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TechTalk
SERVING THE MIT COMMUNITY

PHOTOS / **DONNA COVENEY**

Toast of New Orleans

The music of New Orleans was heard around campus as Donald Harrison (at left on sax) and Marva Wright put their soul into song at the Bayou Bash on Sunday night, Oct. 30. Below, members of the Wild Magnolias (in costume) parade across campus, Mardi-Gras style, with members of the Stooges Brass Band. Both groups also performed Sunday at Kresge Auditorium.

Researchers map genetic variation

Researchers at the Broad Institute of MIT and Harvard and colleagues published new papers last week that bring scientists closer to their ultimate goal — to grasp the core mechanisms of human biology and disease — by developing a comprehensive catalog of the genetic diversity in the human genome sequence across human populations.

The first step toward grasping those core mechanisms was realized in 2001, with the completion of the human genome sequence.

The new Broad papers describe both the content and uses of a comprehensive genomic catalog, known as HapMap, that maps common human DNA sequence variations, enabling systematic testing of genetic variants for their association with disease and their place in human evolutionary history.

HapMap gets its name from "haplotypes" — collectively inherited groups of human genetic variants that are located physically close to one another in the genome.

"Built upon the foundation laid by the human genome sequence, the HapMap is a powerful new tool for exploring the root causes of common diseases. We absolutely require such a resource so that we can develop new and much-needed approaches to understand these diseases, such as diabetes, bipolar disorder, [and] cancer," said David Altshuler, director of the Broad's Program in Medical and Population Genetics and an associate professor at Massachusetts General Hospital and Harvard Medical School. Altshuler and Peter Donnelly, of the University of Oxford in England, are two of the authors of an Oct. 27 paper in Nature.

Diseases run in families, and perhaps half the risk of any given common disease can be explained by genetic differences inherited from one's parents. Inheritance also plays a role in the different responses people can have to a drug or to an environmental factor. A "map" to discern the range of genetic contributions to common diseases and responses to therapies was proposed 10 years ago. With HapMap, technology has caught up to biomedical research needs.

"The data from the HapMap project allows scientists to select the particular DNA variants that provide the greatest information in the most efficient manner, lower-

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McGovern celebrates opening its new home Friday

The McGovern Institute for Brain Research at MIT will celebrate the formal opening of its new home in the brain and cognitive sciences complex this Friday, Nov. 4.

As part of the event, Massachusetts Sen. John Kerry, television host and author Jane Pauley, Nobel laureate Dr. Eric Kandel and Robert M. Metcalfe (S.B. 1968), the inventor of the Ethernet, are all scheduled to speak to a capacity crowd in the third-floor atrium of the new complex between 9:30 a.m. and 12:30 p.m. The community is invited to tune in via a live webcast, at http://web.mit.edu/mcgovern/html/Events_and_Seminars/mcgovern_opening_webcast.shtml.

As leaders in their own fields, each speaker will bring a unique perspective to the future impact of neuroscience on society — ranging from treatments for brain disorders, to education, to the development of new technologies and industries.

The theme of the gala celebration is neuroscience and society, a topic of particular significance to donors Lore Harp McGovern and Patrick J. McGovern Jr., MIT Class of 1959. The McGoverns founded the institute with the largest donation ever made to MIT in the hopes that neuroscience research could play a leading role in improving the quality of human life and humans' ability to acquire knowledge and use it effectively.

"The McGovern Institute was created at the start of this new century, with a mandate to lead the world into a new era of systems neuroscience, the study of brain systems and behavior," said Professor Robert Desimone, McGovern's direc-

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Students gather to raise funds for the millions left homeless after the Oct. 8 earthquake in South Asia.

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A karaoke installation is the centerpiece of an exhibition of Christian Jankowski's work at the List Visual Arts Center.

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N.Y. STORY

The work of Media Lab graduate student James Patten is now on view at the Museum of Modern Art.

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Eric Grimson named head of EECS

Elizabeth A. Thomson
News Office

Professor Eric Grimson, a leading expert in computer vision, has been named the new head of the Department of Electrical Engineering and Computer Science.

"Based upon the recommendation of the Faculty Advisory Committee, I am delighted to appoint Eric Grimson as the new Department Head," said Dean of Engineering Thomas Magnanti in a letter to EECS faculty and administrators Oct. 21. Professors Duane Boning and Srini Devadas will serve as associate department heads.

"With these appointments, we have in place an outstanding leadership team. I very much look forward to working with the team to ensure the continuing vitality and strength of the Department," Magnanti said.

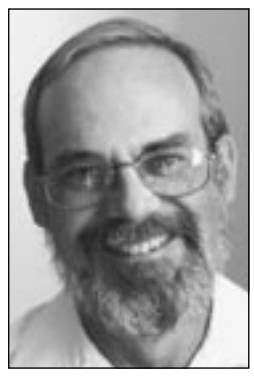
Grimson, the Bernard Gordon Professor of Medical Engineering, is currently head of the computer vision group of MIT's Computer Science and Artificial Intelligence Laboratory (CSAIL). His research ranges from image-guided surgery to the construction of an interactive anatomy browser.

With Boning, he has been an associate head of EECS since 2004. A Fellow of the American Association for Artificial Intelligence and of the Institute of Electrical and Electronics Engineers, he has also received the School of Engineering's Bose Award for excellence in teaching.

Grimson received a B.Sc. (high honors) in mathematics and physics from the University of Regina and earned a Ph.D. in mathematics from MIT in 1980.

Grimson succeeds Professor Rafael Reif, who was named MIT provost earlier this year.

Boning has been associate director of the MIT Microsystems Technology Laboratories since 1998. He holds S.B. degrees in both computer science and electrical engineering, and earned his Ph.D. degree in electrical engineering and computer science in 1991, all from MIT.



Eric Grimson

His research focuses on interconnect technology, variation modeling, control, and environmental issues in semiconductor and MEMS manufacturing.

Devadas' research interests include computer-aided design, computer architecture, hardware validation, network router hardware, computer security and computational biology. He serves as the research director for architecture, systems and networking at CSAIL.

He received the B.Tech. from the Indian Institute of Technology in 1985 and the M.S.E.E. and Ph.D. from the University of California at Berkeley in 1986 and 1988, respectively.

Faculty named to professorships

A number of faculty members have been appointed to named professorships. All appointments are for three-year terms and became effective July 1 unless otherwise noted.

Assistant Professor **Nittai Bergman** of the Sloan School of Management has been selected to hold the Class of 1957 Career Development Professorship.

Erik Demaine, associate professor of electrical engineering and computer science, and **Kimberly Hamad-Schifferli**, assistant professor of mechanical engineering, were selected to be Esther and Harold E. Edgerton Professors. The Edgerton Professorships were established in 1973 by the MIT Corporation to honor the late Professor Edgerton and his wife.

Assistant Professor **Andrew D. Endy** of biological engineering was named to the Thomas D. and Virginia W. Cabot Career Development Professorship. This is one of two chairs established by the Cabots in the fields of engineering and molecular or cellular biology.

Assistant Professor **Daniel Frey** of mechanical engineering has been named to the Robert N. Noyce Career Development Professorship.

John D.E. Gabrieli, professor of brain and cognitive sciences, was appointed to the Grover Hermann Professorship in Health Sciences and Technology, for a five-year renewable term. This chair was established in 1977 by the Grover Hermann Foundation.

Scott Hughes, assistant professor of physics, was named to the Class of 1956 Career Development Professorship. The Class of 1956 established this chair in celebration of its 25th reunion.

Hiroshi Ishii, associate professor of media arts and sciences, and **Gareth H. McKinley**, professor of mechanical engineering, have been named to two-year terms as Class of 1960 Fellows.

Noel B. Jackson, associate professor of literature, is the next holder of the Homer A. Burnell Career Development Professorship. The chair was established from the bequest of Burnell (S.B. 1928) to support a junior faculty member.

David Jones, assistant professor of science, technology and society, was appointed to the Leo Marx Career Development Professorship in the History and Culture of Science and Technology. The professorship honors MIT Professor Emeritus Leo Marx, who has taught in the STS program for many years.

