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Wednesday – November 16, 2005

TechTalk

SERVING THE MIT COMMUNITY

PHOTO / **DONNA COVENEY**

Solar panels on top of the Hayden Memorial Library soak up the afternoon sun on Monday, Nov. 14, the day MIT celebrated the completion of its largest solar installation.

Solar power has shining moment

Sarah H. Wright
News Office

As the autumn sun set, MIT celebrated the completion of its third and largest solar installation at Hayden Memorial Library on Monday, Nov. 14.

President Susan Hockfield seized the moment of natural beauty to affirm the Institute's commitment to innovations in energy use.

Thanks to the MIT Community Solar Power Initiative and to those who installed the 42 solar panels on the library's roof, much of the sun's "energy is being captured and converted to electricity to help power a portion of the essential functions of this library," Hockfield said.

The president noted that the installation of the system atop the library represented the successful culmination of a project to promote sustainable energy on campus and facilitate education and research in solar power as well as to reduce MIT's emissions footprint.

Jamie Lewis Keith, senior counsel and managing director for MIT Environmental Programs, noted that Hockfield had charged MIT with applying its multidisciplinary creativity to addressing the world's enormously complex energy challenges when she was inaugurated last May.

Keith's remarks at Monday's ribbon cutting pointed to MIT's goals – leadership in energy and environmental research and education – and its environmental policies, which commit the Institute to environmental stewardship on campus, regionally and globally.

Keith welcomed Cambridge Mayor Michael Sullivan; Ann Wolpert, director of the MIT Libraries; and Mitchell Adams, executive director of the Massachusetts Technology Collaborative (MTC).

MTC administers the Renewable Energy Trust, which provided $455,700 in funding to launch MIT's Community Solar Power Initiative in 2002.

Hockfield thanked Adams and MTC for the "financial incentives to get this project off the ground and for investing in the Massachusetts innovation economy."

PHOTO / **DONNA COVENEY**

Cambridge Mayor Michael Sullivan joined President Susan Hockfield in the ribbon-cutting ceremony for the new installation.

The library roof was selected for the solar installation by the Department of Facilities for its southern exposure. The 12,000-watt system on the library's roof is comprised of 42 panels, each measuring 2 feet by 5 feet and containing 72 photo voltaic cells. The system will generate around 15,000 kilowatt hours a year — roughly equivalent to the energy needed to power two homes for a year. The production of the electricity will result in zero greenhouse gas emissions and will supplement power provided by MIT's co-generation plant on Vassar Street.

Solar panels are also installed at the MIT Museum (N52) and at the Student Center; those panels generate a combined total of 11,500 kilowatt hours.

The MIT Department of Facilities and the Laboratory for Energy and the Environment (LFEE) received the initial grants to launch 40 solar installations on campus as well as at schools, homes and businesses in Cambridge, Watertown, Arlington, Lexington and Waltham.

To learn more about the MIT Community Solar Power Initiative and view photos of solar power panel installations go to solarpower.mit.edu.

Vice President Stowe to retire

Barbara Stowe

MIT President Susan Hockfield has announced that Barbara G. Stowe, vice president for resource development, will retire at the end of the academic year, after 11 years as vice president and nearly 25 years at MIT.

In making the announcement at the annual meeting of the Corporation Development Committee on Tuesday, Nov. 15, Hockfield said, "Barbara's vision of MIT's fund-raising aspirations has transformed our place in the philanthropic universe. She has done so with a deep institutional and personal wisdom that has guided senior officers and the resource development staff in setting strategies and making the best possible case for the Institute. The extraordinary success of the Campaign for MIT is an example of how she helped us raise the bar and then exceed even that goal. Perhaps most importantly, she has kept us true to the underlying spirit of philanthropy — which is based on shared values and trust."

Noting that Stowe had postponed her retirement plans for several months, Hockfield said, "Barbara very kindly agreed to stay on for a longer period than she had originally intended, to introduce me to fund raising at MIT, including visits with some of our most generous benefactors. I am extraordinarily grateful for her willingness to do so, and for her guidance in this and many other facets

See **STOWE**
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OCW draws attention at world summit

Jon Paul Potts
MIT OpenCourseWare

At the World Summit on the Information Society this week in Tunis, Tunisia, MIT OpenCourseWare co-hosted a half-day event with the United Nations University, "Widening Access to Knowledge Through Open Sharing: The Growing OpenCourseWare Movement."

More than 100 people attended the Nov. 14 forum, which featured presentations by prominent leaders from the global education community. The proceedings

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RESEARCH

A REALLY COOL TRIP

A team of MIT researchers visits the Arctic to test technologies that could prove useful in outer space.

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COVER STORIES

MIT researchers have been highlighted on the cover of the prestigious journal Nature four times in recent months.

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NEWS

LOW PRICE HIGH TECH

The first working prototype of the $100 laptop will be unveiled tonight at the World Summit on the Information Society in Tunis, Tunisia.

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ARTS

INSPIRING CAMPUS

Three artists use MIT buildings as the inspiration for their work, exhibited this week in Cambridge.

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JUST FOLK

Bring an instrument and play along with folk performer Jeff Warner at a free concert/demonstration next week.

Page 7

World AIDS Day event planned

In observance of World AIDS Day, the MIT Women's League will be raising funds and awareness in Lobby 10 on Thursday, Dec. 1.

World AIDS Day is an international day of coordinated action against AIDS — a day for bringing messages of compassion, hope, solidarity and understanding about AIDS to every country in the world. The theme for this year's event is "Stop AIDS, keep the promise."

A centerpiece of the event will be the league's annual Chocolate Buffet and raffle fund-raiser. Chocolate desserts donated by local bakeries, hotels, restaurants, catering services and members of the MIT community will be on sale. Proceeds will benefit the Boston Living Center, a nonprofit organization that provides support and services to the HIV/AIDS community of Greater Boston.

Visitors to Lobby 10 will be able to see several panels from the AIDS Memorial Quilt. There will also be tables of information about the Boston Living Center, Cambridge Cares About AIDS, the Center for Health Promotion and Wellness at MIT Medical, the Children's Hospital AIDS Program, the Latin American Health Initiative, the LBGT Issues Group, Massachusetts Asian & Pacific Islanders for Health, the MIT African Students Association, the Names Project Boston and the SPARK Center.

The Women's League, a social and service organization open to all women in the MIT community, initiated MIT's annual observance of World AIDS Day in 1999 and has coordinated this event for the Institute every year since.

Volunteers are still needed to donate baked goods and to staff the buffet. If you would like to help, contact Sis de Bordenave at x3-3656 or esdeb@mit.edu.

STOWE

Continued from Page 1

of MIT."

Stowe joined MIT in 1981 as director of health sciences development, after several years of fund-raising work at research universities and health-care organizations. In 1986 she became assistant dean for resource development in the School of Humanities, Arts and Social Sciences.

In 1988, she became director of foundation relations for the Institute, during which time she strengthened and enhanced the overall program of identifying, cultivating and raising donations from foundations — with a particular focus on matching MIT's academic priorities with the strategic priorities of foundations. In 1991, she became director of foundation relations and development services, with primary fund-raising responsibility for major gifts from alumni in Europe and the Middle East. In 1994, then-President Charles M. Vest appointed her vice president for resource development.

Vest commented, "Barbara Stowe has been amazingly effective as MIT's vice president for resource development. Under her leadership, MIT conducted a highly successful $2 billion capital campaign and moved us into a new league in private support. She has combined a strategic and analytical approach to fund raising with keen insights and appreciation of donors, faculty and staff. She brought to her difficult work a gracefulness and spirit of optimism that was infectious. She won friends, admirers and volunteers for MIT as well as financial donors. She realized the potential of MIT to receive major support from the international community, when many others doubted the potential for doing so. Finally, she was one of my closest and most trusted advisors, and I relied heavily on the wisdom, accuracy and candor of her advice."

