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TechTalk

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

MacVicar Day offers glimpse into future of MIT education

Sasha Brown
News Office

Providing students more choice in their undergraduate core requirements may be the key to expanding the scope of a four-year MIT education, according to a report from the Task Force on the Undergraduate Educational Commons made during MacVicar Day on Friday, March 4.

MacVicar Day celebrates the achievements of Professor Margaret MacVicar, the first dean for undergraduate education, who died in 1991.

Each year, faculty and students gather to explore issues in undergraduate education at MIT and celebrate the faculty members named as MacVicar Fellows. This year's MacVicar fellows are Professors Haynes Miller of mathematics, Ruth Perry of literature and David Pesetsky of linguistics.

"I am sure Margaret would be interested and excited about what is going on at MIT right now," said current Dean for Undergraduate Education Robert Redwine.

Room 6-120 was filled to capacity with faculty, students and staff eager to explore the question "What Should We Achieve in a Four-Year MIT Education?"

A little more than a year ago, the Task Force on the Undergraduate Educational Commons began a review of the General Institute Requirements (GIRs) and other aspects of the common undergraduate experience with a view to recommending changes to better serve MIT students.

Currently all undergraduates are required to take six science core subjects – two each in physics and calculus, one in chemistry and one in modern molecular biology.

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PHOTO / DONNA COVENEY

Nobelist in physics Frank Wilczek explored the mysteries of the universe for an audience of 1,200 at Kresge Auditorium on Monday, March 7, during his talk, 'The Universe Is a Strange Place,' the last in the Ford/MIT Nobel Laureate Lecture Series.

Wilczek sizes up universe

Probes mysteries in Ford lecture

Sasha Brown
News Office

In a talk that focused on his work, the future of physics and his own life since winning the Nobel Prize last fall, Nobel laureate and physics Professor Frank Wilczek gave the seventh and final installment of the Ford/MIT Nobel Laureate Lecture Series to a capacity crowd gathered in Kresge Auditorium on Monday, March 7.

Wearing a blazer over a black T-shirt purchased at a "head shop in Amsterdam," Wilczek gave his speech, "The Universe Is a Strange Place," to roughly 1,200 people. The lecture was also broadcast live on the Internet.

Wilczek, who shared the 2004 Nobel Prize in Physics with David J. Gross and H. David Politzer "for the discovery of asymptotic freedom in the theory of the strong interaction," spoke for about 90 minutes, focusing the first hour of his lecture on what we do and do not understand about our universe.

"The picture modern physics pro-

vides is strange in many ways," said Wilczek, who spent the first part of his hour discussing the 5 percent of the universe we do understand the matter comprising our bodies and other "ordinary matter" like stars and galaxies.

The other 95 percent of the universe is a mystery, composed of 25 percent mystical "dark matter," which is only understood through its gravitational pull on ordinary matter, and 70 percent "dark energy," which exerts negative pressure.

Wilczek presented two questions: "What is the dark stuff?" and "How do you think about such a question?" The rest of his talk focused on the quest to understand these mysteries, a task Wilczek believes might be accomplished by "demanding more beautiful equations."

With so much left to understand, Wilczek looks forward to the continued creativity and hard work of his fellow researchers. "The world is very

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Student drafted for basketball flick

Sasha Brown
News Office

When MIT comparative media major Daniel Kanamori '06 took more than a year off school to move to Los Angeles, he never expected to wind up sharing screen time with A-list movie star Samuel L. Jackson, but that is exactly what happened.

The aspiring actor and screenwriter had only been in Hollywood for a few months last year when he lucked into an audition for "Coach Carter." The

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Muh winner opens a window on the mind

Sarah H. Wright
News Office

"What is consciousness in the brain?"

According to MIT alumnus Ned Block, whose talk last week explored the reaches of what is known about the human mind, "A lot of our conscious experience is experience we don't even know about. That is experience that happens very quickly fades before it gets to our conceptual, cognitive system."

A professor of philosophy and psychology at New York University, Block received the Robert A. Muh Alumni Award and delivered his talk on Wednesday, March 2, in Bartos Theater.

The Muh Award honors an MIT graduate for noteworthy achievements in the humanities, arts and social sciences. Block received the S.B. degree in physics and humanities in 1964 and taught philosophy at MIT for 25 years,

serving for six years as chair of the philosophy section in the Department of Linguistics and Philosophy.

Philip S. Khoury, Kenan Sahin Dean of the School of Humanities, Arts and Social Sciences and professor of history, presented the award. "Ned Block is a natural for the award. After his undergraduate work at MIT, he went on to become one of the leading analytic philosophers of his generation. And he helped to build our doctoral program in philosophy into a national leader."

Block's expertise is in the philosophy of mind and the philosophy of cognitive science. Alex Byrne, associate professor of philosophy and friend and former colleague of Block, framed Block's role in the field as "absolutely fundamental in shaping the research agenda in the philosophy of mind over the past three decades. He has made important contributions to our understanding of mental

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ZITHER AND FLUTE

The Wind Ensemble will premier Evan Ziporyn's new piece juxtaposing ancient and modern poetry.

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Power scavenger wins soldier prize

Eve Downing

Institute for Soldier Nanotechnologies

Power, cooling and casualty evacuation were recurrent themes at the final judging of the second annual MIT Soldier Design Competition—a reflection of the harsh realities of soldiers' lives in combat.

About 200 people gathered last Tuesday to watch 15 teams of students from MIT and the U.S. Military Academy at West Point demonstrate prototypes of practical, non-weapons devices of use to soldiers, as well as to police, firefighters and other emergency first responders. The competition is sponsored by MIT's Institute for Soldier Nanotechnologies.

The five undergraduate cadets of team "Supercharged" from West Point won the Raytheon-sponsored first-place award of \$5,000 for their battery scavenger system for recovering the power remaining in depleted batteries. Pocket-sized, rugged and inexpensive, the device could reduce soldiers' battery needs by 15 percent to 20 percent, providing significant savings in weight carried in the field, environmental impact and cost.

The Boeing second-place award of

\$3,000 went to the "Ancile" team, also from West Point, for its computerized tracking system that provides soldiers with advance warning of incoming strikes through small radio pagers. Team "ATLAS" from MIT took the SAIC third-place award of \$3,000 for its powered rope ascender.

One fourth-place award of \$2,000 went to each school: Team "Joe Proof" from West Point took the Charles River award for its hands-free casualty carriage system, and team "Grapefruit" from MIT took the Hudson River award for its battery scavenger and recharge system. A director's award of \$1,000 for special achievement went to the "Cool Warrior" team for its cooling system for Interceptor body armor.

"This competition is about putting new technology into soldiers' hands soon," said Professor Ned Thomas, director of the MIT Institute for Soldier Nanotechnologies. "These are real problems we're addressing, and the Army is very interested in the innovations that are coming out of these student teams."

The Army was so impressed with one of last year's winning inventions—a system to digitize soldiers' hand-arm communications signals—they have funded the team with a small-business research grant



PHOTO / L. BARRY HETHERINGTON

Owen Fogarty (center), a member of a West Point team competing in the Soldier Design Competition, demonstrates his team's hands-free, casualty-carriage system for Lt. Col. Shawn Reinwald of the U.S. Marine Corps, who judged the competition. Team members Jamie Pittman (wearing the device) and Venkat Motupalli look on.

to continue development.

The judges for the finals included uniformed and civilian representatives of the Army and Marine Corps, as well as individuals from MIT and industry. Gen. Benjamin Griffin, senior Army guest at the event, was very impressed with the students' and cadets' efforts on behalf of sol-

dier protection, noting that fresh ideas can often bring solutions to old problems.

"These ideas have direct application to the challenges of today's Army," said Griffin, who is commanding general of Army Materiel Command. "From where I sit, there is nothing more important than what you're doing here tonight."

Tuition and fees set for 2005-2006

MIT has set tuition and fees for the 2005-2006 academic year at \$32,300, an increase of 4.9 percent over the current year. The new figures were announced at the March 4 meeting of the MIT Corporation.