Roger Dale Kamm, professor of mechanical engineering and biological engineering, is the next holder of the Germeshausen Professorship for a five-year renewable term. Kenneth Germeshausen and his wife established this chair in 1968 "to support MIT's strong interest in combin-

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PHOTO / **DONNA COVENEY**

Sweet reminder

Community Giving volunteer Y-Chie Primo, left, offers a passerby candy and a reminder about MIT's annual Community Giving Campaign outside 77 Mass. Ave. on Monday, Oct. 31.

The goal of this year's campaign is $400,000 in contributions to the MIT Community Service Fund, the United Way of Massachusetts Bay or to any other nonprofit through MIT's Other Charities Program. The campaign runs through March. Pledge packets will be delivered to each community member.

The campaign will include a winter clothing drive (Nov. 14-Dec. 2, 2005), a children's book fair (Dec. 19) and a crafts fair (March 16, 2006).

— Sarah H. Wright

MEMORIAL SERVICE

A memorial service for Donald Harleman, MIT Ford Professor Emeritus of Environmental Engineering, will be held Saturday, Nov. 5, at 1 p.m. in the MIT Chapel. Harleman, a renowned civil engineer whose love for the ocean and expertise in water quality and waste treatment benefited urban harbors throughout the world, died of cancer on Sept. 28 on Nantucket. For his full obituary, visit web.mit.edu/newsoffice/2005/obit-harleman.html.

Professor emeritus Alvin Drake dies at 70

Sarah H. Wright
News Office

Alvin W. Drake, a professor emeritus of electrical engineering and computer science who was respected among colleagues and students alike for the vitality of his teaching and the vigor of his research, died of cancer at a hospice near his Falmouth home on Sunday, Oct. 30. He was 70.

Drake, a native of Bayonne, N.J., specialized in decision analysis, applied probability, applications of operations research to public systems and blood and organ banking.

Drake's best-known MIT course, Probabilistic Systems Analysis (6.041), was "legendary," said Richard Larson, Mitsui Professor of Civil and Environmental Engineering and of Engineering Systems. "He taught students to think in terms of basic principles, in the MIT way."

Ethernet inventor Robert Metcalfe (S.B. 1968), who was a student of Drake's, called him the "epitome of the MIT professor."

Drake's own enthusiasm for the Institute and his devotion to the "MIT way" were leavened by his awareness of the toll of competitiveness on self-esteem.

In a 1993 essay, "Notes on Being at a Great, but Greatly Intimidating Place," Drake encouraged students and faculty not to let others' brilliance make them feel "less special, less bright or less alive."

Drake himself was willing to take risks, such as launching MIT and the then-fledgling Operations Research Center (ORC) into the analysis of public systems.

"This pioneering work led to major research in blood banking, airport operations and urban public safety. It put MIT ORC on the map of public sector operations research," Larson said.

Alvin W. Drake

Drake's particular interests in operations research included blood banking systems and public attitudes and decision processes with regard to blood donation. He served as a director of the Red Cross Northeast Regional Blood Program.

Drake came to MIT as an instructor in 1960 and taught continuously, except for service in the U.S. Army Signal Corps (1962-1964) and sabbaticals at Harvard and Berkeley, until his retirement at the end of 1996. He served as associate director of the Operations Research Center from 1966 to 1977 and was promoted to full professor in 1973.

He wrote the classic text "Fundamentals of Probability Theory" (1967) and co-authored "The American Blood Supply" (1982) with Stan N. Finkelstein, senior research scientist, Engineering Systems Division, and Harvey M. Sapolsky, professor of political science.

In his later years, Drake worked with students in the Engineering Systems Division (ESD) and in the Leaders for Manufacturing Program (LFM).

"As a mentor, teacher and advisor to students in the LFM program, he touched students in the same way he touched me as a student in the 1960s," said Donald Rosenfield, director of the LFM Fellows Program.

In 1991, Drake received the School of Engineering's Amar Bose Award for excellence in teaching.

In 1995, Drake was appointed Ford Professor of Engineering.

The next year, on the eve of his last session teaching 6.041, Drake received a unique honor. Speaking for four decades of MIT students, the MIT Chorallaries sang an a cappella verse they composed for him:

"Professor Drake's retiring, we hate to see him go/He always has supported us — he's even come to shows!/ We've sung here each and every term and had a lot of fun/As the official a cappella group of Drake's 6.041!"

Drake received four degrees from MIT: the S.B. and S.M. in 1958, the E.E. in 1961 and the Sc.D. in 1962.

Drake married Julie Atwood in 1995. He is survived by his wife; stepson Todd C. Wheelden and his wife, Babette, of Kents Hill, Maine; two grandsons, Drake and Fenix Wheelden; and a brother, Jerome, of Somerville, Mass.

A memorial service will be held at 3 p.m. on Saturday, Nov. 5, at the Popponesset Inn in Mashpee, Mass.

A celebration of life service will be held at a later date.

For fuller text and donation information, visit the News Office web site.

HOW TO REACH US

News Office
Telephone: 617-253-2700
E-mail: newsoffice@mit.edu
http://web.mit.edu/newsoffice

Office of the Arts
http://web.mit.edu/arts

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Editor
Kathryn O'Neill

Photojournalist
Donna Coveney

Production
Anne Trafton

News Office Staff

Senior Communications Officer/ Science Writer — Denise Brehm
News Manager/Editor — Kathryn O'Neill
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MIT, Nokia join to advance mobile computing

MIT's Computer Science and Artificial Intelligence Laboratory (CSAIL) and Nokia Research Center last week announced a research collaboration to advance the state of the art in mobile computing and communications technologies.

CSAIL and Nokia will establish a new research facility — the Nokia Research Center Cambridge — near the MIT campus, where researchers from MIT and Nokia will work closely together on a new vision for mobile computing.

"Information and communication technologies are becoming ever more critical in all aspects of our personal and professional lives," said MIT President Susan Hockfield. "By carrying out long-term research in these fields, including novel uses of hand-held devices, MIT and Nokia will make new communication opportunities and services available for people around the globe."

"For Nokia, this is a fresh approach to our research collaboration with universities," said Dr. Bob Iannucci, head of Nokia Research Center. "Bringing together the collective expertise of MIT and Nokia in mobile computing and communications provides a vehicle for rapidly generating new concepts and bringing innovations to the marketplace on a large scale."

The collaborative work of the Nokia Research Center Cambridge will center on a view of the future where small handheld devices such as mobile phones will become parts of an "ecosystem" of information, services, peripherals, sensors and other devices. Research will address new user interfaces that incorporate speech and other modalities, new mobile computing platforms — including low power hardware platforms and wireless communication, as well as new software architectures. Researchers will also address new ways of managing information: The use of Semantic Web technologies — an extension of the current Web developed in part at CSAIL and at the Nokia Research Center — will enable devices to more intuitively and automatically understand interconnected terms, information and services.

Approximately 20 researchers from MIT and 20 researchers from Nokia will participate in joint projects under the direction of a joint steering committee. Dr. James Hicks from Nokia Research Center has been named director of the Nokia Research Center Cambridge. Professor Arvind, Johnson Professor of Computer Science and Engineering, will be the program manager.

"This is a totally unique kind of collaboration for both MIT and Nokia," said Professor Rodney Brooks, director of CSAIL. "Unlike most university-industry alliances, where researchers work at their own pace — often at opposite ends of the globe — the joint laboratory with Nokia will bring a dynamic group of scientists into close physical proximity in an open, creative and dynamic environment."

The Nokia Research Center Cambridge will be located in Kendall Square and will begin operations on Jan. 1. Five initial research projects have already been planned.

PHOTO COURTESY / **DR. BARBARA O'PRAY**

Dr. Barbara O'Pray poses aboard the U.S.N.S. Comfort, where she volunteered to help victims of Hurricane Katrina this September.

MIT doctor gives comfort to hurricane victims

Sasha Brown
News Office

Dr. Barbara O'Pray of MIT Medical had wanted to work on the peacetime hospital ship the S.S. Hope ever since she was a little girl.

