Nokia Research Center Cambridge opens

Advancing the vision of mobility while developing real-world applications, MIT and Nokia today announced the opening of the Nokia Research Center Cambridge on Friday, April 21.

The joint research facility, a collaboration between Nokia Research Center and MIT’s Computer Science and Artificial Intelligence Laboratory (CSAIL), brings researchers and scientists from MIT and Nokia together to develop high-impact research to create the state of the art in communications technologies.

“Our mission is to explore and develop technologies that will be available in the marketplace in five to 10 years — not just novelties, but technologies that will see mass-market demand from consumers and enterprises,” said Bob Iannucci, head of Nokia Research Center. “With MIT’s academic and research expertise, Nokia’s mobility and technology leadership, and the fusion of some of the world’s brightest minds, the Nokia Research Center Cambridge will provide a platform for delivering compelling new innovations.”

The center is currently focusing its research on several projects, each part of a larger vision in which mobile devices become elements of an “ecosystem” of information, services, peripherals, sensors and other devices. These projects revolve around enhancing people’s lives and productivity by enabling more intuitive interaction between individuals, machines and environments, and range from developing the underlying computer architecture to leveraging and extending the Semantic Web. Although not commercially available today, projects like those under way could likely become real-world applications within the next decade.

Specific projects include:

- Project Simone addresses new ways to interact with your mobile device primar-ily using speech.
- MobileStart provides a framework for task-oriented applications that interact via written language on the mobile device.
- MyNet/UA develops a way for different users to connect various devices to each other and across the Internet easily and securely.
- Asbestos: explores the use of new operating systems mechanisms for information flow control to prevent private information from being inadvertently shared or maliciously exposed.
- SwapMe: develops a platform for Semantic Web applications that are policy, preference and context aware.

- ComposeMe provides mechanisms for verifying interoperability of Web services.

- Arno: explores new design method-ologies and languages to enable the develop-ment of high-performance, energy-effi-cient hardware for mobile devices.

“Our collaboration with Nokia and the subsequent opening of the Nokia Research Center Cambridge is an exciting oppor-tunity for all parties, including the CSAIL research team,” said Professor Rodney Brooks, director of the MIT CSAIL Lab. “Not only do we have the opportunity to work on truly compelling research with Nokia’s highest-caliber researchers, but —

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Engineering solutions in Louisiana

Students spend break studying lake sediment

Sasha Brown

The MIT students stayed at South
Teaching assistant Dana Hunt, a

Dr. John Niederhuber

Niederhuber, are the microenvironment around the tumor and cancer cells that accumulate genetic alterations over a lifetime and renew themselves to establish cancer in a given tissue.

“We’ve directed money toward col-laboration rather than the big science,” he said. “MIT is a classic example of bring-ing together people from chemistry, engi-neering and computer science — people who are not normally involved in cancer research — to work with biologists and clinicians. From that, exciting things can bubble up.”

Another area of strength at MIT that Niederhuber emphasized was nanotech-nology. Nanotech platforms can be used

Civil and environmental engineering senior James Vanzo draws water samples from Lake Pontchartrain, which borders New Orleans, during spring break. Vanzo was one of eight undergraduates who conducted research on water quality as part of Laboratory Course 1.107.

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MIT Tech Talk

PAGE 2 April 26, 2006

Kaiser receives Edgerton Award

Diana Chaban Griffith
MIT Sloan School of Management

MBA students typically bring a wealth of experience to the program. At the MIT Sloan School of Management, under- graduates can benefit from that resource through the Sloan Undergraduate Management Association’s MBA-Undergraduate Mentor Program. We are trying to bridge that gap between two generations,” said senior Noelie Kanaga, the Sloan Undergraduate Management Association (SUMA) Chair and one of the program coordinators. She serves as one of this year’s program coordinators, and the program has offered her and other undergraduates a way to get to know their MBA counterparts. “We do have classes in the same room, and that helps a lot. But you don’t typically interact with the MBA classes. SUMA began the mentorship program three years ago to tap into that insight, and in that time the program has grown into a successful part of the undergraduate experience,” she said.

This year we had a record number of participants,” said sophomore Jenny Chen, director of marketing for SUMA and project manager for the MBA-Undergraduate Mentoring Program. “Sixty-six MBA students offered mentors, and 80 undergraduates registered as mentees,” she said. All undergraduates were paired with mentors, with many mentors agreeing to help two students.

