good” or “bad,” but provide a non-judgmental yet structured environment in which you can discover what works for you. No dogma! – just scientifically informed frameworks and models of human behavior to leverage your own common sense.

Instructors

- Charles E. Leiserson, Professor of Computer Science and Engineering, MIT
- Chuck McVinney, Management Consultant, McVinney & Company

What Participants Say

More than 95% of over 300 past participants have graded this workshop A or A+.

Here are some of their comments:

“The professor/student role-playing taught me how differences in communication styles can seriously complicate interactions, a poignant and unforgettable lesson.”
Prof. Polina Golland, MIT

“Tremendously helpful! I learned many key things essential to running a group and interacting with others that you don’t learn anywhere else.”
Prof. Kimberly Hamad-Schifferli,
Mechanical Engineering, MIT

“I strongly recommend this workshop to anyone in a supervisory role.”
Dr. Jim Glass, Computer Science, MIT

“I wish I took this course 10 years ago. Today is a milestone in my understanding of who I am as a professor.”
Sagar Kamarlhi, Associate Professor,
Northeastern University

“I wish I had taken this in my first year as a faculty.”

Alan Aspuru-Guzik, Associate Professor,
Harvard University

“An eye opener on human relationships and leadership founded on rigorous personality classification and human motivation. Every professor should take it.”

Rahul Sarpeshkar, Associate Professor,
MIT

How to Register

- \$1,600 – Regular Tuition
- \$1,360 – Tuition for MIT faculty after 15% group discount is applied

MIT’s Office of Sponsored Programs advises that the cost is eligible for direct charging to a sponsored research project, because workshop activities can be identified specifically with the participant’s particular project and benefits that project directly.

In addition, the Dean of Engineering has made eight full scholarships available for faculty in the School of Engineering and the Dean of Science will provide full funding for interested tenure-track faculty members in the School of Science.

For more information, please visit the course Website (web.mit.edu/professional/short-programs/courses/engineering_leadership_skills.html) or contact MIT Professional Education Short Programs by e-mailing shortprograms@mit.edu. If you wish to register, you should do so by May 18.

Note: Space is limited and will be filled on a first-come, first-serve basis. ■

M.I.T. Numbers Past Presidents of MIT



Education
B.A., Biology,
University of Rochester;
Ph.D., Anatomy (and
Neuroscience),
Georgetown University
School of Medicine.

Susan Hockfield
2004-2012

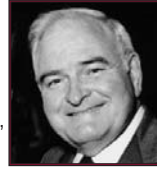
Previous Position
Provost, Yale University



Education
B.S., Mechanical
Engineering, West
Virginia University;
M. S., Ph.D.,
Mechanical Engineering,
University of Michigan.

Charles M. Vest
1990-2004

Previous Position
Provost and Vice
President, U. of Michigan



Education
B.S., S.M., Sc.D.,
Electrical Engineering,
M.I.T.

Previous Position
Chancellor, M.I.T.

Paul E. Gray
1980-1990



Education
B.S., M.S., Ph.D.,
Electrical Engineering,
University of Michigan.

Previous Position
Provost, M.I.T.

Jerome B. Wiesner
1971-1980



Education
B.A., Central College,
M.A., University of
Chicago.

Previous Position
Dean, Sloan School of
Management, M.I.T.

Howard W. Johnson
1966-1971



Education
S.B., S.M., Electrical
Engineering, M.I.T.,
Sc.D., Mathematical
Physics, Eidgenossische
Technische Hochschule,
Zurich, Switzerland.

Previous Position
Acting President, M.I.T.

Julius A. Stratton
1959-1966



Education
S.B., Management,
M.I.T.

Previous Position
Executive Vice
President and Member
of the Corporation,
M.I.T.

James R. Killian
1948-1959



Education
B.S., M.S., Physics,
College of Wooster;
Ph.D., Princeton
University.

Previous Position
Director of Research,
Palmer Laboratory,
Princeton University

Karl T. Compton
1930-1948



Education
B.S., Illinois Industrial
University at Urbana
(later the University of
Illinois).

Previous Position
Provost, Yale University

Samuel W. Stratton
1923-1930



Education
Central High School,
Philadelphia,
Pennsylvania.

Previous Position
Lecturer in Electrical
Engineering, M.I.T.

***Elihu Thomson**
1921-1923



Education
B.S., Kansas
Agricultural College,
M.S., D.Sc., Cornell
University.

Previous Position
Professor of Physics,
Yale University

Ernest F. Nichols
1921-1922



Education
Central High School,
Philadelphia,
Pennsylvania.

Previous Position
Lecturer in Electrical
Engineering, M.I.T.

***Elihu Thomson**
1920-1921



Education
B.A., M.A.,
Mathematics, Law
Degree, University of
Cambridge (England).

Previous Position
Head, Department of
Physics, Columbia
University

Richard C. Maclaurin
1909-1920



Education
B.S., M.S., Chemistry,
M.I.T., Ph.D., University
of Leipzig.

Previous Position
Professor of Chemistry,
M.I.T.

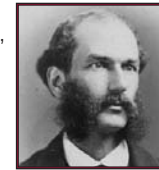
***Arthur A. Noyes**
1907-1909



Education
A.B., Pritchett College,
Ph.D. University of
Munich.

Previous Position
Superintendent, U.S.
Coast and Geodetic
Survey

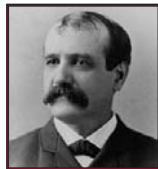
Henry S. Pritchett
1900-1907



Education
S.B., Lawrence
Scientific School,
Harvard University.

Previous Position
Professor of Chemistry,
M.I.T.

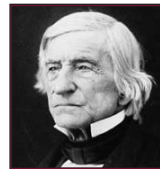
James M. Crafts
1897-1900



Education
A.B., Amherst College.

Previous Position
Professor of Political
Economy and History,
Sheffield Scientific
School of Yale
University

Francis A. Walker
1881-1897



Education
College of William and
Mary (no degree con-
ferred).

William B. Rogers
1879-1881



Education
B.S., Mathematics,
Harvard College.

Previous Position
Professor of
Mathematics, M.I.T.

John D. Runkle
1870-1878



Education
College of William and
Mary (no degree con-
ferred).

William B. Rogers
1862-1870

*Acting President

Source: MIT Libraries, Archives