A key element in the success of the campaign was her transformation of MIT's private donor base from its traditional reliance on corporate and foundation giving to an emphasis on gifts from alumni and friends. During that campaign, MIT raised more dollars per alumnus and more dollars per fund-raising staff than any of the other universities with $2 billion campaigns at that time.

An honorary member of the MIT Alumni Association, Stowe is member of the board of Management Sciences for Health, and a member of the Council for the Advancement and Support of Education and the Association of Development Officers of Urban Universities.

PHOTO / **DONNA COVENEY**

Holidays approach

Jeanne Hogman, pediatric clinic assistant in MIT Medical, shows off her handmade dolls at a crafts fair held in the atrium lobby of the Whitaker Building on Wednesday, Nov. 9.

NEWS YOU CAN USE

Blood drive

A blood drive will be held in La Sala de Puerto Rico on Monday, Nov. 21, from noon to 6 p.m. and on Tuesday, Nov. 22 from 8 a.m. to 8 p.m. For more information or to make an appointment, visit web.mit.edu/blood-drive/www/.

Credit union directors

The MIT Federal Credit Union is seeking members interested in serving on the board of directors. Anyone interested in serving on the credit union's board may contact Edward J. Hartnett III at x8-2628 or at ehartnett@draper.com by Dec. 23.

No Tech Talk

There will be no Tech Talk published on Nov. 23 due to Thanksgiving. The next issue of Tech Talk will appear on Nov. 30.

Faculty meeting scheduled

A regular meeting of the faculty will take place Wednesday, Nov. 16, at 3:30 p.m. in Room 32-141. The agenda includes:

- Vote on changes to the "Rules and Regulations of the Faculty," Section 1.73.7
- A report from the Special Committee to Review the Nominations Process and a proposal to change Section 1.51 of the "Rules and Regulations of the Faculty"
- A progress report from the Task Force on the Undergraduate Educational Commons
- A report from the Task Force on Medical Care for the MIT Community
- Remarks from President Susan Hockfield
- Topics arising and questions for the president, the provost and the chancellor

DIGITALK: WHERE IT'S AT

Podcasts at MIT

According to the Oxford English Dictionary, a podcast is "a digital recording of a radio broadcast or similar program, made available on the Internet for downloading to a personal audio player." IS&T recently launched a Podcasts at MIT page (web.mit.edu/ist/podcasts/) to encourage members of the community to contribute podcasts. Especially relevant are submissions from departments, labs and centers, as well as MIT-sponsored events such as lectures and forums. Individuals can add informal content directly via the IS&T Podcast Wiki at istwiki.mit.edu/istwiki/podcasts.

All submissions must be free of copyright infringement. IS&T recommends that contributors look into getting a Creative Commons license, which enables copyright holders to grant some of their rights to the public while retaining others. For details, visit creativecommons.org/.

IS&T plans to roll out a more robust podcast indexing service and is working on standards for tagging to make content easily accessible and searchable.

Theses in DSpace

The MIT Libraries have added more than 11,000 MIT theses to DSpace — doubling the content of the digital archive and providing worldwide exposure to the work of MIT scholars. The MIT thesis collection contains the theses of many well-known MIT alumni, including several Nobel Prize winners.

To find theses in DSpace, go to libraries.mit.edu/mit-theses. Current MIT students, faculty and staff can print PDF files of theses (certificates required). Non-MIT users have access to a readable copy and the option of purchasing printable files.

The theses in DSpace represent a small portion of the more than 100,000 theses in the collection. The full collection of paper theses dating from 1868 can be found in the Institute archives. More theses will be added to DSpace as they are scanned on demand or submitted electronically. Recent MIT graduates or students about to complete their degree may submit electronic versions of their theses to DSpace at web.mit.edu/etheses.

Lower international rates

MIT staff and students can now take advantage of reduced international cell phone calling rates through an agreement with MobileSphere. This prepaid CellularLD service is intended for cell phone calls originating in the United States and placed to an international location.

Once you've registered for the service, you will be given a local Boston area access number and an extensive list of local access numbers throughout the United States that you can use to make international calls when you are traveling. An international call will incur charges against your prepaid CellularLD account, as well as local minute charges against your cell phone plan.

To learn more about MobileSphere's CellularLD service, including rates and how to sign up, go to web.mit.edu/ist/tel/cellularld.html.

New Media Center

The New Media Center in Room 26-139 provides the MIT community with a range of tools for producing multimedia. This "do-it-yourself" cluster includes Power Macintosh G5s loaded with multimedia software, as well as a new analog-to-digital video converter for digitization of VHS tapes. Many of the machines feature Athena-enabled logins and home directories; the entire cluster will offer this capability by the end of this year.

When it isn't being used by a class, the center is open to the MIT community 24 hours a day, seven days a week. The NMC has a keypad lock to allow access to students, faculty and staff. To get the code (the same as the Athena cluster code), type "tellme combo" at an Athena prompt. For more information, including a link to a schedule of reserved times, see web.mit.edu/nmc/.

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Neuroscientists break code on sight

Cathryn M. Delude
News Office Correspondent

In the sci-fi movie "The Matrix," a cable running from a computer into Neo's brain writes in visual perceptions, and Neo's brain can manipulate the computer-created world. In reality, scientists cannot interact directly with the brain because they do not understand enough about how it encodes and decodes information.

Now, neuroscientists at the McGovern Institute at MIT have been able to decipher a part of the code involved in recognizing visual objects. Practically speaking, computer algorithms used in artificial vision systems might benefit from mimicking these newly uncovered codes.

The study, a collaboration between James DiCarlo's and Tomaso Poggio's labs, appeared in the Nov. 4 issue of Science.

"We want to know how the brain works to create intelligence," said Poggio, the Eugene McDermott Professor in Brain Sciences and Human Behavior. "Our ability to recognize objects in the visual world is among the most complex problems the brain must solve. Computationally, it is much harder than reasoning." Yet we take it for granted because it appears to happen automatically and almost unconsciously.

"This work enhances our understanding of how the brain encodes visual information in a useful format for brain regions involved in action, planning and memory," said DiCarlo, an assistant professor of neuroscience.

In a fraction of a second, visual input about an object runs from the retina through increasingly higher levels of the visual stream, continuously reformatting the information until it reaches the highest purely visual level, the inferotemporal (IT) cortex. The IT cortex identifies and categorizes the object and sends that information to other brain regions.

To explore how the IT cortex formats that output, the researchers trained monkeys to recognize different objects grouped into categories, such as faces, toys and vehicles. The images appeared in different sizes and positions in the visual field. Recording the activity of hundreds of IT neurons produced a large database of IT neural patterns generated in response to each object under many different conditions.

Then, the researchers used a computer algorithm, called a classifier, to decipher the code. The classifier was used to associate each object – say, a monkey's face – with a particular pattern of neural signals, effectively decoding neural activity. Remarkably, the classifier found that just a split second's worth of the neural signal contained specific enough information to identity and categorize the object, even at positions and sizes the classifier had not previously "seen."

It was quite surprising that so few IT neurons (several hundred out of millions) for such a short period of time contained so much precise information. "If we could record a larger population of neurons simultaneously, we might find even more robust codes hidden in the neural patterns and extract even fuller information," Poggio said.

This work was funded by DARPA, the Office of Naval Research and the National Institutes of Health.

PHOTO / **MATTHEW R. SILVER**

In this aerial view of the Haughton-Mars Base, near the North Pole, the six core structures (including the MIT tent) can be seen on the left.

MIT researchers visit Mars on Earth

Matthew R. Silver
News Office Correspondent

At 75 degrees north latitude, Devon Island lies high above the Arctic Circle, a few hundred miles from the magnetic North Pole. A true polar desert, it is also the largest uninhabited island on Earth. But the reach of MIT extends even here.

This past summer, a research team from MIT's Department of Aeronautics and Astronautics established a semi-permanent shelter at the NASA Haughton-Mars Base. Supported by a NASA grant on interplanetary supply chain management, the team went to Devon Island because the existing base infrastructure, combined with the remote and barren location, makes it ideal for studying logistics strategies that could be used in planning exploration strategies to the moon and Mars. The principal investigators for the project are Professors Olivier de Weck and David Simchi-Levi.

