MIT's
Oldest and Largest
Newspaper

The Tech
Established 1881

WEATHER, p. 2
Today: 63°F | 37°F
Chance of showers
WED: 63°F | 37°F
Clear
THU: 44°F | 30°F
Sunny and windy

Volume 130, Number 56 | tech.mit.edu | Tuesday, November 23, 2010

Koch Institute begins relocation

New Building 76 to host interdisciplinary cancer research

By Anne Cai
STAFF REPORTER

The David H. Koch Institute for Integrative Cancer Research has begun moving into its newly finished home in Building 76, which replaced a parking lot along Main Street between Ames and Vassar.

The first group of faculty moved into the new building in the first week of November; the Koch Institute will gradually shift into Building 76 through mid-December. Once full, the seven-story building will contain about 600 researchers working in 25 faculty labs. According to the Koch Institute website, the first floor will feature a "changing display of art and information on MIT's leadership role in life sciences."

Construction began in March 2008 and finished a month earlier than projected and well within the original budget, which included a $100-million donation by David H. Koch '62. The building was designed by Ellenzweig, an architectural firm founded by Harry Ellenzweig, who has designed and redesigned numerous MIT academic and research buildings.

"It's also important to recognize

Koch Institute, Page 12

ANDREW SWAYZE—THE TECH

The Koch Institute's new building, running along Main Street between Ames and Vassar, will promote collaboration between different departments on cancer research.

Senior selected to be Rhodes Scholar

Jennifer Lai '11, Course 20 and 21M, will be heading to Oxford next year to study Immunology

By Joanna Kao
STAFF REPORTER

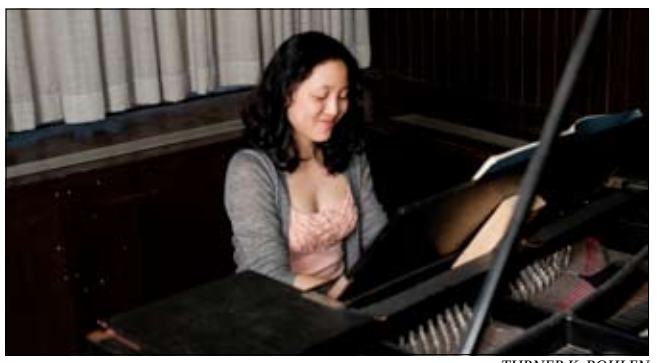
Jennifer I. Lai '11 is MIT's latest Rhodes scholar, joining an elite group of 43 MIT alumni.

"I was honestly in shock, and still am. I don't think it has quite hit me yet," said Lai, a double major in biological engineering (Course 20) and music and theater arts (Course 21M). "First, I called my mom at home. I think she was really confused as to why I was so calm because I was in disbelief and was certain I was kidding her. Finally, she realized that I wasn't kidding, and I think at that point, she was more excited than I was."

Lai will be heading off to the University of Oxford to study Immunology next year. "First, I'm really excited about studying Immunology, which I've been wanting to do for a really long time. Second, I think that going to Oxford, and meeting and playing music with others who have such diverse interests will be a really great and broadening experience," Lai said.

To become a Rhodes scholar, Lai had to submit multiple letters of recommendation, a personal essay, and be endorsed by MIT. "The application process is tough, but it really forces you to determine what it is that you want to do. For me, it's just solidified my future goals, which is the most rewarding

Rhodes, Page 13



TURNER K. BOHLEN

Jennifer Lai, a senior majoring in biological engineering and music and theater arts and an accomplished pianist, is one of 32 American students chosen for this year's Rhodes Scholarship.

Smize!

SARANG KULKARNI—THE TECH

Lauren E. Clark '14 walks the runway on Friday in Kappa Alpha Theta's KATWalk fashion show. Proceeds from ticket sales help raise money for "Court Appointed Special Advocates," which trains community volunteers to speak on behalf of abused and neglected children in court.

At Logan, delays are imminent

What to expect when going home this week

By Jessica Pourian
ASSOCIATE NEWS EDITOR

Flying home for Thanksgiving? Better pack your patience. You can expect long lines and new security measures at Logan Airport this week.

According to the Air Transport Association, over 24 million people will be flying this Thanksgiving holiday, up 3.5 percent from last year. The TSA is expecting to screen an average of 2.2 million people per day this weekend, up from the 1.8 million people it normally screens on a daily basis.

INSIDE
Tips for Thanksgiving travel, **p. 12**

New security measures are also expected to complicate the holiday rush. Over the summer, Logan installed new full-body scanners, which come in two forms — backscatter X-ray and millimeter wave imaging. Currently, there are more than 380 full-body scanners in 68 airports nationwide. Both types of machines work by bouncing waves off the passenger and producing an image from the reflection of the waves and their energy. The systems, known as Advanced Imaging Technology (AIT), are capable of seeing underneath clothing, a point that has raised privacy concerns.

After a person is scanned, the image is sent to a computer in an isolated "resolution room" where a TSA officer looks at it. The officer physically assisting the passenger never sees the photo, the TSA explains, and instead communicates with the officer in the back room with a wireless headset. After the passenger is cleared, the photo is automatically deleted by the machine. Officers are prohibited from taking cameras or phones into the resolution room. The millimeter-wave scanners also blur the face of each passenger.

A passenger can decline use of the machine and receive a physical pat-down instead, but those measures have themselves been

Airport security, Page 12

Course 6/7 joint major proposed

If approved in Dec., could start taking students this fall

By Joanna Kao
STAFF REPORTER

A bachelor's degree in computer science and molecular biology was proposed by the Departments of Biology and Electrical Engineering and Computer Science (EECS) at the Nov. 17 faculty meeting. At the faculty meeting, Eric L. Grimson PhD '80, head of the EECS department, said that the EECS faculty "basically unanimously endorsed" the proposal. Commentary at the meeting was so positive that at the end of the discussion, MIT President Susan J. Hockfield asked, "Anyone else want to join the love-fest?"

If the proposal passes at the next faculty meeting in December, it will begin admitting students next fall.

The joint program includes eight courses from the EECS department and 7.5 courses

INSIDE
The 6/7 joint major course requirements, **p. 12**

Joint program, Page 12

IN SHORT

The Spring 2011 course schedule is now available online, at *http://student.mit.edu/catalog/index.cgi.*

Bikes parked on racks between Walker Memorial and Hayden Library are scheduled to be removed today and tomorrow.

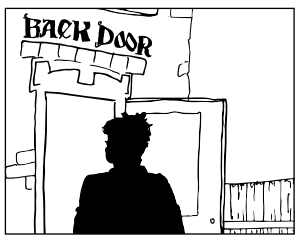
The Student Center will be closed for Thanksgiving, from 11 p.m. Wednesday night until 7 a.m. Friday morning.

UA Finance Board applications for the IAP/Spring 2011 period are due Sunday, Nov. 28, at 9 p.m.

Spring graduate housing allocation closes on Sunday, Nov. 28. The deadline to enter the undergraduate housing switch lottery is on Wednesday, Dec. 1.

THE BANANA-EQUIVALENT DOSE
There are reasons for wanting to opt-out of the new airport x-ray scanners, but safety isn't one of them. **OPN, p. 4**

THE MAGIC IS STILL ALIVE
The latest *Harry Potter* film is the best yet in the series.
ARTS, p. 9



VARIOUS STATES OF UNDRESS
Here's an experiment for you.
CL, p. 11

STEAL MY COMIC
Protect yourself. Learn about tryptophan.
FUN, p. 6

SECTIONS
World & Nation . . . 2
Opinion 4
Fun Pages 6
Arts 9
Campus Life 11
Sports 16

New rules tell insurers: spend more on care

WASHINGTON — The Obama administration issued new federal rules Monday that will require many health insurance companies to spend more on medical care and allocate less to profits, executive compensation, marketing and overhead expenses.

The rules, intended to benefit consumers, vastly expand federal authority to direct the use of premiums collected by companies like Aetna Inc., Humana, UnitedHealth Group Inc. and WellPoint Inc. While some states have had such requirements, Monday's announcement is the first such mandate by the federal government and grows out of the new national health care law.

"Millions of Americans will get better value for their health insurance premium dollar," Kathleen Sebelius, the secretary of health and human services, said in issuing the rules.

Starting next year, she said, insurers in the individual and small-group markets must spend at least 80 percent of their premium revenues on medical care and activities to improve the quality of care. Insurers in the large-group market must spend at least 85 percent of premium dollars for those purposes.

Insurers that do not meet the standards next year will have to pay rebates to consumers, starting in 2012.

—Robert Pear, The New York Times

Stampede in Cambodia leaves hundreds dead

BANGKOK — More than 300 people were killed and hundreds more were injured in a stampede at an annual water festival in Cambodia that the prime minister Tuesday called the nation's worst tragedy since the murderous Khmer Rouge regime more than three decades ago.

Witnesses in Phnom Penh, the capital, said the stampede began Monday night when people panicked in a dense crowd on a small island close to the shore of the Bassac River.

Hundreds of people tried to escape over a short suspension bridge. Many died of suffocation, were crushed underfoot or were electrocuted by loose wires. Many drowned when they leapt from the suspension bridge into the water.

The night was filled with the constant sound of sirens and, at the scene and in the hospital, with the wailing of people discovering dead friends or relatives.

"This is the biggest tragedy in more than 31 years since the Pol Pot regime," Prime Minister Hun Sen said in one of several television announcements through the night.

There was no confirmation of the cause of the stampede, but Information Minister Khieu Kanharith said it began when what he said were one million people became "scared of something."

—Seth Mydans, The New York Times

Instead of company cars, rentals by the hour

Businesses are increasingly adopting car sharing as a cost-saving alternative for employee travel. Workers can step outside their company's front door and into a car they can drive to a business meeting or sales call, and — during breaks or lunch hour — use for errands or shopping.

For companies, car sharing is a way to reduce rental costs, fleet size or use of car livery services. The hourly rentals, with gas, insurance and parking included, can also help businesses bolster their green credentials by offering hybrids as well as electric plug-in cars.

Zipcar, the pioneer of per-trip rentals in the United States, in Cambridge, Mass., has been wooing corporate customers to expand its 400,000-client list. Zipcar has signed up 10,000 company clients under its Zipcar for Business program, said Scott Griffith, the company's chief executive.

—Elizabeth Olson, The New York Times

Founder of Libertarian Party, David Nolan '65 is dead at 66

By Douglas Martin
THE NEW YORK TIMES

David Nolan '65, whose opposition to the Vietnam War and President Richard M. Nixon's wage and price controls impelled him in 1971 to join with a few friends to found the Libertarian Party to fight against government power, died Sunday in Tucson, Ariz. He was 66.

Mark Hinkle, chairman of the party's national committee, said Nolan appeared to have had a heart attack or stroke while driving his car. He lived in Tucson.

Though its membership has always been relatively small, the Libertarian Party became a forceful voice for limiting government regulation of Americans' economic and political lives. It has argued for curbs on police power, lifting abortion restrictions, open immigration and an end to foreign wars.

In the recent elections, long-held Libertarian positions were echoed in the firestorm of concern about deficits and government spending expressed most loudly by Republicans and Tea Party advocates. But Libertarians' dovish views on military involvement and liberal attitudes about abortion veer sharply from those of conservatives. This week, expectedly enough, Libertarians campaigned against airport pat-downs.

The party's mix of conservative and liberal positions reflects an underlying belief that almost all government power is inherently coercive. Nolan came up with a well-known graph, called the Nolan Chart, to explain this phenomenon.

The graph has two axes: one labeled economic freedom and the other called personal freedom. Under Nolan's scheme, Libertarians dwell in the corner of the graph where both kinds of freedom are greatest. His hope was to persuade people to think of politics as a debate between libertarian and authoritarian positions rather than as one between the traditional left and right.

The Libertarians grew to become commonly regarded as the nation's most enduring political party after the Democrats and Republicans.

Nolan had no illusions that the Libertarians would ever become powerful in raw votes. But he hoped the party's participation in elections would simply expose Americans to libertarian views as a means to effect change.

In this month's election, he ran for the U.S. Senate seat in Arizona held by John McCain, a Republican, who easily won re-election. Nolan earlier ran unsuccessfully for an Arizona congressional seat, again to draw attention to the Libertarian agenda.

David Fraser Nolan was born on Nov. 23, 1943, in Washington and grew up in Maryland. He was influenced by the individualist fiction of Robert A. Heinlein and the novels of Ayn Rand. He went to the Massachusetts Institute of Technology with the idea of being an uncompromising architect like Howard Roark, the hero of Rand's "Fountainhead."

After switching his major to political science, his involvement in conservative politics deepened. He was a founding member of MIT Students for Goldwater in 1964, promoting the Republican presidential candidacy of Sen. Barry Goldwater of Arizona, and helped it become the largest chapter in New England.

Taliban leader in secret peace talks was an impostor

By Dexter Filkins and Carlotta Gall
THE NEW YORK TIMES

KABUL, Afghanistan — For months, the secret talks unfolding between Taliban and Afghan leaders to end the war appeared to be showing promise, if only because of the repeated appearance of a certain insurgent leader at one end of the table: Mullah Akhtar Muhammad Mansour, one of the most senior commanders in the Taliban movement.