"It was something I always wanted to do," O'Pray said, though she never got the chance. "Most of the opportunities are so far away," she explained.

When Hurricane Katrina struck the Gulf Coast, however, there was suddenly a need for doctors close to home. Although the S.S. Hope was retired in 1974, O'Pray got the chance to serve aboard the U.S.N.S. Comfort, one of two naval hospital ships that have taken its place.

O'Pray used two weeks of her vacation time to provide health care for victims of the Aug. 29 hurricane that devastated New Orleans and parts of the Gulf Coast.

"Immediately after Hurricane Katrina struck, I was looking for a way to volunteer," O'Pray said. She served in the region from Sept. 13 through 29.

The 900-foot-long, 100-foot-wide ship can hold 1,000 hospital beds and has 10 operating rooms. At the time O'Pray was on board, there were 250 beds on the ship.

Commissioned in 1958, the S.S. Hope was the world's first peacetime hospital ship. Project HOPE (Health Opportunities for People Everywhere), now partnered with the U.S. Navy, continues the mission of providing health education and humanitarian assistance with two ships as well as land-based training and education programs on five continents, including North America.

Following the hurricanes, the Comfort's emergency room saw about 200 patients a day. Although they spent most of their nights on the ship, O'Pray and her fellow volunteers spent a lot of days off the boat, helping out as needed in affected neighborhoods.

Much of what she saw was shocking. In one small Vietnamese community in Biloxi, Miss., the mainstay shrimping industry was in ruins. Many residents' boats had been lost at sea, and many people lost relatives.

"It was totally devastated," O'Pray said. The Project HOPE group set up a small clinic for the community.

O'Pray logged a few 24-hour shifts. "I was in a small, 325-bed, community hospital in Gulfport [Miss.] where we were seeing about triple the number they usually saw," said O'Pray. "The doctors were wiped out."

The problems she encountered varied. "We didn't see a lot of acute injuries," she said, but there were a lot of chemical rashes and skin infections from the dirty water as well as "routine problems that had nowhere else to go."

There were also a number of patients suffering post-traumatic stress symptoms, she said. One patient suffering from insomnia had spent five days trapped in his house in New Orleans and three days in the Superdome before making it to his brother's house in Gulfport.

In some cases, Project HOPE set up clinics to care for people waiting in line for help from the Federal Emergency Management Agency or the Red Cross. Although drinks were available, the wait could last 10 to 15 hours, and "people were dropping like flies," said O'Pray.

O'Pray, who is a pediatrician, evaluated a 10-year-old boy with appendicitis in the emergency room at Columbia Garden Park Hospital in Gulfport who had to be referred to the ship for surgery because there were no local surgeons available.

"The next day he was golden," O'Pray said.

Although it was difficult for O'Pray to spend time away from home and work, the experience was well worth it, she said.

"This is something I have always wanted to do."

Benefit concert this Sunday

MIT students have joined with students from four other universities to raise money for the victims of Hurricane Katrina and the Oct. 8 earthquake in Pakistan, India and Afghanistan with a benefit concert.

Two months in the works, the concert scheduled for 3-5 p.m. at Walker Memorial on Sunday, Nov. 6, was the brainchild of sophomore Rany Woo, who worked with members of Kappa Alpha Theta, Sigma Phi Epsilon and the Society of Women Engineers.

Student musicians from MIT, Harvard University, Berklee College of Music, Wellesley College and Brandeis University are scheduled to appear.

"This intercollegiate concert shows that through collaboration and unification, we can make a difference," Woo said.

— Sasha Brown

Professor dismissed for research misconduct

MIT announced last week that Luk Van Parijs, an associate professor in biology, has been terminated for research misconduct.

The university launched an investigation in August of 2004 when members of his research group brought allegations of research misconduct by Van Parijs to the attention of the MIT administration. During the course of the investigation, Van Parijs admitted to fabricating and falsifying research data in a paper and several manuscripts and grant applications. The investigation found no evidence that his co-authors or the members of his research group were involved in the misconduct or were aware of it when it occurred.

"In this case a single individual admitted that he fabricated and falsified data," said Associate Provost and Vice President for Research Alice Gast, who oversees allegations of scientific and academic misconduct at MIT. "We are very concerned that his actions not cast a shadow over his co-authors or members of his research group, none of whom was involved in the misconduct.

"Integrity in research and scholarship is a bedrock principle of MIT. Research misconduct violates this principle and MIT takes any allegations of research misconduct very seriously," said Gast. "We acted immediately when the allegations were brought to our attention and began a very thorough and confidential investigation to determine the extent of the misconduct and whether other individuals were involved."

Van Parijs was placed on leave immediately after the allegations were reported and has had no access to his lab or office since then.

Van Parijs' area of research is in the use of short-interference RNA (or RNAi) in studying disease mechanisms, especially in autoimmune diseases. It can be categorized as basic scientific research related to normal immune cell function and defects in these cells during disease development. His work did not involve medical treatments. RNAi is an important area of research, and scientists in the field of RNAi, including many researchers at MIT, continue to make legitimate and important advances, some of which are related to the treatment of such diseases as cancer, diabetes and arthritis.

MIT is working in collaboration with the co-authors and in consultation with the Office of Research Integrity in the National Institutes of Health, the federal agency that oversees these investigations, to see that retractions are published. In cases where research involves federal funding, as some of Van Parijs' work did, federal regulations specify how allegations of scientific misconduct should be investigated. Under MIT's own policies for such investigations, which follow the federal require-

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Transgenic technique could lead to flu-resistant birds

Creating a strain of avian flu-resistant chickens and exploring how canaries learn to sing are two of many potential uses for a Picower Institute of Learning and Memory researcher's simple new way to create transgenic birds. The work will appear this week in the online early edition of the Proceedings of the National Academy of Sciences (PNAS).

There are only four known types of animals that learn to communicate vocally: humans, whales, hummingbirds and songbirds. Hummingbirds do not breed well in captivity and whales have obvious issues as lab animals, but brain researchers can learn a lot from songbirds such as finches and canaries because they learn songs by imitating adults, just as children learn to talk. "Songbirds are a very practical animal system to study the genetic and neurobiological basis of learning and communication," said co-author Carlos E. Lois, assistant professor of neuroscience at MIT's Picower Institute.

In addition to creating transgenic chickens resistant to avian flu, scientists could also engineer chickens to produce high levels of therapeutic protein in their egg whites. For example, transgenic chickens carrying the gene encoding human insulin could produce high levels of insulin in a very pure form.

Benjamin B. Scott, a graduate student in the Department of Brain and Cognitive Sciences at MIT, and Lois came up with a way to transport genes directly into the genome of egg cells much more effectively than previously possible, creating transgenic birds with ease. In addition, the transgenes could be activated reliably in specific organs, such as brain or muscle tissue.

In addition to the benefits of using transgenic bird models to advance developmental biology and neurobiology, manipulating the avian genome could lead to chickens that do not transmit diseases to humans; chickens that are resistant to common chicken diseases such as tuberculosis; and chickens that produce large amounts of useful pharmaceuticals such as insulin, growth hormone and hormones that increase blood production in patients with cancer, anemia and other diseases.

In the PNAS paper, the researchers reported that they used their method to create transgenic quails with a fluorescent marker in their neurons that allowed researchers to visualize with fluorescent microscopy the birds' axons and dendrites.

Traditional methods of injecting DNA into the nucleus of an embryo result in only around 1 to 3 percent of cells incorporating the new DNA properly. With this low rate of DNA delivery, this method can still be used to produce transgenic mice, but it was not useful for creating transgenic birds. In 2002, Lois described a new method to generate transgenic animals by taking advantage of the specialized molecular machinery of lentiviruses. The viruses transport DNA into the nucleus efficiently in a way that integrates the new DNA more consistently. In 2002, Lois applied this method to mice and rats with a 90 percent success rate. More recently, lentiviral vectors also have been used to generate transgenic pigs and cattle. Their work on birds has a 30 percent to 40 percent success rate because when the egg is laid, it has some 40,000 cells and getting the retroviruses into all the egg cells through the yolk is difficult.

