



## ‘Genius’ grants go to four MITers

Elizabeth Thomson  
News Office

Two MIT engineers, a scientist and an alumna have won 2004 MacArthur Fellowships, commonly known as “genius” grants. They were honored for coaxing viruses to manufacture microelectronic devices, inventing inexpensive technologies to solve problems in developing countries, developing potential treatments for diabetes and unraveling the secrets of bacterial infection.

Associate Professor Angela Belcher of the Department of Materials Science and Engineering and the Biological Engineering Division, Edgerton Center Instructor Amy Smith (S.M. 1995), Broad Institute associate Vamsi Mootha, and Julie Theriot (S.B. 1988) will each receive \$500,000 in no-strings-attached support.

MacArthur Fellows—this year there are 23—are selected for their “originality, creativity and potential to do more in the future,” according to the MacArthur Foundation. Candidates are nominated, evaluated and selected through a confidential process; no one may apply for the awards, nor are any interviews conducted.

### Coaxing viruses

Belcher, 37, got the news early last week in her MIT office. She knew something exciting was happening, she said, because “the person who called said, ‘Are you sitting down? Are you by yourself?’”

Although she’s still getting used to the news (“I was very shocked and very surprised,” she said), Belcher said she foresees using the award in two ways. “It will be a catalyst for exploring new ideas in my lab and, equally important, let me contribute more to my community through science outreach to kids.”

According to a biography from the MacArthur Founda-

tion, Belcher has “demonstrated a proclivity for developing new techniques for manipulating systems that straddle the boundary of organic and inorganic chemistry at the molecular scale. In her most recent work, she has genetically modified viruses (strains that only attack bacteria and are harmless to humans) to interact with solutions of inorganic semiconductors, yielding self-assembling metal films and wires” with diameters only billionths of a meter across.

“The ability to control this self-assembly process may one day lead to the next generation of microelectronics or other nanoscale machines,” the Foundation said. Belcher is excited to further extend her work “to medical applications with some of the materials we’re developing,” she said, and has also recently become interested in energy-efficient batteries and lighting.

Belcher received the B.S. (1991) and Ph.D. (1997) from the University of California, Santa Barbara. She was a professor at the University of Texas, Austin, before joining the MIT faculty in 2002 as the John Chipman Career Development Associate Professor of Materials Science and Engineering and Biological Engineering.

### Helpful inventions

Amy Smith, 41, is dedicated to using technology to solve problems in the developing world. Smith said the MacArthur award “is pretty exciting, though a little scary. I’ve always operated on a shoestring. It’ll be odd to do it differently for a change.”

Smith is a mechanical engineer and inventor who designs “life-enhancing solutions and labor-saving technologies for people at the far end of dirt roads in the world’s most remote societies—people facing crises that erupt in health clinics with no electricity and in villages with no

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PHOTO / DONNA COVENEY

Angela Belcher, shown here in her lab at MIT, is a MacArthur Fellow.

## DeFrantz taps across the water

Sarah H. Wright  
News Office

Three MIT dancers in tap shoes and street clothes transformed the soundproof Ford Room (9-152) into an international conversation exploring movement, culture, passion and technology’s role in teaching in an event sponsored by the Singapore-MIT Alliance (SMA) on Tuesday, Sept. 14.

Over the course of 90 lively minutes, the trio in Cambridge exchanged performances and instruction with a group of dancers in Singapore via video conference. Thomas DeFrantz, associate professor of music and theater arts, presented a tap sequence with two student dancers, James Tolbert, a senior majoring in computer science, and Bradford Backus, a graduate student in the Harvard-MIT Program in Health Sciences and Technology.

Singapore choreographer Patrick Loo and six student dancers performed hip-hop movements to Indian music.

Called “Moves Across the Water: Tap and Hip-Hop,” the SMA dance dialogue with the National University of Singapore (NUS) is the first in a new series, said Alan Brody, provost for the arts, in his opening comments.

The Singapore-MIT Alliance is a program that engages MIT, the National Uni-

versity of Singapore and Nanyang Technological University in a collaborative graduate education and research program.

“Until now, SMA has focused entirely on aspects of engineering education. But to truly represent an MIT education, some

aspect of the arts should be included. The new series is conceived as a practice-dialogue on the arts and a genuine

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PHOTO / DONNA COVENEY

Professor Thomas DeFrantz follows moves by a group of dancers in Singapore in a video conference dance class sponsored by the MIT-Singapore Alliance.

## Student writes Patriots’ news in Mandarin

Sasha Brown  
News Office

Tian He has always been interested in integrating the two pieces of his life—one spent in China and the other in the United States.

As the official Mandarin translator for the New England Patriot’s web site, the electrical engineering and computer science junior may have found a way.

“I’ve always been a football fan,” said He, who was born in Beijing and moved to the United States in 1993. His family settled in Knoxville, Tenn., where his father studied at the Tennessee Technological University.

Initially, He knew little English, but as his language skills grew, so did his interest in other bits of Western culture, primarily football.

Though he didn’t play varsity foot-

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Playwright Alan Brody turns his pen to Isaac Newton.

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Screenings, readings, photos and exhibitions make up the List Center’s fall trio.

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PHOTO / LAURA WULF

Senior Ben Wagner (center) helps graduate student Sian Kleindienst (foreground) register to vote during a Rock the Vote event on Kresge Oval Friday.

## Rockin' event registers voters

Sasha Brown  
News Office

In an attempt to draw more young voters to the polls, MTV came up with Rock the Vote 14 years ago. Thanks to a number of campus groups, Rock the Vote came to MIT on Friday, Sept. 24.

Rock the Vote is unique in its approach. The organization uses pop culture and other entertainment to appeal to voters aged 18-24, a group traditionally showing low numbers at the polls.

Offering free lunch, loud music, dancing and even salsa lessons, the event drew a steady stream of students to Kresge Oval through the afternoon and into the evening. Students could register to vote and apply for absentee ballots in their home states. Fifteen organizations, including the MIT Arab Student Organization, MIT Black Graduate Student Association, MIT College Republicans and MIT College Democrats, sponsored the outdoor event.

Freshman Zandile Williams of Houston, Texas, was a registered voter, but applied for an absentee ballot.

"I was just out here buying plants in the Student Center and saw this," said Williams. "It seemed like the best time to go ahead and do it."

Though Rock the Vote is a non-partisan organization, most of the students already knew who they were going to vote for this year. Williams thought it important that she vote in Texas, home of President George W. Bush.

"I am voting for Kerry, absolutely," said Williams. "But it is obviously not the norm in Texas."

Greg Dennis, a graduate student studying computer science, was helping to register people. Though he is a member of the MIT Green Party, he was not trying to sway voters.

"I am non-partisan here," said Dennis, who said he'd never seen so many people register at a single campus event. "There's a lot at stake in this election," he said.

In fact, the numbers of MIT students voting in the last election are significantly higher than the nationwide average for the 18-24 age group. According to an editorial in the New York Times on Sept. 28, the national average voter turnout for that age group in the last presidential election was about 37 percent.

City of Cambridge records from the 2000 presidential election indicate that the two MIT precincts reported 45 percent and 52 percent turnout. (Average voter turnout in Cambridge was 64 percent.) These numbers belie the fact that many more students vote by absentee ballot in their home state.

Toyya Pujol-Mitchell, a sophomore in mechanical engineering, applied for an absentee New York ballot on Friday. "I am a New Yorker," she said. "And I want to vote in New York."

She was not alone. Of the 184 forms filled out Friday, 60 percent were out-of-state forms and requests for absentee ballots, said graduate student Shihab Elborai, president of the Arab Student Organization.

## Voting experts list 7 steps to ensure all votes count

Voting experts from MIT and the California Institute of Technology say that American voters can take seven crucial steps to ensure that their votes are counted in the Nov. 2 presidential election.