Kanaga’s mentor from last year, Brian Duncan, said he felt called to volunteer because mentoring has played an important role in his life. “I’ve always found a lot of power in my life through being able to communicate with people not only of different backgrounds but also different ages,” he said.

The voice of experience

Students can and do talk about anything with their mentors, including how to handle interviews, search for summer placements, and make long-range career choices. Chen’s mentor, Tony Xu, met with her several times to help her with her internship search. “It was really great to hear about the financial services industry from his point of view. He has also helped me to understand what I’m looking to do after college,” she said.

Kanaga turned to her mentor to help weigh two attractive job offers. “At first I thought it’s hard to go to your parents or a friend who doesn’t really understand the industry, doesn’t really understand the way lines in the Gulf Coast. Kaiser completed Ph.D.s in physics and the history of science at Harvard University in 1997 and 2000, respectively. His physics research focused on changes in American physics after World War II, looking at how the post-war generation of graduate students was trained. Kaiser said he was “deeply honored and pleased” about the award, and also surprised, because his colleagues had brought him to the faculty meeting under false pretenses. Family care policies

Late Baily, professor of management at the MIT Sloan School of Management, described revised faculty policies in her remarks to the MIT Edgerton Award Committee. The committee approved three new family policies intended to help MIT faculty have productive careers while keeping up with their family responsibilities. A tenure clock extension was instituted to make it possible for women faculty to bear children without losing the opportunity for tenure. In 2001, 52 percent of the women in the School of Engineering had children, while nationally, 82.5 percent of women age 40–44 had borne a child.

In her remarks, Polenske noted that she enjoyed Kaiser’s recent book, “Drawing Theories Apart: The Dispersion of Feynman Diagrams in Postwar Physics,” and other undergraduates a way to get to know their MBA counterparts. “We do have classes in the same room, and that helps a lot. But you don’t typically interact with the MBA classes. SUMA began the mentorship program three years ago to tap into that insight, and in that time the program has grown into a successful part of the undergraduate experience,” she said.

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AAAS names 3 fellows from MIT
Sarah H. Wright

Three MIT faculty members — two acclaimed labor economists and a renowned computer scientist — were elected fellows of the American Academy of Arts and Sciences on Monday, April 24.

The new MIT fellows are: Daron Acemoglu, professor of economics; Joshua Angrist, professor of economics; and Timothy Swagel, department head and John D. MacArthur Professor of Chemistry. They will be honored at an induction ceremony on Saturday, Oct. 7, at the academy’s headquarters in Cambridge.

The MIT fellows are “outstanding leaders in their fields, selected through a highly competitive process that recognizes individuals who have made preeminent contributions to their disciplines and to society at large,” said academy President Patricia Meyer Spacks.

Although it has not been an entirely easy road, MIT has always been one step ahead in terms of accepting differences, a panel of gay, lesbian and transgender alumni told a crowd gathered in Building 10 earlier today, ahead in terms of accepting differences, as an event sponsored by BGALA, MIT’s Bisexual, Gay, Lesbian, and Transgender Alumni and the Friends of the Students Homophile League (SHL) — an organization that emerged in the 1970s at MIT, including the first dance for homosexuals. Students themselves helped bring about these changes, with the assistance of supportive administration members, according to panelist Stewart Land Martinez.

The 2006 MIT inductees were among 175 new fellows and 20 new foreign honorary members. This year’s new fellows include former Presidents George W. Bush and Bill Clinton; Nobel Prize-winning biochemist and Rockefeller University President Sir Paul Nurse; the chairman and vice chairman of the 9/11 Commission, Thomas Kean and Lee Hamilton; and actor and director Martin Scorsese.

Fellows and foreign honorary members are nominated and elected to the academy by current members.

Founded in 1780 by John Adams, Thomas Jefferson, John Jay and other Founding Fathers, the American Academy of Arts and Sciences is a private organization of distinguished and continuing achievement in the sciences, arts, humanities, and business.

The 2006 inductees from MIT are:
Edward H. Adelson, professor of vision science in the Department of Brain and Cognitive Sciences and the Computer Science and Artificial Intelligence Laboratory.

Adelson’s research is in human visual perception, machine vision and image processing.

Dale Joachim, an electrical engineer whose research on acoustic sensor systems could significantly improve both wildlife monitoring and musical understanding, has been named a Martin Luther King Jr. Visiting Professor for 2006-2007.

