SONNET OF APPRECIATION

Nobel laureate Frank Wilczek, who won the Nobel Prize in physics Oct. 5, waxes poetic on quarks, gratitude and his e-mail box.

MEET ME IN THE PUB

The R and D pub, the latest addition to the Stata Center, opened Oct. 12. The four-floor space is unique to campus, providing a comfortable place where graduate students, faculty and staff can meet, mingle and nosh.

RECENT GRAD NAMED GRAD DEAN

Christopher Jones, who earned his M.S. at MIT in 2003, came back to campus in September as assistant dean for graduate students. Jones will focus on helping departments and programs increase the number of graduate students from underrepresented groups.

FLU VACCINE IN SHORT SUPPLY

The MIT medical department expects to receive only about 15 percent of its usual vaccine order because of the nationwide shortage. Only those falling in the CDC high-risk categories who get their medical care primarily from MIT Medical will be vaccinated at MIT this year.

NEW MEDIA AFFECT CAMPAIGNS

Panelists discussed how the Internet and its ability to foster “viral marketing” has affected political campaigns the past few years.

RESEARCH

BOON FOR BROAD

A $14 million grant to the Broad Institute will allow U.S. researchers to carry out large-scale studies of genetic variation, work that is key to the identification of genes linked to diseases.

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ARTS

NOT-SO-SILENT FILMS

MIT lecturer Martin Markes curated a set of three DVDs that capture 50 rarely seen silent films with their scores. A multimedia performance with screenings of some of the films and live music by Markes and other MIT community members has been scheduled for Oct. 27 in Killian Hall.

FEATURED STORY

Ph.D. candidate Seth Coe-Sullivan’s studies have turned him into an award-winning artist. He took first prize in a recent photography contest sponsored by Nikon.

R&D 100 lists three from MIT

Sarah H. Wright

The leader of an MIT team that created the nanoruler, the world’s most precise ruler with ‘ticks’ only a few hundred billionths of a meter apart, has been named one of the “R&D 100” for 2004.

The R&D 100 is an annual listing, produced by R&D magazine, to honor the year’s most significant new technological products and processes. Winners are selected by R&D editors along with experts in a variety of disciplines.

Two other MIT researchers also won, sharing their awards with industry and government colleagues. A black-tie banquet was held in Chicago last week to celebrate the 2004 awards.

R&D 100 award-winner Mark Schattenburg, director of MIT’s Space Nano-technology Laboratory in the Center for Space Research, guided researchers in building the nanoruler, whose speed and precision for patterning parallel lines across large surfaces could affect fields from the manufacture of computer chips to space physics.

The hydrogels are used to develop medical devices and in drug discovery, tissue engineering and cell migration and invasion, among other areas. For researchers in these fields, PuraMatrix Hydrogels may be used to create synthetic nanoscale scaffolds to encapsulate cells in 3-D, to plate cells in 2-D coatings, or to weave nanocarriers in suspension cultures.

K. Dane Wittrup, the R. Mares Professor of Chemical Engineering and Bioengineering, was also an R&D 100 co-awardee, sharing the honor with scientists at the Department of Energy’s Pacific Northwest National Laboratory (PNNL).

Wittrup and his colleagues were recognized for building a library of one billion human antibodies and expressing them on the surface of yeast cells. To do this, the MIT-PNNL group used a platform designed by Wittrup. The library could one day replace the need to produce antibodies within animals, such as mice, and lead to the development of medical treatments more acceptable to the human immune system.

NEW RISKS FOR BLADDER CANCER IDENTIFIED

Elizabeth Thomson

MIT researchers and colleagues have identified three new chemical risk factors for bladder cancer in a study involving some 600 people in the Los Angeles area. The work was reported in the Oct. 6 issue of the Journal of the National Cancer Institute.

The newly discovered carcinogens are found in cigarette smoke, which is already known to be a major cause of bladder cancer, contributing to at least 50 percent of the approximately 60,000 cases in the United States every year.

All three of the new carcinogens, however, were also found to be risk factors for bladder cancer in nonsmokers. Although second-hand smoke is one source of exposure for nonsmokers, the researchers say that it is very important to identify the other sources of exposure for nonsmokers.

“This is very important from a public health point of view,” said Tannenbaum, the Underwood-Prescott Professor of Toxicology at MIT. “It’s much more effective to prevent cancer rather than treat it.”

“The team also identified six chemicals in the same chemical family that do not appear to be human carcinogens. Because they are chemically similar to their three new cousins, they could potentially lead to safer alternatives for the latter.”

According to Ringling Brothers trainer Tim Holan, technology has changed circus life and the look of circus trains. “We have a self-contained city here, with people from 16 different nations. Today, the buzz on board is all about who’s got the best cell phone, the best computer. And the trains look like they have ears—it’s the satellite dishes, pointing every which way, to pick up news from home.”
Black alumni celebrate milestone

James Wolken
MIT Alumni Association

Black Alumni at MIT (BAMIT) held a special conference over the Columbus Day weekend celebrating its 25th anniversary as an organization.