"Haughton-Mars Base provides an excellent analogy to lunar and Mars exploration," said de Weck. "This is primarily due to its remoteness, the time-varying nature of the transportation links and its thin supply line." The MIT team also included former NASA astronaut and MIT Professor Jeffrey Hoffman and seven students.

The Haughton-Mars Project is an international, interdisciplinary field research project sponsored by NASA and the Canadian Space Agency, focused on the scientific study of the Haughton Crater — a 40-kilometer-wide geological structure formed more than 38 million years ago by the impact of a large meteor. Chosen in part for its remoteness and similarity to Mars terrain, the site also serves as an analogue or "mock" exploration base, where an array of exploration-related engineering and technology experiments are tested.

PHOTO / **JESSICA MARQUEZ**

MIT Professor Jeffrey Hoffman tests a Hamiliton Sundstrand concept spacesuit while at the Haughton-Mars Base on Devon Island last summer.

Another expedition goal was to establish an MIT presence at the Haughton base for future educational and research activities.

"The Haughton-Mars Project Devon Island base gives us a unique opportunity to conduct experimental tests of some of the ideas we've been developing for lunar and Martian exploration," Hoffman said. "We're hoping this becomes a permanent MIT facility."

The MIT team compiled a complete inventory of materials at the base, including such key items as food and fuel. It also experimented with modern logistics technologies, such as radio frequency identification, that autonomously manage and track assets, with the ultimate goal of creating a "smart exploration base" that could increase safety and save astronauts and explorers precious time.

Results from the MIT expedition are now being processed. These findings will form the basis for continued work on interplanetary logistics through this fall.

Tech Museum honors OCW

Jon Paul Potts
MIT OpenCourseWare

For its work using technology to improve the lives of people around the world, MIT OpenCourseWare was honored with a Tech Museum Award on Nov. 9.

In recognizing MIT OpenCourseWare (OCW) and four other $50,000 cash prize recipients, the Tech Museum of Innovation spotlighted technology solutions that are changing the lives of countless individuals from all backgrounds.

Each of the five prize laureates is encouraged to reinvest the winnings in additional innovative programs that utilize technology to improve people's lives.

"We are honored that MIT OCW has been recognized by the Tech Museum, and the fact that we were nominated for this by two MIT alumni, Derry and Charlene Chiaki Kabcenell, makes this award that much more meaningful," said Anne H. Margulies, the executive director of MIT OCW, who accepted the Tech Museum's Microsoft Education Award on behalf of MIT.

"This award recognizes the very simple, yet very big idea, that came from the MIT faculty — that the best way to advance education is to share knowledge openly and freely," she said.

Derry Kabcenell (S.B. 1975) and his wife, Charlene Chiaki (Nohara) Kabcenell (S.B. 1979), MIT alumni from Northern California, nominated OCW for the Tech Museum Award in January.

"From the beginning, I've felt that OCW is a bold initiative that deserves broad exposure," Derry Kabcenell said. "I enjoy thinking about the students in remote parts of the world who are, at this moment, deciding to become scientists and engineers because of OCW. When I read the stories about how it is being used, I'm even more proud to be an MIT alumnus."

The other 2005 Tech Museum Awards cash prize recipients are: Enviro Options, which received the Intel Environment Award for its waterless dehydration/evaporation toilet; SELCO Solar Light, which received the Accenture Economic Development Award for its work supplying power to rural India; the Hib Vaccine Team, which received the Agilent Technologies Foundation Health Award for creating an affordable, synthetic vaccine against the bacteria that can cause meningitis and pneumonia; and the Center for the Improvement of Working Conditions & Environment, which received the Knight Ridder Equality Award for its efforts to improve working conditions for adults in the carpet weaving industry.

The Silicon Valley awards gala, attended by more than 1,100 global technology leaders, philanthropists and guests, honored 25 laureates (five of whom are the prize laureates) in the categories of environment, economic development, education, equality and health.

Jacks to share cancer research prize

MIT Professor Tyler E. Jacks will share the 2005 Paul Marks Prize for Cancer Research awarded by Memorial Sloan-Kettering Cancer Center.

Jacks, who is the director of the Center for Cancer Research and a Howard Hughes Medical Institute (HHMI) investigator, will share the $150,000 award with Scott W. Lowe of Cold Spring Harbor Laboratory and the HHMI; and Jeff Wrana of the University of Toronto and the Samuel Lunenfeld Research Institute.

Jacks was cited for advancing the understanding of the pathogenesis of cancer; Lowe, for studying how genes influence the response to chemotherapy; and Wrana, for his work analyzing the impact of cell-cell communication on tumor development.

The prize, named after Paul A. Marks, president emeritus of Sloan-Kettering, recognizes significant contributions to the basic understanding and treatment of cancer by scientists no more than 45 years old at the time they are nominated. The winners were selected by a committee chaired by Jeffrey M. Friedman, a professor at Rockefeller University and an HHMI investigator.

"While still in relatively early stages of their careers, the three winners already are leaders in their respective fields of research," said Friedman. "Each has made significant contributions to our understanding of the genes, signaling pathways and processes that regulate cell proliferation and lead to the formation of tumors, their spread and their response to treatment. The selection committee is confident that these three young scientists will continue to play key roles in cancer research in the future."

This year's winners of the Paul Marks Prizes will be honored at a luncheon on Dec. 1 and will speak about their work at a public symposium held after the luncheon at Memorial Sloan-Kettering Cancer Center in New York.

Nature-al selection

Sept. 29

Oct. 6

Research by MIT scientists and colleagues has graced the cover of Nature four times over the last month and a half.

On Sept. 29 the weekly, one of the world's premier science journals, featured work led by Professor John Bush of mathematics on how certain insects navigate the surface of water (visit web.mit.edu/newsoffice/2005/insects.html). The Oct. 6 cover focused on the origin of short gamma-ray bursts, violent cosmic events marking the collision of two compact stars (visit web.mit.edu/newsoffice/2005/gamma-ray.html). George Ricker, a senior research scientist at the MIT Kavli Institute for Astrophysics and Space Research, led the MIT team involved in that work.

On Oct. 20, the journal ran an image of Z-DNA, an unexpected left-handed form of DNA discovered by Alexander Rich, William Thompson Sedgwick Professor of Biophysics, and colleagues more than 20 years ago. Now Rich and his team have determined the crystal structure of the junction between Z-DNA and "normal," right-handed DNA (B-DNA).

The following week, Nature focused on the completion of the HapMap project, a comprehensive catalog of the genetic diversity in the human genome sequence across human populations. Several researchers from the Broad Institute of MIT and Harvard were co-authors of a paper on the work (web.mit.edu/newsoffice/2005/hapmap.html).

— Elizabeth Thomson

Oct. 20

Oct. 27

Women's Union set to honor Hockfield

President Susan Hockfield is slated to receive the Amelia Earhart Award from the Women's Union on Monday, Nov. 21, at a luncheon at the Boston Marriott Copley Place.

The Amelia Earhart Award was established in 1983 by the Women's Union to recognize women who continue Earhart's pioneering spirit. The award honors a woman who has significantly contributed to the expansion of opportunities for women. Doris Kearns Goodwin was honored last year; other recent recipients include Ruth Simmons, Liz Walker, Gwen Ifill and Julia Child.


Susan Hockfield

On its web site, the Women's Union describes Hockfield as "a strong advocate of the vital role that science, technology and the research university play in the world." It adds that "she brings to the MIT presidency an exceptional record of achievement in serving faculty and student interests."

The Women's Union works to address the educational and economic barriers confronting women and their families.

In 1926, Amelia Earhart came to the Women's Union for employment assistance and was placed as a social worker at Denison House in Boston. While working with immigrant children at the settlement house, she pursued her interest in flying and, in 1928, she became the first woman to cross the Atlantic in an airplane.