But now, it turns out, Mansour was apparently not Mansour at all. In an episode that could have been lifted from a spy novel, U.S. and Afghan officials now say that the Afghan man was an impostor and that high-level discussions conducted with the assistance of NATO appear to have achieved little.

"It's not him," said a Western diplomat in Kabul intimately involved in the discussions. "And we gave him a lot of money."

U.S. officials confirmed Monday that they had given up hope that the Afghan was Mansour or even a member of the Taliban leadership.

NATO and Afghan officials said they held three meetings with the man, who traveled from across the border in Pakistan, where Taliban leaders have taken refuge.

The fake Taliban leader even met with President Hamid Karzai, having been flown to Kabul on a NATO aircraft and ushered into the presidential palace, officials said.

The episode underscores the uncertain and even bizarre nature of the atmosphere in which Afghan and U.S. leaders search for ways to bring the nine-year-old U.S.-led war to an end. The leaders of the Taliban are believed to be hiding in Pakistan, possibly with the assistance of the Pakistani government, which receives billions of dollars in U.S. aid.

Many in the Taliban leadership, which is largely made up of barely literate clerics from the countryside, had not been seen in person by U.S., NATO or Afghan officials.

Doubts were raised about the man claiming to be Mansour — who by some accounts is the second-ranking official in the Taliban, behind only the founder, Mullah Mohammed Omar — after the third meeting, held in the southern Afghan city of Kandahar. A man who had known Mansour years ago told Afghan officials that the man at the table did not resemble him.

As recently as last month, U.S. and Afghan officials held high hopes for the talks. Senior U.S. officials, including Gen. David H. Petraeus, said the talks indicated that Taliban leaders, whose rank-and-file fighters are under extraordinary pressure from the U.S.-led offensive, were at least willing to discuss an end to the war.

WEATHER

Getting colder, but no snow for this week

By Roman Kowch
STAFF METEOROLOGIST

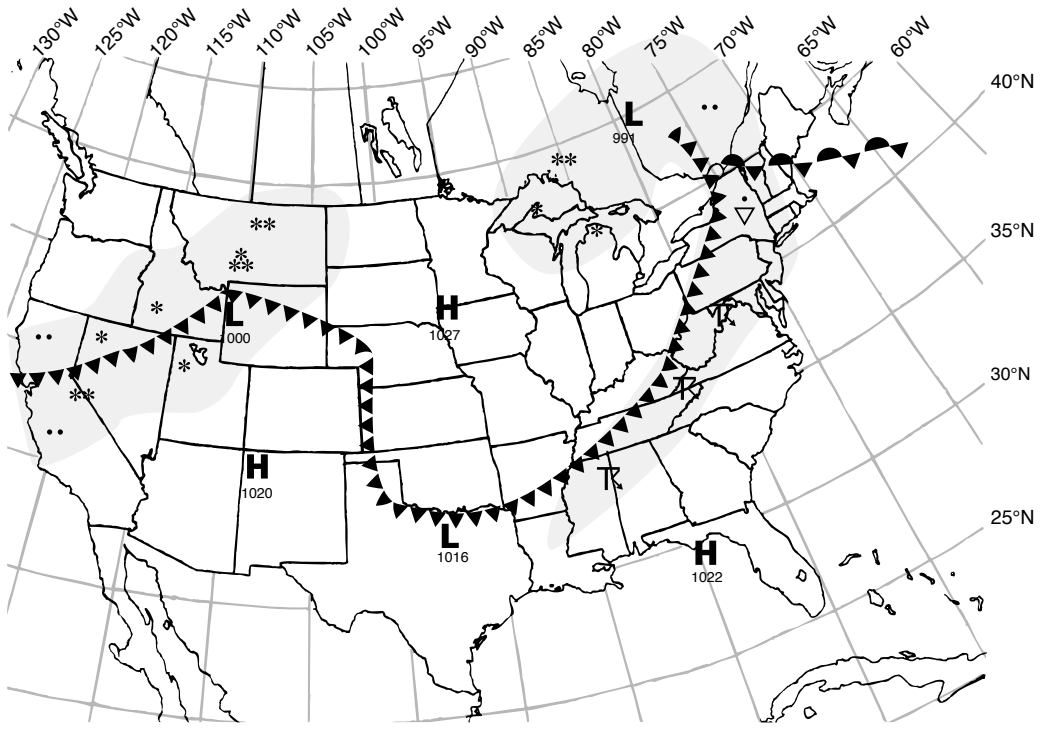
The eastern half of the U.S. is lucky to escape the weather on its neighboring side. From the Rockies to the Pacific Ocean, snow is piling up in many areas. Not only are many areas getting snowed in, but winds are howling as a vigorous storm system pushes through the Northwest.

Closer to us, in the northern Midwest, another storm is deepening and should drop frozen precipitation through tomorrow. Unfortunately, the current storm in the West will "greet" the Midwest with unsettled weather by Thanksgiving.

Despite the messy weather in those regions, Boston will escape the frozen stuff this week. A cold front will cross the area tonight, sweeping out today's warmer air mass. Sunny skies and gusty winds will arrive on Wednesday, with fair holiday conditions shaping up for the region. Jackets will be needed after today!

Extended Forecast

Today: Cloudy. Slight chance of showers. High 63°F (17°C). Southwest wind at 10 mph, gusting to 20 mph.
Tonight: Gradual clearing. Low 35°F (2°C). West wind at 15 mph.
Tomorrow: Sunny. High 45°F (7°C). Breezy northwest wind at 20 mph, gusting to 35 mph.
Thursday: Mostly sunny. High 47°F (8°C). Low 29°F (-2°C).
Friday: Rain likely. Highs in the upper 40s (7-9°C). Lows in the upper 30s (2-4°C).



Situation for Noon Eastern Time, Tuesday, November 23, 2010

Weather Systems	Weather Fronts	Precipitation Symbols			Other Symbols
			Snow	Rain	
H High Pressure	Trough	Showers	*	▽	Fog
L Low Pressure	Warm Front	Light	*	•	Thunderstorm
§ Hurricane	Cold Front	Moderate	**	••	Haze
	Stationary Front	Heavy	⁂	∴	

Compiled by MIT Meteorology Staff and *The Tech*

Some suggest U.S. look at Israeli airport screening

By Helene Cooper
THE NEW YORK TIMES

WASHINGTON — Amid the uproar that airport screenings have become too intrusive, some Americans are now asking why the United States cannot do it like the Israelis.

Rep. John L. Mica, R-Fla., a critic of the Obama administration's new screening methods, says the Transportation Security Administration should look at the process in Israel, which uses early detection techniques at airports. An editorial in *The Washington Times* last week praised El Al, the Israeli national airline, as employing the "smarter approach" of using "sophisticated intelligence analysis which allows them to predict which travelers constitute a possible threat and which do not."

As it turns out, the security methods employed by Israel's Shin Bet security service at Ben-Gurion International Airport in Tel Aviv are frequently stricter and more intrusive than the full-body scanners and pat-downs that U.S. officials put into place Nov. 1, said security analysts and the travelers who regularly show up at the Ben-Gurion four hours before their flights for screening.

At Ben-Gurion, some passengers have been searched so thoroughly that they have had to walk through the terminals, the gates and up to the doors of their planes with no handbags, wallets or even shoes.

The Israeli approach highlights the difficult balance faced by the Obama administration as it tries to address terror threats without unduly alienating the people it is trying to protect. The Israeli system relies on steps that would be likely to provoke U.S. opposition on civil liberties grounds: collecting detailed information about passengers before they fly. Besides, Israel has only two airports and 50 flights a day, compared with 450 airports and thousands of daily flights in the United States.

The administration argues that by focusing on the search for weapons — in contrast to the Israelis, who focus on finding terrorists — the United States is mounting a valuable and necessary last line of defense without undermining civil liberties. The multiethnic U.S. population makes it more difficult here than in Israel to profile possible terrorists, experts say, leaving officials with little choice but to screen passengers carefully for illicit items.

"If you say at the highest level of generality that the American system is looking for weapons and the Israelis are looking for terrorists, obviously we would be better off looking for terrorists, because then we would spare ourselves the silly indignities we imposed on ourselves because of our civil liberties laws," said Stewart Baker, a former official with the Department of Homeland Security.

"But we tried that, tried doing security checks on passengers, and a left-right coalition said 'You can't trust the government with this.'"

Baker was referring to several proposals for advanced screening that were scrapped during the Bush administration. One plan would have involved checking credit records and criminal histories, along with checking whether passengers were on terrorism watch lists. Based on results, each traveler would have been assigned a risk level. Those deemed dangerous would have been barred from flights.

FBI raids hedge fund offices in Wall Street trading inquiry

By Peter Lattman and Azam Ahmed
THE NEW YORK TIMES

FBI agents raided the offices of three hedge funds Monday, the government's latest salvo in an escalating investigation into insider trading on Wall Street.

Two of the hedge funds, Level Global Investors of New York and Diamondback Capital Management of Stamford, Conn., are controlled by alumni of SAC Capital Advisors, the Greenwich, Conn., hedge fund colossus run by billionaire Steven A. Cohen, who is known for his stellar returns and uncanny trading talents.

The third firm, Loch Capital Management, is a Boston hedge fund focused on technology investments.

More searches could be executed in the coming days, according to a person briefed on the investigation who spoke only on the condition of anonymity.

"We are conducting court-authorized search warrants as part of an ongoing investigation," said Richard Kolko, a supervisory special agent at the FBI's New York office. "The matter is sealed. We have no further comment."

No one at the firms and neither Cohen nor the SAC has been accused of any wrongdoing. An SAC spokesman declined to comment.

A spokesman for Level Global confirmed that FBI agents visited the fund's offices and said that the company was cooperating fully with authorities. A Diamondback spokesman said the firm received an FBI inquiry and was voluntarily cooperating.

A lawyer for Loch Capital did not return telephone calls and e-mails seeking comment.

Taking the aggressive tack of using search warrants to raid the firms' offices, rather than issuing grand jury subpoenas demanding the production of documents, suggests that federal prosecutors are concerned about the destruction of evidence related to possible crimes, lawyers say.

It is also possible that the government has already served these firms with subpoenas, and it is looking to scoop up any remaining documents.

"This guarantees that the government can quickly and securely get its hand on evidence," said Fernando L. Aenlle-Rocha, a lawyer at White & Case and former federal prosecutor who is not involved in the investigation. "Tactics such as this tend to make people at the targets very nervous and may even prompt some employees to speak to government agents."

The FBI raids came after media reports over the weekend that the Justice Department and the Securities and Exchange Commission were readying a round of criminal and civil charges related to insider trading.

This aggressive government tactic is part of a broader investigation of insider trading led by Preet Bharara, the U.S. attorney for Manhattan.

Years after end of Apartheid, affirmative action opens rift

By Celia W. Dugger
THE NEW YORK TIMES

CAPE TOWN — The University of Cape Town was once a citadel of white privilege on the majestic slopes of Devil's Peak. At the height of apartheid, it admitted few black or mixed-race students, and they were barred from campus dormitories, even forbidden to attend medical school postmortems on white corpses.

South Africa's finest university is now resplendently multiracial. But it is also engaged in a searching debate about just how far affirmative action should go to heal the wounds of an oppressive history, echoing similar conflicts in the United States, where half a dozen states have banned the use of racial preferences in admissions to public universities.

"Are we here because we're black or are we here because we're intelligent?" asked Sam Mgobozi, 19, a middle-class black student who attended a first-rate high school in Durban and finds affirmative action offensive, even as he concedes that poor black applicants may still need it.

The University of Cape Town was supposed to have settled this debate last year when its professors — seven out of 10 of them white men — supported a policythat gave admissions preferences based on apartheid racial categories to black, mixed-race and Indian students.

Instead, unease with the current approach has spilled out over the past year in fierce exchanges on newspaper editorial pages and formal debating platforms. Sixteen years after the political ascent of the black majority, the university's dilemma resonates across a society conflicted about how best to achieve racial redress, whether in corporate board rooms or classrooms.

Professor Neville Alexander, a Marxist sociologist who was classified as mixed race under apartheid, has roused the campus debate with the charge that affirmative action betrays the ideals of non-racialism that so many fought and died for during the struggle against apartheid. Alexander, who spent a decade imprisoned on Robben Island with Nelson Mandela, insists that the University of Cape Town, which is public, must resist pressure from the government to use racial benchmarks in determining how well the university is performing.

"The government under apartheid did the same and we told them to go to hell," he said in one standing-room-only campus debate.

Affirmative action's champion on campus is Max Price, the vice chancellor, who was himself detained as an anti-apartheid student activist in the mid-1970s. Price, who grew up as a child of white privilege, contends that preferences based on apartheid's racial classifications provide a means to help those harmed by that system to gain critical educational opportunities.

Virtual healing for the real world

OTTAWA — For more than a decade, a handful of therapists have been using virtual environments to help people to work through phobias, like a fear of heights or of public spaces. But now advances in artificial intelligence and computer modeling are allowing them to take on a wider array of complex social challenges and to gain insight into how people are affected by interactions with virtual humans — or by inhabiting avatars of themselves.