“Great Accomplishments, Great Expectations” looked at the impact of black alumni over the past century and included a special tribute to astronaut Ronald McNair (Ph.D. 1977) who died in the Challenger space shuttle explosion in 1986. McNair’s brother, Carl McNair, paid tribute to him in an event at Walker Memorial.

Shirley Ann Jackson, president of Rensselaer Polytechnic Institute, delivered the keynote address, evoking the legacy of McNair during the gala at the MIT Museum. The crowd gave her a standing ovation.

The tribute to Ron McNair really captured the essence of this conference,” said BAMIT president Chiquita White (S.B. 1986). “He was a risk taker, a pioneer, and a champion of following one’s dreams to reach an important goal. Those characteristics are what BAMIT is about in many ways.


“Listening to the four keynote speakers was a special moment for many members,” said White. “These four alumni were contemporaries at the Institute and took significant personal risk to raise awareness of key issues facing minority students at MIT.”

While she said she was approached by a number of attendees who want to establish BAMIT chapters in their own areas. “A number of attendees said this was their first visit back to campus in 20 years,” she said.

“It was great to see old friends reconnect,” said Robert Hillman (S.B. 1986). “But the best moments were the interactions between current students and alumni.” Hillman said the usually unflappable Gates was taken aback by an autograph request from a current student. “I don’t know if he realizes how inspiring he is to today’s students. These speakers are important role models to this generation.

This was a special event in many ways,” said Beth Garvin, executive vice president and CEO of the MIT Alumni Association. “This conference memorialized important historical accomplishments of MIT’s black alumni. It was inspiring.”

Sonnet for a Quark

I don’t suppose that colored quarks and glue
Think over much about what they’re up to;
They just do what comes naturally
And leave the worrying to you and me.

Free spirits! They seemed blithely unconcerned
With sacred lessons we’d with effort learned.
But by invoking then heredity
Wild hypotheses theoretical
I found they were not so easily understood:
So the world makes sense, as it damn well should.

The prize recalls those days of search and find,
Warm notes from friends bring human joy to mind.
My heart is full, as is my thanks to you.
My box is small, but I am afraid—adieu.

—Frank Wilczek

Toasting on his laurels

Chiquita White

Nobel laureate Frank Wilczek celebrated with colleagues from the Department of Physics at a party held in his honor the day he won the Nobel Prize, Oct. 5. A few days later, swamped by congratulations from people near and far, Wilczek penned a sonnet to show his appreciation for science and his friends.

AWARDS & HONORS

Earl M. Murman, professor in the Department of Aeronautics and Astronautics and the Engineering System Development Laboratory, has been elected to the Royal Swedish Academy of Engineering Sciences as a Foreign Member of the Academy. This honor recognizes Murman’s many years of work in systems engineering, product development, aerodynamics, computational fluid dynamics and engineering education. The academy consists of nearly 1,500 distinguished engineers and economists elected to the Academy by their peers. It promotes cross-fertilization among industry, academia and public administration, and is closely affiliated with a number of organizations, most notably the Nobel Foundation. Murman was head of MIT’s aero-astro department from 1990 to 1996. He has also directed MIT’s Project Alliance and Lean Aerospace Initiative, and is co-founder of “Lean Enterprise Value: Insights from MIT’s Lean Aerospace,” which was awarded the International Aeronautical Academy’s 2004 Engineering Sciences Book Award.

Det. Sgt. Mary Beth Riley of the MIT Police was recently elected to the Athletic Hall of Fame of her alma mater, St. Lawrence University in Canton, N.Y., for her accomplishments in soccer and ice hockey. The 1985 graduate is the daughter of the Hon. Gene Riley, who served as a U.S. District Judge in the district of New York from 1991 to 2004. Riley was a two-time All-Sun East Conference soccer team member and a two-time All-American soccer player in 1983 and 1984. Riley was the key player for the women’s ice hockey team in its inaugural season in 1985. Riley was named to the All-American team in both 1984 and 1985 and was a co-captain of the team in 1985. She was named to the All-Sun East Conference ice hockey team in 1984 and 1985.

The American Physical Society has awarded the 2006 Leo Seltzer Lecture Award to the members of its Study Group on Boost-Phase Intercept Systems for National Missile Defense, including MIT Professor Daniel Kleppner, director of the MIT-Harvard Center for Ultracold Atoms and the Lester Wolfe Professor of Physics Emeritus at MIT, and David Moncton, director of MIT’s Nuclear Reactor Laboratory and an adjunct professor of physics. The award honors the outstanding accomplishments of physicists who promote the use of physics for the public good in such areas as the environment, arms control and science policy. The APS cited the Study Group, which is co-chaired by Kleppner, for its report “That adds physics insight to the public debate” on national missile defense.

Subra Suresh, head of the Department of Materials Science and Engineering, has been selected by the American Society of Materials International to receive the 2004 Albert S. Smith Award. The award recognizes “pioneering materials science and engineering achievements that have stimulated organized work along similar lines to such an extent that a marked basic advance has been made in the knowledge of materials science and engineering.” Suresh, who is the Ford Professor of Engineering and a professor of biological engineering, is cited for “outstanding contributions to the understanding of deformation behavior at different length scales and mechanics of materials and demonstrated leadership in materials education.” He received the award at a banquet on Oct. 19 in Columbus, Ohio, at the annual meeting of ASM International.