MEMORIAL

A memorial service will be held Nov. 29 for Institute Professor Emeritus Morris Cohen, who died May 27 at the age of 93. Morris, a world-renowned metallurgist, was a founding father of the integrated field of materials science and engineering. The service will begin at 4 p.m. in the MIT Chapel. For more information, call x3-6936 or e-mail cohen-memorial@mit.edu. For his full obituary, visit web.mit.edu/newsoffice/2005/obit-cohen.html.

Annan to present prototype $100 laptop at World Summit on Information Society

U.N. Secretary-General Kofi Annan will unveil the first working prototype of the $100 laptop tonight at the World Summit on the Information Society in Tunis, Tunisia. Annan will be joined by his wife, Nane Annan, and Nicholas Negroponte, chairman and co-founder of the Media Lab at MIT, in presenting the laptop to the 200-nation gathering.

The $100 laptop, first announced by Negroponte at the World Economic Forum in January 2005, is an ultra-low-cost, full-featured computer designed to dramatically enhance children's primary and secondary education worldwide. It is a joint project of the Media Lab and the nonprofit One Laptop per Child (OLPC) association, which aims to equip the world's schoolchildren and their teachers with a personal, portable, connected computer.

"Children are the greatest natural resource of any country, and educating these children is at the root of solving our largest and most complex problems," said Negroponte. "Yet the best education may not come from sitting in a traditional classroom, but rather through independent interaction and exploration. The development of a $100 laptop will now make this possible for all kids — especially those in developing nations. It will redefine how we 'learn learning.'"

OLPC is a Delaware-based, nonprofit organization created by faculty members from the MIT Media Lab to design, manufacture and distribute laptops that are sufficiently inexpensive to provide every child in the world access to knowledge and modern forms of education. The laptops will be sold to governments and issued to children by schools on a basis of one laptop per child. These machines will be rugged, Linux-based, and so energy-efficient that hand-cranking alone will generate sufficient power for operation. Mesh networking will give many machines Internet access from one connection. The pricing goal is to start at approximately $100 and then steadily decrease.

The World Summit on the Information Society is the culmination of three years of planning, turning the global spotlight to developing strategies to bridge the digital divide and harness the power of information and communication technologies to spur progress towards the U.N.'s Millennium Development Goals. Forty-five heads of state and delegations from more than 120 nations are among the 10,000 attendees. For more on the summit, visit www.itu.int/wsis/index.html.

OCW

Continued from Page 1

focused on the burgeoning OCW movement — which now includes participating universities on five continents — and how to best to leverage OCW resources to improve education around the globe.

"I am surprised by all the OpenCourseWares, open educational resources and other 'open movements' around the world. It is truly a global movement, and MIT started it all with OCW," said Professor Shigeru Miyagawa, the MIT Kochi-Manjiro Professor of Japanese Language and Culture, who represented OpenCourseWare. "A UNESCO official told me that MIT is a 'trailblazer.' We set the world in motion with this OpenCourseWare Movement, and as the UNESCO official said, 'Nothing can stop it now.'"

The keynote address at Monday's event was given by G.M. Reed, director of the U.N. University's International Institute for Software Technology. Featured speakers included leading educators from the University of the Western Cape in South Africa, Keio University in Japan, the Université Paris 3-Sorbonne in France, the African Virtual University, the UNESCO Information Society Division and MIT, among others.

"I'm also gratified that so many people around the world know about MIT's OpenCourseWare, and the respect that they have for MIT and our faculty because of it," Miyagawa said. "I chaired the panel on 'The Growing International OpenCourseWare Movement,' and it was truly amazing to hear about OpenCourseWares being launched in Japan, France and other American schools such as Tufts. Everyone who attended our discussion 'got it' — OCW is about sharing educational content freely and openly with anyone who wants to use it."

Women's Week embraces feminine diversity

Sasha Brown
News Office

Courses in self-defense, kickboxing, manners and much more made this year's Women's Week, which ran from Nov. 5-10, far more comprehensive than ever before.

"We tried to elevate it a bit this year to make it appealing to many different women," said senior Janet Zhou, one of the organizers.

Sponsored by MIT Medical, Student Life, MIT Society of Women Engineers, MIT Pan-Hellenic Society, MIT Leadership, the Association of Student Activities, Arcade (Assisting Recurring Cultural and Diversity Events) and the Baker Foundation, the weeklong series of events was designed "to promote a model of femininity that incorporates and embraces the properties of intelligence, competence and ambition."

Rather than focusing primarily on physical beauty, this year's events focused on physical fitness, diversity and life skills — such as tax preparation and etiquette training. Zhou organized a four-hour leadership conference to kick off the week's activities. The 100 participants broke into groups and formed improvement plans around such issues as mentoring and advising, political/social awareness in the classroom and creating more campus unity.

Later in the day, the group had lunch with 50 faculty members and administrative officials. "It went really well," said Zhou, who said she hopes that next year's conference will be expanded to include graduate students. "It was very helpful to all who participated."

Although the faculty and administrators who attended the conference included men and women, Zhou said the all-women format worked well for the student attendees. "The qualities we were trying to promote were well served," said Zhou.

Throughout the week, there was a photo booth in Lobby 10 sponsored by Apple Computer. Participants had their photos taken with a digitally created T-shirt stating, "I am a feminist." More than 150 people, half of them men, got their pictures taken. "The idea is that feminism doesn't have just one face," Zhou said.

The campaign included seven well-known campus figures wearing the T-shirt on posters distributed around campus.

Women's Week also included workshops in diversity, money management and safety. On Wednesday evening, female MIT faculty members joined female students in a discussion about the challenges faced by women around the world.

The week culminated in "The Double Dare Ultimate Sex Challenge" — a competition that featured men and women building models of the other gender's reproductive system and questions about safer sexual activity. The men won two rounds and the women won one, Zhou said.

"The program itself was a lot of fun," she said.

Links wanted for chain reaction

This holiday season, embrace the feeling that it's just one thing after another. Participate in the MIT Museum's annual Friday After Thanksgiving Mega Chain Reaction.

Participants create their own chain reactions. It can be as simple as books falling against one another or as complicated as a Rube Goldberg invention. Then, artist/inventor Arthur Ganson masterminds the choreography of a "mega-machine," created by linking participants' creations. The giant chain reaction that results is set off at the end of the program.

Bring your own chain reaction, or just come and watch. The MIT Museum's F.A.T. Mega Chain Reaction will take place Friday, Nov. 25, from 1 to 4 p.m. at Rockwell Cage in MIT's Zesiger Sports and Fitness Center.

Participants must register by Saturday, Nov. 19. The fee is $10 per four-person team; $5 for each additional team member.

The spectator fee is $10 for adults; $2 for students, seniors and youth under 18; free for children under 5 and those with MIT ID. The spectator fee includes admission to the MIT Museum, which will be open until 6 p.m. that day.

For more information, visit web.mit.edu/museum/programs/fat.html or call (617) 452-2111 during business hours.

PHOTO / **DONNA COVENEY**

Fall for New England foliage

Wind and rain are starting to take down the leaves across campus, but this beautiful tree outside the Whitaker Building was still awash in red last week.

Technology will save TV, student says

Sarah H. Wright
News Office

Network TV is dead! Long live network TV!

Since Apple announced on Oct. 12 that certain TV programs would be sold through iTunes, the same source that fills iPods with music, iTunes customers have purchased more than 1 million videos of their favorite ABC-Disney shows.

With Google, Microsoft and Yahoo! set to dance to the iTunes tune — selling television content online, on demand — it seems the era of recliners, remote controls and ratings is coming to an end.

But maybe not, says Ivan Askwith, a graduate student in literature and a media analyst with MIT's Convergence Culture Consortium.

In an essay appearing online in Slate on Nov. 1, Askwith suggests that what is coming is a "new age of television in which fans have the power to keep their favorite series in production, and producers have the opportunity to create more elaborate, controversial and innovative programs."