Lois said that transgenic techniques will likely not be useful in creating a better chicken for human consumption, because chickens have already been selectively bred for years to create birds with a lot of meat on their bones. "The differences between today's chickens and wild chickens are as large as those that separate poodles and wolves," Lois said. "If chickens had any more muscle mass their legs would not hold them up. I really think we have pushed the body of the chicken close to the edge."

This work is supported by the Ellison Medical Foundation Aging Program.

PHOTO / **DONNA COVENEY**

Art in progress

Sculptor Mark di Suvero, left, watches as his piece, 'Aesop's Fables, II' (2005) is assembled in front of the Stata Center on Thursday, Oct. 27. An influential figure in American and European art since 1960, Suvero is known for his monumentally scaled sculptures, constructed primarily from industrial I-beams. This piece is a gift of Vera List, the family of Robert Sanders, MIT '64, and is made possible through the generosity of the artist.

Hockfield to give Miller Lecture

Sasha Brown
News Office

MIT President Susan Hockfield will give a talk on "The University and Its Responsibilities" at the annual Science, Technology and Society-sponsored Arthur Miller Lecture on Science and Ethics on Monday, Nov. 7, at 4 p.m. in Kirsch Auditorium in the Stata Center.

A neuroscientist whose research has focused on the development of the brain, Hockfield received her bachelor's degree in biology from the University of Rochester and her Ph.D. in anatomy and neuroscience from Georgetown University School of Medicine. Prior to being named the Institute's 16th president in December 2004, she was the William Edward Gilbert Professor of Neurobiology and provost at Yale University.

Hockfield will speak on the complex, sometimes contradictory imperatives that universities today face — to be at once local, regional, national and international, and to preserve academic values while engaging with industry, government and society. She will discuss the role of the modern university as well as the special responsibilities faced by educators, students and researchers in the physical sciences, the life sciences and technology.

The lecture honors the memory of Arthur Miller, an MIT alumnus (S.B. 1945) noted for his work in electronic measurement and instrumentation.

During World War II, he worked at the Radiation Lab, where he worked for several years. His medical contributions included methods to reduce shock hazards in hospital monitoring systems and designing the first commercial cardiographs that featured adequate patient circuit isolation from line and ground.

The talk is free and open to the public. For more information, call Debbie Meinbresse at x3-4062.

Museum exhibit shows wireless campus never sleeps

Denise Brehm
News Office

MIT unwired last month when Information Services & Technology installed the last of 2,800 wireless access points, making the MIT campus one of the largest geographic entities — about 9.4 million square feet — served by a single wireless network.

Blanket wireless service is reason enough to celebrate on a campus where most of the 10,000 students own laptop computers and many work into the not-so-wee hours of the morning. IS&T and the MIT Museum are commemorating the achievement with an exhibition called "iSpots," which features three electronic real-time maps of campus wireless use projected onto large Plexiglas rectangles that appear to float in the room.

"Laptops and WiFi are creating a revolutionary change in the way that people work," said Carlo Ratti, architect and director of the SENSEable City Lab in MIT's Department of Urban Studies and Planning. "iSpots aims to visualize these changes by monitoring the traffic on the wireless network and showing how people move around campus.

"The maps provide quantitative evidence that people on the campus really are using WiFi nearly 24 hours a day. I suspect that MIT today represents the world of the future in this regard," said Ratti.

"Having a fully wireless campus means people can be assured of using their computers anywhere they go," said Jerrold Grochow, MIT's vice president for information services and technology. "As more IP-based devices come into being, I think we'll see a major change in the way members of the community interact. And as wireless goes even further, perhaps throughout Cambridge, the concepts of campus and community will blend even further. With iSpots, we'll be able to focus improvements to the wireless grid and begin to anticipate these changes." Grochow said even the campus playing fields will have wireless service in the next year.

The iSpots maps show that wireless use in the dormitories increases after 5:30 p.m., peaks around 10 p.m., then drops until it plateaus from 2 to 8 a.m. Even at its lowest point, wireless access holds at about one-third of the peak usage. Business hours (9 a.m. to 5 p.m.) are the peak time for total wireless use on campus, with administrative and classroom buildings starting to increase at about 8 a.m.

The Sidney-Pacific graduate residence hall (NW86) and MIT Sloan (E51) frequently tie for most wireless use, according to urban studies and planning graduate student Sonya Huang, a member of Ratti's research group. "Planning is inherently ahistorical," said Huang. "What's interesting about this project is it gives real-time information that planners can later use to make decisions."

Campus denizens can access iSpots from their laptops on the SENSEable City Lab web site and can choose to identify their own red spots of wirelessness as they move from dorm to classroom. While most of the maps use anonymous data, a few people have already chosen to identify themselves on one of the maps, e.g. Joe and Dan were logged on at noon on Nov. 1 in Building W61.

Architecture graduate student Andres Sevtsuk has been one of the primary researchers on the iSpots project. Other researchers are sophomore Daniel Gutierrez, Huang, senior David Lee, graduate student Xiongjiu Liao, junior Jia Lou and Mark Silis, manager of network and infrastructure services for IS&T.

They have logged many hours on MIT's WiFi network at all hours to create iSpots, a project that proves the campus never sleeps.

NEWS YOU CAN USE

Open enrollment

The annual benefits open enrollment period will be held from Monday, Nov. 14, through Friday, Dec. 2. Personal Enrollment Guides will be e-mailed to all active benefits-eligible employees on Nov. 14. The guide summarizes current benefit coverage and provides instructions for making benefits elections. You will not need to do anything if you want to maintain your current level of coverage for 2006 unless you want to enroll in a Flexible Spending Account for 2006. You will be able to make your 2006 elections online through Employee Self Service. Watch for more information to follow in the upcoming weeks.

PHOTO / **DONNA COVENEY**

Students attend a candlelight vigil on the steps of the Student Center on Oct. 27 to raise money for victims of the earthquake that hit Pakistan, Afghanistan and India earlier this month. From left are juniors Nupur Garg of chemical engineering, Tasneem Hussam of civil and environmental engineering and Saosan Sarwahrdy, who attends Wellesley College.

Earthquake vigil held

Sasha Brown
News Office

Eighty MIT students stood together on the steps of the Student Center on Thursday, Oct. 27 in a candlelight vigil to raise money for the victims of the Oct. 8 earthquake that devastated parts of Pakistan, Afghanistan and India.

Organized by the Pakistani Students at MIT (Paksmit), the vigil was one of many taking place on campuses around the region. Harvard University, Wellesley College, Mount Holyoke College, Tufts University, Brandeis University, Boston University, Rutgers University, Columbia University, Cornell University, Berklee College, Hampshire College, Dartmouth College and New York University all participated.

More than 80,000 people died and more than 3 million were left homeless in Pakistan, the country most devastated by the earthquake. Entire villages in the Kashmir region and northern Pakistan have been destroyed, and the death toll is still expected to rise.

On Oct. 9, Paksmit started collecting funds in Lobby 10, and over the following week collected more than $1,000. Paksmit also brought the Pakistan Association of Greater Boston and the Association for the Development of Pakistan together in an online collection effort, which raised $150,000 in just 72 hours.

Concerned by the lack of attention in the media, senior Mubarik Imam of Paksmit has been working to raise awareness about Pakistan and the earthquake.

During the vigil, which was rescheduled from Tuesday, Oct. 25, due to rain, Paksmit showed a video depicting the beauty of Kashmir and what the people were like as well as the "utter devastation that followed," said Imam.

Candles were available for a suggested donation of $2, although many people gave more. More than $750 was raised.

"We wanted to find a way to bring the campus together," said Imam. "A lot of people came up to us afterward to say how touched they were."

Yo ho ho! Sea chanteys inspire singers

Sasha Brown
News Office

It is easy to sing a sea chantey: Just say: "to me way-hey-hey-YAH," said Lynn Noel, one of the founding members of a group of singers that brings its special brand of maritime history to the MIT Museum each month.

"There is an exuberance and enthusiasm in these songs, like the smell of salt on your face," Noel said.