Tech Talk is published by the News Office on Wednesdays during term time except for most Monday holiday weeks. See Production Schedule at http://web.mit.edu/newsoffice/production.html. The News Office is in 77 Massachusetts Avenue, Cambridge, MA 02139-4307.

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Dennis Breben

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Production
Roger Donaghy

Black alumni celebrate milestone
**Former MIT grad student chosen as graduate dean**

Just five years ago, Assistant Dean for Graduate Students Christopher Jones stood in the place where his students now stand.

A 2003 graduate of MIT, Jones earned dual master’s degrees in nuclear engineering and political science. The hard work prepared him well for the task at hand. As assistant dean, he will focus on helping departments and programs increase the number of graduate students from underrepresented groups.

Though not a new position, the role comes on the heels of the May 19 faculty resolution urging MIT leadership to increase the percentage of underrepresented minority and other underrepresented graduate students. He began his job Sept. 20.

“He will work with faculty to reshape our Summer Research Program into a recruitment tool for MIT’s graduate programs,” said Isaac Colbert, dean for graduate students. “For the past 18 years, that program has been successful in bringing students into the graduate pipeline nationally, but now it needs to focus more particularly on MIT’s needs.”

Colbert knew Jones as a student and said he looks forward to work with him as a colleague. “He’s energetic, well-educated and trained, entrepreneurial, articulate, thoughtful and a good problem-solver and diplomat,” said Colbert. “He’ll call on all of these characteristics for the task ahead.”

**Students travel to swing state for presidential debates**

Sasha Brown

While many in the U.S. were focused for a few hours on the John Edwards/Dick Cheney debate about our nation’s future in Cleveland, Ohio, six MIT students spent their entire weekend in the same place sparring in the same topics.

The students—three Republicans and three Democrats—traveled to Ohio to participate in a mock political convention and debate held on Oct. 4 at Case Western Reserve University—the same campus at which Vice President Dick Cheney and Sen. John Edwards (D-N.C.) exchanged sniping blows on Oct. 5.

The bipartisan MIT group was part of a group of more than 60 students from 15 colleges and universities across the country who volunteered to participate in the national student convention called “The Race at Case.”

The 30 student convention “delegates” in each party elected student debaters to serve as their representatives in the final one-on-one debates on the U.S. economy, national security, social issues and domestic policy.

Kenneth Nesmith, an MIT senior majoring in political science, was elected by the Republicans to represent his party in the one-on-one debates on national security, social issues and domestic policy.

Nesmith, a member of the MIT College Republicans, being at Case Western Reserve University—the same campus at which Vice President Dick Cheney and Sen. John Edwards (D-N.C.) exchanged sniping blows on Oct. 5—was “very exciting,” he said. “It’s a unique experience and a unique environment.”

“I have never seen anything like it,” he said. “There were a lot of bad senators and politicians there.”

Nesmith plans to join the Peace Corps after graduation.

Seven MIT students attended the Oct. 5 vice-presidential debate along with the other seven student debaters. (The remaining 53 students watched it on TV.)

Thirty minutes after its 4 p.m. opening on Tuesday, Oct. 12, the pub had about 15 patrons, many of whom came out to celebrate, but not to watch the Red Sox game, at least not yet. The pub doesn’t have a TV.

“We hope this will draw a mixture of people from the MIT community and create more campus camaraderie,” said Richard Berlin, director of Campus Dining.

Patrons at the over-21 pub must show ID indicating they are at least 21 years old and must have an MIT ID or be the guest of someone with an MIT ID.

Three minutes after its 4 p.m. opening on Tuesday, Oct. 12, the pub had about 15 patrons, many of whom came out to celebrate, but not to watch the Red Sox game, at least not yet. The pub doesn’t have a TV.

“We plan to fix that,” said Guttag. With the installation of a good sound system in the bar area, the pub will be close to perfect, Berlin said.

**New pub in Stata Center offers congenial place to commingle**

Sasha Brown

The new pub offers many things—including a central location—that the other campus pubs don’t. While graduate students spend time in the Thirsty Ear and Muddy Charles, faculty rarely venture to them. Additionally, the R and D’s “light fare” menu includes sushi, hummus plates and fruit, the kind of finger food that lends itself to academic meetings and informal classes. The four distinct spaces—a bar area, a restaurant area and two lounge-type spaces—will serve a variety of needs, said Berlin.

**Social commingling among faculty, staff and graduate students just got a big boost thanks to the brand new R and D pub that opened on the fourth floor of the Stata Center. Beautiful views, bright blue walls, two floors and four separate “hang out” areas, make the pub a gathering place like no other on campus.**

“We hope this will draw a mixture of people from the MIT community and create more campus camaraderie,” said Richard Berlin, director of Campus Dining.

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Professors John Guttag and Alan Willsky of electrical engineering and computer science served as sommeliers for the pub, crafting an eclectic wine list with selections from Australia, South Africa, Italy and California.