In his studies of communication among birds, Joachim applies sensor and signal processing methods to “something very dear to me — nature conservation,” he said.

Currently, wildlife biologists monitor populations of some bird species by setting up equipment in the birds’ habitat, replicating the particular call and logging and analyzing the responses they get.

Joachim hopes to establish an encoded form of bird calls suitable for remote cell phone broadcast. Once programmed to broadcast, the cell phones will also serve as channels, sending the birds’ responses back to a home base for logging and analysis.

Joachim has focused initially on the conservation of swallow-tailed kites — birds native to Louisiana whose population is “being decimated by great horned owls,” he said.

Success in his research could lead to federal certification of cellphone telephones for use in conservation monitoring programs, Joachim said.

Joachim also studies the cognitive processes involved in accurately recognizing pitch differences within musical compositions. He hopes to develop intelligent systems to automate musical chord transcription and, ultimately, to “emulate a human bass player’s understanding sufficiently well that a computer could substitute for a real bass line accompaniment,” he said.

“We are extremely happy to have Professor Joachim join us as an MLK Jr. Visiting Professor. His teaching and his research interest in the use of technology for wildlife monitoring should lead to a very effective stay here,” said Michael Feld, professor of physics and co-chair of the MLK Jr. Celebration Committee.

Panel explores LGBT experience at MIT
Sasha Brown

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For fuller text, visit web.mit.edu/newsoffice/2006/mlk-joachim.html

Researchers makes call to help wildlife
Sarah H. Wright

Researchers have come out with some early predictions about what 2006 will bring for wildlife in Massachusetts, now that the last full month of winter has arrived.

No Massachusetts isle can be spared from the effects of climate change, according to researchers who spoke at the Whitehead Institute for Biomedical Research in Cambridge on Monday, April 24.

Some experts predict that this year will bring a “wonderful winter” — where winters are longer and colder — while others believe that this year will bring a “wonderful winter” — where winters are longer and colder — while others believe that this year will bring a “wonderful winter” — where winters are longer and colder — while others believe that this year will bring a “wonderful winter” — where winters are longer and colder — while others believe that this year will bring a “wonderful winter” — where winters are longer and colder — while others believe that this year will bring a “wonderful winter” — where winters are longer and colder — while others believe that this year will bring a “wonderful winter” — where winters are longer and colder.

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Faculty members elected to NAS
Elizabeth Thomson
News Office

Three MIT faculty members are among the 72 newly elected members and 18 foreign associates of the National Academy of Sciences — an honor that recognizes their distinguished and continuing achievements in original research.

Election to membership in the National Academy of Sciences (NAS) is considered one of the highest honors in American science or engineering. Those elected on Tuesday, April 25, bring the total number of active members to 2,103.

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MIT method allows 3-D study of cell tissue organization

MIT bioengineers have devised a new technique that makes it possible to learn more about how cells are organized in tissues and potentially even to regrow cells for repairing areas of the body damaged by disease, accidents or aging.

The method gives them unprecedented control over organ physiology and the body in three dimensions, which is how they exist inside the body. It uses electricity to move cells into a desired position, followed by light to organize cells outside the body in three dimensions, repairing areas of the body damaged by disease, accidents or other tissues,” said Dirk Albrecht, a postdoctoral associate.

Associate Professor Sangeeta Bhatia of the Harvard-MIT Division of Health Sciences and Technology (HST), one author of a paper on the technique in the May issue of Nature Methods.

“This raises questions about how cells might sense their environment in 3-D and how important this might be in other tissues,” said Dirk Albrecht, a postdoctoral associate in Bhatia’s lab. “We have shown that this is a general method to answer some of these questions in the lab.”

Scientists have analyzed new cells in 3-D by patching them randomly into a gel. The cells clump together into “cell spheroids,” but that is a slow process, and the size of and shape of the cells clumps vary significantly. In addition, cells that communicate by direct contact can end up too far apart.

The new technique allows precise control of cell organization, and takes minutes to perform compared to hours or days for the other method.

Albrecht and his colleagues have been using a microstamp- ing technique to carefully position the cells within about 10 microns of each other. That’s nearly the diameter of a cell and about one-fifth of a human hair. The technique uses a device made with photolithography, the same process used to create circuit patterns on electronics microchips.