Fans are gaining power from their wallets. Purchasing episodes of favorite shows provides production funds. This, in turns, fuels more creativity, he says. "The iTunes distribution model gives the networks a huge opportunity to reinvent themselves," he writes in his essay, titled, "TV You'll Want to Pay For."

"As iTunes and its inevitable competitors offer more broadcast-television content, producers won't have to compromise their programs to meet broadcast requirements. Episode lengths can vary as needed, content can be darker, more topical and more explicit. If the networks are clever, these changes can supplement broadcast programming rather than replace it," he writes.

Askwith's new age of television is a democratic one, with the "enticing possibility that on-demand television will allow audiences to take an active role in programming the networks," he writes. Fans will soar up the entertainment food chain, determining the financial health, longevity and vitality of shows.

"Direct downloads will give fans of endangered shows the chance to vote with their wallets while a show is still on the air. And when a program *does* go off the air, direct payments from fans might provide enough revenue to keep it in production as an online-only venture," Askwith notes.

The math looks good, too, he writes.

"If we assume that the average hour-long drama costs $1.5 million per episode and downloads will cost around $2 per viewer, shows would only need a few million viewers to turn a small profit. Would a few million viewers pay $2 a week to download an hour of television? It's certainly not impossible," he says.

Direct download TV might also resuscitate interest in long-running, complex series, Askwith writes.

"While DVDs now give viewers the chance to catch up between seasons, on-demand television will allow anyone to catch up at any time, quickly and legally. This would be especially critical for plot-intensive shows like 'Alias,' which has been forced to 'reboot' its plot several times to make it accessible to new viewers," Askwith writes.

It's a win-win for viewers and networks, he writes. For fans, more power. For networks, more profit.

The full text of Askwith's column was posted on Slate on Tuesday, Nov. 1. Visit www.slate.com/id/2129003/.

Professor sees static in future

Sarah H. Wright
News Office

Fans now generate more publicity for new TV shows than big corporate campaigns, and their growing influence promises to create new alliances between citizen-viewers and producers — but networks are not necessarily embracing these changes, according to Henry Jenkins, director of MIT's Comparative Media Studies Program and the Peter de Florez Professor of Humanities.

In an essay titled "I Want My Geek TV," Jenkins outlines how fans, producers and television networks currently tug at the global entertainment fabric when new shows are introduced, extended or canceled.

In his article, published Nov. 1 in "Flow," an online forum on television and media culture, Jenkins envisions a future in which the global TV market is powered by fans.

The fans' efforts to influence networks break down the "walls between program producers and consumers as they make common cause against the networks," Jenkins writes.

Jenkins describes a world of subscription TV, in which "viewers commit to pay a monthly fee to watch a season of episodes delivered into their homes via broadband," bonding producers' interests to theirs.

The BBC is already offering a version of subscription TV: all BBC-aired programs are available for download off the web for up to a week after their broadcast date. Online, fans determine a show's global fate.

Fans' power will grow; they will soon become "niche marketers, helping to spread word about compelling new content, indexing and meta-tagging key moments in the series so that new viewers can get up to speed to central plot developments," Jenkins predicts in "Geek."

But, Jenkins points out, "Social, cultural, economic and legal factors also help determine what kinds of media change actually occur."

For example, not all networks want to share power with the fans. Jenkins cites the case of "Global Frequency," (GF) a science fiction/action/adventure series whose pilot episode, though hugely successful among fans, was cast into the outer darkness by network execs.

Based on a comic book series by Warren Ellis, GF features a secret transnational organization of ordinary people who respond to crises caused by the collapse of nation states and the emergence of global capitalism.

"The show created industry buzz when the pilot was being developed; the WB Network grabbed the rights; but, due to a shift in management, it got dumped," Jenkins writes.

Next came the network execs' acid reflux: An unauthorized copy of the GF pilot was leaked from WB and began circulating; it became the focus of a grassroots effort to get the series back into production.

"Global Frequency" had a cult following — i.e. profitability — before it even reached the air, but WB chose the "same saber-rattling they have been doing ever since they woke up one morning and found Napster on their kids' computers," Jenkins writes. Citing copyright issues, WB retrenched, and "Global Frequency" never aired on TV.

To read the full text of Jenkins' essay, visit jot.communication.utexas.edu/flow/?jot=view&id=936.

'Turnaround artist' gives Sloan talk

Sarah Foote
MIT Sloan School of Management

Michael Kaiser, known as the "turnaround artist" who led the revitalization of the Kennedy Center for the Performing Arts, gave a capacity crowd some insight into his business practices at a talk held Thursday, Nov. 3, in Room E51-345.

"You can't just address costs. You must address revenue," said Kaiser, a 1977 graduate of MIT Sloan School of Management. Kaiser was the final fall speaker in the Dean's Innovative Leader Series.

Introduced by William Pounds, former MIT Sloan dean from 1966 to 1980, Kaiser opted for an interview format; students took turns with Pounds asking questions.

Kaiser, who has spent the last 20 years of his career turning around arts organizations, is one of the best-known arts administrators in the world. He has worked for the Royal Opera House in London, the American Ballet Theatre, the Alvin Ailey Dance Theatre Foundation and the Kansas City Ballet, to name just a few. He is currently the president of the John F. Kennedy Center for the Performing Arts in Washington, D.C.

The Kennedy Center was not in a financial crisis when Kaiser arrived there, so instead he looked into making it *the* national center for the arts. He wanted to turn the Kennedy Center into a "destination," and one of the first things he did to achieve that goal was to create artistic and educational programs.

The key to success in turning around an arts center is similar to that of turning around a business, Kaiser said. "If you have a good product, that will help turn things around. All the techniques I learned here [at MIT Sloan] can transfer to the business world. But success is the hardest thing to measure in the nonprofit world."

Kaiser admitted that it took him nearly eight months to land the job at the Royal Opera House in London, saying he was "the only dope who wanted the job." The tabloids in London were not kind to him … at first anyway. In just two years, he was able to erase a $30 million deficit, raise enough money to complete renovations to the Opera House, and create a $30 million dollar endowment.

He began by addressing the programming that was offered by the Opera House and working to create a social life around the organization. The Opera House developed events that people wanted to go to, and not only did he have people buy tickets, but he had them donate at the same time. "You can scrimp on everything but what goes on stage," said Kaiser. "Most people would cut back on the art or on marketing and those are the two things that produce revenue. So I didn't cut back on those. It would have made the situation worse. The more programs you have, the more marketing you need and the more money you will make. It's the same for any nonprofit."

Although he did not cut the programming function of the Opera House, he did cut staff. In his first week, he laid off 300 of the 1,100 employees, noting that it was one of the hardest things he has ever had to do. After two years in London he had completed his turnaround mission and today the Opera House is still running strong.

Michael Kaiser

Kaiser finished his talk by admitting that he got into the arts because he had once aspired to be an opera singer. He told students to find something that they like, that they have a passion for, and to pursue that for a career. "You have to like the product that you are going to work with," he said. "Like others, I found that art is more interesting as a product than money."

MIT takes classes to corporate America

Lauren Clark
School of Engineering

When a group of engineers exploring new vehicle and fuel technologies at the National Renewable Energy Laboratory (NREL) in Colorado wanted instruction in engines, they turned to MIT. But they didn't have to travel to Cambridge. Thanks to MIT's Professional Education Programs (PEP), the internal combustion engines course came to them. The curriculum was customized to their needs by widely known experts in engine technology, Professors John Heywood and Wai Cheng.

"The rapid change in today's technologies, industries and organizations creates an unprecedented need, an opportunity, for high-quality, customized professional education," said Thomas L. Magnanti, dean of engineering. "PEP responds to this demand by creating custom programs that can quickly bring entire groups of employees anywhere in the country up to speed in new or evolving areas of knowledge and help them apply what they learn to their work."

Geared toward engineers, scientists and managers in groups of 25 or more, custom programs are adapted from courses at MIT's Professional Institute, part of PEP. These courses cover such areas as applied nanotechnology, biotechnology and pharmaceuticals, data modeling and analysis, to name a few, and are customized to meet the company's needs. If needed, the programs can also be developed around new topics and can combine management and technology fields. Courses last from a few days to several weeks and can be taught at the company, offsite or at MIT. Continuing education units are awarded to participants upon completion.