In the 2000 presidential election, as many as six million votes were lost, including three million due to voter registration mix-ups. Two million additional votes were lost due to faulty voting equipment and confusing ballots, and another one million, as the result of polling-place problems.

Researchers with the Caltech-MIT Voting Technology Project made the announcement Sept. 21 after studying U.S. elections for four years.

MIT President Charles M. Vest and Caltech President David Baltimore initiated the voting technology project in December 2000, following the election fiasco the previous month. The group, composed of both political scientists and engineers, is charged with evaluating the current state of reliability and uniformity of U.S. voting systems, establishing uniform attributes and quantitative guidelines for performance and reliability of voting systems, and proposing specific uniform guidelines and requirements for reliable voting systems.

The researchers recommend the following seven steps.

1. Make sure you are registered. Look on the Internet or call the local election office to find out if you are on the precinct's list of registered voters and if you need to bring identification.

2. Get a sample ballot from your local elections office.

3. Bring your sample ballot to help you in the voting booth.

4. Try to vote between 10 a.m. and 4 p.m. or allow extra time for long lines. The times before work, during the lunch hour, and after work are especially busy, so if you can avoid voting at these times, you should try to do so.

5. Know your rights and ask for help if you need it. You can obtain information beforehand from your local election office, but don't be afraid to ask officials at the polling site for help.

6. Don't leave the polling place without casting your vote. You have a right to vote if you are registered in your precinct, even if your name does not appear on the list. Rules vary across the nation, so ask the poll workers in your precinct if you can cast a "provisional" or "fail-safe" vote. In some parts of the country, if you cast a provisional ballot in the wrong precinct, your vote may not get counted, so be certain you vote in the precinct in which you are registered.

7. Double-check that your ballot reflects how you want to vote before you turn it in. Common problems include unintentionally voting for more than one candidate for an office, accidentally not voting for a candidate or a measure and forgetting to vote both the front and back of a two-sided ballot. If you make a mistake, ask a poll worker for a new ballot.

This information, as well as information about local elections, has been compiled at <http://www.vote.caltech.edu>.

## Aero/astro's Unified Engineering is largest on OCW site

Jon Paul Potts  
MIT OpenCourseWare

Say the words Unified Engineering or Course 16.01 in the hallways of NASA's headquarters or the Jet Propulsion Lab in California, and at least a few heads will turn.

Mention this famous course from MIT's Department of Aeronautics and Astronautics to any of the department's alumni of the last 30 years and you are certain to get a response.

The challenging course is the bane of sophomore year for aero/astro majors. It combines the disciplines of materials and structures, computer programming, fluid mechanics, thermodynamics, propulsion, signals and systems, and systems and labs, into a year-long course designed to introduce the systemic nature of aerospace engineering.

And it is by far the biggest course ever published on the MIT OpenCourseWare (OCW) site. Its inclusion

marks a major publishing milestone for OCW and a major opportunity for the aero/astro department to share its unique pedagogical approach with the world.

"Unified Engineering is the signature course for aero/astro at the undergraduate level and it embodies the essence of aerospace engineering education at MIT," said Professor Wesley L. Harris, the head of the aero/astro department. "The opportunity afforded us to publish Unified through OCW brings benefits to the students, to the faculty involved in the teaching of the materials, and to others outside of the department and beyond MIT. We are better equipped to continuously improve Unified Engineering now that it is so easily accessible to all our faculty."

Professor Steven R. Hall, a 2002 MacVicar Faculty Fellow, is a lead instructor on the course. He and professors Charles Coleman, Mark Drela, Kristina Lundqvist, Mark Searing, Ian Waitz and Peter Young contributed material to the online course.

"Starting three or four years ago, we really began to transition to an almost web-only system. We had been

building the site using Dreamweaver [a popular web-publishing software], and if you look at our current site and compare it to what is on OCW, it is fairly similar. We tended to organize each discipline as a matrix, with each lecture topic and the corresponding homework, tests and problem sets," said Hall, who took a much lower-tech version of Unified as a student in 1978-79. "We always had the philosophy that the course would be open to the world, and OCW lets us do that."

Unified has been a requirement for Course 16 students since 1973, and nearly 2,500 students have struggled through its problem sets. The new course site features more than four times the volume of educational materials of a typical one-semester MIT course—about 1,500 different files, including video course introductions by Coleman and Waitz, lecture notes, assignments and video footage of the semester project.

The publication of Unified on Sept. 17 brings the total number of courses available to 906.

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# MACARTHUR

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clean water," according to the MacArthur Foundation biography.

"Striking in their simplicity and effectiveness, her inventions include grain-grinding hammer mills, water-purification

devices and field incubators for biologic testing, each reflecting her inordinate creativity and ingenuity," the biography said.

"I currently have very little funding for my projects, so this gives me a lot more flexibility," said Smith, who is working on two projects in Haiti. "I will be able to

move forward a lot faster now. There's so much to do in Haiti, it's really nice to have the resources to keep these projects going, and start new projects, too."

Smith said she often meets people in the countries where she works who have ideas for projects of their own, but no resources. "Now I'm in the position where I can help with those resources, which is pretty cool," she said.

Smith received the S.B. (1984) and S.M. (1995) from MIT; between undergraduate and graduate school, she was a Peace Corps volunteer in Botswana. In 2000 she joined the staff of the MIT Edgerton Center, where she co-founded the MIT IDEAS Competition (Innovation, Development, Enterprise, Action, Service) for students who developed designs to solve community problems.

She teaches a class at MIT called D-Lab that combines many of her interests—teaching, international development, invention and design.

"I think we've worked out a pretty nice model, where we start by teaching about international development and appropriate technology and begin working with community partners in developing countries. Then we travel to work with these partners in the field, spending the Independent Activities Period implementing some of what we learned in the class, and identifying additional projects to work on back at MIT during the next semester," said Smith. Students working on the projects are often able to go back to the field in the summer for the next round of fieldwork, supported by the IDEAS Competition or MIT Public Service Center fellowships.

### Treating diabetes

Vamsi Mootha, 33, told the Boston Globe that he initially thought the call from the MacArthur Foundation was a prank. "It was a very odd, surreal conversation," said Mootha, who in addition to being an associate member of the Broad Institute of MIT and Harvard is also an assistant professor of systems biology at Harvard Medical School and an assistant professor of medicine at Massachusetts General Hospital.

According to the foundation, Mootha is converting the "promise of new technologies such as genomics and proteomics into tangible, important insights regarding basic biological processes and the sources of human diseases."

Earlier this year Mootha and colleagues

reported a discovery that suggests a new treatment for adult-onset diabetes. Specifically, they found a gene that revs up the energy-producing ability of muscle cells. Doing so could lessen the harmful effects of the disease.

Mootha was also honored by the MacArthur Foundation for pioneering "powerful, adaptable computational strategies for mining data collected in laboratories throughout the world, providing an efficient means to hunt down gene interactions that lead to a wide variety of diseases."

Mootha received a B.S. (1993) from Stanford University and an M.D. (1998) from Harvard University Medical School through the Harvard-MIT Health Sciences Technology Program. He completed his internship and residency in internal medicine at the Brigham and Women's Hospital (1998-2001).

In September 2004, he completed a postdoctoral fellowship at the Whitehead Institute for Biomedical Research and the Broad Institute, as well as an instructorship in medicine at Brigham and Women's Hospital.

### Understanding bacteria

Julie Theriot (S.B. 1988) was cited by the foundation for "unraveling the secrets of bacterial infection by illuminating basic biophysical processes underlying movement of cells and the pathogens that invade them." Theriot, 36, is an assistant professor of biochemistry, microbiology and immunology at Stanford University.