Both faculty members were among the first to sample the pub’s ambiance on opening day.

“We like to have fun,” said Guttag. “My hope is that it will be a place where faculty and graduate students get together in an informal setting.”

Among the first customers at the R and D pub on the fourth floor of the Stata Center were (left to right): Professor John Guttag; architect Thomas Kim; Simon J. Hernandez, research technician for W3C; Professor Alan Willsky; and Karen Gardner, personnel coordinator for the Computer Science and Artificial Intelligence Lab. Guttag and Willsky utilized their knowledge of wines to play sommelier for the new pub.
**Accidental artist emerges**

Sasha Brown
News Office

Electrical engineering Ph.D. candidate Seth Coe-Sullivan never set out to become an artist, but one of his photographs recently took first place in an international contest sponsored by Nikon.

Coe-Sullivan found art one day when his microscope image of quantum dot nanocrystals revealed elaborate patterns instead of the flat films he was expecting. He showed the results to research colleagues John Kymriah and Sung-Hoon Kang of MIT’s Research Laboratory of Electronics, who suggested Coe-Sullivan enter the images in Nikon’s Small World Photomicroscopy contest. The image took first prize, netting Coe-Sullivan some new Nikon camera equipment and publicity in USA Today.

An enlargement of the photograph will hang with the other 20 winning images in galleries throughout the U.S. during the month of January. A construction worker seems to be painting on a canvas as he works on the exterior of the new brain and cognitive sciences building under construction on Main Street near Parsons Laboratory.

**Four professors win Presidential Early Career Awards for research support**

Four MIT researchers are among the 57 recipients of the 2003 Presidential Early Career Award for Scientists and Engineers given by the U.S. government to recognize researchers at the beginning of their careers. The awards were presented at the White House Sept. 9.

This is the eighth year for the PECASE awards, which were established by the White House in 1996. Scientists and engineers are nominated by eight federal departments and agencies as the researchers best able to fulfill the agencies’ missions. Those participating agencies award the young scientists and engineers with up to five years of funding to continue their research.

This year’s MIT winners are:

- **Vladimir Bulovic**, associate professor in the Department of Electrical Engineering and Computer Science, for his contributions “examining optical and electrical properties of organic and inorganic nanocrystalline thin films and applying the fundamental findings to develop novel active devices.”

- **Christopher Schuh**, assistant professor in the Department of Materials Science and Engineering, for his “combined experimental and theoretical research on the structure-property relationships in advanced structural materials, including amorphous and nanocrystalline metals.”

- **Moe Z. Win**, the Charles Stark Draper Associate Professor of Aeronautics and Astronautics in the Laboratory for Information and Decision Systems, for his “pioneering work on novel ultrawideband radio communication systems including fundamental propagation studies, channel modeling, and signal acquisition protocols; providing the foundation for utilizing this new form of radio communication in the design of secure, fade resistant, high data rate wireless networks.”

- **Stephanie Seminara**, a visiting scientist at the Clinical Research Center, for “outstanding contributions to the field of reproductive endocrinology, including the identification of genetic factors which regulate the onset of puberty, giving us new insights into the causes of human infertility.”

**MIT Medical sets flu vaccine policy**

The nationwide shortage of flu vaccine will significantly reduce the number of people the MIT medical department will be able to vaccinate this year.

MIT Medical expects to receive about 15 percent of its usual vaccine order. It will make vaccines available as supply permits to people within the high-risk groups outlined by the U.S. Centers for Disease Control and Prevention (CDC) who receive their ongoing primary care from MIT Medical.

CDC guidelines prioritize vaccine administration to those individuals most likely to suffer serious medical complications from the flu—those with chronic illnesses. The Massachusetts Department of Public Health is legally requiring that flu vaccination be strictly limited to those in the CDC-specified high-risk groups.

MIT Medical does not expect to have enough vaccine for all patients that fall within the CDC high risk guidelines, so they will first vaccinate patients at the highest risk for medical complications from the flu. Members of the community who fall within the CDC vaccination guidelines may call the MIT Medical Information line at 253-4865 to find out about vaccine availability.

Doctors advise that vaccination is not the only way to help prevent the flu. They recommend frequent and thorough hand washing, staying home when sick, and covering coughs and sneezes as effective preventative measures.

Check the MIT Medical website for more detailed pre-vaccination tips and for suggestions on what to do if you do get the flu. Several antiviral drugs can reduce flu symptoms and duration if taken within two days of getting sick.
Researchers display the light-sensitive fabric they created. From left are Professor John Joannopoulos, Professor Yoel Fink (framed with fibers of the new fabric in front of his face), postdoctoral researcher Mehran Bayindir, graduate student Fabien Sorin and Ayman Abouraddy, a postdoctoral researcher.

MIT’s novel fabrics see the light

Work combines semiconductors, fiber optics

Elizabeth Thomson

In that work, researchers created semiconductors and all-optical devices that can not only see light, but also analyze its colors.

"These fiber solar cells offer unique possibilities for constructing a photovoltaic solar panel that can be flexible and mechanically tough, and can thus be woven," write the researchers in the Oct. 14 issue of Nature. "Interesting device applications follow not only from the ability to engineer the single-fiber properties, but also from the specifics of fiber arrangements into larger assemblies."