In the paper, the MIT researchers said they have formed more than 20,000 cell clusters with precise size, shape and borders that resemble tissues. The 3-D organization of cells also may help researchers understand how cells respond to drugs when they are in a normal state compared to a diseased state like cancer.

“We also think this technique will be useful for building engineered tissues in specific ways,” Bhatia said. “It wasn’t possible until now to get this degree of control over cells in 3-D.”

Other authors on the paper are MIT HST postdoctoral fellow Greg Underhill, University of California at San Diego Professor of Bioengineering Robert Sah and UCSD alumnus Travis Wassermann.

The authors have applied for a patent on their work. The research was funded by The Whittaker Foundation, The National Institutes of Health, the David and Lucille Packard Foundation and NASA.

Lazy eye theory gets a workout

Deborah Halber

In a study that challenges conventional thinking about the condition known as lazy eye, researchers at MIT’s Picower Institute for Learning and Memory show that it’s the quality, not the quantity, of images and the retina that causes one eye to lose function.

The study will appear in the May issue of the Journal of Neurophysiology.

Amblyopia, or lazy eye, is a developmental disorder characterized by poor or blurry vision in an eye that is structurally normal. The problem results either from no transmission or poor transmission of visual images to the brain for a sustained period during early childhood. Amblyopia has been estimated to affect 1 percent to 5 percent of children.

“It’s been known for a long time that if you are born with cataracts in one eye, your other eye becomes stronger, but that is not what causes one eye to lose function,” said Lead author Deborah Halber.

When it was thought that inactivity caused the neurons associated with the deprived eye to wither — a case of “use it or lose it” — Boren and colleagues at Brown University report that a blurry image is working just as well.

The conventional treatment for lazy eye is to wear a patch over the good eye in the hopes that the weaker eye will get stronger. “It’s a zero-sum game,” said Boren. “because as the weak eye gets stronger, the strong eye gets weaker. The challenge is to promote function in the weak eye without impairing the other eye.”

Clinicians have debated the value of allowing the good eye to watch while the patch is applied to activate neurons in the retina. However, Boren’s new results indicate that the best way to treat lazy eye “is to use both eyes.” They show that the overcorrecting contact lens was just as good as closing the eyelid for weakening connections in the developing brain.

This work is supported by the National Eye Institute and the Howard Hughes Medical Institute.

Nokia

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for the early detection of cancer, he said. Last October NCI director Dr. Andrew T. von Eschenbach announced initiatives to establish several multi-institutional hubs across the nation that will foster nano-technology across a broad array of cancer research projects and aim for new solutions to diagnose and destroy cancer quicker and cheaper. Among them is the MIT-Harvard Center of Cancer Nanotechnology Excellence.

The nanotechnology initiative is one of the “big science” ideas championed by retiring NCI director Dr. John Zerhouni. Under von Eschenbach’s tenure, NCI funding from the federal government had doubled until 2003, but it has remained flat since.

Faculty at the event pressed Niederhuber about what NCI is doing to preserve funding for younger researchers. Niederhuber said the 27 institutions and centers of the National Institutes of Health, of which NCI is one, are working together, so many grants for cancer work could actually come from other institutions.

One area of note, he said, is that NCI has increased the funding amount for some time investigators.

Niederhuber also said he is paying particular attention to researchers competing to renew an NCI grant for the first time.

“The first competing renewal of a grant is a weak point to get funding,” he said. “I’m trying to highlight and identify individuals so we don’t lose talent-ed people at this point.”

For fuller text visit web.mit.edu/newsof- fice/2006/novi.html.

Nokia

Continued from Page 1

because of Nokia’s leadership in the mobile communications market — we also have confidence that our joint research will likely be deployed throughout the world, ulti-mately having a positive impact on the daily lives of hundreds of millions of people.”

Located five minutes from CSAIL’s headquarters, the Nokia Research Cen- ter Cambridge will have approximately 20 researchers from MIT and 20 research- ers from Nokia. Joint projects will be managed under the direction of a joint steer- ing committee, and James Hicks from the Nokia Research Center has been named director of the Nokia Research Center Cambridge. James Hicks is a visiting professor of computer science and engineering at MIT, will be the program manager for MIT-CSAIL.