Vamsi Mootha



Julie Theriot



PHOTO / DAN SHERIZAN

One of Amy Smith's projects is to help prevent deforestation in Haiti by using agricultural waste to make cooking fuel. "If they can make their own cooking fuel from agricultural waste, they don't need to cut down trees to make charcoal," said Smith, who is shown above teaching Haitian boys how to make charcoal out of waste sugar cane.

# MANDARIN

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ball—he ran cross-country throughout high school—He and his friends organized games of tackle football every other weekend. These were no light games, he said. In one game, a player burst his spleen. "I guess we played pretty rough," he said with a laugh.

But for He, football is about more than brute force.

"It's a beautiful sport," he said. "Each play is skillfully thought out."

Until 1997, his experience of football was limited to watching college games. But that year, he turned on the television to watch the New England Patriots play the Green Bay Packers in Super Bowl XXXI. New England lost, but that day in late January, a Pats fan was born.

"They are a great franchise," said He.

After coming to MIT two years ago, He expected to watch the Patriots, but never to get as close as he is now. Last summer, he was living on campus when he received a group e-mail noting that the Patriots were looking for someone to translate their news into Chinese.

After two Super Bowl wins, the team was looking to expand globally, said Fred Kirsch, director of interactive media for the team.

When Kirsch received He's audition tape—an audio recording of He translating the Patriot's video news into Mandarin—he knew He was right for the job.

"With a local resource like Tian available to us, offering our first non-English translation of Patriots.com to a Chinese audience was a no-brainer," said Kirsch.

Each day, He gathers news from Patriots.com and compiles it into his own words, for which he is well paid. "Let's just say it pays better than your average UROP," he said.

His parents log on regularly to see what's new. "They always wanted me to find a way to keep up my Chinese," He said.

Though he has no plans to go into sports writing ("I think I'll stick with the technical side," he said), this has been a great opportunity for He to fulfill some dreams. "I was always interested in finding a way to connect the East and West," he said.



PHOTO / LAURA WULF

Tian He, who writes Patriots' news in Mandarin, strikes a Tom Brady-like pose during an intramural football game on Briggs Field.

## NEWS YOU CAN USE

### Better rates for MIT calling cards

Information Services and Technology (IS&T) has negotiated a new calling card contract with Qwest that has significantly lower rates than those available through AT&T. New Qwest calling cards have been activated for every member of the community who has an MIT AT&T or Verizon calling card.

Effective Oct. 1, the new Qwest calling cards will use the 1-800-6GETMIT number, and that number will no longer work for AT&T calling cards. To use the AT&T calling card, dial 1-800-CALLATT. However, IS&T encourages those with MIT calling cards to use the new Qwest cards instead. For details, see the IS&T web site.

### Awards nominations due

The deadline for nominating co-workers for the 2004-05 MIT Excellence Awards is Wednesday, Oct. 13. This is a great opportunity to recognize peers and colleagues for their exceptional contributions in five categories: Bringing Out the Best, Work/Life Balance, Going Above and Beyond, Creating Connections, and Innovative Solutions. Go to the Human Resources web site for details on award criteria, useful tips for writing a nomination and to get a nomination form (online and downloadable forms are available). Contact Kande Culver, Rewards & Recognition program administrator, at 253-5986 or rewards@mit.edu if you have questions.

### Gallery seeks student art

Students are welcome to apply to put up an exhibit of their artwork in the Wiesner Student Art Gallery on the second floor of the Student Center. Call the Office of the Arts at 253-7019 for more information.

# Corporation awards tenure to assoc

## School of Science



**Angelika Amon**

**Biology**

**Education:** B.A. 1989 and Ph.D. 1993 (both from University of Vienna, Austria).

**Joined MIT faculty:** 1999

A leader in the field of mitotic cell cycle regulation, Amon has discovered regulatory networks that govern and ensure the fidelity of chromosome segregation during mitosis and meiosis. Deciphering the networks that ensure accurate chromosome segregation is vital to understanding normal cell division as well as the abnormal events that lead to cancer and birth defects.



**Alexander van Oudenaarden**

**Physics**

**Education:** M.S. 1993 (materials science), M.S. 1993 (physics), Ph.D. 1998 (all from Delft University of Technology).

**Joined MIT faculty:** 2000 (Promoted from assistant professor without tenure to associate professor with tenure.)

Van Oudenaarden has two main research interests within biophysics. His group focuses on the importance of noise in the expression of genes and also on understanding how small-scale biochemical interactions generate large-scale organization and cellular structure, a central problem in cell biology.



**Deepto Chakrabarty**

**Physics**

**Education:** S.B. 1988 (MIT), M.S. 1992 and Ph.D. 1996 (both from California Institute of Technology).

**Joined MIT faculty:** 1999 (Promoted from assistant professor without tenure to associate professor with tenure.)

Chakrabarty works in several areas of high-energy astrophysics and X-ray astronomy, in particular studying the spin and magnetic evolution of neutron stars. In 2001, he was awarded both an Alfred P. Sloan Research Fellowship and the Buechner Teaching Prize in Physics.



**John W.M. Bush**

**Mathematics**

**Education:** B.Sc. 1986 and M.Sc. 1988 (University of Toronto), Ph.D. 1993 (Harvard University).

**Joined MIT faculty:** 1998

Bush is a fluid dynamicist whose recent work has focused on problems in interfacial phenomena and biocomotion. He has worked on bubble dynamics, the tears of wine, the form and stability of fluid jets and sheets, and recently, the locomotion of water-walking creatures.



**Daniel A. Spielman**

**Mathematics**

**Education:** B.A. 1992 (Yale University), Ph.D. 1995 (MIT).

**Joined MIT faculty:** 1996

Spielman's research bridges discrete mathematics with a wide range of studies in theoretical computer science. He has been especially influential through his constructions of error-correcting codes and his introduction of smoothed analysis.



**Sebastian Seung**

**Brain and cognitive sciences**

**Education:** B.A. 1986 and Ph.D. 1990 (both from Harvard University).

**Joined MIT faculty:** 1998 (Promoted from associate professor without tenure to full professor with tenure.)

Seung is a computational neuroscientist whose research focuses on two fundamental questions about neural networks, namely: how do they use synaptic feedback loops to compute and how do they use synaptic plasticity to learn?

## Sloan School of Management



**Kristin Forbes**

**Education:** B.A. 1992 (Williams College), Ph.D. 1998 (MIT).

**Joined MIT faculty:** 1998

Forbes is an empirical economist in the area of international economics whose research focuses on financial crises, capital controls, contagion, income distribution and economic growth.



**Leonid Kogan**

**Education:** M.Sc. 1993 (Moscow State University), Ph.D. 1995 (Cornell University), Ph.D. 1999 (MIT).

**Joined MIT faculty:** 2001 (Promoted from assistant professor without tenure to associate professor with tenure.)

Kogan's research interest is in the general area of asset pricing, focusing mainly on the links between observed asset prices, firms' technology and investment decisions and the preferences and beliefs of market participants.



**Roberto Rigobon**

**Education:** E.E. 1984 (Universidad Simon Bolivar, Venezuela); M.B.A. 1991 (Instituto de Estudios Superiores de Administracion), Ph.D. 1997 (MIT).

**Joined MIT faculty:** 1997

Rigobon is a researcher in international economics whose publications stand out in three fields: international finance, monetary economics and econometrics.

## Holders of named professorships announced

Several MIT faculty members have been appointed to named professorships. All appointments are effective July 1, 2004.

Assistant Professor **Jongyoon Han** of electrical engineering and computer science (EECS) is the next holder of the three-year Karl Van Tassell Career Development Professorship, established by Van Tassell (S.B. 1925) in 1986.