The team’s leader, Yoel Fink, notes that “the technique we developed allows us to bring together two disparate technologies: those involved in creating optical fibers and those for electronic components.”

This work challenges the traditional barrier between semiconduc-
tor devices and fiber-optic processing, said Fink, the Thomas D. King Assistant Professor of Materials Science and Engineering. "It is the assembly of such fiber arrangements into larger assemblies that opens the way to interesting device applications." While the team has not yet developed an electronic device that uses the fiber solar cells, Fink says he is confident that such applications are possible.

"-instead of having a mechanical mouse, you could just use a light beam, like a laser pointer, to communicate with the computer because the screen would show where it was being hit," said the paper’s lead author, Mehmet Bayindir, a postdoctoral associate in MIT’s Research Laboratory for Electronics (RLE).

"This work is funded by the Defense Advanced Research Projects Agency, the Army Research Office, the Office of Naval Research, the Air Force Office of Scientific Research, the National Science Foundation, and RLE. All of the authors are affiliated with MIT’s Center for Materials Science and Engineering and RLE."

This is a close-up of a spectrometric fabric made in Yoel Fink’s lab.

CANCER

Continued from Page 1

research scientist, and Jinping Gan, a former graduate stu-
dent. Their colleagues Manuela Gago-Dominguez, Kamilo Arakawa, Ronald K. Ross, and Mimi C. Yu are at the Uni-
versity of Southern California, Los Angeles.

In 1993 Tannenbaum and Skipper teamed up with Yu on the ongoing Los Angeles Bladder Cancer Study. Among other conclusions, that study has shown that the incidence of new prostate cancer cases is increasing at a faster rate than its death rate.

"...being able, for the first time, to precisely control the behavior of electrons, photons and their interactions with a fiber framework leads naturally to the exciting possibility of eventually creating intrinsically smart fabrics," said co-author John D. Joannopoulos, the Francis Wright Davis Professor of Physics.

Some of the most exciting and novel potential applications stem from assembling the fibers into woven structures. As the authors point out, "It is the assembly of such fibers into 2-D grids or webs that enables the identification of the location of an excitation point on a surface," and does so with a very small number of fibers by addressing these grids in computer screens or on projection panels could therefore provide a new type of interface, said Fink. "In order to have a mechanical mouse, you could just use a light beam, like a laser pointer, to communicate with the computer because the screen would show where it was being hit."

This image is a close-up of a spectrometric fabric made in Yoel Fink’s lab.

Broad gets new center to study genotyping

A $14 million grant to the the Eli and Edythe L. Broad Institute of MIT and Harvard will allow U.S. researchers to quickly and comparatively examine large-scale studies of genetic variation in humans and animals, work that is key to the identification of genes linked to disease.

The funds from the National Center for Research Resources (NCRR), a component of the National Institutes of Health (NIH), will establish the first national center for high-throughput genotyping dedicated solely to the analysis of large-scale SNP (single nucleotide polymorphism), the most common type of variation in the human genome.

"We are thrilled that the NCRR has selected the Broad Institute for this important responsibility," said Eric Lander, founder of the Broad Institute and a professor of biology at MIT. "Human genetics is undergoing an extraordinary transformation, which is leading to the ability to take a comprehensive view of all human genetic variation and its association with disease. The National Genotyping Center at the Broad will make this capability accessible to many biomed-
ical researchers and thereby have a direct impact on the understanding of disease."

Many diseases can be traced to inherited differences in each individual’s genes. A SNP (pronounced "snip") is a single DNA base pair, or unit of DNA, the sequence of which can vary from individual to individual. It is estimated that there are at least 10 million SNPs in the human population. Scientists have found that certain SNP combinations are associated with predisposition to particular diseases or adverse drug reactions.

The new center will offer tools to aid in the selection, discovery and analysis of SNPs by providing broad access to flexible, accurate and affordable genotyping and sequencing. Integrated computational tools will help researchers manage and interpret databases of patient data and design experiments using secure informatics tools for sample management.

"The tremendous potential of genomic research makes it critical that we develop this central resource so investigators around the country can access high-capacity genotyping with the additional benefits of economies of scale, quality assurance and data shar-
ing," said Anthony Hayward, director of the NCRR Division for Clinical Research Resources.

"The demand for genotyping will grow exponen-
tially as investigators prioritize potential targets for treatment and as members of afflicted families try to better estimate their risk for a particular condition."

The new center will provide an integrated SNP selection tool to automate screening and create panels. A secure, web-based environment will provide access to a database linked to an in-house DNA repos-
itory and all samples will be coded to safeguard confidentiality. Results will be accessible to the inves-
tigators through a secure database integrated with a suite of data management and analysis tools for mini-
um of potential correlations among variants and with disease phenotypes.

Because investigators use different technologies based on the scales and configurations needed, a menu of services will be offered using different tech-
ology platforms. When fully operational, the center will be able to process up to 900 million to a million as billions of genotypes per year, depending on the technology platform used and the needs of outside users.