For more information on the Nokia Research Center, visit http://research.nokia.com/
Mini MIT satellites rocketing to space station

A Russian rocket launched Monday, April 24, into orbit the first of three small, spherical satellites developed at MIT to the International Space Station — a major step toward building space-based robotic telescopes and other systems.

The MIT SPHERES project — the acronym stands for Synchronized Position, Hold, Engage and Range Experimental Satellites — involves satellites about the size of volleyballs that are designed to fine-tune space while maintaining a precise position. A gang of such instruments, which could be used to serve as parts of a massive telescope looking for planets near other stars.

Launched from the Baikonur facility in Kazakhstan, the rocket with the satellites is expected to dock with the station today. April 25.

The first critical test of the SPHEREs is a pilot test of the mini satellites rocketing to space station. Two additional SPHERES are scheduled to reach the space station, carried up by a U.S. space shuttle, before the end of the year.

“We’re doing this because these missions have a lot of new, untried technology,” said David W. Miller, an associate professor in MIT’s Department of Aero- nautics and Astronautics. “Testing inside the space station will allow us to mature these technologies in a less risky microgravity environment, meaning inside the warm, air-filled station, rather than outside in the hazardous conditions of space.

Eventually, such autonomous space vehicles will fly on their own, in forma- tion in orbit — and maintain their positions using radio links, interacting almost constantly by the amount they belong in relation to each other. Like a huge multiplex mirror telescope, each element will be able to frequently to keep the overall instrument “in tune.”

The SPHERES were originally proto- typed by undergraduate students at MIT. Subsequently, the flight SPHERES were built by the Jet Propulsion Laboratory and Pae- load Systems Inc. of Cambridge, Mass., but launch was delayed for years by loss of the shuttle Columbia, and by a very crowd- ed launch schedule. In the meantime, all the SPHERES on the project have graduated, all but one have left MIT, and the technology has been steadily refined.

Two astronauts — one from NASA, the other from the European Space Agency — have been recruited to run the first experiments with SPHERES adrift inside the space station. Willow Miller, a researcher in aero- nautics and astronautics, is managing the project.

Graduate students currently working on the project are Simon Nolet, Mark Hil- stad, Swati Mohan, Nick Hoff and Georg- es Assale. Miller and Professor Jonathan How are the participating faculty.

Scientists envision using SPHERES for the research robots that can come together to work on construction projects, repair damage, refuel other satellites or work as parts of other systems — including telescopes of unprec- edented size.

These first SPHERES serve as proto- types for bigger instrument packages that will spread out in space to work together.

Miller, who is also director of MIT’s Space Systems Laboratory, said the two other identical test SPHERES will be carried up to the space station on Satur- day, July 1, the other on Thursday, Dec. 14, if shuttle launches occur as planned.

One goal is to refine and test the technol- ogy for use with the bigger, more complex spheres yet to come.

Before the SPHERES finally got off the ground this week, the project encountered several delays. “They were ready to go in 2003,” Miller said, but then the Space Shuttle Columbia disintegrated in the heat of reentry, killing the astronauts on board and setting the U.S. space pro- gram back by years.

Of course, there’s no guarantee that all of the SPHERES will get aloft now, Miller said. There is huge demand for cargo space, especially aboard the shut- tles, but launch delays because of techni- cal problems, or simply the weather, are common.

This work is funded by DARPA, with additional support from NASA’s God- dard Space Flight Center, NASA’s Ames Research Center and NASA’s Jet Propul- sion Laboratory.

MacArthur grant of $1.2M to enhance global security

The John D. and Catherine T. MacAr- thur Foundation recently announced that MIT will receive a $1.2 million grant to help reduce the dangers posed by nuclear and biological weapons and materials.

The award is one of 12 grants, totaling nearly $15 million, announced to encourage and promote international cooperation to strengthen global security.

The grant will support its Science, Technology and Global Security Working Group. Grant funds will be used to nurture multidisciplinary research among science and security experts, to conduct technical studies on a range of issues and to develop new measures to reduce risk in South Asia, and for efforts to ensure that technical analysis is relayed to policy experts.

The MIT group is one of the largest groups of international experts dedicated to independent technical analysis on science and security-related matters, including tech- nical analysis of ballistic missile systems and global satellite monitoring and surveillance.

New tools enable large-scale studies of gene function

A molecular library created by a research team led by scientists at the Broad Institute and director of MIT and Harvard Medical School, systems biologists can dramatically accelerate scientists’ understanding of the genetics behind cancer and many biological processes.