Assistant professors **Marc A. Baldo** of EECS and **Daniela Pucci de Fariás** of mechanical engineering each will hold the Esther and Harold E. Edgerton Professorship for a three-year term. The professorships were established in 1973 by the MIT Corporation to honor the Edgertons.

Professor **Henry Jenkins** of the literature section in the School of Humanities, Arts and Social Sciences will hold the Peter de Florez Professorship for a five-year term. The professorship, estab-

lished by de Florez (S.B. 1938), recognizes Jenkins' devotion to the study of comedy in media.

Assistant Professor **Eric Hudson** of physics will hold the three-year Class of 1958 Career Development Professorship, established by the class at its 25th reunion.

Assistant Professor **Matthew Lang** of mechanical engineering and biological engineering will hold the W.M. Keck Career Development Professorship for three years. The professorship was established by the Keck Foundation to aid work in science, engineering and medical research.

Assistant Professor **Sarah O'Connor** of chemistry will hold the three-year Latham Family Career Development Professorship, established by Allen Latham Jr. (S.B. 1930) and his wife Ruth.

Assistant Professor **Christopher Burge** of biology will be the Whitehead

Career Development Professor for a three-year term.

Professor **Nancy Kanwisher** of brain and cognitive sciences will hold the Ellen Swallow Richards Professorship for a five-year term. The Professorship was established in 1973 to honor MIT's first woman graduate and first woman teacher.

Professor **Barbara Imperiali** of chemistry will be the Class of 1922 Professor for a five-year term.

Assistant Professor **Fiona Murray** of the Sloan School will hold the Class of 1922 Career Development Professorship for three years.

**Jared Curhan**, assistant professor of organization studies at Sloan, will hold the Mitsui Career Development Professorship for a three-year term. The professorships were established in 1980 by the Mitsui Group in 1980.

Assistant Professor of History **Meg**

**Jacobs** will hold the Class of 1947 Career Development Professorship for a three-year term.

Associate Professor of Design and Computation **John Maeda** of media arts and sciences is the next holder of the Rudge and Nancy Allen Professorship for a five-year term. E. Rudge Allen (S.B. 1948, S.B. 1949) was a member of the MIT Corporation at the time of his death in 1990.

Assistant Professor **J. Meejin Yoon** of architecture will hold the Class of 1948 Career Development Professorship for a three-year term. The professorship was established by the class at its 40th reunion.

Assistant Professor **Martin Culpepper** of mechanical engineering will be the next Rockwell International Career Development Professor for a three-year term. The professorship was endowed in 1985 by Rockwell International Corp.

# Associate professors effective July 2004

## School of Humanities, Arts and Social Sciences



**Daniel Fox**  
**Linguistics and philosophy**  
**Education:** M.A. 1993 (Tel Aviv University), Ph.D. 1998 (MIT).  
**Joined MIT faculty:** 2001

Fox's main research specialty is the interface between syntax and semantics. His publications contain important new linguistic data, and his claim that quantifier scope and pronoun binding are governed by optimization principles initiated a whole new research program in the field.



**Thomas F. DeFrantz**  
**Music and theater arts**  
**Education:** B.A. 1988 (Yale University), M.A. 1989 (City College of New York) Ph.D. 1997 (New York University).  
**Joined MIT faculty:** 1997

As a dance scholar and historian, DeFrantz' areas of inquiry range from ballet to all forms of modern and popular dance. A gifted tap performer, DeFrantz uses this genre to explore the history of movement and of music. He also has challenged MIT dance students to perform at a new level of sophistication and creativity.



**Edward Steinfeld**  
**Political science**  
**Education:** B.A. 1988, M.A. 1993, Ph.D. 1996 (all from Harvard University).  
**Joined MIT faculty:** 1996

The author of "Forging Reform in China," Steinfeld is a sinologist and comparativist whose focus is Chinese political economy. His research aims to show that to function successfully, markets depend on their institutional and cultural setting as well as on privatization and deregulation.



**Norvin W. Richards III**  
**Linguistics and philosophy**  
**Education:** B. A. 1993 (Cornell University), Ph.D. 1997 (MIT).  
**Joined MIT faculty:** 1999

Richards, who is well known for his ability to learn languages, has taken over the field methods course formerly taught by Ken Hale. Richards' main research focus is on issues of movement in syntactic theory, and he has made important breakthroughs in the field. Richards has also devoted significant time to preserving endangered languages such as Lardil (Australia) and Wampanoag (New England).



**Helen Elaine Lee**  
**Writing and humanistic studies**  
**Education:** B.A. 1981 (Harvard University), J.D. 1985 (Harvard Law School).  
**Joined MIT faculty:** 1997

Lee is a highly regarded author whose general subject, the lives and families of African-Americans, has come vividly to life in two well-received novels, "The Serpent's Gift" (1994) and "Water Marked" (1999). An inspired teacher and mentor at MIT, Lee has also served as fiction editor of "Callaloo," a major literary journal, and as a volunteer writing teacher in Boston-area correctional facilities.

### AWARDS AND HONORS

**Charles M. Oman**, director of the Man Vehicle Lab in MIT's Center for Space Research, has been elected a Corresponding Member of the International Academy of Astronautics (IAA). Oman, who is a senior lecturer and senior research engineer in the Department of Aeronautics and Astronautics, has served as the principle investigator for shuttle/spacelab and International Space Station projects, headed the neurovestibular research section of the National Space Biomedical Research Institute, and chairs the NASA Advisory Council Space Station Utilization Advisory Subcommittee. He is one of only 11 individuals worldwide elected to IAA Life Science Section membership this year. IAA fosters the development of astronautics for peaceful purposes and enables its members to contribute to international endeavors and cooperation in the advancement of aerospace science.

The **Sloan School of Management** Buck Weaver Award was presented on Sept. 11 to **David Aaker**, professor emeritus at the HASS School of Business at the University of California, Berkeley, at a conference at MIT in his honor. The award, which is sponsored by General Motors Corp., was established last year to honor individuals who have made important contributions to the advancement of theory and practice in marketing science. Aaker is the author of 13 books and 100 articles, focusing primarily on the field of branding.

"David Aaker has been a pioneer in preaching the doctrine of brand equity. He has brought a rare blend of analytical thinking and practical insight and recommendations to the field of marketing strategy," said Professor Glen Urban of Sloan. Members of the selection committee also noted his leadership in the marketing community.

Professor **Stanford Anderson**, head of the Department of Architecture, was presented the 2004 Topaz Medallion for Excellence in Architecture Education by the American Institute of Architects (AIA) and the Association of Collegiate Schools of Architecture. The Topaz Medallion honors an individual who has made outstanding contributions to architectural education for at least 10 years. Anderson founded the Ph.D. program in architecture and has taught for more than 40 years, concentrating on history and architecture. The AIA cited Anderson's "intellectual and institutional leadership. He has made history and theory relevant to practice and education. Graduates of the MIT program practice, teach and govern all over the world."

Cisco Systems presented the Cisco Achievement Program Award to **Varun Parmar**, a graduate student in the Systems Design and Management program. Parmar, who has an internship at the company while conducting his thesis research, received the award for his contribution to the re-design of Cisco's optical technology supply chain. "Varun has gone way beyond the level of performance expected of an intern by challenging the status quo of our business and initiating fundamental changes in the way we do business in the optical networking group," said Andrew Buckley of Cisco. "Cisco could not have made many of these mental leaps without his tremendous understanding of supply chain principles and his outstanding ability to influence."

## School of Engineering



**William H. Green, Jr.**  
**Chemical engineering**  
**Education:** B.A. 1983 (Swarthmore College), Ph.D. 1988 (University of California, Berkeley).  
**Joined MIT faculty:** 1997

An expert in chemical kinetics, Green uses detailed chemistry, quantum mechanical calculations and advanced numerical methods to build accurate simulations. These make it possible to predict chemical kinetics even when no experimental data are available, and thus to design rationally new engines, fuels and chemical manufacturing processes.