The cost for genotyping will be on the order of pen-
quas per genotype, varying according to the tech-
ology platform used. Prices are expected to drop fur-
ther as technology improves. In two decades ago, the cost was $10 per genotype. A portion of the center’s annual budget will be used to partially support compelling genotyping research projects.

The first genotyping studies within the new genotyping center will be performed in early 2005. Researchers interested in access to the center or applying for subsidized genotyping should contact the Broad Institute for details on the application process last this fall.

Stacey Gabriel, the new center’s principal investiga-

ator, and director, currently oversees the Broad’s genotyping analysis platform; she manages all of the genotyping projects and is responsible for her work related to human genetics. Gabriel also serves as sci-
entific director of the Broad Institute’s portion of the International HapMap Project.

The center’s research is designed to advance genomic research and its application to disease gene discovery leading to an understanding of patterns of genetic variation throughout the human genome.

The Broad Institute is a research collaboration between MIT, Harvard University and its hospitals and the Whitehead Institute for Biomedical Research.

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Internet’s snowball effect changes political campaigns

Patti Richards  
News Office

“New Media, Old Politics,” a panel discussion co-sponsored by the MIT Communications Forum and by the Technology and Culture Forum last Friday night, spotlighted the presentations on the internet and other forms of new media on the 2004 presidential campaign. The three panelists were Henry Jenkins, the John E. Burchard Professor of Humanities and director of Comparative Media Studies; Garret LoPorto, a consultant for the MIT Communications Forum; and Joe Trippi, the national campaign manager for Howard Dean’s 2004 campaign and the author of "The Revolution Will Be Televised" (HarperCollins).

David Thorburn, professor of literature and director of the MIT Communications Forum, moderated the Oct. 14 event in Barton Theater.

Jenkins identified “convergence”—the interplay between different types of new media and the interaction between old media and new—as being a central factor in this year’s political coverage. Both he and Trippi spoke of a campaign caught in the crossfire of the Internet and TV, where a candidate’s web posts often get taken out of context, forcing them to uncommonly watch television and spark a mini media tidal wave.

For LoPorto, who works with trumopularity, the grassroots advocacy groups started by Ben Cohen (of Ben & Jerry’s), the challenge is to put out the right message to the right group at the right moment. In the best possible scenario, he might get a 2 to 4 percent response rate from an e-mailing to a carefully selected list of 100,000 names, and that number might become a groundswell.

Trippi, a self-proclaimed “technology geek,” agreed with Jenkins that a clash between the ascendency of the Internet and the decline of television is the media story behind this year’s presidential campaigns. The Internet is letting Americans connect along the same lines as a number of other technologies, Trippi said.

During this discussion, some in the audience said it was the old media that did in the Dean campaign by incessantly replacing the candidate’s infamous “I have a scream” speech. But the miracle, according to Trippi, is that Dean’s post-paper, post-broadcast Internet campaign worked at all. "Dean showed amazing courage and talent, proven by how far he went," Trippi said.

Trippi predicted that American politics hasn’t seen the end of high-tech and high-touch people move decade or decade longer. "There will be 20 or 30 members of Congress who get their start in the Dean campaign," they will bring into a totally different view of community and empowerment to the electorate, he said.


Migration policy concerns needed, Uni. officials say

Mamphela Ramphele, co-chair of the U.N. Commission on Global Migration and formerly one of four managing directors at the World Bank, observed the policy incoherence and hypocrisy now endangering the 200 million people who live outside their countries of origin in a talk delivered on Oct. 5 in Winn Auditorium.

Ramphele, 56, a South African physician with a Ph.D. in social anthropology, gave the keynote presentation in an event hosted by the Center for International Studies’ Starr Forum to celebrate the 30th anniversary of the Inter-University Committee on Migration.

"Migration is as old as human history. Today, capital, goods, ideas and high-tech people move freely. But lower-skilled asylum seekers face many obstacles, resulting in the use of human rights, traffickers and in the likelihood of being detained, deported, marginalized and exploited," Ramphele said.

Consistency of laws across nations is the best way to ease the suffering endemic to migration now, she said.

"Social imperfections in the system, she said, from demographic pressure. For example, the average age of people in Northern Africa is between 15 and 35; in Europe, it is between 35 and 65. "If you let young people from Africa do work too demanding (or demeaning) for the aging population of Europe, Northern countries need labor from the south to keep their economies, Ramphele said.

"The common hypocrisy is, a developed nation does not acknowledge it’s necessary to the society, she said.

"-Sarah Wright
Silent films may have lacked dialogue, but they certainly did not lack sound. Music—often performed live—was fundamental to setting mood, heightening tension, and signalling romance or conveying comedy. Now an MIT lecturer and his colleagues have brought their talents and passions to a new set of DVDs that brings life music and the almost-forgotten films it accompanies.

“More Treasures from American Film Archives: 50 Films, 1894-1931,” is a box set showcasing 50 rare films and six trailers recorded during the first four decades of American filmmaking. The collection was issued by the National Film Preservation Foundation under a National Endowment for the Humanities grant. Scores in the collection were recorded in Killian Hall, under supervision of Boston-based recording engineer, Ken Lacouture.