Researchers are populating digital worlds with autonomous, virtual humans that can evoke the same tensions as in real-life encounters. People with social anxiety are struck dumb when asked questions by a virtual stranger. Heavy drinkers feel strong urges to order something from a virtual bartender, while gamblers are drawn to sit down and join a group playing on virtual slot machines. And therapists can advise patients at the very moment those sensations are felt.

In a series of experiments, researchers have shown that people internalize these virtual experiences and their responses to them — with effects that carry over into real life.

The emerging field, called cybertherapy, now has annual conferences and a growing international following of therapists, researchers and others interested improving behavior through the use of simulations. The Canadian military has invested heavily in virtual-reality research; so has the U.S. Army, which has been spending about $4 million annually on programs with computer-generated agents, for training officers and treating post-traumatic stress reactions.

Interacting with a virtual human programmed to be socially sensitive is oddly liberating. The figures are clearly not human; some are balky with language, others mute. Many have a 2-D graphic-arts quality.

—Benedict Carey, The New York Times

Irish debt crisis forces collapse of government

DUBLIN — The Irish government faced imminent collapse Monday, only a day after it signed off on a $100 billion bailout, setting the stage for a new election early next year and injecting the threat of political instability into a European financial crisis that already has markets on edge.

Confronted with high-level defections from his governing coalition, Prime Minister Brian Cowen said he would dissolve the government after passage of the country's crucial 2011 budget early in December.

His announcement capped a grim day for Ireland, as protesters tried to storm the parliament building in Dublin, and Moody's Investors Service, the ratings agency, lowered the rating on Irish debt by several notches.

In agreeing to new elections, Cowen seemed sure to become the first political casualty of the debt crisis in the 16-member euro zone.

The developments sent a chill through financial markets and political circles in the euro zone, where the severe austerity measures imposed to keep the currency union from fracturing have yet to be tested in general elections.

—Landon Thomas Jr., The New York Times

Defenders of earmarks point to needs that would not be met

ST. LOUIS —With their vote last week to support a moratorium on earmarks, House and Senate Republicans are taking aim at a popular target: the much-criticized system for distributing federal money that reflects politicians' clout as much as the merits of projects in their districts.

In doing so, Republicans are hoping to tap into growing public concern about federal spending and stand up to the kind of projects that have become reliable late-night punch lines, like bridges to nowhere, teapot museums and studies of pig odor.

But at a local level, there remain many supporters of earmarks, who argue that they play an important role — solving basic and urgent infrastructure needs in communities — that is often lost in their cartoonish portrayals.

"I don't really care what it's called. — I'm mostly concerned about what the money is going to be used for," said Francis G. Slay, the mayor of St. Louis, whose deteriorating flood-control system along the banks of the Mississippi went unaddressed for years until Sen. Christopher S. Bond, a Republican, accelerated the slow-moving project with help from an earmark.

—A.G. Sulzberger, The New York Times

Agent's loans to poor baseball prospects pose concerns

The company of Scott Boras, baseball's pre-eminent agent, provided tens of thousands of dollars in loans and payments to the families of poor Dominican teenage prospects, according to people with ties to Boras, raising questions about whether the company exploited the prospects and violated the rules of the Major League Baseball Players Association.

The union, which oversees agents and restricts many such transactions because they create a financial tether that can lead to the players becoming indentured, can levy penalties ranging from a fine to revoking an agent's right to represent players, sports law experts said.

"The money obligates them to the agent, gives the agent leverage, and coerces the athlete to do what the agent wants because of fear of foreclosure or other adverse consequences for the athlete or the athlete's family," said Mark S. Levinstein, a prominent sports lawyer who is a partner at the Washington law firm Williams & Connolly.

According to the union's regulations governing agents, loans of more than $500 a year to players and their families are prohibited unless the purpose of the loan is disclosed to the union.

—Michael S. Schmidt, The New York Times

OPINION OPINION

Chairman
Steve Howland '11
Editor in Chief
Jeff Guo '11
Business Manager
Greg Steinbrecher '12
Managing Editor
David M. Templeton '08
Executive Editor
Natasha Plotkin '11

NEWS STAFF

News Editors: John A. Hawkinson '98, Elijah Jordan Turner '11, Robert McQueen '12; **Features Editor:** Pearle Lipinski '12; **Associate News Editors:** Jingyun Fan '12, Maggie Lloyd '12, Jessica J. Pourian '13; **Staff:** Vinayak Ranade '09, Liz Tsai '11, Danielle Gorman '12, Ziwei Hao '12, Jiyeon Baek '13, Margaret Cunniff '13, Joy E. Lee '13, Yuliya Preger '13, Divya Srinivasan '13, Derek Chang '14, Deborah Chen '14, Stan Gill '14, Isabella Wei '14, Leo Zhou '14; **Meteorologists:** Allison A. Wing G, Vince Agard '11, Roman Kowch '12.

PRODUCTION STAFF

Editors: Joanna Kao '13, Connor Kirschbaum '13, Aislyn Schalck '13; **Associate Editor:** Divya Chhabra '13; **Staff:** Judy Hsiang '12, Fareeha Safir '13, Ben S. Frank '14, Stephanie L. Ku '14, Sarah Ritter '14; **Illustrators:** Monica Gallegos '11, Robin L. Dahan '12, Rachel Fong '12.

OPINION STAFF

Editors: Joseph Maurer '12, Ethan Solomon '12; **Staff:** Florence Gallez G, Ronan Killian McGovern G, Holly V. Moeller G, Alejandro Rogers B. G, Gary Shu G, David Weinberg G, Keith A. Yost G, Nina Sinatra '12, Ryan Normandin '13, Andy Liang '14, Nils Molina '14, Mike Veldman '14.

SPORTS STAFF

Editors: David Zhu '12, Russell Spivak '13; **Associate Editor:** Shelley Ackerman '13; **Staff:** Michael Gerhardt '12, Zach Hynes '12, Nydia Ruleman '12, Carlos Greaves '13, Sarah Weir '14.

ARTS STAFF

Editor: Maggie Liu '12; **Associate Editor:** Samuel Markson '12; **Staff:** Sudeep Agarwala G, Bogdan Fedeles G, Joyce Kwan '10, Joanne Y. Shih '10, Tracy Kambara '11, Sun K. Kim '11, Jeff Z. Chen '12, Kathryn Dere '13, Yü Linlin Huang '13, Emily Nardoni '13, Jenny Xie '13.

PHOTOGRAPHY STAFF

Editors: Vibin Kundukulam '11, Jessica Liu '13, Sam Range '13; **Associate Editor:** Elijah Mena '13; **Staff:** David Chen G, Aviv Ovadya G, Sheng-Ying Aithne Pao G, Arthur Petron G, Melissa Renée Schumacher G, Scott Johnston '03, Biyeun Buczyk '10, Sarang Kulkarni '10, William Yee '10, Jasmine Florentine '11, Stephanie Lin '11, Michael Y. McCanna '11, Yuanyu Chen '12, Jason Chiu '12, Nicholas Chornay '12, Rui Luo '12, Meng Heng Touch '12, Aditi Verma '12, Feng Wu '12, Arfa Aijazi '13, Elizabeth D'Arienzo '13, Sunny X. Long '13, Sean Tang '13, Logan P. Williams '13, Jessica L. Wass '14, Andrew Swayze.

CAMPUS LIFE STAFF

Editor: Michael T. Lin '11; **Staff:** Christine Yu '11; **Cartoonists:** Emily Ruppel G, Michael Ciuffo '11, Letitia W. Li '11, Michael Benitez '12.

BUSINESS STAFF

Advertising Managers: Mark Thompson '11, Moya Chin '13; **Operations Manager:** Sherry Yan '11; **Staff:** Wendy Cheng '13, Jennifer Fong '13, Sarine Shahmirian '14.

TECHNOLOGY STAFF

Director: Quentin Smith G.

EDITORS AT LARGE

Contributing Editor: Alison Malouf '12; **Senior Editors:** Austin Chu G, Brian Hemond G, Charles Lin G, Satwiksai Seshasai G, Nick Bushak '10, Caroline Huang '10, S. Balaji Mani '10, Andrea Robles '10, Jessica Witchley '10, Arkajit Dey '11.

ADVISORY BOARD

Paul E. Schindler, Jr. '74, V. Michael Bove '83, Barry S. Surman '84, Robert E. Malchman '85, Deborah A. Levinson '91, Jonathan E. D. Richmond PhD '91, Karen Kaplan '93, Saul Blumenthal '98, Frank Dabek '00, Daniel Ryan Bersak '02, Eric J. Cholankeril '02, Jordan Rubin '02, Nathan Collins SM '03, Keith J. Winstein '03, Akshay R. Patil '04, Tiffany Dohzen '06, Beckett W. Sterner '06, Marissa Vogt '06, Andrew T. Lukmann '07, Zachary Ozer '07, Michael McGraw-Herdeg '08, Omari Stephens '08, Marie Y. Thibault '08, Ricardo Ramirez '09, Nick Semenkovich '09, Angeline Wang '09, B. D. Colen.

PRODUCTION STAFF FOR THIS ISSUE

Editors: Joanna Kao '13, Connor Kirschbaum '13, Aislyn Schalck '13; **Staff:** Fareeha Safir '13.

The Tech (ISSN 0148-9607) is published on Tuesdays and Fridays during the academic year (except during MIT vacations), Wednesdays during January, and monthly during the summer by The Tech, Room W20-483, 84 Massachusetts Avenue, Cambridge, Mass. 02139. Subscriptions are $50.00 per year (third class). **POSTMASTER:** Please send all address changes to our mailing address: The Tech, P.O. Box 397029, Cambridge, Mass. 02139-7029. **TELEPHONE:** Editorial: (617) 253-1541. Business: (617) 258-8324. Facsimile: (617) 258-8226. *Advertising, subscription, and typesetting rates available.* Entire contents © ***2010 The Tech***. *Printed on recycled paper by Mass Web Printing Company.*

LETTERS TO THE EDITOR

Is MIT a 21st century cattle drive?

If the guest column by John Essigmann, Suzanne Flynn, Steven Hall, Dava Newman, and Charles Stewart (*The Tech*, Nov. 16, 2010) is any indication, the role of housemasters has changed dramatically since I was an MIT undergraduate.

There was a time when the MIT administration worked hard to recruit stellar housemasters such as Maggie and Jerry Lettvin (at Bexley), who were dedicated to enriching the lives of the students while providing much needed guidance and support. Perhaps most importantly, the housemasters were valued by both the student *and* the administration because they could be relied on to do everything within reason to advocate for their residents when conflicts arose between residents and the MIT administration. Their advocacy fostered exactly the kind of effective, civil, but vigorous dialogue which helped the Institute find an optimum path forward.

Unfortunately, as reflected in the guest column, the current administration seems to value housemasters who instead function like masters of a cattle drive charged with keeping the herd under control in order to minimize drama while maximizing the value of bringing the herd to market. This is beyond sad — it is disgraceful. These housemasters should be embarrassed to be caught serving as administration propagandists. They should be ashamed to be caught trying to justify the unilateral decrees of

> **There was a time when the administration treated undergraduates as adults. Today, the administration seems to regard them as infantilized cattle.**

a dictatorial administration which, itself, is demonstrably unwilling to consider the legitimate interests of the undergraduates. If the new dining policies which the housemasters are endorsing are so wonderful for the students, why is it necessary to literally ram these policies down their throats?

There was a time when the administration treated undergraduates as adults. Today, the administration seems to regard them as infantilized cattle. There was a time when the administration made an effort to acknowledge and serve the legitimate interests of the undergraduates. Today, the administration seems willing to throw the undergraduates under a bus without thought or care. The previous administration blazed the cattle trail when it decided to dictate where freshmen can and cannot live. The current administration is following up by mandating not only what the cattle should eat, but when and where they must eat it. What will be the next mandate?

There was a time when students were aware of their institutional power and were not afraid to use it (sometimes to excess). There was a time when students would force the administration to immediately replace an administration propagandist masquerading as a housemaster. Today, students seem content to be driven like cattle to the slaughterhouse. Perhaps it is time for the cattle to stampede? Could the new policy succeed if the housing residents organized a boycott of the mandatory dining housing? Would a boycott's disruption encourage significant numbers of prospective freshmen (and their parents) to choose to matriculate elsewhere? Will these questions be answered, or will the undergraduates simply swallow this latest administration insult whole?

Richard Kramer '75

The banana-equivalent dose

This travel season, opt for the full-body scanner

By Keith Yost
STAFF COLUMNIST

Terrorists are stubborn creatures. Even as we leave soft targets across the U.S. unguarded, they continue to target airplanes. It's an obsession, and appropriately, we've dedicated considerable resources to detecting and defeating just these types of attacks.

One such defense we've created is full body scans. These scans use either high frequency radio waves (the waves pass through clothing and other such soft materials at certain wavelengths), or x-rays (which pass through the clothes and scatter off the target).

> **So what is your 0.01 millirem dose from a backscatter x-ray type machine equivalent to? Roughly speaking, it is equal to a banana.**

It's easy to object to these scans. Just as Americans want to reduce the deficit but not cut spending or raise taxes in the process, airline travelers want to travel securely, but not bear any of the burden of providing that security. Unfortunately, we have little choice — either we scan, and thus obtain some chance of stopping a dedicated enemy who has shown shockingly little variety in his modus operandi, or we live our lives at the whims of lunatics.