**William T. Freeman**  
**Electrical engineering and computer science**  
**Education:** B.S. and M.S. 1979 (both from Stanford University), M.S. 1981 (Cornell University), Ph.D. 1992 (MIT).  
**Joined MIT faculty:** 2001 (as associate professor without tenure).

Freeman's current research interests include machine learning applied to computer vision and interactive applications of computer vision. His previous research topics include steerable filters and pyramids, color constancy, and computer vision for computer games. He holds 18 patents.



**Saman Amarasinghe**  
**Electrical engineering and computer science**  
**Education:** B.Sc. 1988 (Cornell University), M.S. 1990 and Ph.D. 1997 (both from Stanford University).  
**Joined MIT faculty:** 1997

Amarasinghe specializes in the areas of programming languages and compilers. His chief interests are compiler optimizations, computer architectures, software engineering and parallel computing. Amarasinghe is currently working with some of his students on a solution to the Internet worm problem.



**Tommi Jaakkola**  
**Electrical engineering and computer science**  
**Education:** M.Sc. 1992 (Helsinki University of Technology), Ph.D. 1997 (MIT).  
**Joined MIT faculty:** 1998

Jaakkola's primary research areas include statistical inference and estimation, machine learning and computational biology.

# Alumni make heels for pain-free fashion

Dave Enders  
Alumni Association

Love the look of high heels, but can't stand the pain? MIT alumni Brian G.R. Hughes (S.B. 1977) and Paul Rudovsky (S.B. 1966) believe a long overdue injection of high-tech engineering called Insolia® may be just what the foot doctor ordered.

"It's classic MIT approach. This is a fundamental problem to which people have assumed there is no solution," said Hughes.

Hughes and Rudovsky met while serving on the MIT Corporation in 1996, and neither of the former Alumni Association presidents expected to be involved in the fashion industry. Hughes' resumé includes building the first private trans-Atlantic telecommunication system and running his own hybrid rocket development company. Rudovsky has served as CFO of several public and private companies as well as CEO of a clothing manufacturer.

Ironically, it was Hughes, the former rocket builder, who approached Rudovsky about investing in HBN Shoe, makers of shoes that contain Insolia, a "weight-shift" technology invented by a New Hampshire-based podiatrist. By 2002, HBN (named after partners Howard Dananberg, the podiatrist, and MIT alumni Beth Marcus and Nick Soloway) had switched from a grassroots marketing strategy to a technology licensing strategy and Rudovsky had signed on as CFO.

Currently, Insolia is already utilized in women's shoes sold in the United States, China, Hong Kong, Japan, Canada and the Czech Republic.

## The ramp of pain

All podiatrists know the problem with high heels. Standard construction of the shoes creates a "ramp effect"—the foot slides toward the toe box, creating continuous pressure on the digits and ball of the foot. Bunions, hammer toes and a painful thickening of the nerves between the toes as well as ankle, knee and back pain often result.

But what if the ramp could shift more weight back to the heel? Using F-Scan, a flexible computer pressure mapping system, Dananberg created Insolia—insole boards that put the foot in optimal position at various specific heel heights.

The Insolia formula combines a heel cup with a precisely located mid-sole bump. As Hughes explained it, "about 25 percent of the weight that would have slid down to the toe remains back at the heel. Cupping the heel increases



PHOTO / AMBER NOVAK

Alumnus Brian Hughes, chairman of Insolia shoe company, explains the engineering used in his product to make high heel shoes more comfortable.

the contact area and reduces the peak force by 50 percent. It creates the very strong illusion that you are wearing a heel that is about half the height of the one you are actually wearing."

High-heeled shoes with Insolia technology look outwardly just like their punitive kin. But inside—a world of difference awaits. Blind studies commonly result in Insolia wearers describing a "thick, wonderful padding. But there is no padding. It's all geometry," said Hughes.

Insolia made its American debut in Nordstrom stores in

May in Amalfi brand high heels. Only the Insolia logo on the sole or trying them on will reveal the cup-and-bump technology, Hughes noted.

"My working definition of success will be when I walk into Saks Fifth Avenue and watch somebody look at a pair of shoes and the first thing they do is look on the bottom for our logo," said Hughes.

*A version of this article appeared on the MIT Alumni Association's web site.*

# I-Teams course readies technologies for market

Lauren Clark  
School of Engineering

Graduate students who dream of bringing technologies from the test tube to the market can learn how to do it in a new hands-on course called "i-Teams." The course kicks off officially tonight (Sept. 29), after a rigorous, three-week team-building process.

I-Teams (short for Innovation Teams) is a joint product of the Sloan School and the School of Engineering. Each i-Team consists of four to six graduate students who develop go-to-market strategies for innovations created in Institute laboratories using grants from the Deshpande Center for Technological Innovation.

"Everybody talks about how MIT innovation and ingenuity have fueled the engine of American commerce, but nobody understands how that happens," said Ken Zolot, a senior lecturer at Sloan who is an i-Team instructor. "How do you go from being a scientist in a lab to a founder of a company, taking raw data and figuring out how to benefit society with it?"

"MIT is so big when it comes to innovation. I wanted to experience it myself by doing it," said Darrel Quah, a student in the Systems Design and Management program who is involved in a project developing low-cost X-ray systems.

The syllabus is designed to reflect the way early entrepreneurship works. "You don't spend all semester thinking about your grand vision and then present it. You present your grand vision in the second week and then test it," said Zolot. "The most important thing the students do is go out and talk to potential customers, licensees, partners, competitors."

When they apply for the course, students must show that they have professional or research experience relevant to their chosen lab.

They spend the first three sessions building teams according to Professor Deborah Ancona's "X-Teams" philosophy, which emphasizes flexibility. They hash out the roles—leader, technology specialist, marketing specialist—that each team member will play as a company founder. The idea is to put together the most effective team possible for bringing a technol-

ogy to market. In the process, the students experience the "intangible human element of entrepreneurial team formation," said Zolot.

In the next phase of the course, each team tests and re-tests its commercialization strategy. Guided by the labs' principal investigators, faculty from MIT's Entrepreneurship Center and leaders from the local business community, the graduate students identify a market for their lab's scientific breakthrough, develop an intellectual property strategy, perform competitive analysis and identify the appropriate business model.

The end result is a go-to-market plan that might actually go somewhere. For example, the members of Active Joint Brace, the company that won last spring's \$50K Entrepreneurship Competition, credited their accomplishment to their participation in a pilot of the i-Teams course. Active Joint Brace is developing an electromechanical orthotic device that augments physical capability in people with spinal cord injuries and other disabilities.

The MIT Venture Capital and Private Equity Club, and the MIT Entrepreneur-

ship Center also provide support for the teams. Course instructors are Zolot; Professor Charles Cooney, faculty director of the Deshpande Center; and Edward Roberts, the David Sarnoff Professor of Management of Technology.

I-Teams projects for the fall semester are:

- Low-cost X-ray systems: a low-cost x-ray imaging system made with off-the-shelf consumer digital imaging equipment that could be used in the developing world;
- Microfluidic platform for biological assays: a microfluidics-based hybridization platform for faster, easier biological assays;
- Fuel cell breakthrough: an innovative approach to fuel cells and metal-air batteries that could break the cost barriers impeding mass marketing of these devices;
- Colloidal crystals in minutes: rapid, cost-effective fabrication that could enable a wide range of new applications, such as catalysis, drug delivery and photonics;
- Powering the world's cellular networks: amplifiers based on a new ribbon-beam vacuum tube technology.