The sea chantey developed to help coordinate the work on a ship, said David Kessler, program assistant in the MIT Sloan School of Management, who co-produced the program with Noel, an Arlington resident. At its heart, the sea chantey is working music, with songs for pumping water from a ship, heaving at a capstan to bring up an anchor and hauling on lines to trim the sails.

Hauling chanteys come in two basic types: one for long, slow jobs, called drag chanteys, and one for short, quick jobs called short drag chanteys.

"Traditionally, chanteys were mostly sung a cappella, although sometimes there would be a fiddle or banjo," Kessler said. Both the concertina and melodeon (button accordion) might also have been used as accompaniment.

Noel and Kessler, along with MIT alumni Jeff Keller (S.B. 1988) and Michael Bergman (Ph.D. 1992), brought the chantey sings to MIT and to Boston this summer. Both San Francisco and New York City have monthly sings. New York's is held in the historic South Street Seaport.

With its history of sailing and rowing, Boston was ripe for a monthly sing, Noel and Kessler said. "Boston really deserved to have its own sea music community," said Noel.

The group first met at the MIT Sailing Pavilion in July and August. Roughly 30 chantey singers from all over the state sat on the dock, near the water. "There is a degree of authenticity you get when you are right out on the water singing about the water," said Noel.

PHOTO / **DONNA COVENEY**

David Kessler, who works at MIT Sloan School of Management, breaks into song down at the Sailing Pavilion on Friday, Oct. 21. Kessler, who helped launch a series of sea chantey sings, is holding a book of sea chanteys.

The sings moved to the museum for winter but will likely return to the waterfront when the weather improves.

The MIT singers are open to any song of the sea, said Kessler. "We'll sing any song that's about sailors, ships, fishermen, dockyard workers or waterside neighborhoods. We cover all these under the umbrella 'maritime songs,'" he said.

Kessler has been sailing since he was a teenager, but said the songs give him a new appreciation for it. "As I became more interested in boats and larger ships, I became interested in their culture — chanteys are fun and easy, and help me appreciate boats and sailing as much as sailing itself," he said.

For others, singing the chanteys is an opportunity to bring history alive. "It gives us an opportunity to bring the past into the present," Noel said. Just last week, a group of 100 singers came together to celebrate the bicentennial of the Battle of Trafalgar, the famous 1805 sea battle in which Britain's fleet, commanded by Adm. Horatio Nelson, defeated the French under Napoleon. "It is a form of living history," said Noel.

Although the majority of chanteys at the Boston sing are in English, the songs show up in almost every language in the world. Last month, an MIT graduate student who attended a sing performed a Polish chantey.

In the time before motors, "sailing vessels were moved by hand and heart," said Noel. These songs keep that memory alive, celebrating the sea and all the hard work that went into exploring it.

"The songs are an experiential education," Noel said. "They have a real context … the songs allow you to travel the world without leaving your chair."

For more information, or to join in, visit launch.groups.yahoo.com/group/NE_ChanteySings/.

MCGOVERN

Continued from Page 1

tor. "What sets the McGovern Institute apart is not just a commitment to systems neuroscience but also the talent and teamwork of 12 world-class scientists. This is scientific collaboration at the highest level."

As a bonus, guests at Friday's celebration will be among the first to tour the new Athinoula A. Martinos Imaging Center at the McGovern Institute.

"The new brain imaging center is the bridge where brain knowledge meets human action and behavior, where knowledge from basic neuroscience research will be filtered in to how the human brain works and how it can go wrong," said John Gabrieli, head of the imaging center, an associate member of the McGovern Institute, and the Grover Hermann Professor in Health Sciences and Technology and the Department of Brain and Cognitive Sciences.

"Brain imaging is the only non-invasive way you can look at the organization of the human brain," says Nancy Kanwisher, Investigator at the McGovern Institute and the Ellen Swallow Richards Professor of Cognitive Neuroscience. "It's the closest we can come to these direct measurements of the brain in normal human subjects." Previously, she says, researchers undertaking human brain imaging studies had to go to the Athinoula A. Martinos Center for Biomedical Imaging at Massachusetts General Hospital's Charlestown campus. Now, in addition to that complementary facility, faculty and students will have easy access to MIT's own center, and there are plans to incorporate brain imaging into some classes.

The imaging center was made possible by generous gifts from the Martinos family, the McGoverns and an anonymous donor. The Harvard-MIT Division of Health Sciences and Technology (HST) program, the Department of Brain and Cognitive Sciences, and MIT's Office of the Provost contributed significant space, money and human talent.

MIT's new 411,000-square-foot brain and cognitive sciences complex, to be dedicated Dec. 2, will be the largest neuroscience center in the world. In addition to the McGovern Institute, it will house the MIT Department of Brain and Cognitive Sciences and the Picower Institute for Learning and Memory.

"This state-of-the art building gives us the resources needed for collaboration, as well the ability to take full advantage of the stunning array of new enabling technologies — brain imaging, genetics, molecular biology and computer modeling," Desimone said. "Our location at the epicenter of these burgeoning transformations could not be more ideal."

SHASS professorships announced

Philip S. Khoury, Kenan Sahin Dean of the School of Humanities, Arts, and Social Sciences, has announced the appointment of two faculty members to named professorships.

Associate Professor **Esther Duflo** will be the inaugural holder of the Abdul Latif Jameel Professorship in Poverty Alleviation and Development Economics.

This professorship was recently created with a gift from MIT alumnus Mohammed Jameel '78 and named in honor of his late father. The professorship is part of a larger gift in support of the Poverty Action Lab at MIT. For more information on Jameel's gift, visit web.mit.edu/newsoffice/2005/gift.html.

Duflo received the maitrise in history and economics from the École Normale Supérieure in Paris, the master's from Département et Laboratoire d'Economie Théorique et Appliquée, and a Ph.D. from MIT in 1999. She then became a member of MIT's economics faculty. She was the Castle Krob Career Development Associate Professor from 2002 to 2004, and co-founded the Poverty Action Lab in 2003.

A specialist in development economics who is widely considered the leader of her generation, Duflo focuses her research on randomized evaluation, in which the impact of anti-poverty programs is rigorously evaluated by comparing randomly selected treatment and comparison groups, very much like in medical trials.

Duflo has received the Elaine Benett Prize for Research, given once every two years to the best young woman in economics; the Prix du Meilleur Jeune Economiste, awarded yearly by the Cercle des Economistes; and the Journal Le Mondée to the best French economist under 40.

Khoury has also announced the appointment of a member of the faculty of the School of Humanities, Arts, and Social Sciences to a Career Development Professorship for a three-year term beginning July 1.

Muhamet Yildiz of economics is the Pentti Kouri Career Development Professor. Yildiz received his Ph.D. in economic analysis and policy from Stanford University Graduate School of Business in 2000. Appointed in 2000 as assistant professor of economics at MIT, his principal areas of research are game theory, microeconomic theory and political economics.

This professorship was established by a gift from Pentti J. K. Kouri (Ph.D. 1975), the chairman and co-founder of Kouri Capital Group Inc. This professorship is awarded on a rotating basis to nontenured economics faculty with outstanding records of scholarship.

HAPMAP

Continued from **Page 1**

ing the costs and increasing the power of genetic research," said Mark Daly, assistant professor at Massachusetts General Hospital, and an associate member of the Broad Institute. Daly led the Boston team's statistical and analytical work.

HapMap not only builds on the 2001 completion of the human genome sequence, it also advances the massive effort to characterize and catalog the millions of individual DNA base variations (single nucleotide polymorphisms or SNPs) across the genome in the human population. Based on the initial SNP and sequence data, the haplotype structure of the human genome was recognized as early as 2001. Broad Institute scientists led or contributed significantly to all of these efforts.

The HapMap project has also spurred remarkable advances in the technology for testing genetic variations in DNA, making it possible to undertake comprehensive studies in large numbers of patient samples at a lower cost. Stacey Gabriel, director of the Broad Institute's genetic analysis platform, noted, "Several years ago, determining the genotype of a single SNP in a patient cost nearly a dollar, and we could do hundreds a day. Today, the prices have dropped in many cases to a fraction of a penny per genotype, and we can do millions a day. This is the difference between not being able to do the studies, and getting them done rapidly and well."

