



Volume 49 – Number 27
Wednesday – May 11, 2005

TechTalk

S E R V I N G T H E M I T C O M M U N I T Y



PHOTO / DONNA COVENEY

Associate marshal Paul Lagace, left, and chief marshal James Champy, with mace, lead the procession.



PHOTO / DONNA COVENEY

President Susan Hockfield greets the procession before her inauguration on Friday. Hockfield is joined by, from left, her husband, Dr. Thomas Byrne, their daughter, Elizabeth Byrne, and Dana G. Mead, chairman of the Corporation.

Ushering in a new era



PHOTO / L. BARRY HETHERINGTON

Delegates from 61 universities gathered at MIT to help celebrate the inauguration of Susan Hockfield as MIT's 16th president on Friday, May 6. They marched from Walker Memorial to Killian Court for the afternoon ceremony.

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- ▶ **Block party draws thousands**
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Main Group building work to unify physics department

Sarah H. Wright
News Office

A dynamic new center unifying the Department of Physics is the cornerstone of a significant renovation and expansion program of MIT's historic Bosworth Buildings, scheduled to begin this June.

Robert Silbey, dean of the School of Science, Marc Kastner, head of physics and

Donner Professor of Physics, Jim Collins, president of Payette Associates Architects, and Bill Anderson, chief facilities officer, will present the project and answer questions at a special town meeting to be held on Thursday, May 12, from 11 a.m. to noon in Room 6-120.

"The physics department at MIT has a history of great teaching and research. In the past 15 years, faculty in the department have won five Nobel prizes and many other

awards for their great scientific discoveries. In addition, they have been recognized for their great undergraduate teaching with many awards, including MacVicar Faculty Fellowships. The future for the department is bright and the new facilities will enhance their efforts," said Silbey.

The new Green Center for Physics, named for Cecil and Ida Green, will be anchored by an "infill" structure in the Building 6 courtyard. The four-story infill

will have 50,000 square feet connected to Buildings 4 and 6 on the 3rd and 4th floors by walkways and by a two-story atrium on the ground floor.

Currently, the Department of Physics is spread across 13 different buildings, including Building 6.

"The Green Center for Physics will pro-

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A FLAT WORLD

New York Times columnist Thomas Friedman will discuss globalization and sign his new book.

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LIBERATING LABOR

Activists, scholars and a survivor debate forced labor in sessions to be taped for national radio.

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OBJECT LESSONS

Designs for such "unuseless" items as this ketchup dispenser will be celebrated at a ball on Friday.

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LIFE-SAVING LOGISTICS

MIT grad student researches how best to deliver humanitarian aid.

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GEOLOGIC FIND

Scientists discover a new active fault in the Nepalese Himalayas.

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Pulitzer winner Friedman to speak

Pulitzer Prize-winning New York Times columnist and author Thomas L. Friedman will discuss globalization and the digital revolution in a lecture at MIT on Monday, May 16.

A world-renowned author and journalist, Friedman will also be signing his latest book, "The World Is Flat: A Brief History of the Twenty-First Century."

Friedman's speech will focus on the convergence of technology that has allowed India, China and so many other countries to become part of the global supply chain for services and manufacturing, giving them a huge new stake in the success of the global economy.

Friedman will also discuss whether this "flattening" of the globe has created a world too small and too fast for human beings and their political systems to adjust

to in a stable manner.

The lecture, "The World Is Flat," will take place at 4 p.m. in Room 10-250 and is open to the public. The book signing and reception will be held in MIT's Bush Room, Room 10-105.

Friedman has won three Pulitzer Prizes, two for international reporting (in 1983 and 1988) and one for commentary (in 2001). He is currently the foreign affairs columnist for The New York Times. His column, which appears twice a week in The New York Times, is syndicated to 700 newspapers worldwide.

Friedman joined The New York Times in 1981 as a financial reporter specializing in OPEC and oil-related news and has



Thomas Friedman

served as chief diplomatic correspondent, chief White House correspondent and international economics correspondent. He has traveled hundreds of thousands of miles reporting on the Middle East conflict, the end of the Cold War, U.S. domestic politics and foreign policy, international economics, and the worldwide impact of the terrorist threat.

MIT President Emeritus Charles M. Vest will introduce Friedman. Copies of "The World Is Flat" (Farrar, Straus and Giroux, April 2005) will be available for purchase. This event is sponsored by the MIT OpenCourseWare project (online at <http://ocw.mit.edu>).

Three elected to Academy of Sciences from MIT faculty

Three MIT faculty members have been newly elected to the National Academy of Sciences in recognition of 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 for a U.S. scientist or engineer. The 72 people elected this month bring the total number of active members to 1,976.

The NAS is a private organization of scientists and engineers dedicated to the furtherance of science and its use for the general welfare. Established in 1863, it acts as an official advisor to the federal government, on request, in any matter of science or technology.

The new NAS members from MIT are: Nancy Kanwisher, a professor in the Department of Brain and Cognitive Sciences and investigator of the McGovern Institute for Brain Research. Her research focuses on the mechanisms of visual cognition in the human brain.

Butler Lampson, an adjunct professor in the Department of Electrical Engineering and Computer Science and an engineer at Microsoft Corp. His research interests include computer architecture, local area networks, page description languages and operating systems.

David Page, a professor in the Department of Biology, is a member of the Whitehead Institute for Biomedical Research and an investigator of the Howard Hughes Medical Institute. His research involves fundamental studies of mammalian sex chromosomes, with special attention to the function, structure and evolution of the Y chromosome.



Edward DeLong



Daniel Nocera



Harriet Ritvo



Richard Samuels

Arts, sciences fellows named

Four faculty members are among the 196 new fellows recently elected to the American Academy of Arts and Sciences.

Fellows are selected through a highly competitive process that recognizes individuals who have made preeminent contributions to their disciplines and to society at large. They are nominated and elected to the academy by current members.

"Throughout its history, the academy has convened the leading thinkers of the day, from diverse perspectives, to participate in projects and studies that advance the public good," said Academy Executive Officer Leslie Berlowitz.

The academy will welcome this year's new fellows at its annual induction ceremony in October at its Cambridge, Mass., headquarters.

The new MIT fellows are: Edward DeLong, a professor in the Department of Civil and Environmental Engineering.

Daniel Nocera, professor of chemistry and the W. M. Keck Professor of Energy.

Harriet Ritvo, the Arthur J. Conner Professor of History and Writing.

Richard Samuels, the Ford Foundation International Professor of Political Science.

Lincoln Clark, of Rad Lab, 86

Sarah H. Wright
News Office

Lincoln Clark Jr., a chemist and lifelong competitive skier whose wartime career path brought him to MIT's Radiation Laboratory and, later, to management positions at the Nuclear Reactor Laboratory, died in his Chelmsford home on May 4. The cause was pulmonary fibrosis. Clark was 86.

A native of Lowell, Clark earned the S.B. degree in science from Harvard University in 1941 after studying at Malvern College in Britain, perfecting his skiing in Austria, and maintaining hiking trails for the Appalachian Mountain Club in New England.

He worked as a metallurgist, testing armor-piercing shells at Crucible Steel in New Jersey until 1943, when he joined the U.S. Navy. His military service included top-secret radar research at MIT's Rad Lab, at Princeton University and at Bell Telephone Labs.

Despite the extreme sensitivity of his work, Clark communicated by daily letters throughout the war with his wife, Nancy (Parker) Clark, she told The Boston

Globe. "Even when he was out on submarines, he would write two letters on one day," she recalled of Clark's tour in Pearl Harbor, installing radar devices.

Clark returned to MIT in 1958 to work as an associate director and, later, as director of operations at the Nuclear Reactor Laboratory. He received the S.M. degree in nuclear engineering from MIT in 1962.

Clark retired from MIT in 1988. He served as an advisor to the arm of the Nuclear Regulatory Commission that reviews reactor safety regulations and as an expert to the Institute of Nuclear Power Operations in Atlanta. Clark also served as a trustee emeritus to Lowell General Hospital.