"This year's tuition increase will enable MIT to maintain the high quality of its educational programs for all students," said Dean for Undergraduate Education Robert P. Redwine. "It is especially important in light of this increase that we make certain there will not be a negative impact on those who cannot afford to pay more. We will provide the additional financial aid to ensure that all of our undergraduates, regardless of their family resources, can afford an MIT education. MIT remains committed to its principles of need-blind admissions, need-based financial aid, and meeting the full demonstrated need of all undergraduates."

Approximately 16 percent of MIT's undergraduates come from homes with incomes of less than \$41,000. More than ninety percent of undergraduates receive some form of financial aid, including scholarships, loans, and jobs, from all sources. Fifty-eight percent of undergraduates receive a need-based scholarship from MIT.

"An average aid package at MIT next year will be \$31,500. Total undergraduate financial aid from all sources will top \$88 million, of which MIT will provide \$65.5 million, a \$7 million increase over last year," said Elizabeth Hicks, executive director of Student Financial Services.

Alumnus to bankroll winning idea

Jay Chrepta

Department of Mechanical Engineering

An MIT alumnus and entrepreneur whose doctoral thesis provided the basis for what is now a \$2 billion high-tech firm will fund a \$50,000 prize for the best idea for independent research or a doctoral thesis proposed by a graduate student in mechanical engineering.

George Hatsopoulos (S.B. 1949, S.M., Sc.D.), who founded the Waltham, Mass.-based Thermo Electron Corp. almost 50 years ago with early financial assistance from the Institute and \$50,000 from an angel investor, will present the first \$50,000 prize at a ceremony later this year.

"It occurred to me that when someone has a thesis idea associated with an invention and it requires funding, I thought of

making some funding available to make it happen," said Hatsopoulos, who added that the award-winning thesis topic must focus on a practical—and patentable—process or mechanism.

In his doctoral thesis written in 1956, Hatsopoulos demonstrated the principal of direct conversion of heat into electricity that led to development of the thermo electron engine, which became the technological and commercial cornerstone for his company.

At the time, MIT held a 50 percent interest in the engine's patent, which Hatsopoulos offered to buy back. Instead, Dean of Engineering C. Richard Soderberg gave the Institute's interest back to Hatsopoulos in exchange for a gentleman's agreement that Hatsopoulos would endow a professorship in mechanical engineering (a chair currently held by Professor Ian Hunter)

once his new company was successful.

"This would never happen today. But, sure enough, the company was successful," Hatsopoulos said.

In 1999 Hatsopoulos retired from Thermo Electron, which by then had become a diversified, multinational high-tech company with more than \$2 billion in annual revenues and offices around the globe.

Mechanical engineering graduate students are encouraged to submit a proposal of no more than five pages outlining an idea for an innovation or invention that has the potential for being patented and becoming the core of a doctoral dissertation. Proposals may be sent to Leslie Regan (Room 1-106, lregan@mit.edu, 253-2291) by May 15.

E-mailed submissions should have the words "Hatsopoulos \$50,000 Prize" in the subject line.

Doyle chosen for Doherty Professorship



Patrick Doyle

Patrick Doyle, assistant professor in the Department of Chemical Engineering, has been awarded the 2005 Doherty Professorship in Ocean Utilization from the MIT Sea Grant College Program. Every year, the program selects one or two new faculty members for a supplemental award of \$25,000 per year for two years.

Doyle's research focuses on understanding the dynamics of single polymers and biomolecules under forces and fields. His Doherty-funded work will focus on reducing the frictional drag on ships and underwater vehicles.

In the marine environment, suppressing turbulence is key to reducing drag. Controlling turbulence can also help limit the associated noise that may disturb the environment, affect sonar in a submarine, or inhibit the fine-scale maneuvering of a vessel.

While it is known that the addition of a small amount of polymer to a fluid can reduce turbulence, the precise mechanism of that phenomenon is poorly understood. By reliably mea-

suring elongational viscosities and comparing these to molecular simulations, Doyle expects to increase that understanding and the ability to effectively reduce drag.

In 2004, the two-year Doherty was awarded to Anette Hosoi, an assistant professor in the Department of Mechanical Engineering. Hosoi's Doherty-funded research focuses on the experimental and numerical investigation of oceanic particle-laden flows. The findings should increase understanding of the potential risks in offshore construction, ocean exploration, and options for eliminating waste products.

The Doherty Fellowship, endowed by the Henry L. and Grace Doherty Charitable Foundation, encourages promising, non-tenured professors to undertake marine-related research that will further innovative uses of the ocean's resources. The area of research may address any aspect of marine use and/or management, whether social, political, environmental, or technological.

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Robert Langer shares \$1 million Dan David Prize

Elizabeth A. Thomson
News Office

Institute Professor Robert Langer is having quite a year, and it's only the beginning of March.

MIT recently announced that Langer has been named an Institute Professor, the highest honor awarded by the MIT faculty and administration. Now he will share the \$1 million Dan David Prize for his pioneering work in tissue engineering and biomaterials.

Langer, along with Professor George Whitesides of Harvard University and Pro-

fessor C.N.R. Rao of the Jawaharlal Nehru Centre in Bangalore, India, won in the future category of the Dan David Prize, which this year is dedicated to the field of materials science.

Tel Aviv University annually awards three Dan David Prizes of \$1 million each for achievements that have "outstanding scientific, technological, cultural or social impact on our world." The laureates for a given year are chosen for three time dimensions—past, present and future.

Langer was honored for "having pioneered the development of tissue engineering and the creation of numerous

novel biomaterials," such as shape memory polymers and a smart surface that can reversibly switch properties.

Whitesides won for "having bridged the fields of chemistry, chemical engineering and biology to new heights through the development of novel functional materials and systems." Rao won for his "sustained record of scientific accomplishments in solid state and materials chemistry."

The Dan David Prize is unique in its flexible definition of dynamically changing fields of human knowledge and in its process of fostering the next generation of scholars. The laureates annually donate

20 scholarships of \$15,000 each to outstanding doctoral students throughout the world in the chosen fields.

The three \$1 million awards will be presented at a ceremony May 23 at Tel Aviv University. Winners are selected by independent review committees comprising members of the international academic and business communities.

The Dan David Prize was founded in 2001 by international businessman and philanthropist Dan David. His goal, according to the foundation, "is to aid and foster those involved in developing and advancing world knowledge."



Karl Reid, executive director of Special Programs for the School of Engineering, was among 51 MIT employees honored March 2 with MIT Excellence Awards. Reid directs the Minority Introduction to Engineering, Entrepreneurship and Science program.

Reid, artist organizers, more honored for MIT excellence

Denise Brehm
News Office

Showcasing the talents of others is a talent in itself, one that the winners of this year's MIT Excellence Awards have in abundance.

Karl Reid, executive director of Special Programs for the School of Engineering, and the core team of the organizing committee of Artists Behind the Desk (ABD)—Minday Baughman, Mary Gallagher, Anne Hudson, Debra Kedian and Judith Leonard—have helped hundreds of individuals reach their scholastic and artistic potential. Reid, the ABD committee and 45 other MIT employees were honored for their service to the community in a ceremony March 2 in Kresge Auditorium.

President Susan Hockfield presented Reid and the ABD committee members with \$2,000 checks and certificates marking their

service in the "Creating Connections: Making a Difference in our Communities" category of the Excellence Awards. Altogether, 20 awards in five categories were presented to 14 teams and six individuals.

Reid is responsible for directing the Minority Introduction to Engineering, Entrepreneurship and Science (MITE2S) program, a six-week residential summer program for talented high school juniors.

"Karl and his team change students' paradigms in just six weeks to help them believe in their abilities and reach higher than they have ever imagined," said Lorelle Espinosa in her written recommendation of Reid. "Karl has touched many lives and has made the goal of higher education a reality to those who face the greatest challenges in this country. He is much more than a leader in the professional realm; he is also an amazing role model. He inspires young people on this campus, whether or

not they attended one of his life-changing programs. Certainly, he is a model for our young African-American people."

Reid's office also runs MIT's Saturday Engineering Enrichment and Discovery (SEED) academy for local urban high school students and the Science, Technology, Engineering and Mathematics (STEM) academic enrichment program for middle school students. The three programs together reach hundreds of students annually, helping them to improve their academic performance and encouraging them to apply for admission to MIT.