Whether you object or not, it's moot in the short term. Your choice for air travel this holiday season is this: either you submit to the scan, or you submit to a "enhanced pat down" which is just a few steps removed from a full body groping.

There are two main objections to body scans. The first is privacy. Although body scan images are black and white, too blurry to reveal anatomical detail or facial features, and destroyed after use (the machines physically do not have the capability to store or send images), they are, however abstractly, pictures of naked bodies. Though I personally would feel much more comfortable letting someone take a blurry photo of my body than letting them grope me, perhaps you feel the opposite way. *De gustibus non est disputandum* — have fun being felt up.

The second objection is health concerns. There are some out there who believe the backscatter x-ray type of machine (but not the radio wave type) represents an undue risk to passengers because they use ionizing radiation, which has the potential to cause cancer. Let's put to rest this worry right now.

A backscatter x-ray machine will give you approximately 0.01 millirem of radioactive dose. Let's put that in perspective.

You receive, on average, around 360 millirem of dose per year, just living and breathing on this earth (you might receive twice that if you live in a high altitude place such as Colorado, or spend a lot of time around granite). If you receive a 1000 millirem of dose in a year, the Nuclear Regulatory Commission estimates it will lower your expected lifespan by about 51 days due to increased risk of cancer. A transcontinental flight will increase your annual dose by about 4 millirem — like living in Colorado, being up high reduces the amount of shielding between you and cosmic rays.

So what is your 0.01 millirem dose

equivalent to? Roughly speaking, it is equal to a banana.

Bananas are naturally radioactive, owing to their high levels of potassium. When you eat one, it temporarily raises the amount of potassium in your body, and you get a little bit of dose. In fact, you can get some radiation just sitting next to a crate of bananas. The amount of dose you get from a backscatter x-ray scan is about the same as eating a banana. The risk of death is on par with smoking 1/700th of a cigarette, or spending a third of a second in a canoe.

So if you prefer being groped to having a blurry, black and white photograph of your naked body exist for a few seconds on this earth, then by all means, tell airport security you want the full treatment. Otherwise, save the employees of the TSA, your fellow travelers, and yourself a great deal of time and just go through the damn scanner already.

OPINION POLICY

Editorials are the official opinion of *The Tech*. They are written by the editorial board, which consists of Chairman Steve Howland, Editor in Chief Jeff Guo, Managing Editor David M. Templeton, Executive Editor Natasha Plotkin, Opinion Editors Joseph Maurer and Ethan Solomon, Advisory Board member Andrew T. Lukmann, and Opinion Staff members Nina Sinatra and Ryan Normandin.

Dissents are the signed opinions of editorial board members choosing to publish their disagreement with the editorial.

Letters to the editor, **columns**, and **editorial cartoons** are written by individuals and represent the opinion of the author, not necessarily that of the newspaper. Electronic submissions are encouraged and should be sent to *letters@tech.mit.edu*. Hard copy submissions should be addressed to The Tech, P.O. Box 397029, Cambridge, Mass. 02139-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the date of publication.

Letters, columns, and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. *The Tech* reserves the right to edit or condense letters; shorter letters will be given higher priority. Once submitted, all letters become property of *The Tech*, and will not be returned. Letters, columns, and cartoons may also be posted on *The Tech*'s Web site and/or printed or published in any other format or medium now known or later that becomes known. *The Tech* makes no commitment to publish all the letters received.

Guest columns are opinion articles submitted by members of the MIT or local community.

TO REACH US

The Tech's telephone number is (617) 253-1541. E-mail is the easiest way to reach any member of our staff. If you are unsure whom to contact, send mail to *general@tech.mit.edu*, and it will be directed to the appropriate person. You can reach the editor in chief by e-mailing *eic@tech.mit.edu*. Please send press releases, requests for coverage, and information about errors that call for correction to *news@tech.mit.edu*. Letters to the editor should be sent to *letters@tech.mit.edu*. The Tech can be found on the World Wide Web at *http://tech.mit.edu*.

Of cars and ditches

Government Motors should be sold immediately for whatever price we can get

By Keith Yost
STAFF COLUMNIST

There's a story Obama liked to tell on the campaign trail: Republicans drive a car into a ditch, and then hand the keys to Democrats. Democrats work and work to get the car out of the ditch while Republicans sun themselves. Then, once Democrats finally get the car out of the ditch, there's a tap on their shoulder: it's the Republicans, and they want the keys back. The car is the economy. Or the nation. And there are Slurpees involved, I think. But the moral of the story is that you shouldn't give the car keys to Republicans, else they'll run us all into a ditch.

Great story. But I've got a better one. General Motors drives a car into a ditch. Then they go to Democrats, and sell them the now worthless car as if it were new. The Democrats get down into the ditch and start pimping it out. They buy it a fresh coat of paint. They put on some spinning rims. They install a TV. And as they stand over the ravine, grinning imbecilically at the broken wreckage below, they get a tap on their shoulder. It's the Republicans; they want the credit card back. Like Obama's story, mine has a simple moral: if you'd left the credit card with Republicans, they wouldn't have bought a totaled car in the first place.

General Motors drives a car into a ditch. Then they go to Democrats, and sell them the now worthless car as if it were new.

On November 18th, the New General Motors made an initial public offering, (IPO) and the U.S. government took advantage of the occasion to sell a little less than half of its 60.8 percent stake in the company. The price of the stock was about a third less of what was necessary for the government to break even on the deal, and there is virtually zero expectation that the price will rise enough to return the taxpayer money that was spent buying the company... yet Obama used the occasion to sound a triumphant "I told you so" to the legions of economists who had said he was crazy to purchase the bankrupt car company in the first place.

It's not the first time that Democrats have tried to spin news about GM. Back in April of this year, you may remember Democrats dancing as the CEO of Old GM, Ed Whitacre, proudly told the Wall Street Journal: "We're paying back — in full, with interest, years ahead of schedule — loans made to help fund the new GM."

At the time, observers wondered how GM, which had lost 4.3 billion dollars in the second half of 2009, could pay off its debt to the government.

In reality, GM hadn't really lessened its debt to the U.S. government at all — the reason they "paid off" the loan was that if they did so, they would then be eligible to tap into $13.4 billion dollars of "working capital" that the government had offered to loan it. They weren't paying back the loan — they were doubling the size of it.

And of course, this obscures the fact that most of the financial assistance the government gave was not given in the form of loans, but as a direct investment. Using TARP funds intended for the banking sector, the Obama Administration has actually committed $82 billion to the U.S. automotive sector, of which they are still expected to lose an estimated $15 to 34 billion.

Even this amount understates the money that the government has sunk into fixing GM. As part of the restructuring process, GM debt holders legally should have had first claim on the company's assets. Instead, Obama all but wiped them out and divvied up their property between the federal government and the auto unions, giving the U.S. government a 61 percent stake in the new GM, unions a 20 percent stake, and the Canadian government an 11.7 percent stake (our friends from the north loaned $1.4 billion to GM and gave another $8.1b in direct funds). The poor schmucks who should have owned GM now have less than a 9 percent share, and will never be made whole.

Even after stealing such a huge amount from bondholders, the U.S. government is still set to clear a loss on the whole ordeal. It's clear the markets continue to think GM is a lemon: their bonds are rated as junk. It's likely the only reason the IPO got as high a price as it did was because the market believes the government will act as a stop-loss — if GM turns up another few billion in losses next quarter, an embarrassed Uncle Sam will be there to give them more money.

If GM turns up another few billion in losses next quarter, an embarrassed Uncle Sam will be there to give them more money.

Despite these losses, and the risk of future losses, perhaps there are some in government who would rather hold on to the car company forever. After all, such a thing can be politically useful, as Rep. Barney Frank demonstrated when he placed a phone call to Washington and got GM to reverse its decision to lay off some employees from his district.

And it's not just autoworkers whose votes can now be bought under the guise of economic recovery. Government Motors has been the wet dream of many an environmentalist — finally, they can force car makers to go green without having to futz around with clunky regulations. The Thomas Friedman types must also be ecstatic — haven't they long believed that the key to improving American "competitiveness" is to put a gun to an automaker's head and tell him to produce hybrid cars?

If there is one high point in this nightmare, it has to be the 2011 Chevy Volt. By giving the Tom Friedmans of this world a car company of their own, we've been given a chance to see what kind of monstrosity they would create. GM's new hybrid car does not disappoint.

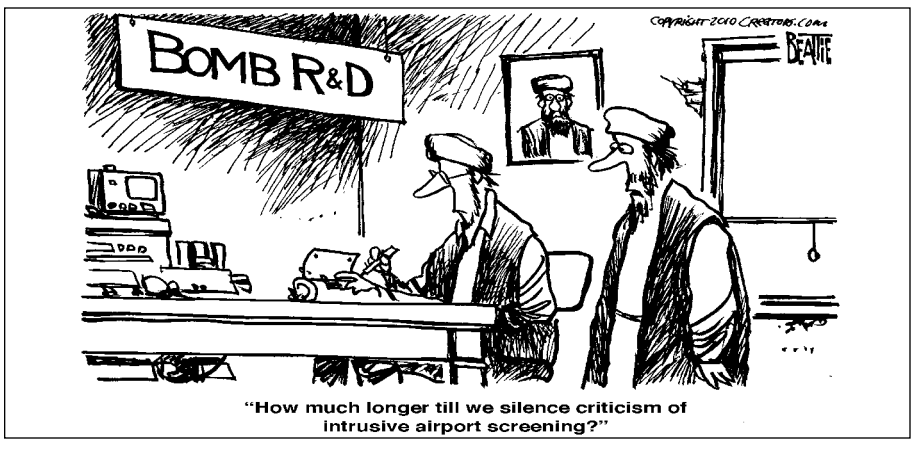
The Volt is an expensive car. Its base price is $41,000, but it shares its platform with the $17,000 Chevy Cruze. In terms of features, it is the equivalent of a $20,000 gas-powered vehicle.

As an electric car, it is inferior in nearly every regard to the Nissan Leaf, which will retail at $33,000. Even with the government offering a $7500 subsidy to Volt buyers, it is hard to see the Volt being sold in large numbers, which might be good, given some estimates that say even at $41,000, the Volt is being sold at a loss.

GM hopes to market the car in California, where hybrid cars are highly treasured. Californians however will discover, as one consumer review company did, that the Volt has an interesting "feature." Edmunds found that the Chevy Volt required 39 kilowatt-hours to travel 100 miles, but only 3.22 gallons of gasoline to travel the same distance. In California, where electricity prices are $0.34 per kWh, and gas prices are $3.11 per gallon, this means it is cheaper for Volt owners to run their car on gasoline than electricity. The disparity is so large that it would take a 45 cent tax on gasoline to reach parity. To put that in perspective, that would be the equivalent of slapping a $51-per-ton-of-CO2 tax on carbon emissions, an amount that is well in excess of the carbon prices charged by countries with cap-and-trade regulations.

We put a gun to GM's head. We told them to make a hybrid car. But even if we taxed carbon as Europe does, and Obama pulled an Oprah and gave the Chevy Volt to every person in California, they would still choose to run the car on gas.

Government Motors indeed. Only Obama could look at this ditch-stuck car and be petulant when the American people ask him to give it back.



TAKE ON A COLUMNIST

Think you have what it takes to tackle a Wall Street Journal argument?

Write for *The Tech*'s Opinion section.

We're looking for writers who want to talk about issues of national and local importance.

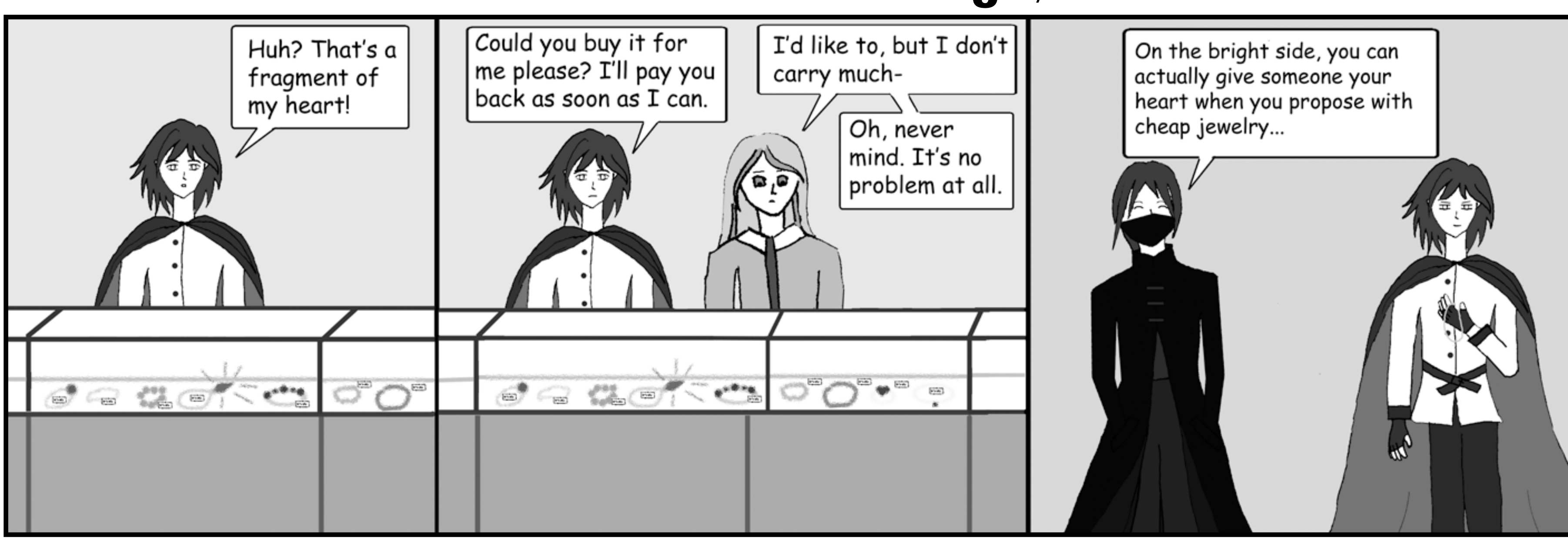
Interested or have an idea?