Besides his wife, Clark is survived by two sons, Lincoln III of Chelmsford and Allan Douglas Park of Charlotte, N.C.; two daughters, Constance Clark Gagnebin of Cambridge and Nancy Clark Tose of Rockland; a brother, Victor F., of Concord; a sister, Phyllis C. Ninger of Woodbury, Conn.; seven grandchildren and two great-grandchildren.

A memorial service will be held at the Central Congregational Church in Chelmsford on June 4 at 2 p.m.

AWARDS & HONORS

The American Academy in Rome has honored two people from MIT. **J. Meejin Yoon**, assistant professor of architecture, received the 2005-2006 Cynthia Hazen Polsky and Leon Polsky Rome Prize Fellowship for Design. **Janna Israel**, a graduate student in architecture and planning's history, theory and criticism section, received the Marian and Andrew Heiskell/Samuel H. Kress Foundation Pre-Doctoral Rome Prize Fellowship in Renaissance and Early Modern Studies for "Reforming Commemoration: Patronage of the Franciscan Observants in the Renaissance." The Rome Prize is awarded annually to 15 emerging artists and 15 scholars through an open juried competition.

Todd Thorsen, assistant professor of mechanical engineering, and Dan Luo of Cornell University have received a Futures grant from the National Academies Keck Futures Initiative. The pair will receive \$75,000 to support their nanotechnology research. Futures grants are funded by a \$40 million grant from the W.M. Keck Foundation

Lotte Bailyn, T Wilson Professor of Management at the MIT Sloan School of Management, has received a 2005 Work Life Legacy Award from the Families and Work Institute, a nonprofit center for research on the changing workforce, changing family and changing community. The Work Life Legacy Award was created to "capture and share the stories of the work life field's accomplishments and honor those whose contributions have been extraordinary."

Jennifer A. Topinka (S.M. '03) has received the 2004 Society of Automotive Engineers Myers Award for Outstanding Student Paper. Topinka wrote her award-winning piece with the help of **John B. Heywood**, MIT's Sun Jae Professor of Mechanical Engineering and director of the Sloan Automotive Lab. Their fellow co-authors were Michael D. Gerty and James C. Keck. The award was presented to Topinka on April 12 during the Honors Convocation at the annual SAE World Congress in Detroit, Mich. This award, established in 1998, is given annually for the best technical paper written by a student and presented at a major SAE meeting. Topinka, along with her co-authors, is being honored for "Knock Behavior of a Lean-Burn, H₂ and CO Enhanced, SI Gasoline Engine Concept."

An MIT alumnus and a sophomore were among four winners of the MIT Arab Student Organization's 2005 Science and Technology Awards. Adel Belcaid, president of the organization, presented awards to **Soulaymane Kachani** (S.M. 2000, Ph.D. 2002) and sophomore **Abdulrahman I. Tarbzouni** at a banquet held at the MIT University Park Hotel on Saturday, April 16. Kachani, a prolific researcher in dynamic pricing and inventory management, is an assistant professor at Columbia University. He got his master's and Ph.D. degrees in operations research from the MIT Sloan School of Management. Tarbzouni is in the Department of Electrical Engineering and Computer Science.

NEWS YOU CAN USE

Car-seat checks

MIT and Cambridge police departments will conduct a Child Passenger Seat Safety Checkpoint to teach parents and caregivers how to install a child safety or booster seat in their motor vehicles at MIT in the West Parking Lot, 275 Vassar St., from 10 a.m. to 1 p.m. on Friday, May 13.

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Student plumbs disaster relief logistics

Becky Schneck

Center for Transportation and Logistics

The devastation caused by last December's tsunami prompted an unprecedented outpouring of global aid that presented disaster relief providers with innumerable logistical challenges. Now an MIT graduate student has teamed up with an international humanitarian organization to draw logistical lessons from the relief effort and create a supply chain framework to deal with future disasters.

Tim Russell, a graduate student in the Engineering Systems Division, has been collaborating with the Fritz Institute, whose mission is to improve the efficiency of disaster relief efforts through logistics practices and technology solutions.

The Fritz Institute carried out a survey of almost 40 organizations that were providing on-site relief to tsunami victims in Southeast Asia and East Africa. More than

100 people from 18 international aid organizations replied.

Russell is analyzing the data. The initial results were presented in late April at the Humanitarian Logistics Conference in Geneva.

"The biggest lesson to be learned...is that one centralized group needs to coordinate the logistics of the entire [relief] effort," said Russell. After the tsunami hit, hundreds of aid organizations, thousands of volunteers, tons of supplies and billions of dollars flooded the region. Every organization agreed that the financial resources needed to conduct the relief effort were available, but the lack of clear ground information kept the aid from reaching many of the people in need.

The United Nations did set up a joint logistics center to help disseminate ground information and reduce duplications in the supply chain, but unfortunately not all groups used the hub. "It's the best way to share information. At the hub, they'll

know what roads are open, what the latest customs processes are, if bridges have been fixed, and what the airport manifest looks like," Russell explained.

That information would have proved valuable to many of the organizations. For example, the survey showed that more than 70 percent of the respondents encountered delays due to the inconsistent and constantly changing customs procedures.

Another lesson learned from the Fritz survey is that aid organizations did not have enough people with appropriate training to perform specific tasks, especially trained logisticians.

When there are not enough logisticians in the field, said Russell, "there's no metrics being done, no way to track how fast goods are getting to their destination, and no means to evaluate the supply chain in real time." This problem is exacerbated by the lack of software to track the supply chain. According to the surveys, most

organizations just use Excel spreadsheets or homegrown systems. "The cost of time and money to buy the software and train their people is too much for many groups to handle."

These problems are not new to the humanitarian community. "Whenever the international community responds to war, civil conflict and natural disasters with aid, complex logistical problems present themselves," said Russell. "Many people involved in humanitarian relief recognize these problems, but this is the first time anyone has ever done studies on how to solve them."

Russell hopes the Fritz survey and his research will help open the world's eyes to the need for more study in humanitarian logistics.

"This research might introduce the academic world to this problem," he said. "And who knows, it may inspire more people to do more studies and make humanitarian relief even more effective."

Conference slated on forced labor

Sarah H. Wright
News Office

A former child slave, an anti-slavery activist working to end child and forced labor in the chocolate industry, and the U.S. deputy secretary of labor will join authors and globalization specialists in two debates at MIT about modern-day slavery on Saturday, May 14.

"Forced Labor in the Global Economy," presented by the MIT Program on Human Rights and Justice at MIT's Center for International Studies and the BBC World Service Trust, will be held from 8:45 a.m. to noon in Kresge Auditorium.

"A major purpose of this conference is to raise public awareness about this gross violation of human rights, since many people do not know that forced labor exists across the world and that certain forms of it are just like slavery," said Balakrishnan Rajagopal, Ford International Assistant Professor of Law and Development and Director of the MIT program on Human Rights and Justice.

Commenting on the need for debate, Rajagopal said, the practice of forced labor is "obviously odious. But there are disagreements about how big a problem it is, how it should be defined and who should deal with it."

The Saturday event coincides with today's release of a major report by the International Labor Organization (ILO) on the scope of forced labor in the global economy.

The event is free and open to the public. Refreshments will be served.

MIT hosts science fair

In the midst of inaugural festivities, the 56th annual Massachusetts Science Fair took up residence in Johnson Athletics Center on May 6 and 7. The high school fair drew more than 300 students from all over the state to MIT to compete for college scholarships, awards and honors.

"The students love coming to MIT," said Althea Brown, a biology teacher at Medford High School. "We tell them that MIT is the place to be."

Close to 250 judges, including doctors, engineers and university professors, presided over this year's competition. Student projects ranged in topic from astronomy to earth science, computer science and more. There were projects on dental decay, bacteria in foods and even the effect of certain food allergies on weight.

Arielle Rollins of Westfield High used her love of dance to create her project, "The Turning Point: The Physics of a Pirouette," which won one of the regional first-place prizes, worth \$300.