In her recommendation to the Artist Behind the Desk organizing committee, Margaret Ann Gray said that while the membership of the committee fluctuates, this core team has been responsible for the comeback of ABD since 1999.

"Without the work of these five individuals, ABD may not exist and, if it did, most likely would not have the depth and breadth it does today. These five members have dedicated their efforts and volunteered uncounted personal hours for five consecutive years. Today, they continue in their original roles, persistently building, shaping, bending, filling in the holes and evolving with the Artists Behind the Desk program to support the arts at MIT," wrote Gray.

At last week's ceremony, Laura Avakian, vice president of Human Resources, emceed, Hockfield gave opening remarks, and Tom Magnanti, dean of engineering, gave the keynote speech.

"I never cease to be amazed by the simply superb quality of [MIT] and the remarkable people who make the Institute what it is: the students, faculty and especially the staff," said Magnanti. "MIT would be a mere shadow of itself without such dedicated and exceptional staff. Each one of our award recipients today has learned the secret of joy in work," said Magnanti.

The band BJ Magoon and Driving Sideways (featuring artist Brian Magoon of Audio Visual Services) performed during the buffet luncheon that followed in Kresge Lobby. Four ABD visual artists exhibited their work in the lobby as well—Mindy Baughman, Betty Bolivar, Judith Daniels and Heather Kaufman.

"People couldn't stop praising the band, and loved having the artwork as part of the event. It turned it into a real party," said Kande Culver, administrator of the MIT Rewards and Recognition Program and organizer of the event.



PHOTO / DONNA COVENEY

The Artists Behind the Desk organizing committee (left to right), Debi Kedian of Campus Activities, Judy Leonard of IS&T, Anne Hudson of chemistry, Mary Gallagher of LFEE, and Mindy Baughman of DMSE, received an MIT Excellence Award March 2.

Two professors elected to NAE

Two MIT professors are among the 74 new members of the National Academy of Engineering.

Election to the NAE is among the highest professional distinctions an engineer can receive. Academy membership honors those who have made "important contributions to engineering theory and practice" and who have demonstrated accomplishment in "pioneering new fields of engineering, making major advancements in traditional fields of engineering, or developing/implementing innovative approaches to engi-

neering education."

MIT's new members are:

Dimitris J. Bertsimas, the Boeing Professor of Operations Research in the Sloan School of Management, "for contributions to optimization theory and stochastic systems and innovative applications in financial engineering and transportation."

Shafira Goldwasser, the RSA Professor of Computer Science and Engineering, "for contributions to cryptography, number theory and complexity theory, and their applications to privacy and security."

Teng receives Levitan Prize

Emma Teng, associate professor of foreign languages and literature and Class of '56 Career Development Chair, has been awarded the 2005 Levitan Prize in the Humanities, announced Philip Khoury, dean of the School of Humanities, Arts, and Social Sciences.

Professor Teng received her Ph.D. in East Asian Languages and Civilizations from Harvard University in 1997, and joined the MIT faculty as an assistant professor in the Foreign Languages and Literatures Section in 1998.

The \$25,000 prize was established through a gift from James A. Levitan, a 1945 MIT graduate in chemistry, an

emeritus member of the MIT Corporation and of-counsel at the law firm of Skadden, Arps, Slate, Meagher and Flom of New York City. The prize, first awarded in 1990, supports innovative and creative scholarship in the humanities by faculty members in the School of Humanities, Arts and Social Sciences.

Professor Teng will research her book, "The Chinese Eurasian: East-West Interracialism at the Turn of the Twentieth Century," which she describes as "a comparative study of Chinese and Chinese American representations of Chinese-Western interracialism."

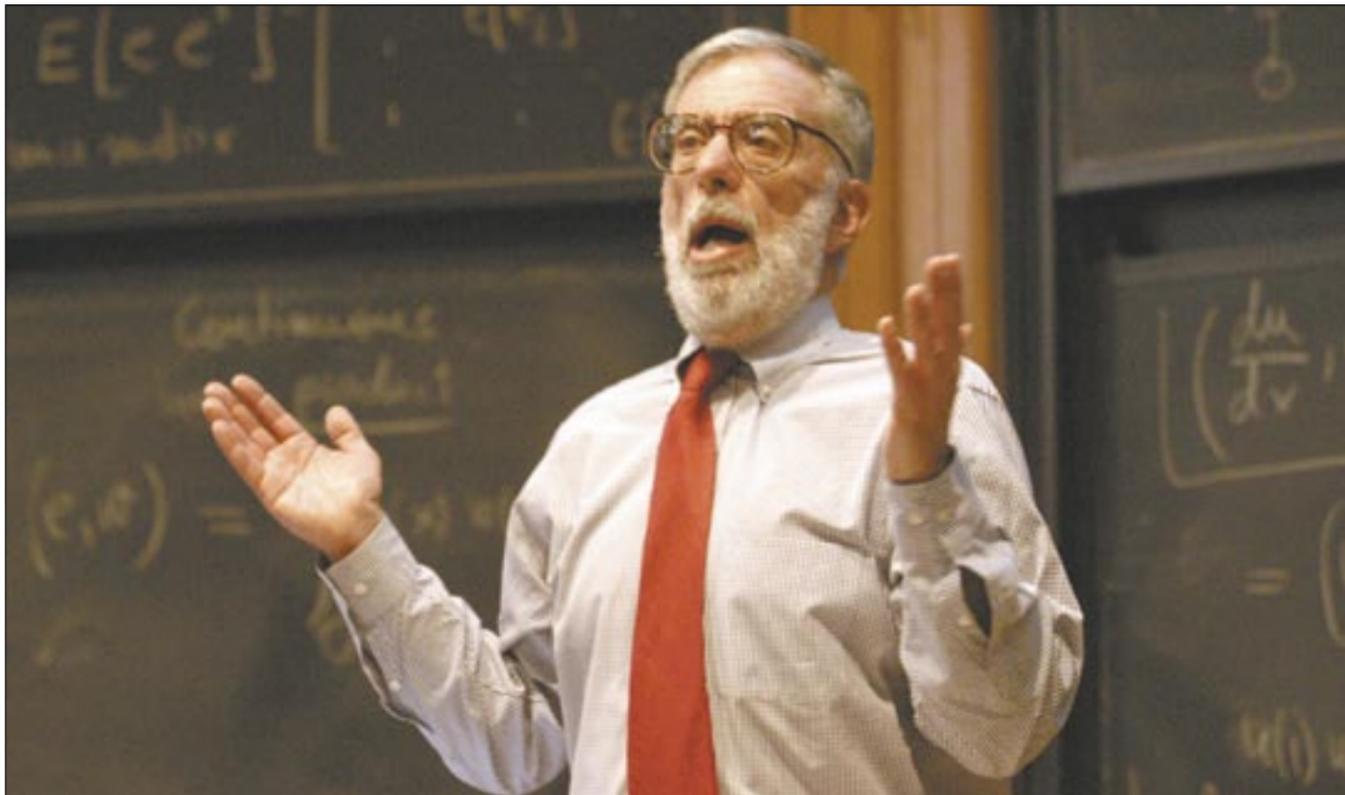


PHOTO / DONNA COVENEY

Dean of Science Robert Silbey talked about possible changes to the undergraduate educational commons, as part of MacVicar Day.

Three named MacVicar Fellows

Three faculty members were recognized for their outstanding teaching abilities last Friday when they were named MacVicar Faculty Fellows: Haynes Miller of mathematics, Ruth Perry of literature, and David Pesetsky of Linguistics and Philosophy.

The fellowships were established in 1992 to honor the life and contributions of Margaret MacVicar (S.B. 1964, Sc.D.), MIT's first dean for undergraduate education and founder of UROP (the Undergraduate Research Opportunities Program). The program

gives an annual scholar's allowance to each Fellow to use for developing ways to enrich the undergraduate learning experience. Fellows serve 10-year terms.

The March 4 ceremony at the Faculty Club was followed by a talk on "What Should We Achieve in an MIT Four-Year Education?" by Dean of Science Robert Silbey and Professor Charles Stewart of political science, both of whom serve on the Task Force on the Undergraduate Educational Commons.