“The films restored to life by this collection have much to teach us about America’s cultural history and the motion picture medium’s inexhaustible potential,” said senior lecturer Martin Marks, who served as music curator for the collection. “I wanted the music to enhance the educational value, to delight audiences, and to enrich the sum of these treasures.”

Dave Kehr of the New York Times called the music track a “triumph” and the entire film compilation “nine and a half hours of ecstasy.”

Marks will host a multimedia performance of some of the films to celebrate release of the three-DVD collection on Wednesday, Oct. 27 at 8 p.m. in Killian Hall.

Films screened will include “Rip Van Winkle” (1918) scored by lecturer Charles Shadle and played by Shadle on harpsichord and Marks on piano; “Skyscraper Symphony” (1929) scored by Professor Peter Child and recorded by The Lydian Quartet; “Cockeyed: Gems from the Memory of a Nutty Cameraman” (ca. 1925), with a score composed and recorded by Assistant Professor Brian Robison for electric guitar; “Breath of a Nation,” a short animated satire of prohibition, scored by a five-man ensemble led by lecturer Mark Harvey; and “A Bronx Morning,” an abstract collage of films featuring Marks on piano with Professor Jay Keyser on trombone, Professor Evan Ziporyn on clarinet and Harvey on trumpet.

The evening will conclude with live performances of “Tramp Tramp Tramp” (1926), a sing-along cartoon with audience participation led by a vocal quartet; “Zora Neale Hurson’s Fieldwork Footage” (2010), and “Indikings” (1928) a Fleischer cartoon newly scored by Fred Steiner and conducted by lecturer Fred Harris, director of the MIT Wind Ensemble.

“T’im grateful to all those driven people,” said Marks referring to his colleagues and students who “snatched time out of frantic schedules to become—if only for a shabby few hours—movie musicians in Killian Hall,” Marks said.

Festival ends with a flurry

“In Beyond Exile: Central European Writing and Film,” the fifth and final installment of the International Film Series and Foreign Languages and Literatures’ month-long festival of film, poetry and politics, concludes with a flurry of events on Saturday, Oct. 23.

Warsaw-born filmmaker Agnieszka Holland will screen and lead a discussion of her film “Julie Walking Home” in Room 10-250 at noon. The drama explores a story about a Canadian woman who cannot accept the impending death of her grandmother. She embarks on a journey to Poland to seek the help of a Russian faith healer.

At 3:30 p.m. in Room 4-237A, a roundtable discussion will feature Visiting Professor Eva Hoffman, Assistant Professor Charity Scribner; culture critic Susan Suleiman; and author Dubravka Ugresic.

“Beyond Exile” explores Central European identity by focusing on film and poetry, and it follows the progress of Central European film and poetry arts from the Cold War period to the present. The theme of the festival is “Beyond Exile: Central European Writing and Film,” offered in collaboration with the Foreign Languages and Literatures Department and the Visual Arts and Humanities Division.

On Monday, Oct. 18 at 4:15 p.m. in Room 2-139, a screening of “Julie Walking Home,” along with a conversation and reception, will feature director Agnieszka Holland. The film tells the story of a Canadian woman who cannot accept the impending death of her grandmother. She embarks on a journey to Poland to seek the help of a Russian faith healer.

On Tuesday, Oct. 19 at 8 p.m. in Killian Hall, a screening of “Beside and Beyond,” a selection of work by French filmmaker Jean E. Calas, will be shown. The film is accompanied by a discussion with Jean Calas and Professor Mark A. Nance.

On Wednesday, Oct. 20 at 5 p.m. in Killian Hall, a screening of “Beyond Exile” will be followed by a discussion with visiting professor Eva Hoffman and residence director Susan Suleiman.

On Thursday, Oct. 21 at 6 p.m. in Killian Hall, a screening of “The Abandoned” will be shown. The film is accompanied by a discussion with visiting professor Eva Hoffman and residence director Susan Suleiman.

On Friday, Oct. 22 at 4 p.m. in Killian Hall, a screening of “The Abandoned” will be shown. The film is accompanied by a discussion with visiting professor Eva Hoffman and residence director Susan Suleiman.

On Saturday, Oct. 23 at 3 p.m. in Killian Hall, a screening of “Beyond Exile” will be shown. The film is accompanied by a discussion with visiting professor Eva Hoffman and residence director Susan Suleiman.

Photos preserve Lebanon’s architectural heritage

In pursuit of his dream to build his own home, Joseph Homer Saleh discovered a true respect for architectural preservation in his native Lebanon. The photographic results can be seen in an exhibition at the Rotch Library titled “The (Fading) Poetry of Old Lebanese Homes.”

Saleh’s mission expanded as he saw the architectural and visual beauty of his homelands. He wanted to enhance the educational value, to delight audiences, and to enrich the sum of these treasures.”

Saleh’s research also became a social experience, as he sought admittance to people’s houses. “I’d ask if I could photograph the old house next door from their balcony or rooftop,” said Saleh, noting that he always was received cordially, and sometimes was offered coffee or breakfast. “Intrigued at first, my hosts would sometimes recount the story of the old house,” he said, recalling one house that belonged to “Francis, one of the seven families in a small village that was Anschut.”