E-mail opinion@tech.mit.edu

Fun

Steal My Comic by Michael Ciuffo

Somewhere on the Search for Meaning by Letitia Li



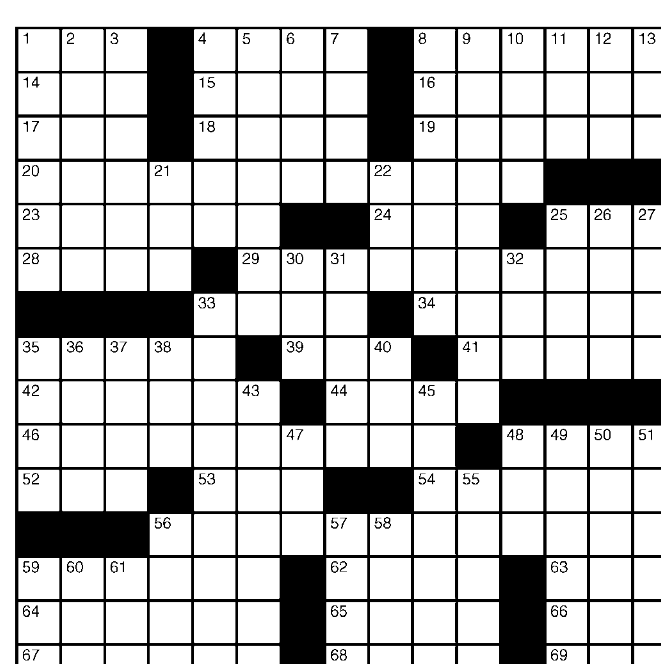
[redacted]

Crossword Puzzle

Solution, page 10

ACROSS
1 Math proof letters
4 Tritons' sch.
8 Preoccupy completely
14 Verse starter?
15 Lanai neighbor
16 Having a tapering end
17 Upper limb
18 Tournament passes
19 Matriculate
20 Feeling okay?
23 Luke's Jedi mentor
24 Old-time Olds
25 Fuss
28 Understands
29 Occasionally
33 Glum drop
34 Like a matinee idol
35 Like nostalgic fashions
39 Watch pocket
41 Remove from packaging
42 Canadian capital
44 Linguist Chomsky
46 Rolling Stones hit
48 Key with 3 sharps
52 Aug. follower
53 QVC rival
54 Court decree
56 Farmers' outing contest
59 #1 hit by the Fleetwoods
62 Purim's month
63 Exist
64 String of words
65 Soda brand
66 Hair stiffener
67 Charlotte pro
68 C. Everett __
69 Snaky letter

DOWN
1 Cape Cod clam
2 Don vestments
3 Chowderhead
4 Eclipse shadow
5 Hot pepper
6 Mutton fat
7 Menu entree
8 Unrestricted
9 Beatnik instrument
10 British knights
11 British musician Brian
12 MO town
13 Part of a wd.
21 Sounds of disappointment
22 Pension $
25 Pequod captain
26 Preview tape
27 Cameo stone
30 Doofus
31 Injustice
32 Bo's number
33 Brownstone, perhaps
35 Steals from
36 French 101 verb
37 Roof with removable panels
38 Lacking experience
40 Nonvenomous snake
43 Comparable to candy or kisses
45 Plains tribe
47 Chapel Hill sch.
48 Volcanic dust
49 Desert illusion
50 Portuguese islands



51 Gems
55 Get into your birthday suit?
56 Family group
57 Slugger Aaron
58 Logical start?
59 Radar gun meas.
60 Greek letter
61 It's c-c-c-cold!

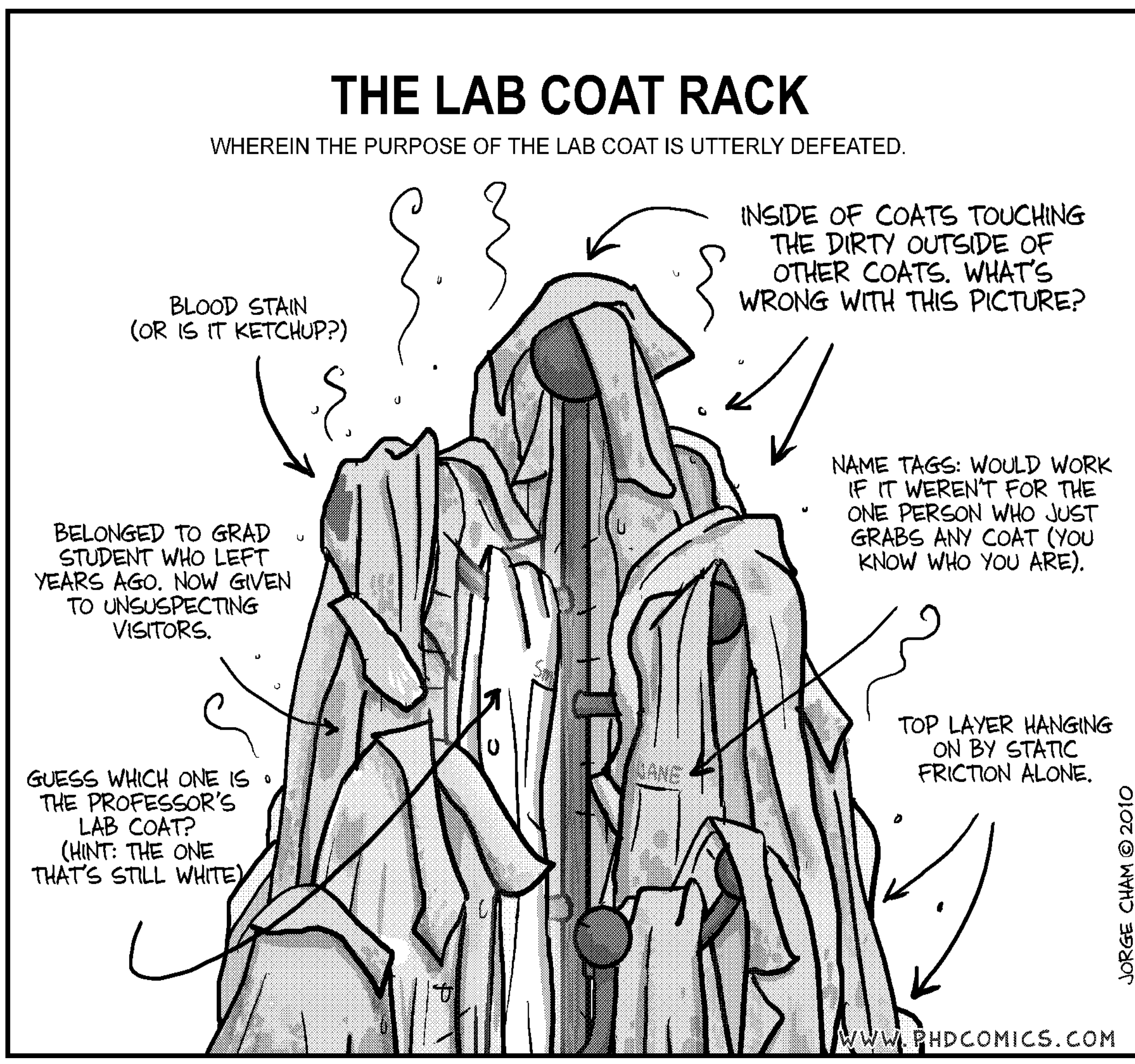
Prognostication

Penny Arcade .com

by Jerry Holkins
and Mike Krahulik

PhD
PILED HIGHER AND DEEPER

by Jorge Cham



Easy Sudoku

Solution, page 13

5	3			9				
7		2	6				1	9
	9		3		1	7		
	7	8				2		
		4				5	7	
		9	1		5		6	
6	4				3	1		7
				4			9	5

Hard Sudoku

Solution, page 13

			4	9				
9	5					7	4	
4	6			7	5		2	
						9	3	
7	8						1	4
	9	4						
	1		5	3			9	2
	4	2					7	6
				4	2			

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Ring innovation.

James Allen®

Visit **jamesallen.com** and experience beautiful engagement rings in stunning 3D. Our exclusive 3HD™ Player sets the new standard for online shopping — nothing even comes close. Top-quality engagement rings and fine jewelry for less than you imagine. Discover why James Allen is the premier online retailer for all things diamond.

FILM REVIEW

Magic is still alive

The long-awaited *Harry Potter 7.1* is here!

By Yü Linlin Huang
STAFF WRITER

★★★★☆

Harry Potter and the Deathly Hallows, Part 1

Directed by David Yates

Starring Daniel Radcliffe, Emma Watson, and Rupert Grint

Potter fanatics had been counting down to the release of *Harry Potter and the Deathly Hallows* for months; the anticipation was almost too much to bear. On the opening night, throngs of Muggles queued up in theaters, even along sides of streets, in creatively Potter-fied costumes waiting for the clock to strike midnight. Thanks to MIT's student body class organizers, many MIT students were able to view the pre-midnight premiere at Boston Commons Loews theater, making them the envy of the crowds.

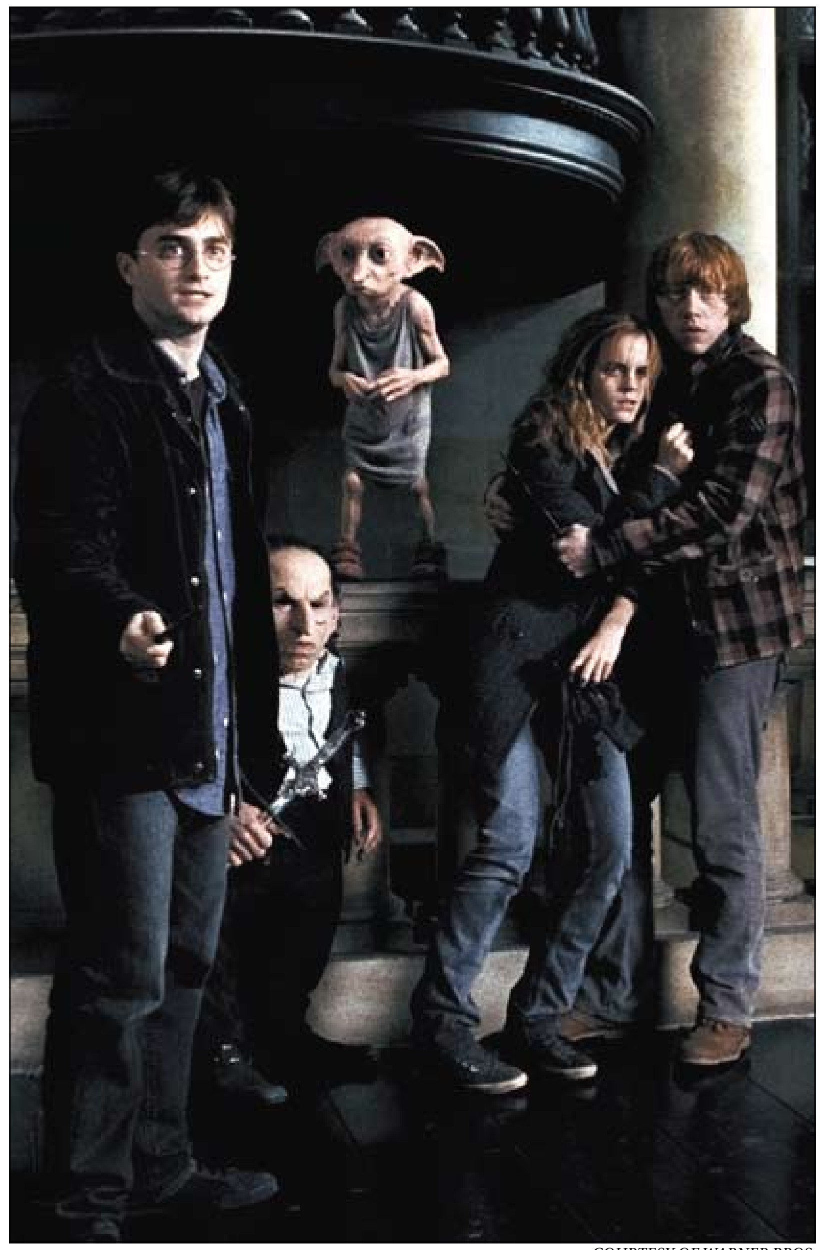
The film does not disappoint. It is saturated with well-planned suspense, several heart-wrenching moments, and lighthearted innuendo. In comparison with the previous six films, it was the most artistic. Instead of dark and eerie shots inside Hogwart's classrooms and hallways, the movie is mostly composed of shots in nature. Adaptation of the storyline from the book is well done for the most part, but avid fans will notice several gaping holes.