HAYNES R. MILLER
Mathematics

- B.A. from Harvard University in 1970; Ph.D. from Princeton University in 1974.
- Professor, 1986 to present.

Colleague comments:

- "I see his office full, every day, of students who come to him for help. He has an open door in the best tradition of Margaret MacVicar."
- "[He is] currently the de facto department leader in educational innovation."

Student comments:

- "Not only did Professor Miller want us to appreciate math, but he sincerely wanted us to be able to understand it, as opposed to caring about whether we could simply solve equations."
- "He would ask us hard questions and not accept the simple 'I don't know.' Because he wasn't afraid to do this, I, in turn, wasn't afraid to think and figure out answers on my own."
- "Work didn't feel like work anymore; it felt like joy."
- "Professor Miller leaves students expecting more, not only of their other professors, but also of themselves."



RUTH PERRY
Literature

- B.A. cum laude from Cornell University in 1963; M.A. in physiological psychology from Cornell in 1965; M.A. in literature in 1970 and Ph.D. in literature in 1974, both from the University of California at Santa Cruz.
- Instructor, 1972-73; assistant professor, 1973-80; associate professor, 1980-82; director of Women's Studies Program and senior lecturer in literature and women's studies, 1982-87; director, WSP, 1991-93 and 1996-98; professor, 1987-present.

Colleague comments:

- "Her enthusiasm for bringing new subject material to students is contagious, and I count myself fortunate to have had her for a colleague and informal mentor since my arrival here as a junior faculty member."
- "She is a superb discussion leader as well as an insistent critic and successful improver of student writing. She is a peerless mentor."

Student comments:

- "Ruth is the professor you hope you have at least once in your life."
- "Professor Perry's enthusiasm for her subject is inspiring and contagious; I loved every minute I spent in her classes."
- "She listens with benevolence, with a mind open to the possibility of gaining new perspectives from her students."



DAVID PESETSKY
Linguistics and Philosophy

- B.A. summa cum laude from Yale University in 1977; Ph.D. in 1983 from MIT.
- Associate professor, 1988-1994; professor, 1994-99; Ferrari P. Ward Professor of Modern Languages and Linguistics, 1999-present.

Colleague comments:

- "David can make the most complicated material easy to understand. I love listening to him and watching him teach, even if it is material that I have taught many times myself."
- "Without exaggeration, he is the best teacher of linguistics I have encountered in my 25 years of teaching."

Student comments:

- "He manages to teach not just the conclusions, but also the sort of thought processes and evidence necessary to reach those conclusions."
- "David was one of the most enthusiastic teachers I had as an undergraduate, and his energetic teaching and his ability to radiate a tremendous sense of excitement at the discoveries of linguistics theory had significant effect on my interest."
- "Most instructors are good at teaching either introductory-level courses or advanced classes, but not both. Professor Pesetsky is one of the rare people who are equally comfortable in both environments."

MACVICAR

Continued from Page 1

Students are also required to satisfy a laboratory requirement, take two additional subjects in science, mathematics or technology, and take at least eight subjects in the humanities, arts and social sciences (HASS). In addition, a four-subject communication requirement is satisfied through specific subjects in HASS and in the major. "This is a rigorous undergraduate education," said the task force chair, Dean of the School of Science Robert Silbey.

During the course of its early deliberations, the task force identified a number of working principles about MIT's educational philosophy in order to frame its review. The first principle, Silbey said, was that an MIT education should foster "a persistent passion for learning." He said the task force addressed a lengthy list of subject areas suggested by members of the community for inclusion in the commons experience.

"It is impossible to get everything we want to give to our students in four years," said Silbey. "More things are essential to an MIT undergraduate education, but we are uneasy about adding more requirements. This is our design challenge."

Silbey said he wanted to use MacVicar Day to highlight emerging recommendations and to hear audience reactions. Other task force members on hand were Professors Dava Newman of aeronautics and astronautics, Heidi Nepf of civil and environmental Engineering and chair of the subcommittee on balancing majors and the GIRs, and Charles Stewart, head of political science and chair of the subcommittee on the HASS experience.

Silbey said that the subcommittee examining the core requirements in science and engineering have recommended that the current Institute Laboratory Requirement be replaced with a project-based experience. The subcommittee also provided a number of possible models that would expand the educational scope of the core science and engineering requirements.

One plan would offer more choices to undergraduates than are currently available, but many in the audience were concerned that the option to choose might encourage students to pass over subjects they are not interested in, thereby losing something fundamental to an MIT education. "We do have to prioritize," said Silbey.

Professor Charles Stewart talked about his subcommittee's ideas for changes to the HASS requirement.

Part of the problem with the current requirement, Stewart said, is that students often do not take HASS courses as seriously as their courses in science and engineering. To some extent, Stewart suggested, this might be due to the confusing nature of the requirement. The current requirement is succeeding "retail, but not wholesale," he said. "The complexity really undermines it."

Currently, freshmen choose from among 75 HASS-Distribution subjects. One idea explored by Stewart's subcommittee is to create a "faceted" first-year common experience, allowing students to select from one of five themes – for instance, creativity or democracy. Over the course of the semester, students would explore that topic from a variety of disciplines within HASS with a group of up to 200 other freshmen in small classes studying common material.

Stewart also discussed another model in which students would select one discipline-oriented subject within the same theme as an option in their second year. For all other semesters, students would choose six or seven additional subjects, with a concentration.

By introducing students to the humanities, arts, and social sciences in a unified way, the subcommittee hopes to inspire students to continue discussions with their peers outside the classroom.

"We are distinct in requiring more than a science core," said Stewart, adding that the requirement attracts students to MIT who have a broader set of interests. "[MIT students] lead. They don't just sit in a cubicle for the rest of their lives."

Student members of the task force and the Student Advisory Committee will submit their report and recommendations to the task force in the next few weeks, Silbey said.

More information is available at <http://web.mit.edu/committees/edcommons>

Sleep aid gets a nod from MIT study

Elizabeth Thomson
News Office

A new study by MIT scientists and colleagues confirms that melatonin is an effective sleep aid for older insomniacs and others. Misuse of the hormone had led some to question its efficacy, but the latest work (published in the February issue of *Sleep Medicine Reviews*) could jump-start interest in the dietary supplement and help more people get a good night's sleep.

In earlier research, scientists led by Professor Richard Wurtman, principal investigator for the current study, showed that only a small dose of melatonin (about 0.3 milligrams) is necessary for a restful effect. Taken in that quantity, it not only helps people fall asleep, but also makes it easier for them to return to sleep after waking up during the night—a problem for many older adults.

The researchers also found, however, that commercially available melatonin pills

contain 10 times the effective amount. And at that dose, “after a few days it stops working,” said Wurtman, director of MIT’s Clinical Research Center and the Cecil H. Green Distinguished Professor. When the melatonin receptors in the brain are exposed to too much of the hormone, they become unresponsive.

As a result of these inadvertent overdoses, “many people don’t think melatonin works at all,” said Wurtman, who is also affiliated with the Department of Brain and Cognitive Sciences. This belief, coupled with potentially serious side effects related to high doses such as hypothermia, has earned the hormone a bad reputation in some quarters—“and something that could be very useful to a lot of people isn’t,” said Wurtman, who said that he and his wife have been taking melatonin every night for about a year now.

To determine conclusively whether melatonin works or not, the scientists in the current study analyzed 17 peer-reviewed scientific papers about the hormone. To be included in this study, or meta-analysis,

the experiments reported in each paper had to satisfy specific criteria. For example, each had to be placebo-controlled and include objective measurements on at least six adult subjects.

“A meta-analysis essentially tells ‘yes’ or ‘no’—that a treatment does or does not have a significant effect,” Wurtman said. “When a meta-analysis says ‘yes,’ there should no longer be any controversy about whether the treatment works.”

The melatonin meta-analysis delivered a definitive “yes.”

Wurtman notes that some of the 17 studies included in the analysis involved very high doses of the hormone over long periods, a “situation where we know it’s not going to work.” Yet the meta-analysis still showed that the hormone’s positive effects on sleep “are statistically significant.”