PHOTO / **STUART DARSCH**

Professor Robert Morris of electrical engineering and computer science teaches a custom course through MIT's Professional Education Programs.

"The pace of development of new tools and methods is ever-accelerating, and industry employees need to be in a perpetual mode of learning — otherwise they become obsolete fast," said chemical engineering Professor Greg Stephanopolous, who taught bioinformatics last summer at Boehringer Ingelheim Pharmaceuticals Inc. in Connecticut. "Courses like this are one mechanism of keeping up with such developments."

MIT's custom programs stand apart from similar programs at other universities because they are developed and taught by professors, rather than adjunct instructors or graduate students. Clients thus benefit from the expert, in-depth teaching for which MIT is renowned.

"Part of the credibility of the [internal combustion engine] course was Dr. Heywood's name. For years, I've heard his name associated with that course. Everybody recognizes him as an expert," said Barbara Goodman, director of NREL's Center for Transportation Technologies and Systems.

This month, PEP launched a new web site with a unified design and additional information on all PEP programs. For more information, visit mitpep.mit.edu/.

PEP is part of the MIT School of Engineering.

AWARDS & HONORS

Joseph P. Carroll, a graduate of the MIT Sloan School of Management (S.M. 1966), was named an officer of the National Order of the Legion of Honor by President Jacques Chirac of France in July. The National Order of the Legion of Honor is France's oldest and highest military and civilian decoration, and it recognizes continued "eminent service" to France. Carroll was honored as "a great philanthropist whose donations enrich the collections of the Museum Guimet with exceptional works of art," according to the citation from Chirac.

Alfred Denny Ellerman, executive director of MIT's Center for Energy and Environmental Policy, has been awarded a Fulbright Scholar grant to do research at the University of Paris (Pantheon-Sorbonne), France, during the spring 2006 semester. Ellerman, who will research emissions trading with the European Union Affairs Research Program, is one of about 850 U.S. faculty and professionals who will travel abroad during the 2005-2006 academic year through the Fulbright Scholar Program.

CLASSIFIED ADS

Members of the MIT community may submit one classified ad each issue. Ads can be resubmitted, but not two weeks in a row. Ads should be 30 words maximum; they will be edited. Submit by e-mail to ttads@mit.edu or mail to Classifieds, Rm 11-400. Deadline is noon Wednesday the week before publication.

FOR SALE

For sale, 2 tires, Goodyear Tracker, P225/75R15, $100. For free, alloy wheel for VW Scirocco 16V. Contact rice@psfc.mit.edu or 253-5395.

Futon mattress: twin, firm, comes w/ cover: $25. mcneillh@mit.edu, 253-0787.

Trivial Pursuit Genius edition board game. All pieces & cards included. $5. On campus, contact forsale@media.mit.edu.

Moving sale — 3 bicycles (girls' and men's), washer & dryer, fridge w/ freezer, TV, more. Call Pat at 781-395-7265.

Gravely walking tractor w/ snowblower, heavy duty, excel. cond., variable speed forward & reverse, new 12v battery for starting motor, maintenance papers, original operating manual, parts list & extra parts, recently tuned, runs perfectly, $950/bst. 781-334-3443.

Solid maple roll top desk, matching chair $350. Call 781-861-9472.

HOUSING

Seeking roommate for 2BR apt. in Arlington. Available 1/1/06, possibly sooner. $600 + utilities. Nr Mass. Ave., #77 & 79 buses to Harvard & Alewife. ~7 mile drive to Lincoln Lab. dheggestad@ll.mit.edu or David at 781-316-2346 or 781-981-2329.

Newton, sabbatical home available 2/06, period negotiable, bright contemporary, 4 BR, 2.5 baths, study, 2 car garage. Hrdwd floors, no lead paint, beautiful yard, quiet street nr shops, transportation, $3000/mo. Suzanne-McLaugh@yahoo.com.

Desirable Acton Center location, 9 room colonial on 2 acres, 4BR, 2.5 bath. Finished basement play room and 4 season sunroom, attached 2 car garage, 3/4 mi. to commuter rail. Call 978-263-4643.

Charming 2-family 1850 brick townhouse, 1.6 mi from MIT in historic Charlestown. Central AC, 3BR/2.5 baths/2 firpl, roofdeck, city vws. $699K. Contact Chris at 253-8716 or crinaldi@mit.edu for pics.

VEHICLES

1999 Honda Civic 4-dr, silver, 59K, AC, AM/FM, new tires, excel. cond., $7,900. llapide@mit.edu or 258-6083.

MISCELLANEOUS

Photographer studio space to share: Maynard, Mass., at Artspace Maynard, artists cooperative. 24'x24' studio w/ Bogen track light system, sublet contract, $180/month. Contact Kim Bond Schaefer, kbond@mit.edu.

Balloons for holiday office parties available on campus. Experienced (10 years), creative balloon artist. Centerpieces, arches, balloon trees. Contact Jennifer Field at 252-3522 or jfield@mit.edu.

STUDENT EMPLOYMENT

Positions for students with work-study eligibility

Like to work with teens? Want an easy, fun way to make a few dollars? Come hang out with teens at the Common Ground Teen Center. Center has a pool table, air hockey, pingpong, foosball, big screen TV, computers and places to just hang out. Need two students to help chaperone this center on Wednesdays from 2:30-5 p.m. Contact Jocelyn Dautel, 781-324-7680, jdautel@gmail.com. $18/hr.

New England Citybridge seeks program coordinator to provide admin. support to staff & services to Citybridge grads. Responsibilities incl. assisting directors w/ event planning, tracking students' progress, providing grads w/ info about summer jobs/internships, organizing reunions, assisting SAT prep course planning & registration. Reqs: experience w/ community outreach programs, interest in educ. admin., strong computer skills. Send cover letter w/ resume & at least 2 references to Alejandra St. Guillen, 978-402-2320, citybridgejobs@concordacademy.org. $16/hr.

Artists' dreamscape builds on MIT

Amanda Smyth
Office of the Arts

Three artists recently asked to dream up public artwork for the city of Cambridge chose MIT for their fantasy projects.

Former MIT artist-in-residence Mary Sherman asked 19 international and local artists to imagine that money was no object and the rules of physics did not apply. The resulting exhibit, "Dimensions Variable, Site Fixed," features models of what the artworks might be like. The exhibit opened this week at the Cambridge Arts Council Gallery.

The show is a dreamscape of creativity, aesthetic beauty and functionality — with some fascinating reconstructions of unbuildable possibilities.

One of the only guidelines was that the pieces had to make use of existing Cambridge landmarks and architectural sites. Three of the artists — Sherman (both the curator of the show and a contributing artist), Jin Soo Kim and Pan Ping-Yu — chose to center works on MIT buildings.

Sherman, artist-in-residence at MIT from 2002 to 2003 in the Department of Mechanical Engineering, chose the MIT Chapel for her work. She proposed installing remote-controlled shooting stars above the chapel at night.

"This would allow us to play gods by rearranging the heavens and, by extension, our destinies," Sherman said. When viewers look into her model, a tall black Plexiglas box with a slit running down the side, they see a model of the chapel and small LED "stars" at the top. When they push a button, one of the "stars" (another tiny LED) "shoots down" from the sky.

Korean artist Jin Soo Kim took a more functional approach to her artwork. Her piece, "Here and There, Now and Then" envisions huge wire cubbies outside MIT's Simmons Hall dormitory.

"Student living space is very limited," said Kim. The cubbies, she said, would be "a site of exchange." Students could place in them things that they no longer wanted or needed — "clothes, cups, ideas, books, anything" — and anyone who needed those things could come and take them. "It makes for a living, ever-changing sculpture and reduces landfill waste. This sculpture will become a point of connection for others," she said. "It is a way to simplify your life."