She hypothesized that a deeper plié would result in a greater turn rate for dancers.

—Sasha Brown



PHOTO / DONNA COVENEY

Let there be light

After days of cold, wet weather, the sun came out and there was nothing to see but clear skies yesterday looking up at the Green Building.

Robert Wilkinson, of Draper, at 79

Robert Haydn Wilkinson Sr., a scientist at the Charles Stark Draper Laboratories for nearly 30 years, died at Brigham and Women's Hospital in Boston on Saturday, May 7, from complications due to diabetes. He was 79.

Born and raised in England, Wilkinson received the S.B. degree in electrical engineering from the University of London in 1948, the S.M. degree in electrical engineering from Syracuse University in 1960, and the Ph.D. degree in astronautical engineering from MIT in 1965.

Wilkinson published numerous papers and articles in the field of aerospace engineering. After retirement, he founded his own business, A. Boffin Inc., in Newton, Mass., which provided technical services to high-tech engineering firms.

In 1955 Wilkinson married an educator granted the Order of Distinction in Jamaica. They were actively involved in the MIT

Hosts for International Students Program for many years, hosting international students coming to study at MIT from all corners of the globe.

A humanitarian, Wilkinson was a steadfast supporter and defender of numerous charitable causes, most notably human rights, disability support, disease research and international humanitarian aid.

Wilkinson is survived by his wife, Doreen; four children, Michael, John, Kathleen and Robert Jr. (S.B. 1992); and four grandchildren.

A memorial service will be held from 3 to 4 p.m. at the MIT Chapel on Saturday, May 14. A reception will be held next door to the chapel, immediately following the service from 4 to 5:30 p.m.

Charitable donations, in Wilkinson's name, may be given to Amnesty International.

—Sarah H. Wright

New fault found in Himalayas

Elizabeth Thomson
News Office

MIT and Dartmouth scientists have identified a previously unrecognized, active fault in the Nepalese Himalayas. The discovery, published in the April 21 issue of *Nature*, provides new insights into how the mountains evolved and helps explain why the transition between the high Himalayan Ranges and their gently sloping foothills is so abrupt.

"This project started with the simple observation that the landscape of the central Nepalese Himalaya seems to be telling us something about deformation at depth in the Earth's crust," said Cameron Wobus, lead author on the paper and a graduate student in MIT's Department of Earth, Atmospheric and Planetary Sciences (EAPS).

"The interdisciplinary approach we've taken to the problem has confirmed this intuition, and has demonstrated the existence of a surface-breaking thrust fault many kilometers north of where most geologists believe active deformation is focused. It's an exciting development and it forces us to think more creatively about how mountain ranges like the Himalaya evolve." Wobus' co-authors are EAPS Professors Kelin Whipple and Kip Hodges, and Assistant Professor Arjun Heimsath of Dartmouth.

The newly discovered fault is at the southern edge of the high Himalayan ranges in central Nepal, about 60 miles northwest of Katmandu. Farther south, the landscape is characterized by gently sloping hills. The researchers discovered that there is a sharp change in both erosion and rock uplift rates across the fault. The erosion rates to the north are four times higher than those to the south.

As a result, they speculate that there may be a feedback mechanism between erosion and tectonic deformation. Hodges notes that this is a new perspective on mountain building. "Rapid erosion related to the Indian monsoon is most intense at the approximate position of the newly discovered fault. Our hypothesis is that the modern geodynamics of the range front is indicative of coordinated high precipitation and active deformation. And it would be a very exciting development if we are right that deformational processes close to the surface of the Earth are interdependent with climatic processes."

Such a relationship is consistent with theory, according to Whipple, but "definitive field evidence for this sort of dynamic feedback has been elusive."

The work was funded principally by the National Science Foundation's Tectonics program, with additional funds from the NSF's Continental Dynamics program.

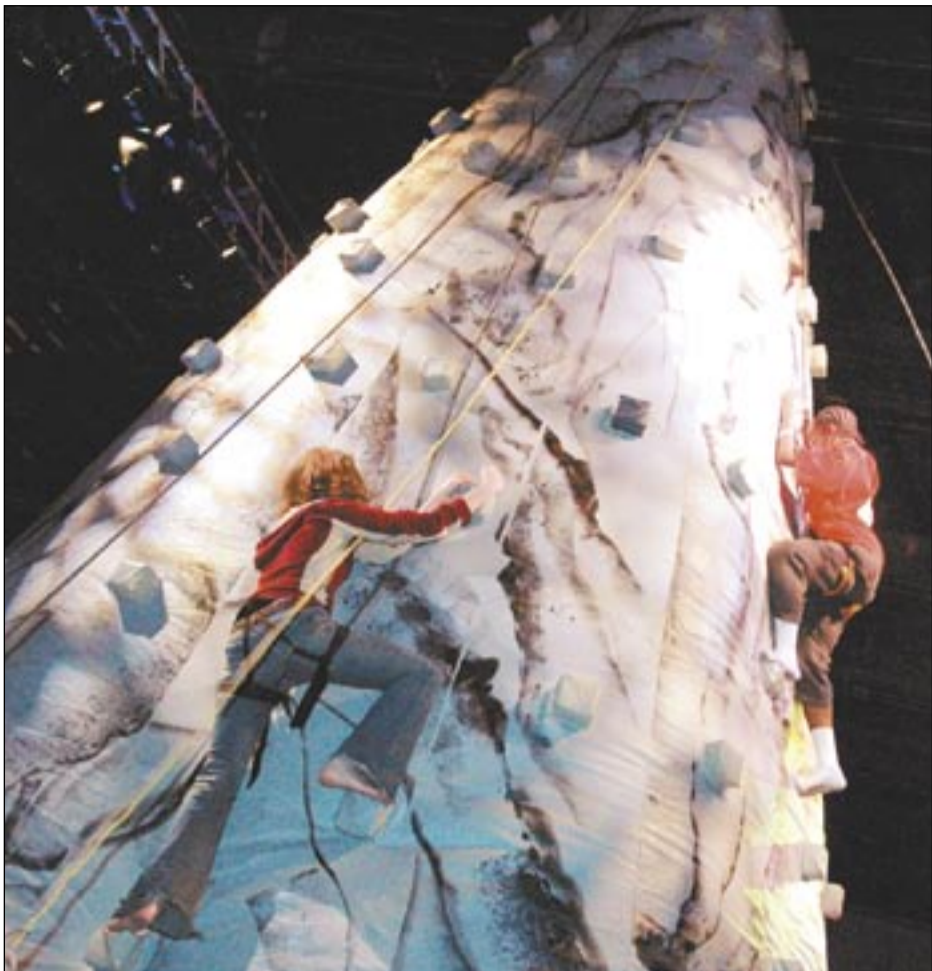


PHOTO / L. BARRY HETHERINGTON

Climbers ascend a 20-foot inflatable 'mountain peak' at the May 7 block party.



PHOTO / DONNA COVENEY

One of the big draws at the block party was the bungee run. Participants ran down an inflated alley, tethered to a bungee cord, which ultimately yanked them back.



PHOTO / DONNA COVENEY

Johnson Athletics Center was in true carnival form as the block party to celebrate Susan Hockfield's inauguration was held there on Saturday. More than 3,000 enjoyed games, food, music and other entertainment.

Block party rocks

Sasha Brown
News Office

Driving rain and high winds did not stop more than 3,000 people from making the trek to Johnson Athletics Center to attend the Uncommon Block Party, the culminating event of a week of activities celebrating MIT's newly inaugurated 16th president, Susan Hockfield.

Wearing an MIT jacket and smiling, Hockfield entered the May 7 party to the strains of "Hail to the Chief" played by a musician dressed as a giant robot. The party, which was held from 3 to 7 p.m. on Saturday, was the biggest party of its kind ever at MIT and drew 1,000 more people than expected. Originally slated to take place on the Kresge lawns and athletic fields, the event was moved to Johnson when the forecasts starting predicting temperatures in the mid-40s, rain and high winds.