## 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. TechTalk ads are posted on the Internet. Submit by e-mail to [ttads@mit.edu](mailto:ttads@mit.edu) or mail to Classifieds, Rm 11-400. Deadline is noon Wednesday the week before publication.

### FOR SALE

Snowblower: powerful 2-stage, self drive, gasoline-powered. Need to make space in garage. Old but good. \$40/bst. [kyang@ll.mit.edu](mailto:kyang@ll.mit.edu).

37 gal fish tank with filter. light and hood. some supplies \$50/bst. All wood kitchen table w/ inside leaf and 5 chairs. like new. \$200/bst. Oak bath vanity with marble sink top and faucet. 24" w x 21" d 32" h. like new. \$100/bst. Don at 978-692-4764 (8-4) or 978-957-2774 (after 4:30) or [drs@haystack.mit.edu](mailto:drs@haystack.mit.edu)

### VEHICLES

1993 Ford Escort LX wagon. Clean, great cond. 4 dr, auto, A/C, JVC radio/CD player. 104K. photographs: <http://matthias.8m.net/> \$1800. Matthias at 617-8646140 or [mkrause@mit.edu](mailto:mkrause@mit.edu).

2001 Honda Civic LX. 2 dr, 32,700K, 4A/C, pwr doors/windows/steering/brakes/windows, AM/FM/CD, cruise, dual airbags. Looks, runs great. \$10,500 firm. [sobnosky@mit.edu](mailto:sobnosky@mit.edu).

1991 Acura Integra GS, 5 sp, sunroof, CD, 140K, good running cond. needs exhaust work. Will sell cheap. John Carroll at 253-2617 or [jcarroll@mit.edu](mailto:jcarroll@mit.edu).

Volvo Station Wagon 1990 740 GL, silver, sunroof, heated seats, airconditioning, airbag, extra tires, tapdeck, AM-FM, new ignition switch, August 04 inspection sticker. \$2150/bst. J. Goldstone at 617-905-9188 or [goldston@mit.edu](mailto:goldston@mit.edu).

### HOUSING

Somerville: Newly renovated 3-4 BR near Harvard and Inman Sq. Hdwd Floors, porch, washer/dryer. \$1400/mo. 617-216-4167 or [ahmed@ll.mit.edu](mailto:ahmed@ll.mit.edu).

For Sale: Ocean-front (north of Cape Cod Canal), contemporary of glass, stone and steel designed by MIT industrial engineer, class of '33. 15 mins. from comm. rail. 508-224-4376.

25 Union St., Everett. \$950/mo. 1 BR/possibly 2. includes driveway parking. Avail. immediately. Pat at 617-908-7911.

Waltham: 1st flr. apt. 2-3 BR, \$1200/mo + utilities. 1 block from T, 5 blocks from comm. rail. Avail. Nov. 1. [pchacon@mit.edu](mailto:pchacon@mit.edu).

Cambridge: Private office space for rent, next to Porter Square T stop. T1 access, multimedia conference room, other amenities.

Great for entrepreneurs/startups. \$650/mo. Everything included. 617-576-0082 x7101 or [amanda@spinfish.com](mailto:amanda@spinfish.com).

### COMMUNITY SERVICE JOBS

#### Positions for students with work-study eligibility.

Tutors for elementary school needed to help with homework in all subject areas. literacy, art, science, and drama workshops. Training and supervision provided. 2-6 hours per week, \$8.75-11/hr. John Evans or Jerry Carr, 617-719-2938 or 617-825-0110.

Tutors for middle or high school needed in reading, English, writing, grammar, algebra, geometry, calculus, biology, chemistry, physics, Spanish, French, Latin, or SAT prep. Previous experience preferred. M-Th 3-7:30 pm, flexible hours. \$10-15/hr. [boslearn@aol.com](mailto:boslearn@aol.com) or Catherine Kostecki at 617-265-7170.

# List launches season with trio of shows

The List Visual Arts Center launches its season with three new shows and an opening reception from 5:30-7:30 p.m. on Thursday, Oct. 7. The shows will be on view through Dec. 31. Artist talks, film nights and special gallery tours will accompany the exhibitions.

## The Aging Body

"Body Parts: A Self-Portrait by John Coplans" showcases a series of 26 large-scale, fragmented self-portraits of the artist's aging body taken shortly before his death in August 2003.

A noted art critic and curator for most of his career, Coplans abandoned these pursuits in 1980 to become, at age 60, an almost immediately successful photographer. Intent on an unusual process of self-investigation and cultural reflection, he told *Art Journal* in 1990 that "the principal thing is the question of how our culture views age: that old is ugly."

Coplans' work reveals the tectonics of physical aging—the wrinkles and sags, hairlessness and varicose veins—but in a way that one critic called "mercilessly beautiful." "I don't really deal with old age per se," said Coplans. "It's only a condition I'm in that I have to make use of the best I can."

The exhibition was organized by Charles Stainback, director of SITE Santa Fe, and List Center Director Jane Farver, in collaboration with the artist.

## Poetry and science

Welsh artist Cerith Wyn Evans' new site-specific projects explore the complex relationships between image and word, poetry and science, and spoken and written language. The List Center's exhibition, "Cerith Wyn Evans: Thoughts unsaid, now forgotten..." is presented simultaneously with a selection of Wyn Evans' work at the Museum of Fine Arts (MFA). Evans will give an artist's talk on Saturday, Oct. 9 at noon at the List Center.

The List presentation, organized by

curator Bill Arning, consists of several installation components including "The Slide Rule Man," an MIT audio recording from the 1960s of a man who traveled to science-based schools inscribing students' names on their slide rules.

One of Wyn Evans' pieces, "WMBR Radio Station," is the original 1960's wood-paneled broadcast studio from WMBR, MIT's radio station. The piece pays respect to technologies that were around before the Internet, when radio was a more important tool for communication. On this equipment, the station explored disco and reggae in 1974 and punk in 1976. "The major themes of Wyn Evans' work—information, poetry, art, science and communication—are all incorporated in these exquisite relics," said Arning.

## Filming Israel

Israeli artist Yael Bartana focuses on the activities and rituals of everyday life in Israel. She is particularly interested in rituals that may be unfamiliar to an international audience and in uncovering the underlying themes within them. This solo exhibition, organized by Farver, includes three short works, "When Adar Enters" (2004), "Kings of the Hill" (2003) and "Ad De'lo Yoda" (2003).

Bartana shot "When Adar Enters" in March 2003 in the Orthodox district of Israel's Jerusalem and Bnei-Brak during the holiday of Purim. The Festival of Purim commemorates victory over oppression as recounted in the book of Esther. In this film, children celebrate Purim by dressing in costumes that reveal Israel's history. By contrast, "Ad De'lo Yoda" depicts a solitary young man watching others celebrate Purim. "Kings of the Hill" is a single-screen video installation based on a time-honored children's game. Men in four-wheel drive conveyances converge on the dusty coastal hills outside Tel Aviv and attempt to scale the most precipitous slopes in their SUVs.



PHOTO / COURTESY ANNET GELINK GALLERY, AMSTERDAM

A still from the film "When Adar Enters" by Yael Bartana shows a young boy celebrating Purim.

## Arts provost explores Isaac Newton in new play

An alchemist who believed he had unearthed revelation, Sir Isaac Newton was a genius with a medieval mind in the beginning of the modern age, obsessed with finding the unity of God's design through science, alchemy and the Bible.

Such is the premise of "Small Infinities," a new play by Alan Brody, associate provost for the arts, that explores the life and paradox of the father of modern science.

"I was originally urged to write a play about the Leibniz-Newton controversy over priority of the invention of the calculus," said Brody. "As I began to research the material, I became more and more fascinated by Newton, the man," he said.