For one, leaving out the ghoul from scenes at the Burrow detracts from the development of Ron's character as well as the humor that lightens the intense storyline. The interesting history of Dumbledore and Grindlewald is also missing from the film, leaving out aspects of the original story that helps to develop and explain Dumbledore's character as well as context for the Hallows. To minimize disappointment, it is advised that you do not (re)read the book right beforehand.

Even though the film leaves out some important aspects of the story, it is arguably one of the best of the Potter film series. The humor in the film has evolved from innocent jokes to well-planned innuendos; several times, the entire theater was roaring with laughter. The characters were great, but the romantic sequences still need a bit of work. The actors' portrayal of the romance between Harry and Ginny and Ron and Hermione was awkward at best. (Although, Ginny's trick with the zipper was clever and can be saved for future reference, ladies.) However, the random naked scene in the movie was "steamy," according to many unnamed male friends. Apart from the trio, the adult actors were fantastically well cast. Even though actors like Nick Moran (Scabior) and Peter Mullan (Yaxley) had only seconds in the film, they definitely made the most of them.

In many ways, the release of *Harry Potter and the Deathly Hallows (Part 1)* is akin to an elephant marching into a crowded room: it pushes all else to the periphery. Movies like *Skyline* and *Unstoppable* had only a few showing times at Loews. In just two days, Potter fans helped the movie gross over $125 million in domestic box office on premiere weekend, the most ever in Potter film history.

The second installment of the *Deathly Hallows* will be released on July 15, 2011. It definitely has a lot to live up to, and part one has not even hit the halfway point in the book. There is still a lot to look forward to from the Potter crew.



COURTESY OF WARNER BROS.

Harry Potter (Daniel Radcliffe) and company wait, poised for uncertainty.

COURTESY OF WARNER BROS.

The infamous trio returns older and wiser, to face far greater dangers than before.

FILM REVIEW

The truth behind the housing bubble

Inside Job is an eye-opening documentary about the 2008 financial crisis

By Philipp Diesinger
STAFF WRITER

★★★★★

Inside Job

Directed by Charles Ferguson

Narrated by Matt Damon

The documentary *Inside Job* by former MIT graduate Charles Ferguson '89 explains the background of the global financial crisis. It features profound background research and several interviews with insiders of the financial world, academics and politicians. Matt Damon supported the documentary as narrator.

In 2007, the collapse of the so-called "housing bubble" caused massive problems within the United States banking system and triggered a global financial crisis. This event led to a globally plummeting stock market and several bank bailouts by the U.S. government.

It is the worst financial crisis since the Great Depression in the 1930s and has caused a loss of 30 million jobs worldwide according to International Monetary Fund director Dominique Strauss-Kahn. The unimaginable gravity of this crisis is humorously expressed in full title of Charles Ferguson's film, which is *Inside Job: The Film That Cost Over $20,000,000,000,000 to Make*.

During the opening minutes of the film, Iceland is presented as a case study for the US American financial crisis: Deregulation of the banking sector caused unrestrained speculations that brought the former prosperous country close to a national bankruptcy. Journalist Andri Magnason makes it very clear: "Finance took over and wrecked the place," she says.

The focus of the documentary then shifts to the 2008 bank collapse in the United States to demonstrate that the same problems caused a similar crisis though on a much larger scale in the US, ultimately leading to a global economical crisis.

Inside Job is well structured and soberly narrated. It is divided into six chapters starting with a description of the deregulation of the banking sector in the 1980s ("How We Got Here") to revealing the connections between the crisis and the current Obama government ("Accountability"). Ferguson presents interviews with many insiders of the banking sector, governments or academics and reveals many facts by his smart off-screen enquiries. Furthermore, *Inside Job* uses examples of previous financial crises to demonstrate that the 2008 banking collapse was not only predictable but also avoidable. But Ferguson never blames capitalism or starts any kind of ideological debate. He himself made his money as an Internet software entrepreneur and profited from our financial system.

Inside Job is not a dry documentary or economics lecture, but fortunately, it is not a sensational but doubt-worthy Michael Moore-style documentary either. Instead, Ferguson stays entirely factual with almost scientific accuracy throughout the entire movie. He lets the facts build up and as the absurdity of the situation that caused the financial meltdown becomes clearer and clearer, it actually triggers many unbelieving laughs in the audience.

Inside Job is not only well investigated — it is also very well crafted. The film — despite being a documentary — is much more entertaining and captivating than many of the latest blockbusters. It will make you laugh, rage with anger, shake your head and even inspire you by laying out the truths behind the financial jargon .

Inside Job teaches the backgrounds of one of the major historical events of the past decade in a very entertaining way. You learn about credit default swaps and other financial innovations that led to the market's downfall.

Ferguson presents a masterpiece documentary and thus a great example for the power of cinema. This eye-opening documentary is a must see for our generation and hopefully a wake-up call as well.

ARTS ARTS ARTS ARTS ARTS ARTS ARTS ARTS ARTS ARTS

THEATRE REVIEW

A grab bag of 30 bite-size treats

Too Much Light holds attention well, has ups and downs

By Michael T. Lin
CAMPUS LIFE EDITOR

The MIT Dramashop's production of *Too Much Light Makes The Baby Go Blind* opened and closed this past weekend. If the title of the show strikes you as suspiciously familiar, it's because Dramashop also put forward a production of *Too Much Light* in 2009.

Mind you, that's not to be taken for laziness — *TMLMTBGB*, as the show is commonly and understandably abbreviated, is unusual in that the lineup of 30 mini-plays that constitute the show is constantly rotating, meaning that from year to year and week to week, the show will be slightly to extremely different. Moreover, the order in which the plays are performed is decided based on numbers shouted to the performers, which means that each performance is different (though not always appreciably so), even on a given weekend, is different from the last.

The distinctive format and conventions of *TMLMTBGB* was developed by Greg Allen and his Chicago-based theatre group, the Neo–Futurists, in 1988. The constant changes to the show's content accounts for its longevity, and the play is ideal for those of us with short attention spans and little free time. The show is 30 plays performed in an hour, and the performances stop at the hour mark regardless of whether all of the plays have finished, so although this means there is a chance of not getting to see all of the plays you wanted, at least you don't have to worry about not getting home at a reasonable hour.

> **Too Much Light strikes me as the theatrical equivalent of picking a gadget at random from Batman's utility belt.**

The plays themselves vary in tone from ultra–dramatic dramatic monologue, hypermodern performance art, and fourth–wall breaking metahumor. The show in its current incarnation seems to lean towards the humorous, although there are a few plays of high–gravity social commentary, and I haven't crunched the numbers on how many there are of each.

There are also several plays with audience participation, like a more adult version of a Disney theme park stage show. Some of the things seen in this year's production, by necessity given in no particular order: a mummy of bubble–wrap; an overly–elaborate set brought in, then moved off, in the space of about sixty seconds; a sandwich of whipped cream between to bare male chests; the most painfully one–sided game show since Jennings–era *Jeopardy!*; a lamentation of mediocrity over a game of "Red Light, Green Light"; and a double–handed flying balloon assassination.

The acting quality was very solid, as far as I could tell. One might argue that not knowing which of their various roles they will be called upon to perform next adds to the challenge for the actors, although few of the plays are long enough or characters complex enough to establish lengthy character arcs.

Unfortunately, as much as I'd like to recommend *Too Much Light*, the show only played this past weekend at MIT. Incarnations of the show are currently playing weekends in Chicago and New York, for anyone visiting those areas over break. On the off–chance that Dramashop opts to perform the show again next year, *Too Much Light Makes The Baby Go Blind* is a neatly compartmentalized show that's a good pick for a weekend theatre excursion, even (or perhaps especially) under a heavy workload, so long as you have an hour and a half to spare.

Too Much Light strikes me as the theatrical equivalent of picking a gadget at random from Batman's utility belt — there's a play for every conceivable mood or situation (except maybe social conservatives with a large personal bubble and small comfort zone), plays range from the very pointed to the absolutely bizarre, and there's always the slight chance that something will explode in your face, but that's part of the fun.

Royal Bengal
Boston's only authentic Bengali Cuisine restaurant
313 Mass. Ave., Cambridge
(617) 491-1988
T: Red Line, Bus #1 – Central Square
Open Daily Except Monday
11:30 am – 11:30 pm
Lunch Buffet $7.95
Reasonably Priced Dinners
10% Discount on $15 (or more) order with MIT ID.
Free delivery for orders over $10.
Take-out, platters, and catering available.
http://www.royalbengalrestaurant.com/

SPERM DONORS
Earn up to $1200 per month
Invest minimal time
Make a real difference in the lives of families
Receive free health and genetic screenings
APPLY ONLINE:
SPERMBANK.com
- convenient Cambridge location

Bose is pleased to offer special savings for all students, employees and retirees of M.I.T.

Receive savings on most Bose® products, including the acclaimed Wave® music system, home entertainment systems, headphones, and solutions for today's most popular portable music devices.

Bose Wave® music system – SoundLink®

QuietComfort 15®
Acoustic Noise Cancelling® headphones

Computer MusicMonitor®

Please direct all inquiries to the "M.I.T. Purchase Program."

1-800-298-BOSE
(2673)
BOSE®
Better sound through research®
©2010 Bose Corporation. Patent rights issued and/or pending. Delivery is subject to product availability.

Are you a tetris ninja?
Use your powers for good!
...by joining the production department at The Tech!
join@tech.mit.edu

LEGAL COUNSEL
MIT students, family, employers and start-ups seeking U.S. legal counsel, campus or office consultation. Call:
James Dennis Leary, Esq.
321-544-0012

PIZZA PAPA JOHN'S
Better Ingredients
Better Pizza.
617-904-7272
www.papajohnsmit.com
Open till 3am, 7 days
We accept MIT Tech Cash

Solution to Crossword
from page 6

Q	E	D	■	U	C	S	D	■	O	B	S	E	S	S
U	N	I	■	M	A	U	I	■	P	O	I	N	T	Y
A	R	M	■	B	Y	E	S	■	E	N	R	O	L	L
H	O	W	A	R	E	T	H	I	N	G	S	■	■	■
O	B	I	W	A	N	■	■	R	E	O	■	A	D	O
G	E	T	S	■	N	O	W	A	N	D	T	H	E	N
■	■	■	■	T	E	A	R	■	D	R	E	A	M	Y
R	E	T	R	O	■	F	O	B	■	U	N	B	O	X
O	T	T	A	W	A	■	N	O	A	M	■	■	■	■
B	R	O	W	N	S	U	G	A	R	■	A	M	A	J
S	E	P	■	H	S	N	■	■	A	S	S	I	Z	E
■	■	■	C	O	W	C	H	I	P	T	H	R	O	W
M	R	B	L	U	E	■	A	D	A	R	■	A	R	E
P	H	R	A	S	E	■	N	E	H	I	■	G	E	L
H	O	R	N	E	T	■	K	O	O	P	■	E	S	S

VARIOUS STATES OF UNDRESS

What what (in the butt)

Tips for approaching from the rear

By M.

I'm making no bones about this: My sex life has been pretty sucktastic lately. Two horrible hookups at the beginning of the semester did a lot to deter me from any carnal pursuits, at least for a while.

But a very fetching fellow walked me home and into my bed recently and really turned things around. I sat in bed the next morning wondering what made this encounter so beautiful, and then the thought suddenly hit me like a sack of bricks, like a finger up the ass...

Crap, I just gave myself away. Alright, kids, we're going anal this week.

This dude dared to go where only one had gone before and stroked my butthole, which earned him the ranking of second best lay. Based on the two data points, I'm going to extrapolate and say there's a very strong correlation there between willingness to probe my ass and how high they rank on my list.

To whatever degree you choose to pursue anal exploration, there is a lot to be said for those who dare. It's an indication of what I look for in a good lover: Adventurous and not easily grossed out, the Bear Grylls of the sack in a world full of Dora the Explorers.

Now, I understand if you consider your butt a one-way street and I won't shame you for it. Different strokes for different folks and all that. But no harm in trying, right? So listen up.

Broach the subject with some finesse.

Do NOT, under any circumstances, go for Surprise Butt Sex — nobody likes unannounced peen or fingers up the ass. Better than SBS is the "sneak up on it" approach: Slowly move your hand closer to the region, let your intentions be known. Someone who is 100 percent against butt play will quickly slap that hand away, but if they're keen on the idea, they may let you continue your pursuit. I like this approach because the rejection is soft and does not kill the mood. If you're a bit more daring, try asking. "Hey, can I delight you in some butt play?" works just dandy.