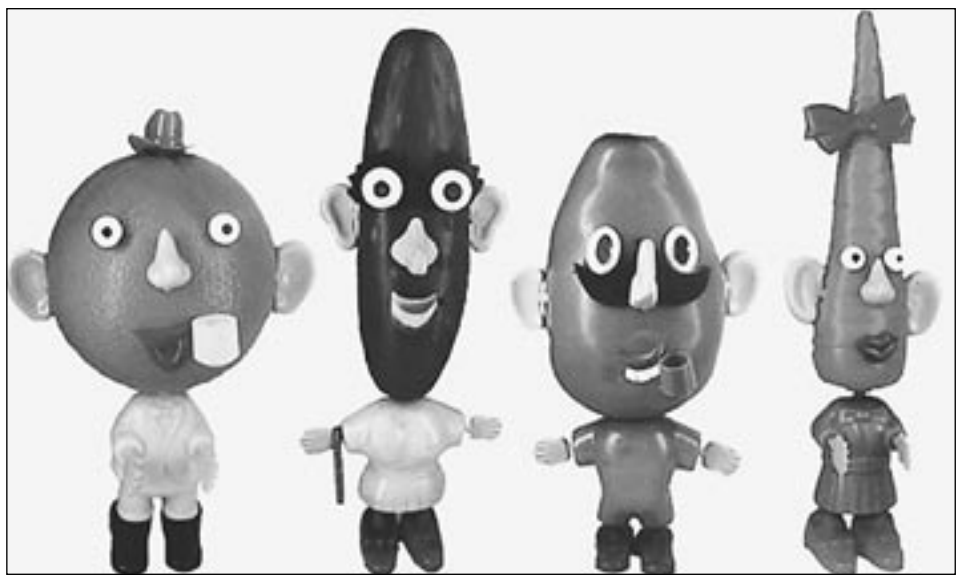

IMAGE COURTESY / **BROAD INSTITUTE**

Any two unrelated people are 99.9 percent identical at the level of DNA sequence. The remaining 0.1 percent difference can help explain why one person has distinct physical features, is more susceptible to a disease or responds differently to a drug or an environmental factor than another person.

The availability of rich "real world" data in HapMap has also led to the realization that previous computer models of human genetics are simply too limited, and can even lead to false conclusions about the role of genes or genetic loci in different diseases.

In a paper to be published in the November issue of Genome Research, Stephen Schaffner, Altshuler and their colleagues at the Broad Institute used HapMap's rich, real world data not only to demonstrate the limitations of prior computer genetic models, but also to provide updated models for the use of the entire scientific community that more closely approximate the reality of human genetic variation.

Although much of the interest in HapMap focuses on disease genetics, its data are equally powerful in uncovering potential sites of natural selection in the human genome. Pardis Sabeti, Eric Lander and colleagues at the Broad Institute, together with Stephen O'Brien and his colleagues at the National Cancer Institute, used the HapMap to re-examine earlier work on natural selection on CCR5-32, a genetic variation in a T-cell receptor that confers strong resistance to infection by HIV and that has been implicated in resistance to the bubonic plague.

"With the benefit of greater genotyping and empirical comparisons from the HapMap, we were able to show that the pattern of genetic variation seen at CCR5-32 does not stand out as exceptional relative to other loci across the genome and is consistent with neutral evolution," said Sabeti, a student at Harvard Medical School and a postdoctoral fellow at the Broad Institute. "In fact, the CCR5-32 allele is likely to have arisen more than 5,000 years ago, rather than during the last 1,000 years as was previously thought."

Their findings, reported in the November issue of PLoS Biology, show that the HapMap also gives scientists unprecedented ability to identify novel candidates for natural selection.

HapMap data are freely available in several public databases, including the HapMap Data Coordination Center, the NIH-funded National Center for Biotechnology Information's SNP database (dbSNP) and the JSNP Database in Japan.

PROFS

Continued from **Page 2**

ing humanitarian advance with technological progress." Germeshausen was a member of the MIT Class of 1931 and one of the founders of EG&G Inc.

Professor **Monty Krieger** of biology is the next Whitehead Professor for a five-year renewable term.

Ernest J. Moniz, professor of physics, is the next holder of the Cecil and Ida Green Distinguished Professorship for a five-year renewable term. This chair was established in 1991 by a generous bequest from the estate of Ida Green.

Christopher Moore, assistant professor of brain and cognitive sciences, and **Forest White**, assistant professor of biological engineering, were named to the Mitsui Career Development Professorships. The Mitsui Chairs were established in 1980 through the generosity of the Mitsui Group, one of the oldest and largest industrial organizations in Japan.

Assistant Professor **Thomas Peacock** of mechanical engineering is the next holder of the Atlantic Richfield Career Development Professorship in Energy Studies. The chair, which was established in 1980 by a grant from the Atlantic Richfield Foundation, was the first endowed chair at MIT specifically designated to support teaching and research related to energy.

Assistant Professor **Sugata Roychowdhury** of the Sloan School of Management is the next holder of the Theodore T. Miller Career Development Professorship. This chair was established by bequest of Miller, a member of the MIT Class of 1922.

David Sabatini, assistant professor of biology, was appointed to the Howard S. and Linda B. Stern Career Development Professorship.

Lawrence Sass, assistant professor of architecture, is the next Cecil and Ida Green Career Development Professor. This chair was established by the late Cecil Green and his wife, who were longtime friends and generous benefactors of MIT. Cecil Green was a member of the class of 1923 and founder of Texas Instruments Inc.

Assistant Professor **Thomas Schwartz** of biology will hold the Pfizer-Laubach Career Development Professorship. The Pfizer-Laubach Chair was established by Pfizer to honor Dr. Gerald D. Laubach, MIT alumnus and former president of Pfizer Inc.

Charity Scribner, assistant professor of foreign languages and literatures, was appointed to the Class of 1954 Career Development Professorship. The Class of 1954 established this chair in celebration of its 40th reunion.

Professor **Timothy M. Swager** of chemistry has been selected as a John D. MacArthur Professor for a five-year, renewable term. This chair was established in 1981 by a grant from the John D. and Catherine T. MacArthur Foundation.

Edward Baron Turk, professor of foreign languages and literatures, was appointed to the John E. Burchard Professorship for a five-year renewable term. This chair was established by the Arthur J. Conner Trust and named for Burchard (S.B. 1923), the first dean of the School of Humanities.

Assistant Professor **Troy van Voorhis** of chemistry is the next holder of the Paul M. Cook Career Development Professorship. This chair was established with a generous contribution from Cook, who earned a degree in chemical engineering in 1947, to support a junior faculty member with a strong interest in materials and chemical sciences.

Misconduct

Continued from **Page 3**

ments, the associate provost and vice president for research appoints an impartial committee to investigate the allegations.

Federal and MIT rules require that investigations be conducted in strict confidence to protect the integrity of the review process and to avoid unjustified damage to the reputations of individuals, including innocent colleagues and collaborators.

The final report of the investigation will be sent to the Office of Research Integrity, which will conduct its own confidential review of the matter and make the findings public when that review is complete.

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

Tickets for Christmas Revels, Sanders Theater, Sunday, Dec. 18 at 1 p.m. 1 adult, 2 kids. Balcony E, Row BB next to center section seats 0005, 6 and 7. Paid $106. $100 or best offer. E-mail phoebe@mit.edu.

Blue sofa, chair, ottoman $125; maple kitchen table, 4 chairs, leaf $75; 2 table lamps $20; bedroom set — triple dresser/mirror, chest, 2 night stands, full size headboard/frame, $250. Contact lohehir@mit.edu or 253-4617.

Window A/C, washer, dryer, bicycle, mountain bicycle, refrigerator. Call 781-395-7265.