"Here was the post-renaissance father of modern science with a thor-

oughly medieval mind, a man who may well have believed he was the prophet of God. I realized I needed to deal with more than the Leibniz controversy to begin to explore his rich contradictions," he said.

The Underground Railway Theater in association with the MIT Office of the Arts will present a stage reading of the play on Wednesday, Oct. 6 at 7:30 p.m. in Room 10-250. Jon Lipsky will direct the reading, which will feature actor Richard McElvain as Newton.

The reading will be followed by a discussion with panelists from the Greater Boston theater and science communities, moderated by physicist/novelist Alan Lightman.

—Mary Haller, Office of the Arts

## TAP

Continued from Page 1

exchange of expertise," said Brody.

Brody, a playwright and novelist, collaborated with Edwin Thumboo, a poet and director of the Center for Fine Arts at the National University of Singapore, to shape the innovative project. The two men met when Brody visited Singapore.

The choreographers had neither met nor e-mailed before Tuesday's rhythm chat, so they had to rely on the language of dance. DeFrantz's instructions to Tolbert and Backus and to Loo's group in Singapore were, more or less, "digga-dot-dot. Yah-bah, yah-bah, oh! Right foot! Inside turn!"

Miraculously, across 12 time zones and 10,000 miles, Patrick Loo smiled, lay down his microphone, and reproduced DeFrantz's tap sequence, more or less, with his six dancers in sneakers and satin sweats.

Later, DeFrantz, Tolbert and Backus replicated Loo's hip-hop sequence. According to DeFrantz, there is a lot of correlation between hip-hop and tapping. "Hip-hop is the rhythm universe. Tap is talking with your feet. Both a tap dancer and a good rap M.C. must have something to say and say it in a jazzy, articulate way."

Steven Lerman, SMA deputy director and professor of civil and environmental engineering, described the "Moves" dance exchange as an "example of MIT at its best."

"It combined the use of advanced technologies with our long-standing interest in weaving the arts throughout our students' experiences here," said Lerman. "It also linked us with our partners in the Singapore-MIT Alliance in a way that went 'outside the box' of teaching engineering courses and working collaboratively on research."

"Dancers in both locations performed in specially equipped videoconference rooms, much like small TV studios, with special lighting, remotely controlled TV cameras and wireless microphones," said Peter Hess, SMA faculty liaison. "Behind the scenes, a CODEC (compressor/

decompressor) took outgoing audio and video and converted it into bits suitable for transmission on a data network. Simultaneously the CODEC reconstructed incoming data and sent it to the large video screens and sound system in each room, on which dancers and audience saw and heard the proceedings," Hess explained.

The network SMA used for the collaboration was Internet2, a high-speed version of the Internet dedicated to research and educational uses.

The event also highlighted student partnerships, as MIT and Singapore students discussed balancing their studies and dancing. Both MIT dancers said they find art and science mutually nourishing.

New Hampshire native Backus started square dancing when he came to MIT and has been tapping for only three years. For him, choreography has become a "passion," he said. "How could I not dance? Dancing is healthy and creative. It helps me in doing science."

Tolbert, of Maryland, has been dancing since age two. A believer in "practice and more practice, since the show must go on," Tolbert said he hopes to combine computer science and dance in graduate work.

The dancers in Loo's Singapore group balance weekly rehearsals with course loads in medicine, science and social sciences, they said.

The student dancers in both performances used the same gestures to express their feelings while learning new moves—hands on hips for frustration; V's for victory and the right hand tapping the heart to denote affection, respect and goodwill.

"Moves Across the Water" ended with the now-global practice of a hurried exchange of e-mail addresses.

The next SMA arts event will be a dialogue on writing and cultural identity with Thumboo and Brody reading from their work. In the spring, George Ruckert will share his expertise on Indian music with an Indian dance specialist at NUS, and MIT's Gamelan Galak Tika will share its work with the NUS gamelan ensemble.

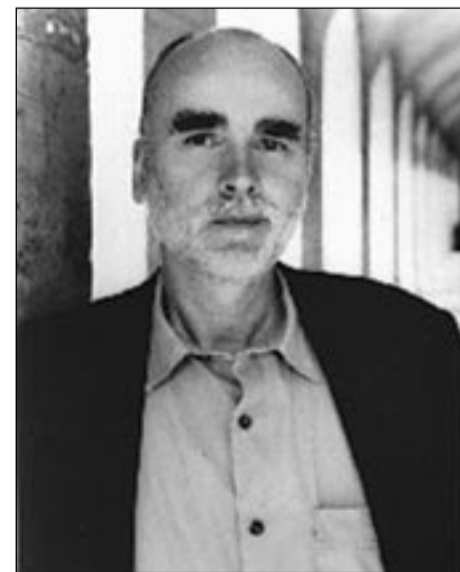
## 'Beyond Exile' focuses on creativity in Central Europe

Foreign Languages and Literatures and The Center for Bilingual/Bicultural Studies are hosting a month-long festival of film, poetry and politics titled "Beyond Exile: Central European Writing and Film."

On Monday, Oct. 4, poet, novelist and essayist Adam Zagajewski, called the "pre-eminent Polish poet of his generation" by *The New Republic*, will present a reading at 7 p.m. in Room 32-155 in the Stata Center.

Zagajewski was born in Lvov in 1945, a largely Polish city that became a part of the Soviet Ukraine shortly after his birth. His ethnic Polish family, which had lived for centuries in Lvov, was forcibly repatriated to Poland. His most recent books are "Canvas and Mysticism for Beginners," "Two Cities and Another Beauty" and "Without End: New and Selected Poems," which was nominated for a 2002 National Book Critics Circle Award. Zagajewski is also the author of a book of essays and literary sketches.

On Tuesday, Oct. 5, Zagajewski will join fellow poets Robert Pinsky, U.S. Poet Laureate 1997-2000, and Derek Walcott, winner of the 1992 Nobel Prize for literature, in a conversation titled "Poetry and



Adam Zagajewski

"Politics" at 6 p.m. at Boston University's Photonics Center (8 St. Mary's St.). Pinsky and Walcott are both professors of English and Creative Writing at Boston University.





















MIT EVENT HIGHLIGHTS SEPTEMBER 29 - OCTOBER 3

-  Science/Technology
-  Performance
-  Architecture/Planning
-  Humanities
-  Music
-  Exhibit
-  Reading
-  Special Interest
-  Business/Money
-  Film
-  Sports
-  Featured Event



Smart City Cars

An exhibition of images of concept cars for the 21st century by the Smart Cities Group at the MIT Media Laboratory is on view at the Wolk Gallery (Room 7-338) through Oct. 15.