While the wind whipped outside, students, faculty and staff partied inside, enjoying the warm, festive atmosphere. "It is great that so many families came," said Ted Johnson of the MIT Community Services Office and the Uncommon Block

Party Committee.

The athletic center proved a good spot for the festivities with its high ceilings and wide, open rooms. "It is fun to use the center in this way," said Emily Paramore of the Office of the President, who was working at the event. "It has gone really well."

Throughout the two main rooms, people mingled, sampling the fare, which included everything from carnival food—popcorn and candy—to chicken wings to Asian noodles, sandwiches and hamburgers. "Any event with lots of toys and free food is bound to be fun," said senior Chris Cary, who waited in a fast-moving food line with his friend, senior Brian Foote. One of the most popular attractions was the candy stand where glass jars full of gummy bears, malted milk balls, and more were available.

Jugglers, magicians and other performers wandered throughout the party doing tricks. One man balanced a full-sized ladder on his chin before a small crowd of wide-eyed children. An Austin Powers impersonator danced to tunes from the movie. Some performers were hired for the occasion, but 29 were affiliated with MIT.

The hallway leading from the main entrance to Johnson and Rockwell Cage

became a workshop area where people could learn origami, belly dancing, stick dancing and more, all presented by MIT groups.

Rockwell was transformed by two centrally located nearly 20-foot blow-up "mountain peaks" that harnessed climbers could scale. There were also blow-up games, including bungee racing: Two runners hooked to bungee cords attempted to outrun each other before being sprung backwards by the cord. Laughing grown-ups and children alike climbed into blow-up bounce rooms while a variety of faculty, student and staff bands played from the main stage, blasting covers and originals.

The mood was celebratory throughout with bright colors, chatter and laughter as people from all over MIT rejoiced in the new presidency together. "It is nice to be here today. Sometimes as a staff member, you don't get to participate as much," said biology postdoctoral fellow Cary Lai, who graduated from MIT in 1998. Lai came to the party with his wife.

Overall, Johnson said that the committee was "thrilled" with the turnout and with the general response to the day. "It really ended up working inside," he said. "It was a great event."

Invocation

The Rev. Amy McCreath, MIT's Episcopal chaplain, gave the following invocation at the inauguration of Susan Hockfield.

Together
Blazing in the white light of a new century
We stand in this commons
Of infinite merit and infinite possibilities.

We call upon the Holy Source of all being
Thankful for all those who have come
before us here
Thankful for the freedom to be here
Thankful for the days ahead
Thankful for Susan Hockfield's leadership:
For her capacity, commitment and courage.

May our commons be a place of transformation, where our passions and talents meet the world's greatest needs.

Blessed are the uncommon who serve this beautiful, yearning, interconnected, standing-on-the-brink-of-everything world.

The towns and cities and nations from which we came here call upon us.

Future generations of children call upon us.

Melting polar ice caps and polluted rivers call upon us.

Mothers praying for the end of wars and the safe return of their sons and daughters call upon us.

The Pleiades and Orion call upon us.

May we respond
In common service
With uncommon strength of mind and hand
and heart.

May our meritocracy merit not just respect but hope.

Perhaps it is for such a moment as this that we have come into this commons. Together.

Amen.

Musical tribute

"Chorus From Pindar," for unison choir and four brass players, was composed by Institute Professor John Harbison for the installation of Susan Hockfield as president of MIT. It was performed by the MIT Chamber Chorus at the ceremony on Friday, May 6.

The lyrics, taken from Pindar's Odes, were written in celebration of athletes, civic leaders and other artists, and were designed to be rendered chorally.

This fragment, as translated by Professor Ronald Trowell of the University of Leeds, and used with his permission, "appears to be urging our leaders to solve disputes by finding common ground," Harbison notes. "This is certainly not the only route leadership might take, but on a day of celebration of a bright future, it is one of the feeling we might entertain."

"Chorus From Pindar"

Let the one who would lead our commonwealth
to sweet tranquility
look for the light, the glow
of large hearted Concord.

And drive from our minds
that bringer of poverty
resentful as a children's nurse—
malignant Discord.



PHOTO / L. BARRY HETHERINGTON

Priscilla Gray, left, the wife of former MIT President Paul E. Gray, congratulates President Susan Hockfield Friday.

16th president accepts MIT charter

Denise Brehm
News Office

At her formal inauguration as MIT's 16th president on May 6, Susan Hockfield announced a new initiative on energy and the environment and said that the Institute should combine its "historic strength" in engineering with its newer strengths in biology and brain and cognitive sciences to help "tackle humanity's most urgent problems."

"The world has never needed MIT as much as it does now. Think how many of the major challenges of this uncertain, unsettled age are shaped by science, technology or daunting problems of quantitative analysis and complex synthesis," she said.

Dana Mead, chairman of MIT's board of trustees, handed the Institute's charter to Hockfield at 2:51 p.m. Hockfield, a neuroscientist and former provost of Yale University, has been in office at MIT since Dec. 6.

The ceremony featured a procession of delegates from 61 universities worldwide marching in order of their institutions' founding dates. Neil Malcolm of the University of Oxford in England, founded in 1249, was the first in line. He was followed by David Good and Alison Richard of Cambridge University in England (1284). Lawrence Summers, president of Harvard University (1636), was fourth in line, representing the oldest American university. Former MIT Chancellor Lawrence Bacow, now president of Tufts University (1852), processed in position 23. MIT was founded in 1861.

Academic regalia ran the gamut, with crimson, purple and gray robes scattered in among the sea of black, and hoods that ranged from canary yellow to bright reds and brilliant blues. Some brightly colored, squashed velvet hats stood out among the assorted headgear as the pageant of delegates processed from Walker Memorial



PHOTO / DONNA COVENEY

President Susan Hockfield accepts the leather-bound copy of MIT's charter from Dana G. Mead, chairman of the Corporation—the act by which she was formally inaugurated as the Institute's 16th president.

down Memorial Drive and into the tent on Killian Court.

MIT musicians performed four original musical pieces composed by MIT faculty members for the occasion: "In Time of Silver Rain" by Elena Ruehr; "Sabar Gong" by Evan Ziporyn and Lamine Touré; "Chorus From Pindar" by John Harbison; and "Fanfare and Fugue" by Peter Child. The Rev. Amy McCreath, MIT's Episcopal chaplain, gave the invocation; Alison Richard, vice chancellor of Cambridge University, welcomed Hockfield on behalf of the Academy.

Hockfield spoke of her impressions of the Institute to date, calling it "a place of deep personal integrity and striking practi-

city" and comparing it to a "stadium with no seats. Everyone is in the game, sometimes 24 hours a day." She put forth her vision for the future of MIT, including the establishment of the initiative on energy, which she said will focus on increasing the energy supply and bringing scientists, engineers and social scientists together to develop the best energy policies.

"Over the last 30 years, these two words—energy and the environment—have gotten a little tired, tired not from overuse, but from lack of progress. The time for that progress is now ... It is our responsibility to lead in this mission," Hockfield told the crowd of roughly 2,300 people, which overflowed the tent set up outside under gray

skies on the 50-degree day.

Hockfield said that just as MIT was instrumental in developing radar, which helped the Allies win World War II, the Institute should now take a lead in the current "convergence of engineering and the life sciences."

"MIT can and must lead in this essential new field-of-all-fields," she said.

Hockfield, the first woman and the first life scientist to lead MIT, committed the Institute to sustaining its commitment to intellectual openness, as well as to increasing the numbers of women and underrepresented minorities in academia.

"We will work toward intellectual openness around the world and to preserve the vital flow of international students and scholars who contribute so much to our universities, and to our society as a whole.

"We also need to sustain our rich diversity of ideas and cultures by building a powerful pipeline of young women and underrepresented minority students eager to pursue advanced degrees and academic careers," she said.

"We need to be the spark that ignites the passion of every child who wants to make the world a better place. We need to reach those young explorers and bring them with us on the great adventure of discovery and innovation that is the soul of MIT," Hockfield said. "We need to help America fall in love all over again with the marvelous possibilities and promises of engineering, science and technology."