The cubbies would be lined with ancient Confucian writings to inspire students with philosophy from the past, Kim said, hence bringing the past to the present.

Taiwanese artist Pan Ping-Yu imagined a meditation garden for MIT's Stata Center. Pan proposed placing the Tree of Life inside the garden to help balance the elements of mind, body, nature and the environment. The green of the tree in the garden, she said, would provide spirituality to all who enter.

Other pieces in the show include a sidewalk that opens up to a bandstand for street musicians (Peter Lindenmuth) and a gold lamé sweater that conceals Harvard University's Science Center (Mary Elizabeth van der Cross).

The exhibit, which runs through Dec. 29, is located at the CAC Gallery, 334 Broadway, Cambridge. For more information, contact Mary Sherman at (617) 464-4086.

Simmons Hall inspired Jin Soo Kim's wire cubby creation. Kim is one of three artists who chose to focus their work on MIT locations for the exhibit "Dimensions Variable, Site Fixed," on display at the Cambridge Arts Council Gallery.

PHOTOS / **HAYDEN TAYLOR**

Leocadia

At left, the Head Waiter (Yuri Podpaly '07) checks out Amanda (Helen McCreery '06) as she takes on the persona of Leocadia in the Dramashop production of Jean Anouilh's 'Leocadia,' which plays Nov. 17-18 at 8 p.m. in Kresge Little Theater. At right, Shuo Zhang '06, performing as the Duchess, implores Amanda to impersonate the late Leocadia. Tickets cost $8, $6 for students.

Folk performer offers musical view of America

Folk performer Jeff Warner will bring his repertoire of Revolutionary War songs, African-American banjo ditties, Irish-American concertina tunes and more to MIT on Monday, Nov. 21, in a free concert/demonstration.

Warner is the fifth performer in a series of folk singers and musicians brought to campus this fall in conjunction with a class called Folk Music of North America and the British Isles. The class is co-taught by George Ruckert, lecturer in the music and theater arts section and Professor Ruth Perry of the literature section.

Something of an American folk tradition himself, Warner performs traditional American folk music connecting 21st century audiences with the music and everyday lives of 19th century people. His parents, Anne and Frank Warner, were pioneer collectors of songs from rural America from 1938 to 1969.

"Warner is a great folk musician and his concert/demonstration will be a mix of singing and playing folk music and talking about its collection and notation and the relation of 'revival' singers to 'source' singers," Perry said.

According to Briony Keith, administrative assistant in the literature section, Warner will perform, teach and demonstrate in his presentation. "If people want to bring their instruments and play along, we would love it," she said. "If it turns out to be a hootenanny, that would be fantastic."

Jeff Warner

Touring throughout the nation for the Smithsonian Institution's National Associate Program, Warner incorporates hands-on accessible rhythm instruments like bones and spoons as he performs everything from the work songs sung aboard wooden ships to the ballads of old New Hampshire.

Warner has worked to preserve the work of his parents, whom he accompanied on musical research trips when he was a child in the 1950s. He helped his mother produce her 1984 book, "Traditional American Folk Songs: From the Anne and Frank Warner Collection," and created a two-volume collection of his parents' recordings that features the actual voices of singers born between 1860 and 1900, recorded on early disc recorders.

Warner's 1995 recording "Two Little Boys: More Old Time Songs for Kids," received a Parents' Choice Award.

"This is a man who can sing and play wonderfully and also can talk about the music knowledgeably from a number of different angles," said Perry.

The event begins at 7:30 p.m. in Killian Hall.

ART NEWS

FJE flexes jazz muscles

MIT's Festival Jazz Ensemble (FJE) will flex its musical muscles in "Flexology," an evening of diverse music for small and large jazz ensembles on Friday, Nov. 18, at 8 p.m. in Kresge Auditorium.

The program will feature "Flex" (2000), a piece by MIT lecturer and guest conductor Mark Harvey that blends complex structural design with improvisation.

The title refers in part to the flexible nature of the piece itself, which is never performed the same way twice, Harvey said. It also refers to the conductor's flexibility in making choices, the flexibility demanded of the players — who must be conversant with many styles and open to many musical possibilities — and to what Harvey calls a "kind of post-modern consciousness."

FJE will also perform Harvey's "De-Evolution Blues," a new work recently premiered by Harvey's own Boston-based Aardvark Jazz Orchestra; Duke Ellington's "The Shepherd," with Harvey on trumpet; as well as Ellington's "Oclupaca"; Magali Souriau's "Petite Promenade"; Charles Mingus' "Haitian Fight Song"; and two nonets by Tad Dameron.

Admission costs $5 at the door. For more information, call x3-2826.

Help make 'Splash'

Volunteers are needed to help high school students write, rehearse and perform a theatrical production at MIT as part of "Splash," a two-day (Nov. 19 and 20) program of enrichment classes led by MIT alumni Catherine Havasi (S.B. 2003) and Dan Zaharopol (S.B. 2004). "Splash" is organized by the MIT Educational Studies Program, a volunteer student group that Zaharopol helped to direct while he was at MIT. The high school students in the theater subprogram will be led through classes on writing, acting and technical theater; they will then write a script, rehearse and perform it for an audience of their peers on Sunday at 6 p.m. "Our goal is to get high school students excited about theater," Havasi said. "A concentrated program like this will let them quickly build a sense of community and will give them a sense of accomplishment." Classes will take place on Saturday, but Havasi stresses that help will be needed throughout the weekend. To participate, e-mail Havasi at havasi@alum.mit.edu or Zaharopol at danz@alum.mit.edu.

Hear composer Schuller

On Monday, Nov. 21, the MIT community will have a rare opportunity to see and hear Pulitzer Prize-winning composer, conductor, teacher and scholar Gunther Schuller — and wish him a happy birthday. Students, faculty and staff are invited to attend a free rehearsal of the MIT Wind Ensemble (MITWE) in preparation for the group's Dec. 2 concert celebrating Schuller's life, achievements and 80th birthday (Nov. 22). Schuller's "Blue Dawn Into White Heat," his 1955 arrangement of "Blue Moon," and Scott Joplin ragtime works are among the pieces on tap for the rehearsal and concert. Schuller will also speak. "[Schuller] always has a lot to say ... about the music, and how we are playing it," said MITWE conductor Frederick Harris. To attend, e-mail fharris@mit.edu.

Reviewer loves Harbison

Institute Professor John Harbison's "Motteti di Montale," (Collage New Music), received a rave review from Anthony Tommasini of The New York Times. "Harbison's music teems with astringent modernist harmonies, fractured counterpoint and mercurial shifts of mood," Tommasini wrote.

MIT EVENT HIGHLIGHTS NOVEMBER 16-20

Science/ Technology · Performance · Architecture/ Planning · Humanities

Music · Exhibit · Reading · Special Interest

Business/ Money · Film · Sports · Featured Event

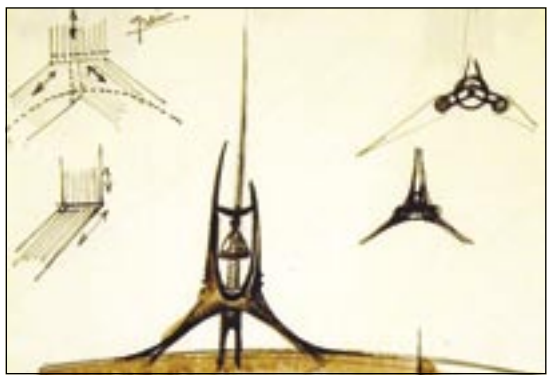

IMAGE COURTESY / **LIST VISUAL ARTS CENTER**

Drawing on the past

Sculptor Theodore Roszak's first major architectural commission was the bell tower for Eero Saarinen's MIT Chapel. His preparatory sketches, on view through Dec. 16 in the Dean's Gallery, show the many variations the artist developed before composing his final work — three smooth vertical thrusts rising from the arches of the base, a symbol of what the artist believed at the time to be the three major religions, Judaism, Catholicism and Protestantism.