When Wurtman first discovered the efficacy of small doses of melatonin, he and MIT patented its use for dosages up to one milligram. Because the FDA defined the hormone as a dietary supplement, however, manufacturers were free to sell it

in much higher dosages, “even though we knew they wouldn’t work,” Wurtman said.

As a result, until recently the hormone was commercially unavailable to the public in small doses. “People who knew that small doses were best often bought the high-dose pills, then divided them with a knife,” Wurtman said. “But that’s not very accurate.”

The company Nature’s Bounty has since licensed the work, and now the hormone is easily available in the effective dosages.

Wurtman’s colleagues in the meta-analysis work are Amnon Brzezinski of Hadassah-Hebrew University Medical Center in Israel; Mark G. Vangel, a visiting scientist at the Clinical Research Center; Gillian Norrie and Ian Ford of the University of Glasgow in Scotland; and Irina Zhdanova of the Boston University School of Medicine.

The work was supported by the National Institutes of Health, the Center for Brain Sciences and Metabolism Charitable Trust, and the Womens’ Health Center of Hadassah-Hebrew University Medical Center.



PHOTO / L. BARRY HETHERINGTON

Robert A. Muh Alumni Award winner Ned Block gives his talk, ‘What Is Consciousness in the Brain?’ at Bartos Theater on Wednesday, March 2. Block, who received his S.B. degree in physics and humanities in 1964, received the prestigious award for noteworthy achievements in the humanities, arts and social sciences. Now a professor at New York University, Block taught philosophy at MIT for 25 years.

BRAIN

Continued from Page 1

imagery, the computer model of the mind and the causal power of mental states.”

Block easily demonstrated why his courses receive rave reviews as engaging, lively events. He presented visual images of experiments as well as diagrams of the underlying neural activity so those present could experience examples of the visual phenomena on which some of the latest research in his field is based.

Block’s Muh Award talk outlined current challenges in doing research about consciousness, asking, “Are the conscious states we can report the same as those we can’t? There is evidence that there are conscious states to which our access is limited, even conscious states that are completely inaccessible. Of course they must in some way have a different neural basis from the conscious states that we can report, but the question is how we know that this difference in neural basis doesn’t make them unconscious?”

Block credited work by Nancy Kanwisher, professor in brain and cognitive

sciences, in advancing research in the neural basis of consciousness. Kanwisher, he noted, located the “fusiform face area on the bottom of the temporal lobe. When your perception is of a face, all the cells in this area are firing. But when the perception is of a place-like stimulus, e.g. a house, then the fusiform face area quiets down whereas cells in a different area are mostly firing. So it looks like these two areas might be part of the neural correlates of distinct specific conscious contents.”

Block summarized recent experiments suggesting that some conscious phenomena might have a brain basis that is not available to “consuming systems in the brain such as reasoning, planning, memory and voluntary direction of action.”

“We often have the sense in our own experience of far richer phenomenal contents than we can get a conceptual grasp on. If the results of research come out as I am suggesting, this will vindicate our introspective judgment,” he said.

Block received the Ph.D. degree in philosophy from Harvard University in 1971. He came to MIT as an assistant profes-

sor of philosophy (1971-77), worked as associate professor of philosophy (1977-83), professor of philosophy (1983-96) and served as chair of the philosophy section (1989-95). He has been a professor in the departments of philosophy and psychology and at the Center for Neural Science at New York University since 1996.

The Robert A. Muh Alumni Award was first announced in October 2000 at the 50th anniversary celebration of the School of Humanities, Arts, and Social Sciences.

Muh (S.B. 1959), a life member of the MIT Corporation and longtime chair of the Humanities Visiting Committee, endowed the award to honor an MIT alumnus or alumna who has made significant contributions to education, scholarship or performance, academic administration or arts management in the humanities, arts or social sciences. The award will rotate among the three major areas in SHASS.

Muh and his wife, Berit, have two daughters, Alison and Carrie. Carrie received the S.B. in biology from MIT in 1996 and the S.B. and S.M. in political science in 1997.

Ketterle’s Killian talk a very cool matter

Nobel laureate Wolfgang Ketterle, one of the first observers of a new state of matter called the Bose-Einstein condensate and creator of the first atom laser, will present the 33rd Killian Lecture next Tuesday, March 15, at 4:30 p.m. in the Kirsch Auditorium.

Ketterle, the John D. MacArthur Professor of Physics, was named the 2004-2005 recipient of the James R. Killian Jr. Faculty Achievement Award at a faculty meeting last May. Upon receiving the award, Ketterle said, “Winning this award means to be appreciated not just as a scientist but as a colleague and member of the MIT community. I have always been proud to be at MIT, to be part of a wonderful community of excellent people.”

Ketterle will speak on “When Freezing Cold Is Not Cold Enough.” His talk will discuss new forms of matter existing only at extremely low temperatures that open a new door to the quantum world where particles behave as waves and “march in lockstep.” In 1925, Albert Einstein predicted such a new form of matter, the Bose-Einstein condensate, but it was realized only in 1995 in laboratories at Boulder and MIT. The lecture will link MIT’s decade-long tradition in this frontier with recent advances.

Ketterle was a co-recipient of the 2001 Nobel Prize in physics with MIT alumni Eric Cornell and Carl Wieman for their work with Bose-Einstein condensation in dilute gases of alkali atoms and for fundamental studies of the properties of the condensates.



Wolfgang Ketterle

Faculty from Africa learn Sloan management lessons

Building upon the success of a nearly decade-old program that has already brought more than 100 professors from four Chinese universities to Cambridge to help them teach business and management at home, the MIT Sloan School is now offering similar opportunities to faculty from other developed and developing nations.

Management schools in Mexico and Korea began sending faculty members to Sloan a year ago. A professor from Ghana's leading management school is an International Faculty Fellow this semester, the second one to come from his university to see firsthand how business is taught at MIT. In the process, the visiting professors offer important lessons to MIT Sloan faculty about how management students are trained in Africa.

"In Ghana and most African educational institutions, we tend to place more emphasis on the theoretical aspects," said Emmanuel Dugbenoo, a senior lecturer at the Ghana Institute of Management and Public Administration (GIMPA). "Here at MIT Sloan, I have seen that faculty link the theoretical with real-life cases in a way that is much more effective. I also find that more time is given to discussion and contributions from students

than is the case at GIMPA." He added, "I am anxious to share my experience with my colleagues and to integrate it into my own teaching program." Dugbenoo teaches human resources and general management as well as organizational behavior in Ghana.

And that, says MIT Sloan Senior Associate Dean Alan White, is precisely the purpose of the International Fellows Program, which is supported by the Washington-based International Finance Corporation. While some universities send their faculty to spend time at foreign institutions, White feels it is more effective for foreign faculty to come here, where they can be fully immersed in MIT Sloan's environment.

"We find that having faculty come here, where they can take classes, sit in on faculty meetings and fully participate with students, is a much better way to assist another university in its institution building," said White, who leads the China Management Education Program as well as the International Fellows Program at Sloan. "The more international faculty we can get to come to American management schools for training, the better they will be able to do their important job at home."

KANAMORI

Continued from Page 1

film about a real-life high school basketball coach who benched his entire team for poor academic performance opened in January. It has grossed \$65 million at the box office thus far.

Kanamori, a Brookline native and member of the MIT basketball team, was perfect for the part of one of the players. "Basketball is my one true love," said Kanamori, whose audition was essentially a basketball game. The familiar activity helped calm his nerves. "It just felt like I was trying out again for one of the Brookline street leagues."

During more than three months of filming, Kanamori said he learned much from Jackson, who has starred in dozens of films, including "Pulp Fiction" and "A Time to Kill." Kanamori said he often pulled Jackson aside to talk about the craft, something Jackson encouraged. Kanamori was impressed by Jackson's stage presence and by the way Jackson handled emotional and inspirational scenes. "When he did his scenes, you could hear a pin drop on the set," Kanamori said.

During the film's production in 2004, Kanamori stopped thinking of the actor as Samuel L. Jackson, famous actor, and started to think of him as Sam, friend and mentor. "Sam was such a great guy," said Kanamori, who was surprised to find that Jackson was also impressed by him. "He was always asking me about MIT and making jokes about astrophysics," Kanamori said.