Immediately following the ceremony, members of the community quickly filled three smaller tents on the court to enjoy desserts and delicacies accompanied by music from a jazz combo. As the new president greeted a long line of well-wishers, a large banner made an unexpected appearance, unfolding under the dome of Building 10 in apparent student hack. Two playing cards were pictured, along with the words: "The king is dead. Long live the queen."



PHOTO / L. BARRY HETHERINGTON

President Susan Hockfield highlights 'the possibilities and promises of engineering, science and technology' in her inaugural speech Friday.



PHOTO / DONNA COVENEY

Shortly before her inauguration, President Susan Hockfield got in a little family time with her husband, Dr. Thomas Byrne, and their daughter, Elizabeth Byrne.



PHOTO / DONNA COVENEY

Three past presidents of MIT, Howard W. Johnson, Paul E. Gray and Charles M. Vest, from left, join President Susan Hockfield in Gray House, the official president's residence, before leaving for the inaugural ceremony on Friday, May 6.



PHOTO / L. BARRY HETHERINGTON

Famous MIT alumna Shirley Ann Jackson, who is now the president of Rensselaer Polytechnic Institute, congratulates President Susan Hockfield.

Art, technology links explored

Sarah H. Wright
News Office

MIT faculty discussed political, personal and practical aspects of the relationship between art and technology in a symposium held Wednesday, May 4, in the Kirsch Auditorium to honor the inauguration of President Susan Hockfield.

Associate Provost for the Arts Alan Brody opened the session, titled "Art, Technology and Public Space."

Krzysztof Wodiczko, professor of architecture and director of the Center for Advanced Visual Studies; director Jay Scheib, assistant professor of music and theater arts, and composer Evan Ziporyn, Kenan Sahin Distinguished Professor of Music, presented talks and selections from their work.

Wodiczko is known internationally as an activist designer who uses technology to confront political and social oppression. His presentation, "Art, Technology and Democracy," included a talk and three videos of his work in Tijuana, Mexico, St. Louis and Hiroshima, Japan.

Wodiczko's work challenges "un-democracy and un-freedom" by "uncovering and bringing into the open hidden traces of inequality and by inserting into public spaces ... those who should testify," he said.

For example, his Tijuana video projected individual faces of women who worked in factories ("maquiladoras") onto the dome of an elite local concert hall. The departing concert audience had to walk beneath the enlarged projected image and hear the amplified voice of a socially invisible woman describing violence in her life. This huge "ad hoc narrative" could bring both narrator and crowd "closeness to misery and recovery from trauma through speech," Wodiczko said.

Scheib has directed productions at MIT, in New York City and in Berlin, in Salzburg, Austria, and in Budapest, Hungary. His multimedia production of Chekhov's Platonov fragment, "In This Is the End of Sleeping," debuted at MIT and was shown at the New York Chekhov Now Festival.

Scheib outlined his personal directorial journey since 2001, focusing particularly on his interest in Rus-

sian romantic naturalism and his use of on-stage video to realize the genre's "one-on-one reality of humans under duress" for contemporary audiences. Media technology in this case made for more reality, he commented.

To illustrate, Scheib showed a video clip from "Demolition Downtown," a 1976 Tennessee Williams play into which Scheib introduced video cameras on stage, two television-sized screens that highlighted the action and a Plexiglas screen between the stage and the audience. The "Demolition" actors, under Scheib's direction, vividly showed duress, and the video footage intensified the drama.

"Technology produced more intimacy, more personality, and more specificity with gestures through the enlargements on screen," Scheib noted. Scheib said he expected his next work to lean toward dance.

Composer and clarinetist Ziporyn weaves traditional Indonesian orchestration with sonic threads from European classical, American jazz and bleeding-edge electronica in his work. Ziporyn has toured with Bang on a Can, which he founded in 1987, Paul Simon and DJ Spooky.

In his talk, "The Uncooperative Mirror: Composers and Computers," Ziporyn characterized technology as "all good" in its sheer practicality. Software enables people without notation skills to compose; it saves labor in copying music, and it offers a "vocabulary for improvising" thanks to which composers have developed or discovered an array of bright new sounds.

Technology also offers productive serendipity, Ziporyn noted. He played a selection from his own work, "Ocean," that was written "completely by accident. I composed it, accidentally pushed the INVERT button, and the piece was turned upside down and backward." He kept it as technology had remade it.

In "Be In," Ziporyn kept a piece technology had unmade. He lost 90 percent of "Be In" when his hard drive crashed, then rewrote the whole piece from memory. "It was better than the original," he said.

"Subtle downsides" to technology for composers show up in the "realm of labor management. We still have to make decent working conditions for people. Musical scores have to be written so people can play them. Thirty violinists can't agree like 30 oscillations," he said.



PHOTO / DONNA COVENEY

Graduate student Aaron Tan shows President Susan Hockfield how to direct a robot's movement with light during an open class on May 5.

Robot 'zoo' is a class act

Elizabeth Thomson
News Office

Icarus and Mostly Harmless were among the machines on hand at a robotic "petting zoo" May 5 held in honor of the inauguration of President Susan Hockfield.

As Hockfield and her family looked on, students and professors introduced the machines, which were the final projects in a course that was new this semester, Robotics Science and Systems I.

Five teams of undergraduates were challenged to build robots that could each tackle one aspect of a larger hypothetical scenario: building shelters on Mars. Imagine that you could parachute prefabricated components to Mars, then have robots already there assemble them into a building, explained Daniela L. Rus, an associate professor in the Department of Electrical Engineering and Computer Science (EECS) and one of four instructors for the course.

In a demonstration, Mostly Harmless traveled slowly around the room looking for colored blocks about 2 inches square. When it found one, it grasped the block with a pincer-like hand and then dropped it into a small rectangular bin attached to its back. Icarus was designed to look for red balls.

What's been the best part of the course for Federico Mora (G) of EECS? "Actually getting to build a robot. It's amazing to see all the pieces coming together—and it actually works." Although, as his EECS teammate, junior Jeffrey Hoff, added, "it often does something completely different from what you expected."

The course is offered jointly between the Departments of Electrical Engineering and Computer Science, Mechanical Engineering and Aeronautics and Astronautics.

The three other instructors are Una-May O'Reilly, a principal research scientist in the Computer Science and Artificial Intelligence Lab; Assistant Professor Nicholas Roy of aero/astro, and EECS Associate Professor Seth Teller.

There are also many teaching assistants. "They're great," said Mora.



PHOTO / DONNA COVENEY

Reaching out to the future

Susan Hockfield, left, chats with staffers of the Women's Technology Program booth at the Inauguration K-12 Educational Outreach Midway on May 4. The residential summer program, directed by Cynthia Skier, right, introduces high school girls to electrical engineering and computer science. To Skier's right is Joelle Brichard, a senior in math, and freshman Irene Duke, who was a participant in the program.

Research symposium centers on uncommon connections

Elizabeth Thomson
News Office

From an engineer working with a gymnastics coach to a chemist's collaboration with surgeons, MIT researchers continue to conduct the interdisciplinary research that the Institute was founded on.

Speaking at a research symposium in honor of President Susan Hockfield's inauguration this week, four MIT professors described work at the interface of science and technology.

"From the start, the MIT curriculum was multidisciplinary," said Rosalind H. Williams, director of the Program in Science, Technology and Society. "This was not respectable at that time [1861], certainly not to our neighbor up the river." Science was seen as aristocratic, technology as lower-class, said the Robert M. Met-

calfe Professor of Writing.

Williams challenged MIT, however, to pioneer an even broader kind of "multidisciplinarity": "We need to bring science, technology and society together." For example, "nanotechnology is not just a matter of molecules, but also of public understanding because fear of it will hurt the field."

Professor of Chemistry Mounji Bawendi, who works in nanotechnology, agreed. Bawendi's research focuses on quantum dots, or semiconductor particles only a few billionths of a meter in diameter. He noted that "the societal psychology around quantum dots is extremely difficult to navigate."