WEDNESDAY November 16

Object Lesson: "Slide Rules"
One of a series of gallery talks by MIT Museum curators that focus on items from the museum's collections. Noon. MIT Museum. 253-4444.

"Big Picture Strategy - Reflections on Uncertainties Attendant to an Emerging China"
Talk by David Finkelstein. Noon. Room E38-615. 253-7529.

Cambridge-MIT Exchange (CME) Information Session
4–6 p.m. Building W20. 253-6057.

WMBR Hip Hop DJ Nite at Massive Records
DJs Jimizz, EmmDee and Nomadik spin a blend of hip-hop and R&B. Third Wednesday of every month. 7–10 p.m. 1105 Mass Ave. 253-4000.

THURSDAY November 17

MIT Chapel Concert
Jean Rife plays the works of Froberger and Bach on the harpsichord. Noon. MIT Chapel. 253-2826.

"The Gender of Citizenship: Bodies, Subjects and Publics in Weimar Germany"
Talk by Kathleen Canning of the University of Michigan. 4:30–6 p.m. Room E51-275. 253-4965.

Autism and Developmental Disorders Colloquium Series
Talk by Professor Helen Tager-Flusberg of B.U. 6–7:15 p.m. Room 46-3002. 253-7626.

"Emerging Muslim Identities in Diasporic Communities"
Film "Head On" (Fatih Akin, Germany, 2003). German with English subtitles. Sponsored by the Center for Bilingual/ Bicultural Studies and Foreign Languages and Literatures at MIT. 7 p.m. Room 56-114. 253-4771.

FRIDAY November 18

Organization Studies Group Seminar Series
Talk by Devah Pager of Princeton University, "Discrimination in Low Wage Labor Markets." 1–2:30 p.m. Room E52-598.

"City of God (Cidade de Deus)"
2002 Brazilian movie about growing up in Rio's infamous housing project. 6 p.m. Room 3-133. 258-8438.

"Ong-Bak (The Thai Warrior)"
LSC Fall 2005 Film Series. $3. 7 p.m. Room 26-100. 253-3791.

Festival Jazz Ensemble: "Flexology"
Evening of diverse music for small and large jazz ensembles featuring "Flex" by Mark Harvey. $5. 8 p.m. Kresge Auditorium. 253-2826.

SATURDAY November 19

Interactive Storytelling for Children
9:15–10:15 a.m. Mother Goose for ages 1-3. 10:15-11:15 a.m. Cinderella for ages 3-6. $2. Room E55-PH.

Tech Model Railroad Club Open House
Annual fall open house. 7–10 p.m. Room N52-118. 253-3269.

MIT Chamber Chorus
Seasonal music featuring Schuetz's "Deutsches Magnificat, 1671," Pinkham's "Christmas Cantata (Sinfonia Sacra)," Harbison's "O Magnum Mysterium," premiere of a carol by MIT graduate student David Foxe. 8 p.m. Kresge Auditorium. 253-2826.

SUNDAY November 20

Chantey Sing
Come sing sea music and chanteys with a room full of maritime enthusiasts, professional and amateur singers. 1-4 p.m. MIT Museum.

Gallery Talk
Talk by Hiroko Kikuchi in conjunction with "Christian Jankowski: Everything Fell Together." 2 p.m. List Visual Arts Center. 253-4680.

Emerson Affiliate Recital
Works by Beethoven, Brahms and Strauss. 4 p.m. Killian Hall. 253-2826.

MITHAS Concert
Ganesh-Kumaresh, Carnatic violin duo. Presented by MIT Heritage of South Asia (MITHAS) in cooperation with Sangam. $18, $14 MITHAS members, $10 students, MIT students free. 4 p.m. Wong Auditorium. 258-7971.

Go Online! For complete events listings, see the MIT Events Calendar at: http://events.mit.edu.
Go Online! Office of the Arts website at: http://web.mit.edu/arts/office.

EDITOR'S CHOICE

"STAR WARS TRILOGY" MUSICAL — *Nov. 16*

Nov. 16-20. $12, $9 students, seniors and MIT faculty/ staff, $6 MIT students. Most performances 8 p.m., 2 p.m. Nov. 20.

La Sala de Puerto Rico
8 p.m., 2 p.m.

COMMUNICATIONS FORUM — *Nov. 17*

Cell phone culture talk by James Katz of Rutgers and Jing Wang of MIT.

Bartos Theater, Media Lab
5-7 p.m.

BLOOD DRIVE — *Nov. 21*

Noon to 6 p.m. Nov 21 and 8 a.m. to 8 p.m. Nov. 22.

La Sala de Puerto Rico

MIT EVENT HIGHLIGHTS NOVEMBER 21-27

MONDAY November 21

"Atmospheric Aerosols: Formation, Aging, and Interaction with Cloud-Climate"
MIT Atmospheric Science Seminars series with talk by Renyi Zhang of Texas A & M University. Noon. Room 54-915. 253-0136.

"Conceptual Neutronic Core Design of the Advanced CANDU Reactor"
Talk by Julian R. Lebenhaft of Atomic Energy of Canada, Ltd. 3:30–4:30 p.m. Room NW14-1112. 253-3720.

Biology Colloquium - Sackler Lecture
Weekly lecture series featuring a talk by Renato Paro. 4–5 p.m. Room 32-123.

American Folk Song Workshop
Guitarist Jeff Warner performs traditional American folk music. 7:30 p.m. Killian Hall. 258-5629.

TUESDAY November 22

Biological Chemistry Seminar
Talk by Nicola Pohl of Iowa State University on "Proteomics and Synthetic Strategies to Decipher the Glycocode." 4 p.m. Room 56-114. 253-1803.

Astrophysics Colloquium
4 p.m. Room 37-252.

"Promoting 'Sustainable' Return"
Talk by Professor Richard Black of the University of Sussex, U.K. 4:30–6 p.m. Room E38-714.

"Limud: Four Dates of Jewish Destiny"
Examine four pivotal moments in Jewish history in a talk by Rabbi Ben Lanckton. 6–7 p.m. W11-Board Room. 253-2982.

WEDNESDAY November 23

"Deep Frontiers: Ocean Engineering at MIT"
9 a.m.-8 p.m. Hart Nautical Gallery. 253-5942.

"Now Playing: Photographs by Joe Seaward"
24 hours a day. Wiesner Student Art Gallery. 253-7019.

Israeli Dancing
Every Wednesday. 8–11 p.m. Lobby 13. 484-3267.

THURSDAY November 24

Thanksgiving Day
MIT Holiday

FRIDAY November 25

F.A.T. (Friday After Thanksgiving) Chain Reaction
Participants link self-created, mini chain reactions together to form one giant chain reaction, set off at the end of the program. $10 per team of four participants. Additional team members, $5 each. Spectators pay $10 for adults, $5 for children, students and seniors. 1-4 p.m. Rockwell Cage. 452-2111.

"The Promise (La Promesse)"
Belgium film from 1996, part of the Suburbia Goes Global film series. 6 p.m. Room 3-133. 258-8438.

MIT Anime Club Weekly Showing
MIT Anime Club shows the best of both recent and classic Japanese animation. Every Friday. 7 p.m. Room 6-120.

SATURDAY November 26

Varsity Men's Basketball vs. Suffolk University
2 p.m. Rockwell Cage. 258-5265.

hiLaRiUm @ Thirsty Ear Pub
Featuring the comedy duo The Walsh Brothers (of ImprovBoston and Comedy Studio). 21+ only. ID required. 8 p.m. Thirsty Ear Pub. 258-9754.

Introduction to Self Defense
Jiu-Jitsu class will cover basic self-defense skills. 3–5 p.m. DuPont Wrestling Room.

SUNDAY November 27

"Mind & Hand: The Making of MIT Scientists & Engineers"
MIT Museum exhibit. Noon-5 p.m. MIT Museum. 253-4444.

International Folk Dancing
Every Sunday. 8-11 p.m. Lobdell Dining Hall, Student Center. 253-FOLK.