Minimize friction.

In case you were not aware, the butt is not self-lubricating, and to top it off, the skin there is quite prone to shearing.

Get a good lube and use it liberally — and by "liberally" I mean that you need to slather that stuff on like gravy on potatoes. You should try a few varieties to see what works best — Medical gives it out for free!

Silicone-based makes a good starting-off point. They don't dry out and are safe to use with condoms, which brings me to the next point...

Use condoms.

Most people use them to avoid STDs and babies, but they're great for keeping things clean on both ends. Make sure you change condoms if you're switching from anal to vaginal sex.

Also, that thing about the butt tearing easily? Yeah, that makes it an easy target for HIV infection. 'Nuff said.

Keep it clean.

I'd like to take this moment to remind you of the fact that the anus is the body's preferred method of waste disposal and, as such, crap may get caught in the way. If you want to make it more inviting to your partner, make sure things are tidy and there are no dangling bits of toilet paper.

Don't ram it in.

Sounds obvious but plenty of folk forget it. The butt is something that needs to be eased into, so if your goal is to get P in the A, start with an F or two.

ROBIN L. DAHAN—THE TECH

An expert on the subject advises, "If you go slow, you can fit all kinds of gigantic crap up your ass." Um, okay!

Relax.

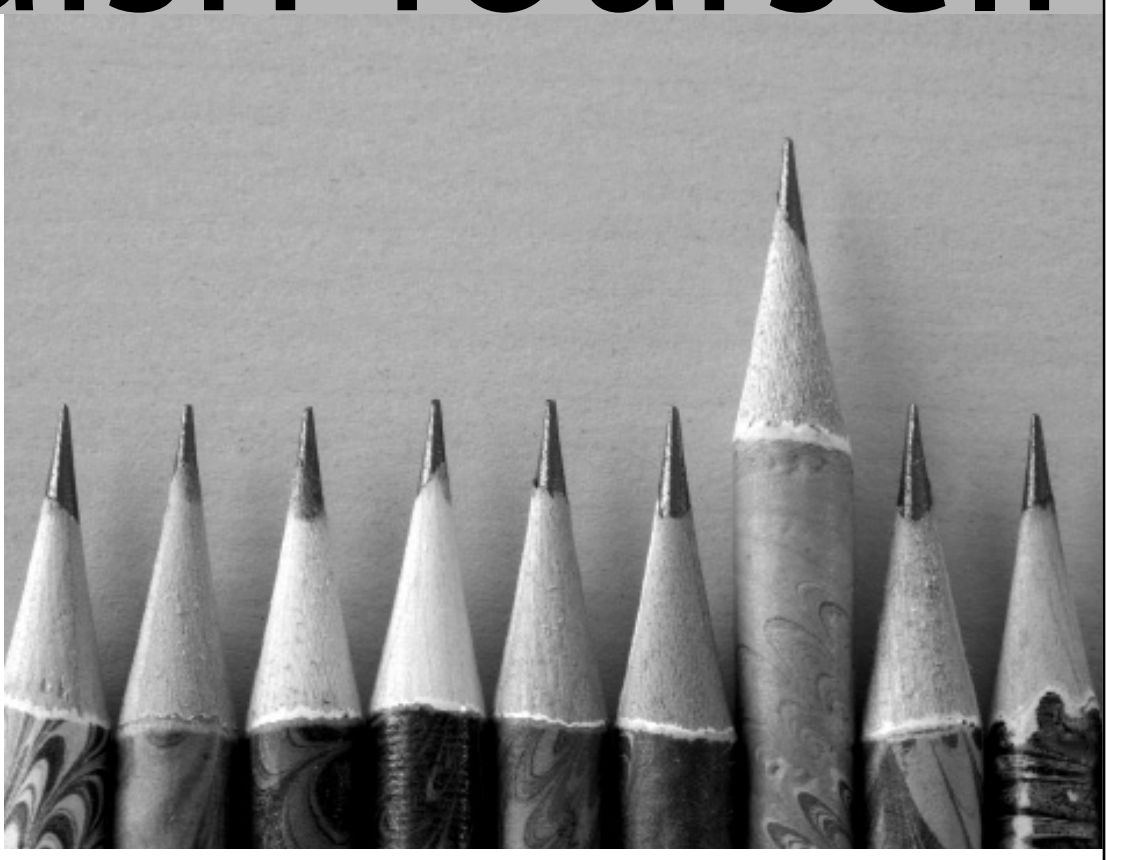
Especially if you're on the receiving end. Stressing leads to clenching up, and clenching up makes it harder to get it in. It's a vicious cycle, peeps. Communicate with your partner, and go at a pace that you are both comfortable with.

If you're a guy, try being on the receiving end.

Get over the taboo. It feels nice. Let your girlfriend try it on you if you've tried it on her.

Lastly, don't feel pressured to take (or give) peen up the ass — it isn't everyone's cup of tea. I, for one, cap things at the digital level. If it doesn't work for you, don't let anyone give you shit for it. But do give it a shot if you're the least bit curious — you may bump into your best lover ever.

Distinguish Yourself as a Burchard Scholar



Expand your intellectual and social horizons.
Meet with other Burchards and MIT faculty each month for a delicious dinner and seminar on topics of the day. Sophomores and Juniors who have shown excellence in some aspect of the humanities, arts, or social sciences are encouraged to apply. Burchards can be majors in any department; no preference is given to HASS majors.

Apply at:
shass.mit.edu/burchard

Sophomores + Juniors—Apply by December 1, 2010

great ideas change the world
SCHOOL OF HUMANITIES, ARTS, & SOCIAL SCIENCES

Computer science and biology major an 'equal partnership'

Both departments interested in promoting the intersection of computation and life sciences

Joint program, from Page 1

from the biology department. "Here you have arguably the best computer science department in the world, and the biology department is probably the best or one of the best quantitatively oriented biology departments," said Chris Kaiser, head of the biology department. "So, in a sense, just by taking off the shelf the courses we already have in these disciplines, we're probably making a program that will be one of the best in the country."

Students will be given an adviser in both departments, but the student can choose which one will have registration signature authority.

"The thing that I'm most happy with and find the most exciting is ... setting this up as an equal partnership between the two departments rather than having a biology track in Course 6 or a CS track in biology," Kaiser said. "The idea is to really marry the two departments and have an equal partnership. This 50/50 partnership between the two departments creates new incentives for biology and Course 6 to teach courses together."

Faculty from both departments have been working on developing this program for the past five years.

"Both biology faculty and CS faculty have been very interested in this area of computational biology for awhile. And there are MIT students who are very alert to new and exciting fields that have been interested as well," Kaiser said. "We knew from the beginning that we were going to be creating something really good for students."

The idea first began at a task force formed to look at general institute requirements (GIRs) about five years ago. According to Kaiser, they found that there were not many programs at MIT that taught the "interfaces between traditional disciplines," and a subgroup of the task force was charged with finding a solution for the problem.

As an example of a joint program solution, Kaiser and Grimson put together a mock-up of a joint degree from courses 6 and 7. Although the mock-up was not embraced by the committee, Kaiser and Grimson liked the idea so much that they decided to continue to develop the idea.

While no surveys or focus groups to poll students about the new proposal have been conducted, the committee is confident of student interest. "For those of us who advise students in this area, we can see it both in our advisees and the enrollment in the various bioinformatics courses that exist. It's become something that we just see so clearly," Kaiser said.

The committee plans on continuing to develop the curriculum using input from students and selected experts from biotechnology companies after getting students in the program. "The idea is to have the students and external consiglieres from companies help us figure out how to build the program, how to grow it," Kaiser said. One example Kaiser gave of how to grow the program was the implementation of the fifth-year master's program (MEng). There is currently no proposal to include a fifth year and students would not be eligible to apply for the existing Course 6 MEng program.

To raise more awareness about the cross-section of biology and computer science, the departments are talking about bringing in people from the biotechnology and pharmaceutical industries. "We're talking about having a series of pizza gatherings in the spring and bringing people in to talk about various sorts of intellectually exciting things that are going on in this area but talk about it in the context of various career things that one could do," Kaiser said.

Bachelor of Science Degree in Computer Science and Molecular Biology Course Requirements

Mathematics and Introductory (3 subjects)

- 18.03: Differential Equations or 18.06: Linear Algebra
- 6.01: Introduction to EECS I
- 6.042: Mathematics for Computer Science

Chemistry (2 subjects)

- 5.12: Organic Chemistry I
- 7.10: Physical Chemistry of Biomolecular Systems or 5.60: Thermodynamics and Kinetics or 20.110: Thermodynamics of Biomolecular Systems or 20.111: Physical Chemistry of Biomolecular Systems

Introductory Laboratory, CI-M#1 (1.5-equivalent subjects)

- 7.02: Introduction to Experimental Biology & Communication

Foundational Computer Science (3 subjects)

- 6.005: Elements of Software Construction
- 6.006: Introduction to Algorithms
- 6.046: Design and Analysis of Algorithms

Foundational Biological Science (3 subjects)

- 7.03: Genetics
- 7.05: General Biochemistry or 5.07: Biological Chemistry I
- 7.06: Cell Biology

Restricted Elective in Computational Biology (1 subject)

- 6.047: Computational Biology: Genomes, Networks, Evolution or 6.581: Foundations of Algorithms and Computational Techniques in Systems Biology or 6.874: Computational Functional Genomics or 6.877: Computational Evolutionary Biology or 7.36: Foundations of Computational and Systems Biology

Restricted Elective in Biology (1 subject)

- 7.20: Human Physiology or 7.23: Immunology or 7.27: Principles of Human Disease or 7.28: Molecular Biology or 7.33: Evolution (new subject motivated in part by anticipation of this program) or others from list.

Advanced Undergraduate Project, CI-M#2 (12 units)

- 6.AUP/6.UAT: Undergraduate Advanced Project

Total requirements beyond GIRs: 186 units (15.5 subjects) with 3 subjects overlapping GIRs.

Overlap of new program with EECS 6-3: 8/14 = 57%

Overlap of new program with Biology: 7.5/12 = 63%

Logan will have staff on hand to guide travelers through security

Body scanners may lead to significant delays this week

Airport security, from Page 1

the subject of controversy due to new rules that have made them more invasive than ever before. TSA employees must now use the front of their hand during the pat-down procedure, checking up between the legs until they meet resistance. Pat-downs also include a breast pat-down for women.

Passengers will only receive a physical pat-down if AIT sees something suspicious on them, they set off a metal detector, or they refuse AIT. Over 99 percent of passengers choose AIT over physical pat-downs and a recent CBS poll shows four out of five Americans support AIT.

Recently the Internet has been aflame with stories of pat-downs gone wrong, complaints about invasion of privacy, and concerns about radiation from the backscatter machines. The TSA says AIT has been reviewed by the Food and Drug Administration, The National Institute of Standards and Technology, and the Johns Hopkins University Applied Physics Laboratory, which have deemed the new technology to be safe. The scans emit an amount of radiation equivalent to that received during two minutes on an airplane, and the millimeter-wave technology is one thousandth as powerful as a cell phone transmission.

A loose campaign against AIT in airports has declared Nov. 24 (the busiest travel day of the year) "National Opt-Out Day." The campaign calls for all air travelers to decline the use of AIT. Declining AIT means a lengthy pat-down and organizers are hoping officials will take notice of the delays resulting from the protest.

To help ease travel frustrations, Logan will have a "BOS Team" wandering around the airport with yellow clipboards, answering questions for passengers. The staff will greet travelers and manage the security line, bringing late passengers up to the front if they are close to missing their flight.

Security at Logan Airport has also decided to change their use of AIT in response to the controversy over screening tactics. Instead of the detailed image now shown to an officer in another room, Logan wants to institute scanners that show a stick-like figure right at the security checkpoint. All that will be shown on the screen is a stick figure with blocks around it depicting anything suspicious. However, these changes will not take place for another six to twelve months.

Tips for Thanksgiving Travel

- **Travel on Tuesday or Thursday morning rather than on Wednesday.** Flights are cheaper, and there are fewer people to deal with at the airport.
- **Pack light and don't check a bag.** This saves you time later and you don't have to worry about the airlines losing your stuff.
- **Check in online.** You don't have to stand in line at the airport and you'll likely be in an earlier boarding group.
- **Get there early.** At least two hours for international flights and an hour for domestic.
- **Don't wear a belt** if you don't have to. It will just slow you at security.
- **Wear easily removable shoes.** Easy on, easy off.
- **Put all your metal objects, jewelry, watches, phones, etc., into your carry-on** before you get to security. That way you don't have to worry about accidentally leaving items at the checkpoint.
- **Pack your 3.4 oz. of liquids in advance** so the TSA won't confiscate them from you. Keep in mind that a lot of food counts as liquid and cannot be brought through security. This includes cranberry sauce! Cakes and pies are acceptable, though they have to be screened.
- **Pack organized.** If your bag is just overflowing with stuff and you get searched, you will have to spend time repacking at the checkpoint.
- **Don't pack gifts** with you. The TSA has the right to open up anything you have wrapped nicely.

Scientists, engineers to unite in Bldg. 76

Center for cancer research moves in

Koch Institute, from Page 1

President Hockfield's commitment to the project and her role in inspiring this convergence," notes Professor Tyler Jacks, Director of the Koch Institute. "This is a very tangible representation."