He went on to give several examples of how science has pushed quantum dot technology forward, and vice versa. These include early work on using quantum dots to form a better laser. The problem

was, "It didn't work. They wouldn't lase," Bawendi said. "We needed to understand the science first. [Then] you can fix the problem." And they did.

Penny Chisholm, the Lee and Geraldine Martin Professor of Environmental Studies, has devoted her research to understanding some of the smallest organisms on Earth: marine microbes.

"They are screaming out to be studied and observed," she said, "but they have basically been ignored in the realm of the sciences." Why are they so important? Among other things, "If you look at the global amount of photosynthesis annually, the microbes I work with are responsible for about as much [photosynthesis] as all the plants and trees on land," Chisholm said.

Chisholm and colleagues are using the organisms as a model system for understanding global processes from the

genome to the ocean. To do so they are working with experts in fields ranging from ecology and genomics to physiology and applied mathematics.

Professor Alexander Slocum, the last speaker, began his talk with what Williams dubbed "geek rap": a poem about all four participants' topics and the overall theme of the event.

Slocum, of the Department of Mechanical Engineering, then described several unusual collaborations in his own research. For example, he is currently working with Noah Riskin, head coach of MIT Men's Gymnastics, on an MIT course aimed at engineering innovative exercise equipment.

To Slocum, "the true power of interdisciplinary research is finding out how other people think. That helps me think differently, and if I can think differently, then every day I continue to grow."

Unuseless ball celebrates what's unnecessary but fun

Sarah H. Wright
News Office

The delight of “what if?” lies deep at the heart of MIT life, and Luis Berrios-Negron’s vision of capturing that spirit in a design contest and major party will be realized this Friday night at MIT’s First Unuseless Beaux Arts Awards Ball, to be held in R&D Common, Stata Center, fourth floor, at 8 p.m.

Berrios-Negron, a graduate student in architecture, organized the “unuseless” contest back in the fall of 2004 with the Graduate Student Office and the Architecture Student Council. He was inspired by MIT’s “geeky, yet ultra-cool ‘hack’ culture” and a series of popular books on “chindogu,” the Japanese art of the useless invention, examples of which include little puff-mops that attach to a cat’s paws to facilitate dusting. “Chindogu” means, literally, “odd or distorted tool.”

The “hack” spirit and the chindogu tradition combine in a contest in which teams

of students are guided by faculty advisors to invent unuseless objects. The hope is that this “leisurely yet meaningfully engaging experience would foment transdisciplinary” among disparate groups at MIT, Berrios-Negron said.

“My biggest, heartfelt critique of MIT is that we have the best resources and talents on the planet, but because of our cloistered lab practices, we are missing out on amplifying collaboration. The Unuseless Competition is a low-browed, light-hearted, small-scale programmatic effort to place art and the creative process in the province of the everyday,” Berrios-Negron said.

Five “unuseless” teams of finalists were selected in April and awarded \$100 each to manufacture prototypes of their designs. The winner will be determined by audience applause-o-meter at Friday night’s ball.

Each unuseless invention has met chindogu tenets including: it must exist, it must not be cruel, its humor must be incidental and it cannot be patented.

Finalists competing for unuseless invention of the year include a “Catsup Crapper,” a mobile unit to dispense the condiment Ronald Reagan called a vegetable, designed by Barry Kudrowitz, Bill Fienup, and Marc Graham, all graduate students in mechanical engineering, with advisor Meejin Yoon, assistant professor of design at MIT School of Architecture.

Graham, a poet and veteran of the 2.007 contest, is working on the machine design for “Catsup.”

“Chindogu is a bit different from my usual routine, and it is a delight to design something without having to focus on a customer, patent or competition. The project is definitely fun, but not more fun than the daily grind. Fortunately, I love what I do so much that the daily grind results in a daily high,” said Graham.

Graduate students Brian Chan, in mechanical engineering, and David Hu, in math, will bring a readymade trifecta to the unuseless awards. They designed a “Will-Powered Chair” that automatically pushes the diner away from dinner, a “Humane

Fly-Swatter” with an exit hole, and a pair of “Stata Glasses” that makes any building look like Gehry’s unusual form. Chan and Hu’s advisor is Chris Csikszentmihalyi, assistant professor of media arts and sciences and

Benesse Career Development Professor of Research in Education.

Other unuseless finalists competing on Friday night include “Boomerun,” a boomerang that won’t ever come back, designed by Liz Burow and Elliot Felix, graduate students in architecture, with advisor Mark Jarzombek, head of history theory and criticism, architecture; “Spike” by Mat Laibowitz, Kelly Norton, graduate students in media arts and sciences, and Mimi Liu, graduate student in electrical engineering and computer science, with advisor Bill Mitchell, academic head, media arts and sciences, and professor of architecture; and “Hairy Bike,” by Coryn Kempster, graduate student in architecture, with advisor Margaret Crawford, professor at the Harvard Graduate School of Design.

PHYSICS

Continued from Page 1

vide a focus for the department’s activities that will enhance interactions among faculty, students and staff. People will meet each other frequently when they use the undergraduate or graduate student common rooms or the variety of conference and seminar rooms, and the center will bring most of our theoretical physicists together, close to the administrative and educational activities of the department,” said Kastner.

The 3rd and 4th floors of the Green Center will house the Center for Theoretical Physics, the Center for Condensed Matter Theory, administrative offices, a Junior lab and a reading room.

“Physics is about interactions, not only between particles, but also between scientists. The Green Center will allow students, postdocs and faculty to come together in a central place to share ideas and discover collaborations,” said Wolfgang Ketterle, professor of physics, 2001 Nobel Laureate and MacArthur Fellow.

The Bosworth Buildings, known on campus as the Main Group, were designed by William Welles Bosworth. Most were completed in 1916. They are connected by the Infinite Corridor and include Buildings 4, 6 and 8. Renovations in these buildings for the current project will affect almost 80,000 square feet of lab and office space.

Kastner commented, “The design takes advantage of the best features of the wonderful old Bosworth buildings, and will be a model for their future renovation. We have been trying to create a focus for the department for 40 years, so we are especially grateful that the generosity of department’s friends—especially Cecil (E.E. ‘23)

and Ida Green, Neil (E.E. ‘64) and Jane Pappalardo, Virgil Elings (physics Ph.D. ‘66) and Jim (physics S.B. ‘53, Ph.D. ‘57) and Sylvia Earl—is about to make the Green Center a reality.”

The Main Group Master Plan was developed in 2002. In addition to providing a central location for the Department of Physics, the program will continue first-floor renovations of the Department of Materials Science and Engineering (DMSE), provide major renewal of Spectroscopy Lab spaces on the second floor and basement levels and construct new, flexible high-bay research space on the first floor of the infill.

The program will include significant infrastructure renewal, through expansion of life safety systems in Buildings 4, 6 and 8 as well as mechanical, electrical and plumbing capacity for all of Buildings 4 and 8 and the north halves of the three buildings. Construction is scheduled to be complete in November 2006.

The project also entails replacement of the windows in the courtyard surrounded by Buildings 2, 4, 6 and 8 as well as some other windows in areas to be renovated. These 90-year-old windows will be replaced with a modern efficient window system that respects the historical significance of the Main Group.

“The project will provide long-term



IMAGE COURTESY / PAYETTE ASSOCIATION

A model shows sunlit walkways connecting Building 6 with the planned new structure.

benefits for the Institute. Our construction manager will do its best to minimize inconvenience to the community. The town meeting on May 12 will describe the project, how it fits in context with the Main Group Master Plan, and the construction impacts that are anticipated,” said John Hawes, senior project manager.

Effective June 13, physics’s faculty, students and staff currently housed in Building 6 will move to the fourth floor of NE25. This group includes everyone from the Center for Theoretical Physics and the non-education staff of the department’s administration. Information on the new office locations can be found on the physics department’s website, web.mit.edu/physics.