In the March 24 issue of Cell, the team, working through the RNAi Consortium (TRC), announced the construction and worldwide availability of a library of molecu- lar reagents that silence entire human and mouse genes. The library consists of small RNA molecules, known as RNA-interfer- ence (RNAi) inhibitors, that can switch off genes individually. That capability will allow scientists to dissect the genetic underpinnings of normal biology and dis- ease.

TRC is a unique collaboration among academic research institutions and lead- ing life science companies. Its mission is to build comprehensive RNAi librari- es and make them available to scientists worldwide. In the coming year, TRC aims to expand the RNAi library to achieve near-complete coverage of the mouse and human genomes. (The library described in Cell is large but not com- prehensive.)

“Switching off a single gene through RNAi reveals how that gene functions in a particular biological process,” said David Root, director of the RNAi platform at the Broad Institute and director of the RNAi Consortium.

“Thanks to this unique public-private effort, we now have new tools to enable the entire research community to real- ize the potential of RNAi in the two most important species in biomedicine,” said Root, a senior author of the Cell paper.

RNAi gives scientists the ability to turn off an individual gene. Each of the small RNA molecules is tailored to match a frag- ment of a gene’s unique RNA, to which it binds, rendering the gene inactive.

The parallel analysis of thousands of genes using RNAi allows researchers to more readily pinpoint the genes that con- trol a biological process. TRC researchers developed techniques and quality-control measures that make it possible to perform such large-scale analysis.

“The RNAi library developed by the RNAi Consortium is a rich resource for biological discovery,” said Nir Hacohen, assistant professor at Massachusetts Gen- eral Hospital and Harvard Medical School, associate member of the Broad Institute and a senior author.

“Ongoing studies in my own laboratory to understand how the immune system senses pathogens and appropriately tar- gets its response will be accelerated using these tools,” Hacohen said.

To evaluate the RNAi library’s perfor- mance, the scientists sampled a subset that targets approximately 1,000 human genes. They systematically inactivated these genes in a human cancer cell line to identify the genes that regulate cell divi- sion during malignancy. Automated cellu- lar imaging was used to efficiently iden- tify dividing cells in thousands of samples. This approach uncovered more than 100 previously unknown cancer regulators, in addition to several known players, confirm- ing the library’s sensitivity as a vehicle for gene discovery.

“This critical new tool illustrates the requirement for academic and industry partners to drive scientific innovation,” said Eric Lander, director of the Broad Institute, a member of the Whitehead Institute for Biomedical Research, an MIT professor of biology, and a senior author on the Cell paper. “The importance of put- ting these reagents in the public domain will be demonstrated by the many impor- tant biomedical discoveries that will stem from them.”

Other authors on the paper include David Sabatini, MIT assistant professor of biology, member of the Whitehead and an associate member of the Broad Institute; Bill Hahn, assistant professor at Dana-Far- ber Cancer Institute and Harvard Medi- cal School, and associate member of the Broad; Sheila Stewart of Washington Uni- versity, formerly of Whitehead; and Brent Stockwell of Columbia University, also for- merly of Whitehead.
The concerts, dancing, food, and more that will make MIT Tech Talk on April 27 a memorable evening in the Stata Center are just the tip of the iceberg this year. This entire week has been rife with Earth Day activities.

Earth Day 2006 — and the compelling lectures and activities that will occur — is sure to be a terrific showcase of the diverse environmental activities in the MIT community, said Steven Seabury, chair of the Committee on Sustainability initiatives in the MIT Environmental Programs Office.

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The theme continues today with a noon talk in the Stata Center titled, "Tide Pools to Beach: The River Cambridge to the Forefront of Environmental Protection" with Renisa von Tschcharner, professor of the Charles River Conservancy.

The talk will be followed this evening by "Reverting the Tide," a play in Room 6-1610 that was written by award-winning actress Lisa Harrow and her husband, Bobbi, the founding president and director of the Ocean Alliance, which is dedicated to the conservation of whales and the ocean environment.

The talk on Monday is "Ephemeral Years: The closing decades of the 20th century," and it will be followed Wednesday night by "Sea Change: From North Atlantic Grasslands to Oceanic Gardens," a presentation about oceanic change, and the ability to subscribe to someone else’s presence (see www.mit.edu/jabber for details). MIT's Jabber service is an MIT namespace (alma.mit.edu) for easier identification of screen names.