WEDNESDAY September 29	THURSDAY September 30	FRIDAY October 1	SATURDAY October 2	SUNDAY October 3
 <b>Haiti: Moving Forward After Failed Transitions</b> Myrtho Bonhomme, advisor to the Prime Minister of Haiti. Center for International Studies. Noon-1:30pm. Wong Auditorium. 253-8306.   <b>How to Understand Syrian Politics: One Historian's View</b> Dean Philip Khoury. Security Studies Program. Noon-1:30pm. Room E38-615. 452-2542.   <b>Why Must Globalization Be Just?</b> Talk by Frank Garcia of BC Law School. 5:30-7pm. Room 4-237. 253-3121.   <b>"The Silences of the Palace"</b> 1996 Tunisian film. 6pm. Room 3-133. 258-8438.   <b>Serving International Needs</b> Find out about international grant opportunities during summer and IAP through the Public Service Center. 7-9pm. Room 4-231. 258-0691.	 <b>Telling It Like It Is: Student Activism at MIT during the Vietnam War</b> Last day for display of posters from the campus-wide protest in the 1970s. 10am-5pm. Free with an MIT ID. MIT Museum. 253-4444.   <b>Transportation Fair</b> 11am-1pm. Lobby 10. 253-9325.   <b>Emergency Room Overcrowding: An OR Analysis</b> Linda Green. Operations Research Center. 4:15-5:15pm. Room E40-298. 253-7412.   <b>Ask a Health Educator</b> Zan Barry, MIT health educator. 4:30pm. Student Center, third floor coffeehouse. 253-3646.	 <b>Voting Technology Conference</b> MIT Votes, Caltech/MIT Voting Technology Project. 8:30am-8pm. Room 32-141.   <b>Men's Varsity Tennis hosts ITA New England Championship</b> Begins 9am Friday, Saturday and Sunday. du Pont Tennis Courts, Carr Tennis Bubble, Johnson Athletic Center. 258-5265.   <b>Alumni Leadership Conference</b> Workshops, networking events and presentation. \$25 admission. Free for MIT staff. Noon-9pm. Various campus locations. 253-8246.   <b>Frontiers of Biotechnology Lecture in Chemical Engineering</b> Douglas Cameron, BioTDC, Cargill, Inc. talks about the emergence of a renewable, feedstock-based chemical industry. 3:30-4:30pm. Room 66-110. 253-6500.	 <b>Fresh Pond Clean-Up</b> Join Sloan alumni in cleaning up trails at Fresh Pond in Cambridge. Registration required. Picnic lunch provided. 9:30am-1pm. Fresh Pond, Cambridge. 508-858-3140.   <b>Volunteer on the Esplanade</b> Join the Graduate Student Volunteer Corps for a day of painting and pruning along the Esplanade. 10am-2pm. Charles River Esplanade, Boston.   <b>Varsity Football vs. Curry College</b> Noon. Steinbrenner Stadium. 258-5265.	 <b>Mooncake Festival Celebration</b> Eat mooncakes and play with lanterns with MIT Singaporean students. Dinner provided. 7-10pm. Lobby 10.   <b>"Fahrenheit 9/11"</b> LSC. \$3. 7pm. Room 26-100. 253-3791.   <b>Movie Night in the Sukkah</b> Bring a jacket and blanket and watch "The Big Lebowski" in the sukkah. 7:30pm. Kresge Oval.   <b>International Folk Dancing (participatory)</b> Folk Dance Club. Admission \$1; MIT/Wellesley free. 8-11pm. Student Center, Lobdell Dining Hall. 253-FOLK.   <b>"Dodgeball: A True Underdog Story"</b> LSC. \$3. 10pm. Room 26-100. 253-3791.

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

**WHAT'S WRONG WITH THE VOTING PROCESS?**  
Overview of technology and logistics in U.S. elections. Caltech-MIT Voting Project.

*Sept. 30*  
**Student Center Mezzanine Lounge**  
7 - 9 p.m.




























**THE 2004 IG NOBEL INFORMAL LECTURES**  
Brief and high-spirited lectures from the 2004 Ig Nobel winners. 253-5249.

*Oct. 2*  
**Room 34-101**  
1 p.m.

**WHAT'S THAT HUT?**  
Open House at the MIT Sukkah. Sponsored by MIT Hillel. 253-2982.

*Oct. 4*  
**Kresge Oval**  
4 - 6 p.m.

MIT EVENT HIGHLIGHTS OCTOBER 4 - 10

MONDAY October 4	TUESDAY October 5	WEDNESDAY October 6	THURSDAY October 7	FRIDAY October 8	SATURDAY October 9	SUNDAY October 10
 <b>Mars Settlement Brainstorming</b> Help plan the first permanent settlement constructed on another world. 6-8pm. Bldg 33, first floor.   <b>"7 Up South Africa"</b> Screening and talk by filmmaker Angus Gibson. 7pm. Room 4-231. 253-2341.   <b>Poetry Reading by Adam Zagajewski</b> Part of the "Beyond Exile: Central European Writing and Film" symposium. 7pm. Stata Center, Room 155. 253-4771.   <b>Music Under the Stars</b> An evening of live music and kosher food in the MIT Sukkah. 8-10pm. Kresge Oval. Open to all graduate students. 253-2982.	 <b>30th Anniversary of Inter-University Committee on International Migration</b> Mamphele Ramphele, former managing director of the World Bank, will deliver keynote address. 4:30-6pm. Wong Auditorium. 253-8306.   <b>Poetry and Politics</b> Panelists Robert Pinsky, Derek Walcott and Adam Zagajewski. Part of the "Beyond Exile: Central European Writing and Film" symposium. 6pm. Boston Univ., 8 St. Mary's St., Boston.   <b>On Production</b> Architecture lecture by Marc Angelil. 6:30pm. Room 10-250. 253-7791.   <b>"Yizo Yizo"</b> Screening and talk by filmmaker Angus Gibson. 7pm. Stata Center, Room 124. 253-2341.	 <b>Artists Behind the Desk</b> Writers Janni Moselsky and Marielle Risse read from their work. Noon-1pm. Killian Hall. 253-9821.   <b>The Changing Nature of State Sponsorship of Terrorism</b> Daniel Byman, Georgetown Univ. Noon-1:30pm. Room E38-615. 452-2542.   <b>Starr Lecture</b> "Aerosols, Clouds, and Climate: Does a Cooler Past Imply a Hotter Future?" Meinrat O. Andrea. 4-5pm. Wong Auditorium. 253-3382.   <b>"Kandahar" 2001</b> Afghanistan movie. 6pm. Room 3-133. 258-8438.   <b>"Small Infinities"</b> Stage reading of play about Isaac Newton by Alan Brody. 7:30pm. Rm 10-250.	 <b>Black Alumni of MIT Conference</b> 8am-6pm, Oct. 7-10. Various campus locations. 324-0379.   <b>MIT Chapel Concert</b> Leonora Quartet. Noon. MIT Chapel. 253-9800.   <b>Brunel Lecture on Complex Systems</b> Dean Thomas Magnanti speaks on "Engineering Engineering Systems." 3:30-4:30pm. Room 34-401. 253-9756.   <b>MIT Women's Choral</b> New members welcome until Oct 21. 7:45-10pm. Room 10-340. 253-1614.	 <b>Weekly Anime Screening</b> MIT Anime Club presents the best of Japanese animation. 7pm-midnight, Rm 6-120.   <b>"Faust"</b> Murnau film with score performed by MIT lecturer Martin Marks and sung by Professor Ellen Harris. \$15. 7pm. Harvard Univ., Carpenter Center, 24 Quincy St, Cambridge. (617) 495-4700.   <b>"Super Size Me"</b> LSC. \$3. 7pm Friday and Sunday. Room 26-100. 253-3791.   <b>Comedy Collage</b> Professional comedians. \$3. 7:15pm. Kresge Auditorium. 225-7427.	 <b>Artist's Talk: Cerith Wyn Evans</b> Presented in conjunction with exhibit at List Visual Arts Center. Noon. LVAC. 253-4680.   <b>Men's Soccer vs. Babson College</b> Steinbrenner Stadium. 1pm.   <b>"Spider Man 2"</b> LSC. \$3. MIT. 7 and 10pm. and Sunday at 10pm. Room 26-100. 253-3791.   <b>Halloween Ball</b> Costumes encouraged, but not required. Dance lesson at 7:30pm. Sponsored by MIT Ballroom Dance Team. 8pm-midnight. Lobdell. \$6 students, \$10 others.	 <b>Padmashri Neeraj Ji</b> India's national poet reads from his work and signs books. Sangam. 3-7pm. \$10 MIT, \$15 others.   <b>International Folk Dancing (participatory)</b> Dance lessons 8-9pm, followed by open dancing until 11pm. Students free; \$1 others. Lobdell. 253-FOLK.