STUDENT EMPLOYMENT

Positions for students with work-study eligibility

Student needed to help develop overall program vision, strategy & logistics for Nuestra Culinary Ventures. Assist in marketing to entrepreneurs, fundraising, providing technical assistance to program participants, training services, direct community outreach, update website, www.ncvkitchen.org, etc. Qualifications: Strong people skills, ability & desire to work w/ people of different cultural, ethnic & socio-economic backgrounds, self-motivated w/ ability to work independently, language skills in Spanish a plus, understanding of Word, Excel & accounting principles a plus. Send resume & cover to Cary Wheaton, cwheaton@nuestracdc.org. $10-$12/hr.

Help produce Peacework Magazine. Learn every aspect of publishing a lively non-profit peace & justice monthly, based in the New England office of the American Friends Service Comittee in Cambridge. Contact Phyllis Gately 617-661-6130, pcohengately@afsc.org. $8.75/hr.

VEHICLES

2000 VW Golf GLS. $8800 or best offer. 30.5K. White, automatic, 5D hatchback, A/C, dual airbag, ABS, alarm, CD changer, sun roof. Contact Kevin at 617-265-6883 or kevinahn@mit.edu.

HOUSING

Lincoln: exceptional home in woods for rent, 2+ acres, 4BR/3BA, new kitchen, total 9 rms, 2 car garage, walk to rail station, top school system, beautiful environment, non-smoker. Pets negotiable. $2500/month. E-mail feng@psfc.mit.edu.

Furnished room avail. Nov. 1, in spacious Arlington home, near public transportation, parking, kitchen privileges, washer & dryer on premises; own refrigerator & TV. Call 781-648-7425, 24 hrs, leave msg & contact info.

Jankowski takes wry look at human condition

Lauren Maurand
Office of the Arts

IMAGE COURTESY/ **KLOSTERFELDE AND MACCARONE, INC.**

"The Holy Artwork" involves a televangelist in San Antonio. Jankowski pretends to pass out at the preacher's feet, effectively giving the preacher a chance to expound upon artwork and God.

Christian Jankowski, a German-born performance and installation artist, has shown his work in more than 10 countries, but the current exhibition of his work at MIT's List Visual Arts Center is the first large-scale survey of his work to tour the United States.

"Christian Jankowski: Everything Fell Together," which opened earlier this month and kicked off the List Center's 20th anniversary season, includes 10 film and video installations as well as 54 photographs.

Jankowski often collaborates with others — including children, magicians, customs officials, artists, therapists, psychics and theologians — and his work frequently involves a surprising turn of events and a subtle but engaging sense of humor.

"The Holy Artwork" (2001) is the piece that garnered Jankowski recognition in the United States when it was shown in the Whitney Biennial in New York City in 2002. In this 15-minute video, Jankowski approaches and collapses at the feet of a televangelist and remains there while the man completes a sermon about art and God.

This is typical of Jankowski's method, which List Curator Bill Arning describes as "looking at various social systems and inserting himself into them in a way that makes you see them anew."

For "Telemistica," the piece that was his major European début at the Venice Biennale in 1999, Jankowski called popular Italian psychics just before the event to ask them advice about the artwork that he was going to make.

In "The Matrix Effect" (2000), his first show in the United States (held at the Wadsworth Athenaeum Museum of Art in Hartford, Conn.), Jankowski conducted interviews with such famous artists as Sol LeWitt, Louise Lawler and Christo, then cast children to re-enact the interviews, putting the fame of his older colleagues into perspective and hinting at the agelessness of art while also highlighting the awkwardness of "artspeak."

The participatory centerpiece of the List exhibition is "The Day We Met," a karaoke installation in which exhibition visitors can choose from a selection of several thousand songs and perform them to the background of four Korean-produced videos that feature the artist.

The preacher in "The Holy Artwork" talks about art as an event, and nothing could be more apt in describing Jankowski's work. Jankowski deals with shame, eating habits, animalization, dreams and ambitions, and the nature of art as it relates to life. The result is imagery that has its own life in the ideas that it engenders.

"Christian Jankowski: Everything Fell Together" runs through Dec. 31. Gallery talks will be held at List on Friday, Nov. 4 at 6 p.m., Sunday, Nov. 6 at 2 p.m. and Sunday, Nov. 20 at 2 p.m.

A film night organized in conjunction with the exhibition offers a screening of "Beaver Trilogy" on Thursday, Nov. 10 at 7 p.m. in Bartos Theater (E15). This series of three films is directed by Trent Harris and is a result of an invitation Harris received to film a talent show by an earnest small town dreamer from Beaver, Utah.

For more information, call x3-4680.

Lynn Heinemann of the Office of the Arts contributed to this story.

Alumnus wins theater award

MIT alumnus Carlos Armesto is one of 24 recipients of the 2005 Princess Grace Awards, given to "aspiring young theater, dance and film artists in America."

Armesto graduated in 1997 with degrees in chemical engineering and theater arts. His award includes an apprenticeship with the Ensemble Studio Theatre (EST) in New York City, where he is co-director of the EST-Sloan Project. The project commissions, produces and promotes plays exploring the worlds of science and technology.

Carlos Armesto

"This is a fast-paced, high-stakes, high-energy theater, where we develop a lot of new work with many high-profile artists," Armesto said.

The Princess Grace Foundation presented its awards on Wednesday, Oct. 26, at a black-tie gala hosted by CNN's Larry King at Manhattan's Cipriani 42nd Street. Joining Monaco's Prince Albert II in bestowing the awards were Bebe Neuwirth, Edie Falco, Isabella Rossellini and Alan Cumming.

The awards are named in honor of the late Princess Grace of Monaco (formerly Grace Kelly), who was known for helping aspiring artists achieve their goals.

Since the first grants were awarded in 1984, the Princess Grace Foundation has awarded over $4 million to more than 400 young artists, including Stephen Hillenburg, creator of Nickelodeon's SpongeBob SquarePants, and Pulitzer Prize-winning playwright Tony Kushner.

PHOTO / **JAMES PATTEN**

Ana Maria Cardenas shops with the aid of one of MIT graduate student James Patten's inventions, now on view at New York's Museum of Modern Art.

Student's work on view at MoMA

"When you go shopping, do you wish you knew more about the companies that made the foods you buy?"

Thus begins a tongue-in-cheek video for the "Swipe 'n' Gripe," one of a series of "Corporate Fallout Detectors," developed by Media Lab graduate student James Patten and now on view at New York's Museum of Modern Art as part of an exhibition titled, "SAFE: Design Takes on Risk." Designed for consumers to bring to the grocery store, the device scans bar codes and makes a clicking noise based on the environmental or ethical record of the manufacturer, thus concretizing issues of corporate accountability and individual choice.

The first major design exhibition at MoMA since the museum reopened in November 2004, "SAFE" presents more than 300 contemporary products and prototypes designed, according to MoMA's web site, "to protect body and mind from dangerous or stressful circumstances, respond to emergencies, ensure clarity of information, and provide a sense of comfort and security."

Patten says his creation is a "completely real, functioning device" containing a database with information on the ethical and environmental records of thousands of companies.

"For some people, the clicking sound it makes brings back ominous memories of Geiger counters sold to the public in the Cold War era," he says. "The hope is that hearing this sound, combined with the sight of someone scrutinizing products in a store, will cause people to think about their buying decisions in a different way."

The show runs through Jan. 3.

Artist gathers New Orleans survival stories

Displaced from his home in New Orleans by Hurricane Katrina, New Orleans poet, filmmaker, educator and critic Kalamu ya Salaam is leading an effort to record the experiences of scattered New Orleanians during and after the devastating storm and to share these stories with the world via the Internet.

Kalamu ya Salaam

Salaam will discuss his project and web site on Wednesday, Nov. 2, at 7 p.m. in Room 4-163.

Salaam likens this project to those of the 1930s Works Projects Administration, which collected the stories of those who had experienced slavery.

"We collect the stories of people who survived a defining moment in American and world history," Salaam writes on his web site.

"Too often when major historic events take place, those who live at the margins of the mainstream are ignored," Salaam writes. "We know what the presidents and generals did; we know what the business leaders and major cultural figures thought; but do we know anything about the poor, the disenfranchised, the people of the dome, the overpass, as well as those who left the city on Sunday and as of Tuesday night had no city to return to?"