For a little more than three months, Kanamori was called to the set almost every day, making new friends and great contacts. Though the few lines he had were left on the cutting-room floor, Kanamori is in nearly every scene.

Last fall, he decided to return to MIT to finish his degree before returning to Los Angeles. An MIT basketball game kept him from attending the movie premiere party, but some of his on-set friends did take time to call him during the premiere so he would not feel left out. "It was cool just to get the calls from them," he said.

Overall, Kanamori has been pleased with his Hollywood experience. In addition to his acting credits, which include a role in a low-budget independent film, Kanamori

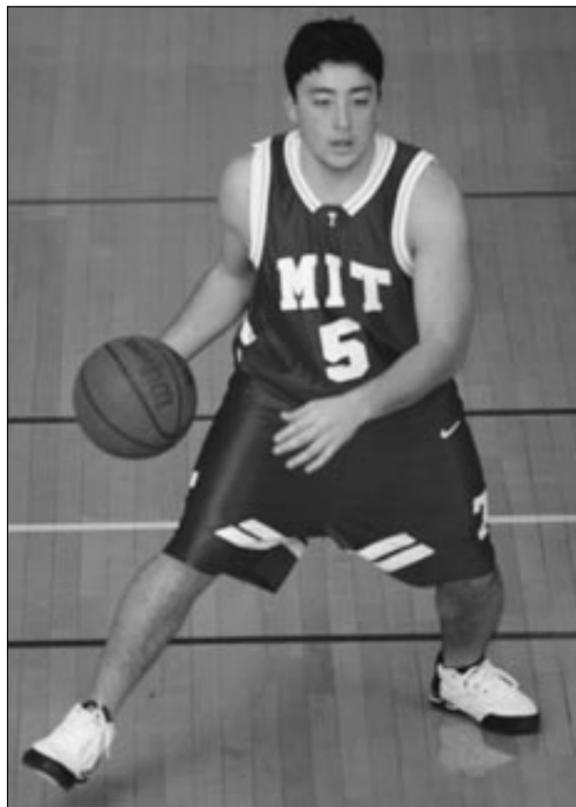


PHOTO / STANLEY HU

Daniel Kanamori's hoop skills paid off in Hollywood.

has a couple of scripts being circulated by a well-known director. So, it looks like Kanamori is well on the way to meeting his goals. "I am planning to be the next Matt Damon," he said, smiling.

WILCZEK

Continued from Page 1

strange and very beautiful. We should admire it and be happy to live in it."

Following the talk, a question and answer session focused largely on Wilczek's personal experience winning the Nobel.

Wilczek told the audience that he was immediately aware of the significance of the 1972 find he and his colleagues made while still graduate students at Princeton University. "I didn't have complete confidence that it was correct, but I did understand that if it was correct, it would be very important."

The more than 30 years he waited to have the work recognized was at times frustrating, he said. "I was very unhappy not to have this marvelous work recognized for so long."

However, since winning the prize, it's been a whirlwind, he said. Wilczek shared a quick-time video of the Nobel Prize banquet he attended in Stockholm, Sweden, last December, a grand-scale affair attended by every member of the Swedish royal family "down to third cousins," joked Wilczek.

For MIT's newest Nobel laureate, the title is going to take time to sink in. "I haven't really absorbed it yet," he said. "I haven't reached a steady state...but it is a lot of fun."

AWARDS AND HONORS

Leslie Servi, technical staff at Lincoln Laboratory, has been named a Fellow of the Institute for Operations Research and Management Sciences (INFORMS). The citation is "in recognition of outstanding contributions, achievements and service that have advanced the profession of operations research and management science."

"Aviation Week & Space Technology" magazine has selected Professor **R. John Hansman Jr.** of aeronautics and astronautics as a recipient of a 2004 Aerospace Commercial Air Transport Laurel. Hansman was cited for his pioneering research on vertical navigation displays. The magazine presents Laurels to individuals who "made lasting contributions to the advancement of aerospace, and to those who applied navigation or space technologies to the betterment of mankind." Hansman is director of the MIT International Center for Air Transportation.

Subra Suresh, the Ford Professor of Engineering and head of the Department of Materials Science and Engineering, has been elected an Honorary Fellow of the Indian Academy of Sciences in Bangalore. The academy, founded in 1934 by Sir C. V. Raman, the 1930 physics Nobel laureate of "Raman Spectroscopy" fame, annually elects no more than three Honorary Fellows who are citizens of foreign countries. The total number of living Honorary Fellows of the Academy currently stands at 45, of whom seven are Nobel Prize winners. Suresh also has been elected in recent years to the U.S. National Academy of Engineering (in which he currently serves as chair of the Materials Section), the American Academy of Arts and Sciences, the Indian National Academy of Engineering, and the Third World Academy of Sciences.

Ellen T. Harris, Class of 1949 Professor of Music, has won the 2004 Westrup Prize awarded by the British journal Music and Letters (Oxford University Press) for her article "Handel the Investor," considered the "most distinguished" among those published in the journal. Harris' article was based on extensive research in the Bank of England archives and details the bank accounts and stock holdings of George Frideric Handel (1685-1759). The abstract reads in part: "Handel kept both cash and stock accounts at the Bank of England. Never before fully examined, these illustrate in their deliberate interlocking Handel's close control over his finances, from early in his first years in London through to and including his will and the posthumous payment of his bequests." According to Harris, the accounts show that Handel passed through periods of financial difficulty, but that he died a rich man due in part to "his ability to deal conservatively in the speculative investment environment of his time."

Daniel Hastings, professor of engineering systems and aeronautics and astronautics and director of the Engineering Systems Division, has been named a 2005 Giant in Science by the Quality Education for Minorities/Mathematics, Science and Engineering (MSE) Network. The award is given to individuals who have had a significant impact on students and their participation in MSE fields; those who are outstanding mentors, teachers, and researchers; and those who are strong advocates for quality MSE education for all students, particularly those underserved by the U.S. educational system. Hastings was specifically honored because of his "outstanding contributions to research and education."

Hastings received the award at a luncheon on Feb. 26 in Washington, D.C. He then participated in an interview session with middle school students.

Institute Professor **Robert Langer** received the Washington Award from the Western Society of Engineers on Feb. 25. The award was created in 1916 to recognize the "devoted, unselfish and pre-eminent service in advancing human progress." It is conferred annually upon an engineer whose professional attainments have advanced the welfare of all peoples. Past recipients include Orville Wright (1927) and Neil Armstrong (1980). It was named the Washington Award as a reminder that the nation's first president was an engineer.

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

John Deere 826 snowblower, electric starter. Rarely used (too big for me). Great machine. Manual/warranty record included. \$500 firm. siggia@mit.edu.

Antique French armoire. 8.5 feet high, w/carv-

ings, shelves. Suited for dining room or stereo, \$850; Large copper kettle, \$95; Large dog crate, \$25. 617-332-8251 or rgunder@mit.edu.

Refrigerator. 15 cu. ft., top freezer, 2-door, 7 months old. \$250. 617-389-8174.

Craftsman snowblower, 9 horsepower, 29" cut, 6 speeds. Firm: \$450 (cash or cashier's check). Anne Carbone at 258-8780.

HOUSING

Furnished room available in large Arlington house. Near public transportation, parking available, kitchen privileges, washer & dryer on

premise, own refrigerator & TV. 781-648-7425 (24 hrs).

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. \$3,600/mo. feng@psfc.mit.edu.

MISCELLANEOUS

ERF Computer Consulting. Home and small office support by MIT employee. System upgrades, Networking, Adware/Spyware/Virus removal and prevention, more. <http://www.erf-it.com> or David at erf_consulting@comcast.net.

STUDENT POSITIONS

Positions for students with work-study eligibility.

Dollars and Sense seeks assistant. Job tasks: assist development director and business manager with data entry and filing, organizing mailings. 4-15 hrs./week. \$12/hr. Resume, cover letter to Adria.Scharf@scharf@dollarsandsense.org.