Saleh hopes to engage architecture students in Lebanon to take on the cause of the old abandoned houses and to create a non-governmental organization to “advocate the cause of this wonderful architectural heritage,” he said. Meanwhile, his plans for his own house are still a week in progress. “It’s coming along nicely,” he said.

The exhibition is on view through Oct. 31.
**MIT Tech Talk**

**Science/ Technology**

**Performance**

**Architecture/ Planning**

**Humanities**

**Special Interest**

**BUSINESS/ MONEY**

**Film**

**Sports**

**Featured Event**

**MIT EVENT HIGHLIGHTS OCTOBER 20 - 24**

**WEDNESDAY October 20**

**Prokofiev with Percy**

Percy Liang, winner of the MITSOO concerto competition, will play Prokofiev’s Piano Concerto No. 3 on Friday at 8 p.m. in Kresge Auditorium. Admission is $5 at the door.

**THURSDAY October 21**

**EHS Awareness Week Day 2**

Learn what MIT is doing to protect the environment. 10:30am-2pm. La Sala de Puerto Rico, Student Center. 452-3897.

**Chapel Concert**


**Media Literacy**

Learning and using the Information Age. Educators discuss learning in the new media environments. 5-7pm. Room E25-115. 253-3921.

**Art Behind the Desk**

Administrative assistant Sally Honda of materials science and engineering performs on piano. Noon-1pm. Killian Hall. 253-9621.

**Elizabeth Strub**

Eat pizza and listen to this choreographer and choreo-rapher Elizabeth Strub, an artist in residence. 5-6:30pm. Rainbow Lounge (Room 50-306). 253-6777.

**SILENT FILMS**

**NEW ROLES FOR OLD MEDIA**

Panelists discuss how the Internet and cable TV channels have fundamentally altered American politics.

**F.A.S.T PROGRAM: GOT BRAINS?**

BCS grad students present an educational, Halloween-appropriate exploration of the human brain and mind. 253-4444.

**SUNDAY October 24**

**Varsity Crew at Head of the Charles Regatta**

Cheer on the team. 9am. Charles River. 258-5265.

**Beyond Exile: Central European Writing, Film**

Screening of “Julie Walking Home” and discussion with filmmaker Agnieszka Holland. Noon. Room 10-250.

**Roundtable**

With Eva Hoffman, Charity Scobin, Suzan Frecon, Suleman and Dubravka Ugrešić. Part of “Beyond Exile.” 3:30pm. Room 4-237.

**MISY Symphony Orchestra**

Screening of Agnieszka Holland’s film “An Evil” in the von Stetten Auditorium. 6pm. Room 10-250. 253-4771.

**MIT Chamber Players**

Marcos Thompson, music director. MIT students, faculty and guests. 4pm. Kresge Auditorium. 253-9800.

**DJ Lessons**

Five-week crash course on DJing. All levels welcome. Sponsored by the Dance Mix Coalition. $20 MIT undergrads, $50 others. 8-9:45pm.

**Go Online!**

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


**LIVE MUSIC, SILENT FILMS**

A multimedia concert celebrates “More Treasures from American Film Archives: 50 Films, 1894-1931,” a new DVD set.

**NEW ROLES FOR OLD MEDIA**

Panelists discuss how the Internet and cable TV channels have fundamentally altered American politics.

**F.A.S.T PROGRAM: GOT BRAINS?**

BCS grad students present an educational, Halloween-appropriate exploration of the human brain and mind. 253-4444.

**MIT EVENT HIGHLIGHTS OCTOBER 25 - 31**

**MONDAY October 25**

**P & B Jam Hunger Help plan the first permanent settlement on another world. 6-8pm. Building 33.**

**TUESDAY October 26**

**National Security and Personal Identification**

The Catherine N. Stratton Lecture. Four public policy experts debate. Lawrence Bacow, president of Tufts, moderates. 4-6pm. Wong Auditorium. 253-3666.

**Human Rights and Security Dimensions of Abu Ghraib and Guantanamo**

Ken Oye will moderate a discussion between Colin Jackson of MIT’s Security Studies Program and international human rights lawyer, Michael Ratner. 5:30-6pm. Room 10-250.

**WEDNESDAY October 27**

**“Cerith Wyn Evans: Thoughts unsaid, new forgotten…”**

Concurrent exhibitions at the List Center and the Museum of Fine Arts. List Visual Arts Center. Noon-6pm.

**Bush’s and Kerry’s Policies on National Security**

Research Horvath Loch of Whithead and Rev. Tadeusz Pacholczyk of the National Catholic Bioethics Center. Q-and-A follows. 5-6pm. Room 1-135.

**“Body Parts–A Self-Portrait by John Coplans”**

Talk by Peter Plagens, Newsweek art critic and painter. 6pm. Bartos Theater (E15). 253-4660.

**“Vignettes”**

Color photographer Brad Endicott (S.B. 1949, Weisman Student Art Gallery. 253-4005.