Salaam, who is living temporarily in Nashville, will also read from his past and current work about New Orleans and displacement.

The event is sponsored by the MIT Program in Writing and Humanistic Studies. For more information, call x3-7894.

MIT EVENT HIGHLIGHTS NOVEMBER 2-6

Science/ Technology | Performance | Architecture/ Planning | Humanities

Music | Exhibit | Reading | Special Interest

Business/ Money | Film | Sports | Featured Event

March of the Ewoks

Costume and puppet designer Eleanor Pritchard '06 hobnobs with a brood of Ewoks from Act VI: Return of the Jedi, part of 'Star Wars: Musical Edition.' The MIT Musical Theatre Guild production runs Nov. 11-13 and Nov. 16-20.

WEDNESDAY November 2

Terrorism
Talk by Jessica Stern of the Kennedy School of Government. Noon. Room E38-615. 253-7529.

"Listen to the People: The Neo-Griot New Orleans Project"
Talk by New Orleans poet, filmmaker and critic Kalamu ya Salaam. 7 p.m. Room 4-163. 253-7894.

"Emerging Muslim Identities in Diasporic Communities"
Film: "A Fond Kiss" (Ken Loach, UK, 2004). 7 p.m. Room 2-105. 253-4771.

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

THURSDAY November 3

MIT Chapel Concert
Alan Jabbour, Appalachian folklorist and fiddler. Noon. MIT Chapel. 253-2826.

"Now Playing: Photographs by Joe Seaward"
Reception. 6 p.m. Wiesner Student Art Gallery. 253-7019.

Writer's Series: Jonathan Lethem
Talk by Lethem, author of "Motherless Brooklyn," which won the National Book Critics Circle Award for Fiction. 7 p.m. Room 10-250. 253-7894.

American Folk Fiddle Workshop
Alan Jabbour, American folk fiddler. 7:30 p.m. Killian Hall. 258-5629.

FRIDAY November 4

"Now Playing: Photographs by Joe Seaward"
Exhibit through Nov. 30. 24 hours a day. Wiesner Student Art Gallery. 253-7019.

"Urga: Close to Eden (Urga: Territoriya Lubvi)"
Part of the Suburbia Goes Global film series. 6 p.m. Room 3-133.

Gallery Talk
Bill Arning, curator of the List Visual Arts Center, speaks on the List exhibition "Christian Jankowski: Everything Fell Together." 6 p.m. List Visual Arts Center (E15). 253-4680.

Diwali Nite 2005
Celebration of Festival of Lights. $21, $18 students, $12 w/ MIT ID. 7 p.m. Room 50-140.

SATURDAY November 5

Diwali Puja
Celebration of Diwali, the festival of lights. 6-7 p.m. MIT Chapel. 225-8814.

"Star Wars Episode III: Revenge of the Sith"
LSC movie. $3. 7 and 10 p.m. showings. Room 26-100. 253-3791.

Smashing the Ceiling
Concert featuring Magdalen Hsu-Li. Raquel Evita Sidel, a local slam poet, will open. $10, $5 students. 8-10 p.m. Room 10-250. 253-5440.

SUNDAY November 6

True Diversity
Diversity workshop with talk by Magdalen Hsu-Li. RSVP required. 11 a.m.-1:30 p.m. Room 10-105. 253-5440.

Gallery Talk
Talk by Jane Farver in conjunction with "Christian Jankowski: Everything Fell Together." 2 p.m. List Visual Arts Center (E15). 253-4680.

Intercollegiate Benefit Concert for Katrina and Earthquake Victims
Performers from MIT, Harvard, Wellesley, Berklee and Brandeis. All proceeds go to Hurricane Katrina and Pakistan earthquake relief. $5 minimum donation. 3-5 p.m. Walker Memorial.

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

"MACBETH"

Nov. 3

Shakespeare Ensemble fall production. $8, $6 students. Nov. 3-5.

Kresge Little Theater

8 p.m.

MCGOVERN INSTITUTE OPENS

Nov. 4

Opening and dedication of the McGovern Institute for Brain Research, speeches by Eric Kandel, Robert Metcalfe, Jane Pauley.

Room 46-3201

10 a.m.-2 p.m.

ARTHUR MILLER LECTURE

Nov. 7

Talk by President Susan Hockfield on science and ethics.

Room 32-123

4-6 p.m.

MIT EVENT HIGHLIGHTS NOVEMBER 7-13

MONDAY November 7

"Challenges for a Mexican Recovery"
Talk by Pedro Aspe Armella. Noon. Room E51-395. 252-1483.

English Ballad Workshop
Brian Peters performs English ballads. 7:30 p.m. Killian Hall. 258-5629.

Trivia Night
Hosted by Tim Graves. Must be 21+. ID required. 8-11:30 p.m. The Thirsty Ear Pub. 258-9754.

TUESDAY November 8

Election Day

Pastry Sales
Pastries from Chinatown. 10 a.m.-5 p.m. Lobby 10.

Wulff lecture
Talk by Professor Ned Thomas, director of the Institute for Soldier Nanotechnology. 3:30-4:30 p.m. Room 10-250. 258-5816.

"Turkey and the Armenian Question: Are Recognition and Reconciliation Possible?"
Emile Bustani Middle East Seminar with Professor Fatma Muge Gocek. 4:30-6:30 p.m. Room E51-095. 253-8961.

Election Day Contra Dance
Music by Apple Crisp with caller Tony Saletan. $5, students free. 8-10:30 p.m. Lobby 13. 354-0864.

WEDNESDAY November 9

"Where You Stand Depends on Where You Get Hit: U.S. and European Counterterrorism Strategies"
Talk by Jeremy Shapiro of the Brookings Institution. Noon. Room E38-615. 253-7529.

Goldman Sachs Asia Panel
Panel of representatives from Goldman Sachs in Asia. 7-8:30 p.m. Room 5-234.

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

THURSDAY November 10

MIT Chapel Concert
Alexey Shabalin on the violin. Noon. MIT Chapel. 253-2826.

"The Power and Weakness of Randomness in Computation"
Talk by Professor Avi Wigderson of the Institute for Advanced Study. 4-5:30 p.m. Room 32-123. 253-8924.

"Beaver Trilogy"
List Visual Arts Center Film Night, presented in conjunction with "Christian Jankowski: Everything Fell Together." 7 p.m. Bartos Theater. 253-4680.

"Leocadia"
Drama shop production of play by Jean Anouilh. Nov. 10-12 and Nov. 17-19. $8, $6 students. 8 p.m. Kresge Little Theater. 253-2908.

FRIDAY November 11

Veteran's Day
MIT Holiday

"Chungking Express (Chongqing Senlin)"
Part of the Suburbia Goes Global film series. Shown in original language with English subtitles. 6 p.m. Room 3-133. 258-8438.

"Star Wars: Musical Edition"
MIT Musical Theatre Guild production based on the "Star Wars" trilogy by George Lucas. Nov. 11-13 and 16-20. $12, $9 students, seniors and MIT faculty/staff, $6 MIT students. Most performances 8 p.m., 2 p.m. on Nov. 13 and Nov. 20. Sala de Puerto Rico. 253-6294.

SATURDAY November 12

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

"iSPOTS: Living and Working in MIT's Wireless Campus"
The iSPOTS installation, produced by MIT's SENSEable City Lab, documents the MIT wireless network. Noon-5 p.m. $5 adults, $2 students and seniors, free w/ MIT ID. Ongoing exhibit. 253-4444.

Anime Club DDR Marathon Party
Dance-Dance-Revolution marathon. Noon-5 p.m. Room 1-135.

SUNDAY November 13

MIT Lecturer Concert: "National Insecurity II"
The second annual marathon concert of political music by contemporary American composers, including performances by Ensemble Newspeak, the Boston/Tucson duo Non-Zero, and Music and Theater Arts Lecturer Curtis Hughes. 3 p.m. Killian Hall. 253-2826.

"Charlie and the Chocolate Factory"
LSC Fall 2005 Film Series. $3. 7 p.m. Room 26-100. 253-3791.

International Folk Dancing
8-11 p.m. Lobdell Dining Hall. 253-FOLK.