Jabber is not a multi-protocol IM client, but IM clients that support Jabber let you chat with users on AIM, ICQ, MSN, Yahoo and other commercial services. IS&T recommends Gaim as a client. Jabber has been installed on Athena, and is available for your Macintosh.

For more information, visit the Jabber website at web.mit.edu/ist/services/messaging/jabber.html. Pilot participants can submit comments and questions to worry@mit.edu.

Earth Day spreads to week of events

Sasha Brown
News Office

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Training for HR-Payroll

The HR-Payroll Project is heading into the home stretch, with implementation of the new SAP Payroll system for July 1. Several new workshops and classes for DIL, DLC administrators and employees (including students paid hourly) will be available in the hope that today are done on paper.

To ease the transition to the new system, an extensive curriculum of classes will begin on May 30 and run through the summer, with refresher classes in the fall. Class descriptions and details about schedule, location, seating availability and registration requirements can be accessed through the Employee Self Service (ESS) website at web.mit.edu/ist/ess/hr-payroll.

If you have questions about which classes to attend, check with your local human resources or personnel administra tors. The training registrar at payroll.registrar@mit.edu can field questions about the schedule. For help using ESS, contact the computing help desk at computing-help@mit.edu or x3-1101.

To learn more about the new payroll system and tools, visit the HR-Payroll Project website at web.mit.edu/ist/ delivery/hr-payroll/.

Windows OS agreement extended

IS&T has extended its Microsoft Campus Agreement for operating systems and client access tools (CALs) to all MIT students, including graduate stu dents who are not currently covered by their departments. This agreement already grants Microsoft, campus IT administrators and graduate students in participating departments the ability to use Windows XP Professional and subsequent OS releases from Microsoft.

Windows XP Professional upgrades are available via an IS&T online request from multiple MIT users. A specific license is required. IS&T encourages all members of the MIT community (whether Windows or Mac users) to upgrade, except those using workstations targeted for replacement during the academic and/or fiscal year.

To learn more about the Microsoft Campus Agreement, visit web.mit.edu/ist/services/software/miana.html.

Digital workplace enhancements include faster, more reliable messaging (IM) service for MIT, and the availability of the Jabber instant messaging service, which is dedicated to the extension of privacy, vision, organization & communication skills to the MIT community. Want Mail and other new features? Look for the 18 other member libraries of the Boston Library Consortium, as well as to Harvard libraries.

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Swiss, MIT choirs plan academic, harmonic convergence

The University Choir of Lausanne, shown here performing at a concert in 2005 at the Lausanne Cathedral, will sing with the MIT Concert Choir on Friday, April 28, at Kresge Auditorium.

William Cutter, director of the MIT Concert Choir, will conduct his choir and the University Choir of Lausanne Friday.

Architect to design concert hall

Robin H. Ray

The concert is part of the International Choir Exchange between the MIT Concert Choir and the University Choir of Lausanne, Switzerland.

The exchange is not just musical. Today, they represent an "international symposium" in Room 26-100, featuring student presentations on research subjects ranging from the life sciences to materials science to architecture. The 9:30 a.m. event is open to the community.

The two schools' choirs, accompanied by a professional symphony orchestra, will then perform "The German Requiem" by Johannes Brahms together on Friday, April 28, at 8 p.m.

"It's considered one of the most important choral and orchestral pieces in the repertoire," said William Cutter, the conductor of the MIT Concert Choir. "It's a great piece for the chorus because they get to sing all of it. The chorus is the star of the show."

The University Choir of Lausanne, which is affiliated with both the Swiss Federal Institute of Technology and the University of Lausanne, will be here for 10 days. Next month, the choir members from MIT will travel to Switzerland, where they will stay for 10 days and perform the "Requiem" two more times, in the Lausanne Cathedral on May 31 and June 1.

"You get to know the people very well," he said. "You make a connection with them as musical friends and as friends."

Thomas Maxisch has been working on organizing the scientific portion of the exchange since 2004. "It's a very nice program, with the purpose that the MIT community will have an impression of what's going on at the other school, in terms of research," he said. Maxisch, an MIT post-doctoral associate in materials science and engineering, received his Ph.D. from Lausanne.

"That's been the idea all along," said Cutter. "It's pretty unique." MIT President Susan Hockfield and Patrick Achleiter, the president of the Swiss Federal Institute of Technology in Lausanne, will both speak before the concert, which Cutter described as one of the biggest performances ever to hit Kresge.