The Prospect Hill Academy Charter School seeks after school tutors for Tuesday-Thursday from 3pm-4:40pm. \$15/hr. Steven Stone at 617-284-7829 or sstone@prospecthillacademy.org.

▶ ARTS NEWS

A musical flowering

Professor Tod Machover of the Program in Media Arts and Sciences, known for his innovations in composing and performing music, has designed an interactive music installation for the annual Marshall Fields Flower Show at the chain's flagship store in downtown Minneapolis. "Music in the Garden," called an "inspired landscape of French post-impressionist art," uses Hyperinstruments and automated pianos that switch sounds from Debussy, Satie and Stravinsky to Machover at the touch of a finger. The project also uses what Machover calls "squeezey flowers that mix nature and electronics, magical indoor wind chimes that move and chime by blowing on a series of giant pinwheels, and a substantial original composition that emerges from the other overlapping experiences—all surrounded by extremely elaborate flowers and plants."

The "South of France" environment was designed by landscape architect Julie Moir Messervy, who studied at MIT while at Wellesley and received masters degrees in both architecture and city planning from MIT in 1978. She taught landscape design at MIT's Graduate School of Architecture for a few years afterwards.

"Music in the Garden" is on view at Marshall Field's (8th Floor Auditorium, 700 On The Mall, Minneapolis), from March 12-26.

Photography talks at the MFA

The MIT Women's League presents two upcoming art talks at Boston's Museum of Fine Arts by Ann Allen, a member of the Council for the Arts at MIT and widow of the late John Allen, former head of the Research Lab for Electronics.

On Thursday, March 31, Allen will discuss two photography exhibitions. One is by Czech photographer Josef Sudek, whose misty, magical images document a private world of great beauty in ordinary things, people and natural effects. The other is by Japanese photographer Hiroshi Sugimoto, whose arresting, minimalist images reflect his fascination with the paradox of photographing time.

On Friday, April 15, Allen's talk is on "Sets, Series and Suites: Contemporary Prints," a show investigating theme and variation in 60 original print series and portfolios by contemporary European and American artists.

The price for each talk is \$10 for MFA members, \$24 for non-members, \$22 for seniors. Reservations will close one week in advance of each event. Both talks are from 1-2 p.m. For more information, call 253-3656 or e-mail wleague@mit.edu.

DeFrantz taps into Monk with high-tech storytelling



PHOTO / CAMPBELL MILLER

Associate Professor Thomas DeFrantz reprises his solo tap dance, 'Monk's Mood: A Performance Meditation on the Life and Music of Thelonious Monk,' this month in Kresge Little Theater.

Associate Professor Thomas DeFrantz uses tap shoes and technology to tell the story of the life and music of jazz pianist and composer Thelonious Monk (1917-1982). DeFrantz will reprise his solo tap dance "Monk's Mood: A Performance Meditation on the Life and Music of Thelonious Monk," March 11-13 and 17-19 in Kresge Little Theater.

Conceived and performed by DeFrantz, "Monk's Mood" explores tap dance as a narrative form augmented by digital technologies. "One of my concerns is how to use technology to enhance theatrical storytelling and not simply as a sort of gimmick," said DeFrantz.

"Monk's Mood" explores Monk's personal relationships with his wife, Nellie, and the Baroness Pannonica de Koenigswarter, who befriended Monk and other jazz musicians of the bebop era. DeFrantz' choreography portrays Monk's isolation, melancholy, creative genius and ultimately his madness.

"This piece also illustrates the potential of tap dance as a lyrical form of storytelling," DeFrantz said. "I intend to explore narrative possibilities within tap, a dance form typically noted for its flashy tricks and rhythmic aspects."

The 50-minute work employs high-tech set pieces designed by MIT and Stanford graduate students to trigger sound and video images during the performance. Foot buttons originally designed for the video game "Dance Dance Revolution" are built into wooden platforms on the stage. Throughout the piece, DeFrantz controls sound and imagery through his dancing.

"Monk's Mood" arose from DeFrantz's fascination with Monk's unique way of hearing and playing. "Monk took a basic tonality, such as a chord progression, and made it strange," he said. "When I dance the way that he played, even simple tap steps become very, very strange. In a way, my steps are analogous to his piano keys; I'm trying to find his rhythms with my feet."

The work is presented by Slippage, an interdisciplinary performance collective. Founded by DeFrantz in 2003, Slippage: Interventions in Performance, Culture and Technology explores connections between performance and emergent technology in the service of theatrical storytelling.

Performances are at 8 p.m. except for a 2 p.m. show on Sunday, March 13. Admission is free; donations are accepted.

New music by Ziporyn spans 1,000 years with voice, wind

"The Ornate Zither and the Nomad Flute" is the intriguing title of Professor Evan Ziporyn's latest composition, which will receive its world premiere thanks to the MIT Wind Ensemble this Saturday, March 12, at 8 p.m. in Kresge Auditorium.

Commissioned by Richard D. Nordlof (S.B. 1955) in memory of his wife, Jody, "The Ornate Zither and the Nomad Flute" juxtaposes two poems written more than a thousand years apart that deal with sensation, memory and the mysterious ways one becomes the other. The Chinese poem "The Ornate Zither" by Li Shangyin dates from the 10th century and is sung in Mandarin; "The Nomad Flute" by the contemporary poet W.S. Merwin appeared in "The New Yorker" in November 2004 and is sung in English.

Lecturer Frederick Harris Jr., director of the wind ensemble, brokered the match between Ziporyn and Nordlof, a longtime supporter of the Wind Ensemble, to honor Nordlof's late wife. "My idea was to have something for voice and winds," since Jody had been an amateur soprano, Harris said.

As the piece uses two alternating pieces of poetry, Ziporyn, who selected the poems, has divided the Wind Ensemble into two identical, smaller groups of winds surrounded by metallic percussion situated on either side of the stage. The chords and melodies will oscillate between the two sides of the stage.

Ziporyn characterizes "The Ornate Zither" as "beautiful and strange, both

highly lyrical and highly abstract." The piece features soprano Anne Harley, who speaks Chinese. "I felt she could convey the stark power of the words in a luminously beautiful way," said Ziporyn.

A graduate of Yale University, Harley received her master's degree in voice from Boston University as well as the Certificate in Opera Performance from Boston University's esteemed Opera Institute. She has since performed throughout Canada, the United States and England, specializing in both contemporary and early music.

An accomplished clarinetist and composer, Ziporyn, who is the Kenan Sahin Distinguished Professor of Music at MIT, has had compositions performed by numerous contemporary artists including the Kronos Quartet, Bang on a Can, the Nederlands Blazer Ensemble, master pipa player Wu Man, Gamelan Sekar Jaya and Maya Beiser. He has been associated with the Bang on a Can Festival since its founding in 1987, appearing as composer, soloist and ensemble leader. As a performer and recording artist, Ziporyn has worked with a range of master musicians from numerous musical cultures, including Paul Simon (with whom he toured throughout the fall of 2000), DJ Spooky, Matthew Shipp, Balinese dalang (puppeteer) I Wayan Wija, Darius Brubeck and Todd Reynolds.

The Wind Ensemble will also perform Vaughn Williams' "English Folk Song Suite," Charles Ives' "Fugue in C" and Peter Mennin's "Canzona." Admission is \$5 at the door.



PHOTO COURTESY/ILAVENIL SUBBIAH

A Vision of 'Past Lives'

This detail from a handmade book by Ilavenil Subbiah can be seen at the 'Past Lives' exhibit on view at MIT in Room E51-095 March 9-10. This series of books brings together images and text created through various techniques, including printmaking, painting, collage and sewing, and tells the stories of families, friends and strangers—of lives lost, shared and found.

MIT EVENT HIGHLIGHTS MARCH 9 - 13

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



PHOTO / CAMPBELL MILLER

'Monk's Mood'

Professor Thomas DeFrantz will perform his piece, 'Monk's Mood: A Performance Meditation on the Life and Music of Thelonious Monk,' March 11-13, 17-19 in Kresge Little Theater.