Policy in works

MIT is working to formulate a policy on demonstrations and leafleting at Commencement and other large campus events, according to Chancellor Phillip L. Clay.

The idea, which originated within the Commencement Committee, is to accommodate the free expression of ideas while assuring that such important community events as Commencement run smoothly. A working group headed by Clay has formulated a draft policy that includes the following principles:

- Commencement exercises require complex and precise planning and the coming and goings of guests must be free of obstruction or interference.
- MIT is committed to providing venues for demonstrations and leafleting and will designate several specific and visible spots for these activities at Commencement.
- MIT relies on a tradition of collaboration in addressing sensitive community issues and prefers colleagues to treat demonstrations as a community matter—not, in the first instance, as a law enforcement matter. Individuals designated by the committee—faculty, staff and students—will be available to address issues should they arise.

In addition to Clay, the working group includes Senior Advisor to the President Kirk Kolenbrander; Professors Eric Grimson, John Belcher and Les Norford; Gayle Gallagher, executive officer for commencement; and students Rohit Gupta and Barun Singh.

The chancellor is seeking input from the community on this issue before finalizing the policy, which he hopes to do before Commencement. Send comments to chancellor@mit.edu.

CLASSIFIED ADS

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

FOR SALE

3 piece bedrm set. Antique white, night stand w/shelf, drawer. 4 drwr chest and 6 drwr dresser w/mirror. Delivery in Lex./Tewks. areas. \$200/bst. Rick at 781-981-5099.

Japanese red maples. 4-6 ft. high. \$60. 781-861-6105.

VEHICLES

2001 Harley Davidson 1200 Custom Edition Sportster. Low mi., well maintained, many extras. Very good looking/running. Deep burgundy sun-glow. \$7,499. Chicarell@psfc.mit.edu or 978-764-8331.

1998 Toyota Avalon XL 4 door sedan. Original owner, ex. cond. Traction control, premium sound system, new Michelin tires. 75K. \$9,500. Alex Parker at 781-981-3678 or aparker@LL.MIT.EDU.

Camper, 1988 Rockwood model 1280 pop up. One owner in great cond. \$1,000. Sleeps 6-8, stove, freeze box. Weekend appts. Diane at 781-

439-5727.

2000 Jetta GLS, silver, 5-speed manual, low mileage (41,330), great cond., well maintained (one owner). \$8,900. mahoney@space.mit.edu or 617-253-0698.

HOUSING

Malden: \$1,000. 6 rm, 2 BR Philly style row house. Extra clean, updated kitchen/bath, small fenced yard, no pets/utilities. Avail. June 1. Fred at 781-324-4083.

Furnished single room for visiting faculty/post-docs. Inman Square. Kitchen, laundry privileges, all utils, cable, wireless LAN, linens & supplies included. Modern, quiet. One month min. 617-625-9839.

Sabbatical Housing Wanted. Move in: July 1-Aug 1, out: Dec. 31. Need de-leaded 3 BR w/appliances, furnished if possible. Prefer Brookline, Belmont, Newton. dad@utk.edu.

Campobello Island: 2BR, 2b log house w/all amenities on 4 acres overlooking Harbour de Lute near Bay of Fundy. June-Oct. \$850/wk. 617-454-2068.

Orient Hts, E. Boston: 2BR apt. Lge waterfront deck, harbor view, 5-min. walk to Blue line. Easy commute to MIT. \$1,000/mo., utl. not included. Marty at 781-981-2114 or millerick@ll.mit.edu.

Wellfleet: 1920 farmhouse on acre: 3 BR, 2b, jacuzzi, outdoor shower, washer/dryer, fireplace,

near ponds/ocean beaches. \$1,200-\$1,650/week. alcohen@mit.edu.

Vacation rental, Cotuit, Cape Cod. House w/ocean view, sleeps 6, 2b. Private beach. www.cotuitcottage.com or Therese Henderson at 253-7492 or Mary Henderson at 207-933-4391.

E. Boston, Historic Eagle Hill: Three 1BRs, newly renovated, storage space, off street prkng, back patio, back yard. Near T. No Pets. Avail. now. \$850-950/mo. 781-608-0182 or wabbikalemba@yahoo.com.

Newton, sabbatical home avail. 9/05, period negotiable. Bright contemporary, 4BR, 2.5b, study, 2-car garage. Hrdwd flrs, no lead paint, beautiful yard, quiet street, \$3,000/mo. Suzanne-McLaughlin@yahoo.com or 617-527-1466.

Lakefront cottage, Lake Maranacook, Winthrop, Me. Sleeps 4, private beach, canoe, boat. Aug. 20-27, Aug. 27-Sept. 3. \$750/wk. Tom at 508-376-4336.

2BR, all utils: \$1,350. 30 min. from MIT, close to “T” in Brighton, 5 min. from shopping mall, parking, yard. Avail. now. sonnyli@mit.edu or 617-504-1169.

Back Bay: 2 BR avail. June 1-Aug. 31. Elevator/laundry in building. \$1,800/mo. includes heat/hot water. ashleyk@alum.mit.edu.

Studio, 2 blocks to beach. Avail. June-Fall only. 10 min walk to subway, 1 block to bus. 617-268-0880.

Summer sublet wanted: Studio or 1 BR wanted for the Aug., Sept. and poss. Oct. On or near campus. Mature female, admin. staff employee at MIT. Pam at 617-699-6893.

Summer sublet wanted: mature, serious, non-smoking Russian student. Speaks English, some Spanish. June-Aug. Room or studio close to subway (5-15 min. walk). goodfellow@rambler.ru.

WANTED

Dissecting microscope needed by non-profit scientific organization. Do you have an unused instrument to donate? Purpose: study of urban/rural coyote diet. www.theconservationagency.org/coyote.htm or esharris@mit.edu.

STUDENT POSITIONS

Positions for students with work study eligibility.

New England Aquarium seeks floor supervisor. Create daily schedule for teens/volunteers. Resume, cover letter (title of the position, university/college currently attending, federal work-study verification, hours/work avail. during week/weekend) to vois@neaq.org (MS Word). \$10/hr

Maria L. Baldwin School seeks elementary school math tutors. 5 mins from Harvard T. 4-8 hours/week, flexible, from 8:45 a.m.-3 p.m. \$17/hr. Mary Eirich at meirich@cpsd.us or 617-349-6525x100.

MIT EVENT HIGHLIGHTS MAY 11-15


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





'bYOB'

Guari Nanda's 'bYOB' (Build Your Own Bag) will be part of 'Seamless: Computational Couture,' a multimedia runway show of innovative clothing designs. May 20 at 8 p.m. in the Media Lab (Building E15).

WEDNESDAY
May 11


 **Spring Pottery/Ceramics Sale**
9 a.m.-4 p.m. Lobby 10. 253-7019.


 **"Hidden Jewels of Our Community Art Exhibit"**
Works by spouses and partners of MIT graduate students. 9 a.m.-1 p.m. Room 10-105. 253-1614.


 **EAPS Department Lecture Series**
Talk by Benjamin Lane, "Detailed Studies of Extrasolar Planets." 4 p.m. Room 54-915. 253-3382.


 **Opening Reception: "Sturtevant: The Brutal Truth"**
Reception for the Paris-based American artist. 5:30-7:30 p.m. List Visual Arts Center. 253-4680.

THURSDAY
May 12

 **"Piled Higher and Deeper" (PhD)**
Jorge Cham, creator of The Tech's comic strip about (non) life in grad school. 4:30 p.m. Room 26-100. Book signing: 5:30 p.m. Stata Student Street.

 **Artist Talk: Sturtevant**
Presented in conjunction with "Sturtevant: The Brutal Truth." 6 p.m. List Visual Arts Center. 253-4680.

 **IFILM Seminar**
Movie based on Marguerite Duras' "L'Amant." 8-10 p.m. Room 4-237.

 **"Composing a Life: Explorations of Self Through Photography, Art and Writing"**
Mixed media autobiographies by Experimental Study Group students, self-portrait in books and clothes by senior Teal Guidici. Weisner Gallery, Stratton Student Center second floor.