"It's going to be a very exciting event," he said. "It's a beautiful piece. Most people that know choral music know this piece."

AWARDS & HONORS

House & Garden magazine recognized MIT in its April award section called "The Innovators: A Salute to 25 Torchbearers Lighting the Way to New and Better Designs." MIT is No. 14 on the list, and the "Innovators" says, "This project is a budding collaboration between Charles Correa, Frank Gehry and Steven Holl, its restoration of older buildings by Eero Saarinen and Alvar Aalto, and its original neo-classical structures. MIT now arguably has the most architecturally diverse campus in the nation."

Drazen Prelec, professor in the MIT Sloan School of Management, has been named Leon Levy Member of the Institute for Advanced Study at Princeton; he gave the first public Leon Levy Lecture on March 29.

Xavier Gabalda, associate professor of economics, is the 2006 recipient of the Young Scientist Award for Socio-and Econophysics. Gabalda was honored for his work using statistical physics to better understand financial markets. The prize was awarded March 28 at the spring meeting of the German Physical Society by the society's Section for Physics of Socio-Economic Systems.

MIT President Emeritus Charles Vest will receive an honorary doctorate in law from Cambridge University at a ceremony in June. As president, Vest helped set up the Cambridge/MIT Institute, an alliance between the two institutions designed to create research projects, educational programs and student exchange programs.

Krzysztof Wodiczko, professor of architecture, was recently named the 21st Robert Leiper Distinguished Lecturer in Creative Inquiry Wodiczko delivered the lecture on April 18 at Carnegie Mellon University in Pittsburgh.

Architect Alan Joslin, an MIT graduate and visiting faculty member, has been selected to design a new concert hall for the Rockport (Mass.) Chamber Music Festival.

Joslin (M.Arch. 1981) has designed performance spaces for music and dance at Tanglewood and Williams College, among other sites. His schematic drawing of Rockport's new concert hall was selected out of a field of 27 competitors.

In Joslin's design, the music festival's new concert space will utilize and also break through the facade of the 19th-century Haskins Building in the heart of the historic seaport, opening up the area to both the waterfront in front and Rockport's commercial sector to the rear.

Deborah Epstein (M.Arch. 1983), Joslin's partner in the firm of Epstein Joslin Architects, will design the interior, along with renowned acoustician Larry Kirkegaard.

The chamber music festival has been squeezed for space at its current location, the Rockport Art Association on Main Street. The 150-year-old Haskins Building was recently purchased by the Rockport Art Association for $450,000.

"You start with the Haskins Building and you have to find a way to make a theater out of it," said Joslin. "We have to make a space that responds to the essential elements of the setting. The 'kids' inspire me," he said. "They ask tough questions, they make bold propositions, they surprise me with solutions that are not intuitively obvious precisely because they are not weighed down with experiences that tell them otherwise."
Remnants Museum. A description on view at Ho Chi Minh City's The War Museum.

Fletcher re-photographed each image and text by Harrell Fletcher on view at the Center for Advanced Visual Studies from April 27 to June 30. In addition to Fletcher's photographic work, a book about his experiences in Vietnam for an artists' retreat during summer 2005, Advanced Visual Studies from April 27 to June 30. In

The MIT Energy Forum: Taking on the Challenge


Wednesday
May 3, 2006
Kresge Auditorium, W16

Opening Remarks
9:00 am – 9:20 am
President Susan Hockfield

Overview of the Energy Research Council Report
9:20 am – 9:50 am
Professor Ernest J. Moniz

Panel Session I
Science and Technology for a Clean Energy Future
10:00 am – 11:15 am

Morning Summary
11:15 am – 11:30 am
President L. Rafael Reif

Lunch and MIT Energy Club Poster Presentation
11:30 am – 12:00 pm

Panel Session II
Improving Today's Energy Systems
1:00 pm – 2:15 pm

Panel Session III
Energy for a Rapidly Evolving World
2:45 pm – 4:00 pm

Question and Answer Session
4:00 pm – 4:30 pm

Receptions
Plasma Science and Fusion Center, NW17
Automotive Laboratory, Building 31
5:00 pm – 6:30 pm

Go Online! For complete events listings, see the MIT Events Calendar at: http://events.mit.edu.