WEDNESDAY
March 9

 **Terrorism**
Colonel Russ Howard discusses terrorism. Noon. Building E38, 6th floor conference room. 253-8092.

 **Advanced Music Performance Student Recital**
Graduate student Amanda Wang on the violin. 5pm. Killian Hall. 253-9800.

 **"Past Lives" Opening Reception**
Exhibit of handmade books by Ilavenil Subbiah. 5-7pm. Room E51-095. 253-9759.

 **"Hidden Warriors: Voices from the Ho Chi Minh Trail"**
Documentary screening and talk by professor and filmmaker Karen Turner of Holy Cross College. 7pm. Room 6-120.

THURSDAY
March 10

 **Festival de Las Americas**
Delicious treats and various organizations. Noon-2pm. Lobby 10.

 **MIT Chapel Concert**
Guitarist Glorianne Collver-Jacobson and percussionist Gerdes Fleurant. MIT Chapel. Noon.

 **Clipper Ships: The Design Process**
Lecture in conjunction with current exhibition. 6:30-8pm. MIT Museum. 253-4444.

 **"The Bear"**
Dramashop student-directed workshop production of play by Chekhov. March 10-12. 8pm. Kresge Rehearsal Room B. 253-2908.

FRIDAY
March 11

 **Pruning Techniques for the Home Garden**
Talk featuring Roger Cook of "This Old House." Noon. Emma Rogers Room.

 **Advanced Music Performance Student Recital**
Graduate student Caitlin Smythe sings. 5pm. Killian Hall. 253-9800.

 **MIT Symphony Orchestra**
Marco Betta's world premiere of "Lacrime," Mozart's Adagio and Fugue; Brahms' Symphony in D Major. \$5. 8pm. Kresge Auditorium. 253-9800.

 **Thomas DeFrantz**
Tap performance: "Monk's Mood: A Performance Meditation on the Life and Music of Thelonious Monk." March 11-13, 17-19. 8pm, except 2pm on March 13. Kresge Little Theater. 253-4720.

SATURDAY
March 12

 **"A Needle Woman"**
Videos created between 1999 and 2001 document Kimsooja dressed in simple gray clothing standing rigidly on several busy city streets. Media Test Wall, Building 56. On view 24 hours. 253-4400.

 **Collegiate Figure Skating Competition**
8am-6pm. Johnson Athletic Center Ice Rink.

 **MIT Wind Ensemble**
World premiere of Evan Ziporyn's "The Ornate Zither and the Nomad Flute" with Anne Harley, soprano. \$5. 8pm. Kresge Auditorium. 253-9800.

SUNDAY
March 13

 **Hoops Against Cancer**
Intercollegiate basketball tournament featuring several contests. \$5. Noon. Rockwell Cage.

 **29th Annual Israel Folk Dance Festival**
\$12. 3pm. Tickets sold in advance. Kresge Auditorium. 253-2982.

 **MITHAS Concert**
Uday Balwalkar, dhruvad vocalist, and Manik Mude, pakawaj. Presented by MITHAS (MIT Heritage of South Asia) in cooperation with Sangam. \$20, \$10 students, MIT students free. 4pm. Wong Auditorium. 258-7971.

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

EDITOR'S CHOICE

"OTHELLO"

Shakespeare Ensemble production directed by Kortney Adams. March 10-12, 17-19. \$8, \$6 students.

Mar. 10
Sala de Puerto Rico
8 p.m.

KILLIAN FACULTY LECTURE

Talk by Professor Wolfgang Ketterle, "When Freezing Cold is Not Cold Enough." 253-0210.

Mar. 15
Room 32-123
4:30 p.m.

THE DARFUR CRISIS

Col. Michael Smith talks about "Successes and Challenges in Planning an Effective African Peace Support Operation."

Mar. 16
E38, 6th floor conference room
Noon

MIT EVENT HIGHLIGHTS MARCH 14 - 20

MONDAY
March 14

 **Lecture on Islamic Architecture**
"Architecture in Lebanon: From Modernism to Contemporary Trends." 5:30pm. Room 3-133. 253-1400.

 **CAVS Artist's Presentation**
Performance by the Center for Urban Participation (CUP), a group dedicated to increasing civic participation through art, architecture, design and technology. Open Studios 3-6pm. Performance at 6:30pm. Room N52-390.452-2484.

 **Globalizing Inequality**
Talk by P. Sainath, one of India's most well-known and influential journalists. 7pm. Room E51-111.

 **Latke-Hamentashen Debate**
Which is better—the fried potato pancake or the fruit-filled cookie? Professors debate. 7-8:30pm. Room 10-250.

TUESDAY
March 15

 **A Report from Behind the Scenes in Asia's War on Terror**
Talk by journalist and filmmaker Tracy Dahlby. Noon. Room E38-615. 253-1965.

 **The Idea of Universality in Linguistics and Human Rights**
Talk by Institute Professor Noam Chomsky. 5pm. Room 66-110. 258-7614.

 **Architecture Lecture Series**
Artist-in-Residence Marjetica Potrc's work. 6:30pm. Room 10-250. 253-7791.

 **St. Patrick's Day Contra Dance**
Music by Pandemonium. \$5, MIT/Wellesley students free. 8-10:30pm. Lobby 13. 354-0864.

WEDNESDAY
March 16

 **Object Lessons: Better, Faster, More-Computer Memory**
Curator of Science and Technology Deborah Douglas tells the story of Jay Forrester's critical computer memory invention from the 1950s. Noon. MIT Museum. 253-4444.

 **Artist Behind the Desk**
Readings by Kevin McLellan of Facilities and Eric Schwartz of the Lean Aerospace Initiative. Noon. Killian Hall. 253-9821.

 **Arts Colloquium**
Jay Scheib, assistant professor of Theater Arts, speaks about his works. 5-7pm. Room 14E-304. Reservations required by March 11. 253-9821.

 **Advanced Music Performance Student Recital**
Sherman (Xiaoming) Jia '06 on the violin. 5pm. Killian Hall. 253-9800.

THURSDAY
March 17

 **Saint Patrick's Day**
Wear green to avoid getting pinched on this day celebrating all things Irish.

 **MIT Chapel Concert**
"Art and Popular Song in Renaissance England" with Richard Maloney on the lute and Maria Georgakarakou singing. Noon. MIT Chapel. 253-9800.

 **Varsity Men's Lacrosse vs. Wentworth**
4pm. Jack Barry Field. 258-5265.

FRIDAY
March 18

 **Developing Countries' Contribution to the Climate Change**
Leena Srivastava, executive director of The Energy and Resources Institute, talks about India. 2pm. Room 6-120. 452-3199.

 **Advanced Music Performance Student Recital**
Ole Nielsen on the flute. 5pm. Killian Hall. 253-9800.

 **Gallery Talk**
Curator Bill Arning discusses the current exhibitions. Musicians Jeff Song and Curt Newton's reveal their contemporary version of traditional Korean instruments. 6pm. List Visual Arts Center. 253-4680.

 **Norouz Celebration**
Traditional Norouz (Persian New Year) dinner. 6pm. Walker Memorial.

SATURDAY
March 19

 **Retreat Based on Mind Training**
Buddhist retreat based on "The Freedom from the Four Attachments." 10:30am-4pm. MIT Chapel. 324-6030.

 **Easter Breakfast**
Easter Breakfast followed by an egg hunt. Sponsored by Westgate Community Association. 10am. Westgate Lounge. 577-5880.

 **"Pavel Braila"**
Pavel Braila's first solo exhibition in the U.S. is a large scale installation which consists of six 11' x 7' video projections and a selection of large-scale photographs. Noon-6pm. List Center. 253-4680.

 **Spring Fling Dance**
Evening of ballroom and latin dancing. Beginner lesson at 7:30pm. 8pm. Morss Hall. 686-0823.

SUNDAY
March 20

 **"Young Inventors at MIT"**
Objects displayed chronicle the past decade of the Lemelson-Student Prize winners, including James McLurkin's SwarmBots (2003), Amy Smith's phase-change incubator (2000), and Saul Griffith's device for creating low-cost eyeglasses (2004). Noon-5pm. 253-4444.

 **Capturing the Light: From Camera Obscura to Holography**
MIT holographer Betsy Connors gives a brief history of how light is captured to make photographs, film, and video and holograms. Noon. MIT Museum. 253-4444.

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