FRIDAY
May 13

 **Harold & Arlene Schnitzer Prize in the Visual Arts Award Winners Exhibit**
Through June 30. 24 hours. Wiesner Student Art Gallery. 253-7019.

 **4th Annual Pappalardo Fellowships in Physics Symposium**
Talks by five Pappalardo Fellows. 2-5 p.m. MIT Faculty Club. 253-4800.

 **MIT Chamber Music Society Student Concert**
Nielsen's Quintet and other works. 5 p.m. Killian Hall. 253-9800.

 **Shakespeare Ensemble Scene Night: Battle of the Sexes**
Scenes from "Cymbeline" and "Henry VI" by Shakespeare, and "Rivers of China" by Alma de Groen. May 13-14. 8 p.m. Kresge Rehearsal Room A. 253-2903.


SATURDAY
May 14


 **"Forced Labor in the Global Economy."**
NPR and BBC World will air live debates presented by MIT Program on Human Rights and Justice and Center for International Studies. 8:45 a.m.-noon. Kresge Auditorium. 253-1965.


 **Walking Tour of Stata Center**
A landscape tour of the Stata Center presented in conjunction with "Constructing Stata: Photographs by Richard Sobol" at the Compton Gallery through June 15. Meet at Stata information desk at 2 p.m. 253-5297.


 **MIT Ballroom End of School Dance**
Evening of social dancing including ballroom and latin dances, along with favorites such as salsa, hustle and merengue. 8 p.m. Morriss Hall. 686-0823.

SUNDAY
May 15

 **"The Clipper Ship Era"**
19th-century lithographs, rare plans, photos, clipper ship cards and exceptional models. Exhibition focuses on the design, construction, speed and social experience of the clipper ship era. Noon-5 p.m. MIT Museum. 253-4444.

 **MIT Swapfest**
MIT's electronics and ham radio flea market. \$5. 9 a.m.-2 p.m. Albany Street Garage. 253-3776.

 **International Folk Dancing (participatory)**
8 p.m. Lobdell Dining Hall. 253-FOLK.

 **"Celebrate 350: Jewish Life in America"**
Exhibit chronicles history, accomplishments of American Jews. Hillel, W11 Dining Room Gallery. 253-2982.

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

MIT CHAMBER MUSIC SOCIETY

Students perform Brahms, Dohnanyi and Turina. 253-9800.

May 11

Killian Hall
7 p.m.

COURSE 2.007 COMPETITION

"Tic Tech Toe." MechE machines fling blocks at a mini replica of Simmons Hall. Finals May 13. 452-2275.

May 12

Johnson Athletic Center Ice Rink
6:30-9 p.m.

UNUSELESS BEAUX ARTS AWARDS BALL


"Hairy bike," "Boomerun" and other laughably logical inventions in the spirit of chingodu. Winners picked by applause. \$5, proceeds to charity.


May 13


R&D Pub, Stata Center
8-11 p.m.


MIT EVENT HIGHLIGHTS MAY 16-22

MONDAY
May 16


 **Photographs From the Arlette and Gus Kayafas '69 Collection**
Collection of 15 photographs including works by the renowned architectural photographer Ezra Stoller. 9 a.m.-5 p.m. 253-4400.


 **"Rock Paper Scissors"**
Projects by Meejin Yoon, assistant professor, architecture. 9 a.m.-5 p.m. Room 7-338. 253-2825.


 **"The World is Flat"**
Talk and book signing by columnist Thomas Friedman of The New York Times. 4-6 p.m. Room 10-250. 452-3621.


 **Kokikai Aikido**
Kokikai is a modern Japanese martial art that teaches coordination of mind and body. Beginners welcome. 7:15-9 p.m. DuPont (W32) Wrestling Room.


TUESDAY
May 17


 **RECOMB 2005**
Multidisciplinary conference for the latest research in bioinformatics, computational biology. 9 a.m.-5 p.m. May 14-18. Kresge Auditorium.

 **Spring Book Buyback**
9:30 a.m.-6:30 p.m. MIT Coop at Kendall Square. 499-3201.


 **A Visit to the Galapagos**
Interactive exhibits built by terrascop students in 1.016. 10 a.m.-6 p.m. Lobby 13.

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

 **Contra Dance for All**
8 p.m. Student Center.


 **QWILLTS Sushi Study Break**
6:30-8:30 p.m. Rainbow Lounge.

WEDNESDAY
May 18


 **Artist Behind the Desk**
Brazilian music performed by Alecia Batson of the Office of the President. Noon. Killian Hall. 253-9821.

 **Gallery Talk: A Walk Through the Muse**
Deborah Douglas, MIT Museum curator of science and technology, conducts a tour of main gallery exhibitions. Noon. MIT Museum. 253-5297.


 **"Seeing the Landscape: Richard Serra: Tuhirangi Contour"**
Documentary about the sculptor's massive earthworks by Alberta Chu. 7 p.m. Bartos Theater. 253-4400.


 **American Jiu-Jitsu**
Practical self-defense. Beginners welcome, especially on Mondays and Wednesdays. DuPont (W32) Wrestling Room. 9-11 p.m.

THURSDAY
May 19

 **CAVS "Read-In"**
Time out for group reading of arts publications collected for Travelling Magazine Table. 6:30-9 p.m. Room N52-390. 452-2484.

 **MIT Gamelan Galak Tika**
World premiere of "Gringsing" by renowned Balinese composer Dewa Ketut Alit. 8 p.m. Kresge Auditorium. 253-9800.


 **MIT Tea Time**
Jack Derby (founder of Derby Management) will talk about writing a business plan and incorporating your company. 5:30-8:30 p.m. Room 66-168.


 **Karaoke Night at the Thirsty Ear**
Must be 21+. I.D. required. 8 p.m. The Thirsty Ear Pub, Ashdown House.

FRIDAY
May 20

 **"Seamless: Computational Couture [the sigtronic collection of runway fashion]"**
Large-scale multimedia runway show of innovative clothing designed by students & alumni of MIT, Harvard. RISD. 8 p.m. Media Lab. 452-5308.

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

 **Vesak Day Celebration**
Singaporeans and non-Singaporeans celebrate Vesak Day, a Singapore holiday. 7-10 p.m. Student Center PDR 1.

 **LiveMusic@the EAR**
Must be 21+. I.D. required. Doors: 8 p.m., show: 9p.m.-1 a.m. The Thirsty Ear Pub, Ashdown House.

SATURDAY
May 21

 **MITHAS Celebration of Indian Music**
Presented by MITHAS (MIT Heritage of South Asia). Deepak Ram, flute; Jerry Leake, tabla. \$20, MIT students free. 1 p.m. Wong Auditorium. 258-7971.

 **"Sturtevant: The Brutal Truth"**
List Curator Bill Arning discusses this Paris-based American artist known for her replications of famous works in a gallery talk on 2 p.m. List Visual Arts Center.

 **MITHAS Celebration of Indian Music**
Presented by MITHAS (MIT Heritage of South Asia). \$20, MIT students free. Padma Talwalkar, khyal; Sudhanshu Kulkarni, harmonium; Satyajit Talwalkar, tabla. 4 p.m. Wong Auditorium. 258-7971.

SUNDAY
May 22

 **MITHAS Celebration of Indian Music**
Presented by MITHAS (MIT Heritage of South Asia). Tara Anand, vocal; K.V.S. Vinay, mridangam. \$20, MIT students free. 1 p.m. Wong Auditorium. 258-7971.

 **MITHAS Celebration of Indian Music**
Presented by MITHAS (MIT Heritage of South Asia). T.M. Krishna, vocal; R.K. Sriram Kumar, violin; K. Arunprakash, mridangam; B. Purushottam, ghatam. \$20, MIT students free. 4 p.m. Wong Auditorium. 258-7971.

 **International Folk Dancing with live music (participatory)**
8 p.m. Lobdell Dining Hall. 253-FOLK.