One of Hockfield's goals for MIT is collaboration between scientists and engineers. When the Koch Institute was founded in 2007 to replace and expand on the work of MIT's Center for Cancer Research, it aimed to bring together people from various disciplines to study and approach cancer from new angles.

"In terms of its occupants, the new building will have an equal number of cancer scientists and cancer-oriented engineers," Jacks said. "That's very important because we're trying to promote interdisciplinary cancer research."

A number of different departments principally housed in separate respective departments will be represented in Building 76, including the Biology, Chemical Engineering, and Materials Science and Engineering departments.

Each of the seven floors will have labs for scientists and engineers with common areas gathered in the center, leading to more chance encounters between researchers of different disciplines.

"Structurally, the building is designed to increase interaction between these different groups of people," Jacks said. "Existing collaborations will be enhanced through this proximity.

"We have several engineering colleagues who are experts in nanotechnology — Robert Langer and Angela Belcher, for example, among many others. They are interacting and increasing collaboration with colleagues from the biology side to, for example, develop new materials for the delivery of drugs directly to the cancer cells."

The new facilities are geared to cover the needs of cancer research, but the building also includes areas dedicated to nanomaterial characterization. There are also many projects still ongoing from when the Koch Institute replaced the Center for Cancer Research in 2007, and Jacks expects these to increase in progress and number through the interaction directly induced by the new building.

Another example of the Koch Institute's integrative cancer research is tumor immunology, figuring out better ways to use the immune system to eradicate cancer. This involves interactions between immunologists, cancer biologists, and engineers to manipulate the immune system to recognize tumors.

"A collection of such individuals will be on the second floor," Jacks said, "and we're expecting really great things from that group of people, and they will significantly benefit from the building structure of the Koch Institute."

With all the benefits of Building 76, the Koch Institute hopes to accomplish something that Jacks calls "a bit of a departure from our history" — translating discovery and technologies into applications that directly benefit patients clinically.

"We've been focused more on discoveries in the past and let others do the clinical aspects," Jacks said.

The Koch Institute laboratories have also served as a training ground, with well more than 100 undergraduates working in the labs.

Lai played concert with Boston Pops

Rhodes, from Page 13

part of the process," Lai said. "The interview was tough, and there are definitely some questions that you wouldn't expect, but the point is to be yourself."

Lai is a piano performance major through the Emerson Fellowship Program and is involved with the MIT Chamber Music Society. Her piano-playing talents have led her to playing with the Boston Pops.

Lai has also done several UROPs with Course 20. Her first UROP was with the Wittrup Lab studying how a protein invokes the immune response; she used yeast to determine which proteins would generate a stronger immune response. Lai's most recent UROP was with the Fraenkel Lab studying gene regulation of glioblastoma, the most common and aggressive form of brain cancer.

In addition to being a Rhodes Scholar, Lai is a Burchard Scholar and a member of the Kappa Alpha Theta sorority.

Solution to Hard Sudoku

from page 7

2	3	7	4	9	1	6	8	5
9	5	1	2	6	8	7	4	3
4	6	8	3	7	5	1	2	9
6	2	5	1	8	4	9	3	7
7	8	3	9	2	6	5	1	4
1	9	4	7	5	3	2	6	8
8	1	6	5	3	7	4	9	2
5	4	2	8	1	9	3	7	6
3	7	9	6	4	2	8	5	1

Solution to Easy Sudoku

from page 7

5	3	1	7	9	8	6	4	2
7	8	2	6	5	4	3	1	9
4	9	6	3	2	1	7	5	8
1	7	8	5	6	9	2	3	4
2	5	3	4	1	7	9	8	6
9	6	4	8	3	2	5	7	1
8	2	9	1	7	5	4	6	3
6	4	5	9	8	3	1	2	7
3	1	7	2	4	6	8	9	5

WORLD WIDE BUS

NEW YORK CITY
31ST STREET
& 8TH AVENUE
[Penn Station]

CAMBRIDGE, MA
[Alewife Station]

NEWTON, MA
[Riverside Station]

$15
WEEKDAYS
MONDAY - THURSDAY

$20
WEEKENDS
FRIDAY - SUNDAY
& HOLIDAYS

Wi Fi
RESTROOM
110 VOLT OUTLET
MOST BUSES

FOR SCHEDULE AND RESERVATIONS:
WorldWideBus.com
1-877-992-8797

New twist in stem cell lawsuit

Sherley. employer at odds over federal stem cell funding

By John A. Hawkinson
NEWS EDITOR

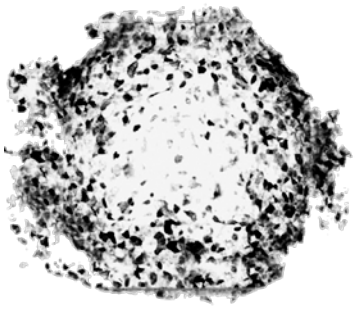
In the latest update in the stem cell lawsuit, *Sherley v. Sebelius*, James L. Sherley now has to contend with the opposition of his own employer, the Boston Biomedical Research Institution.

Sherley is the former MIT professor (who was denied tenure) suing the National Institutes of Health. The case is before the District Court for the District of Columbia, but an appeal is currently before the D.C. Circuit Court of Appeals. The district court had issued a preliminary injunction blocking human embryonic stem cell research, but the appeals court blocked it.

Boston Biomedical filed a motion yesterday indicating it opposes Sherley's position. It asked the appeals court for permission to join the amicus brief that was previously filed by the State of Wisconsin on Oct. 19.

Wisconsin's amicus brief argues against Sherley and another scientist, Theresa A. Deisher. Wisconsin says that the preliminary injunction barring research significantly injured many parties, and that the balance of harms and the public interest were not in favor of halting stem cell research.

Boston Biomedical's board voted on Monday unanimously to join the case in support of the NIH and against Sherley.



"We have taken this step because of our belief that human embryonic stem cell research offers real promise in enhancing understanding of a wide variety of human diseases, and that it has the potential to facilitate development of new and better therapies and potential cures for some of mankind's most devastating diseases," wrote John R. Layton, President of Boston Biomedical's Board of Trustees. "As a result, we believe that federal funding of human embryonic stem cell research should be allowed to resume."

Sherley is not paid by Boston Biomedical; all of their investigators are expected to fund their own research programs and salary, said Charles P. Emerson, Jr., Director of Boston Biomedical.

Boston Biomedical's opposition to Sherley's lawsuit against the government is not new. In September, it issued a statement saying it "fully endorses the funding of research programs by the National Institutes of Health across the country, including those involving human embryonic stem cells. ... Dr. Sherley's position on this issue neither represents nor reflects that of BBRI."

Appeals court sets argument schedule

Also yesterday afternoon, the appeals court announced the schedule for oral argument of the case, will take place on Dec. 6. The government has been allotted 15 minutes, and then Sherley and Deisher will have 15 minutes. These time limits are minimums, though. When both sides argued before the same judges to request a stay on the lower court's preliminary injunction, the three-judge panel extended the time from 30 to 75 minutes.

While the appeals court considers the legitimacy of the lower court's preliminary injunction, it is still possible the lower court may rule on the case itself. When or whether that happens is anyone's guess.

These shoes were found 46 yards from the crash caused by a drunk driver. Carissa Deason was thrown 30 yards and not even her father, a doctor, could save her.

Friends Don't Let Friends Drive Drunk.

Photo by Michael Mazzeo

U.S. Department of Transportation

Ad Council

Research suggests online TV viewers may be willing to tolerate longer commercial breaks

By Brian Stelter
THE NEW YORK TIMES

Viewers of television shows on the Web have grown accustomed to 15- and 30-second commercial breaks — a fraction of the time given for commercials on traditional TV. Would they accept TV-style ad loads?

"It's a million-dollar question," said Jack Wakshlag, the chief research officer for Turner Broadcasting, the parent of TNT and TBS.

He says the answer is yes. Research conducted by Turner suggested that programmers could surround the online streams of shows with even more ads than TV broadcasts have.

Regardless of the ad load, Wakshlag said in an interview, "people will spend approximately the same amount of time watching episodes online."

The research comes at a pivotal time for programmers like Turner, which would like to extend TV-style ad loads to the Internet. Turner and others are slowly extending their programs to the Internet for existing cable and satellite subscribers only, a concept sometimes called TV Everywhere. Heavier ad loads and restricted access will go a long way toward bringing TV on the computer in line with TV on the living room set.

To conduct the test of online viewers' behavior, Turner randomly assigned three sets of anonymous visitors to tnt.tv and tbs.com to a specially built video player. There, the first set was shown about a minute of ads an episode; the second was shown 8 to 10 minutes of ads; and the third was shown 16 to 20 minutes.

Viewers of 30-minute TBS sitcoms like "Meet the Browns" watched, on average, 40 percent of the episode if there was one minute of ads and 37 percent of the episode if there was 16 minutes of ads. Viewers of hourlong TNT shows like "Memphis Beat" watched 59 percent of the episode if there was one minute 15 seconds of ads, and 49 percent of the episode if there was 20 minutes of ads.

Wakshlag's takeaway was that viewers watched, on average, for the same number of minutes no matter how many ads were embedded within. Indeed, the Turner research highlighted one of the oddities of online TV viewing: Viewers often do not watch an entire episode, just as they channel-surf while on the couch.

Turner also found that the commercial retention rate for online video was higher than for traditional television.

Wakshlag said the research, which was done in concert with Magna Global, affirmed that people would trade ad exposure for access to programming.

The CW network has reached the same conclusions in a real-world test. CW, the home of "Gossip Girl" and "The Vampire Diaries," announced last spring that it would increase its ad load on cwtv.com, and since then, it has reported gains in video viewing and visitor retention. According to the measurement firm comScore, the website averaged 57 minutes of video viewing (a total of ads and content) per visitor in September, up 140 percent from the same month in 2009.

Some in the television industry continue to proselytize for fewer but better ads. Hulu, the dominant website for free TV viewing, notes on its website that it has about one-fourth the ad load of traditional TV, and that advertisers pay a premium to be in its less cluttered environment.

One of Hulu's principles, as expressed by its chief executive, Jason Kilar, is, "When it comes to the amount of advertising, lighten up." In an address at the industry conference NewTeeVee Live this month, Kilar compared the four minutes of ads on the half-hour "Alfred Hitchcock Presents" in the 1950s with the eight minutes of ads when NBC broadcasts "The Office" now, and said, "Where we are today is not the ideal balance."

Hulu has been at the fore of coming up with ad products that give viewers more options to, for example, select among three types of commercials by a car company. Still, some Hulu users have noticed an uptick in the number of ads being streamed lately, perhaps evincing the complex calculations that are under way in the industry to increase ad loads and, in doing so, increase revenue for media companies.

Asked about the recent uptick in ads, a Hulu spokeswoman reiterated that the site had "less than half" the ads compared with "what is found on traditional TV." The company said the lighter ad load and the tailoring efforts had "resulted in the advertising spots on Hulu being measured as at least 55 percent more effective than the same ads in traditional channels."

The ads on websites like hulu.com, tbs.com and cwtv.com will continue to be better customized. But if this year's tests indicate anything, it is that there will also be more of them.

New 3D dental scanners raise radiation concerns

By Walt Bogdanich and Jo Craven McGinty
THE NEW YORK TIMES

Because children and adolescents are particularly vulnerable to radiation, doctors three years ago mounted a national campaign to protect them by reducing diagnostic radiation to only those levels seen as absolutely necessary.

It is a message that has resonated in many clinics and hospitals. Yet there is one busy place where it has not: the dental office.

Not only do most dentists continue to use outmoded X-ray film requiring higher amounts of radiation, but orthodontists and other specialists are embracing a new scanning device that emits significantly more radiation than conventional methods, an examination by *The New York Times* has found.

Designed for dental offices, the device, called a cone-beam CT scanner, provides brilliant 3-D images of teeth, roots, jaw and even skull. This technology, its promoters say, is a safe way for orthodontists and oral surgeons to work with more precision and to identify problems that otherwise might go unnoticed.

But there is little independent research to validate these claims. Instead, the cone beam's popularity has been fueled in part by misinformation about its safety and efficacy, some of it coming from dentists paid or sponsored by manufacturers to give speeches, seminars and continuing education classes, as well as by industry-sponsored magazines and conferences, according to records and dozens of interviews with dentists and researchers.

Last month, The Journal of the American Dental Association allowed one of the leading cone-beam manufacturers, Imaging Sciences International, to underwrite an issue devoted entirely to cone-beam technology. That magazine, which the association sent to 150,000 dentists, included a favorable article by an author who has equated a cone-beam CT with an airport scan. In fact, a cone beam can produce hundreds of times more radiation, experts say.

Cone-beam CT scans can help dentists deal with complex cases involving implants, impacted teeth and other serious problems. But many experts in dental radiation have raised alarms about what they see as their indiscriminate use. They worry that with few guidelines or regulations, well-meaning orthodontists and other specialists are turning to a new technology they do not fully understand, putting patients at risk, particularly younger ones.

Some orthodontists now use cone-beam CT scans to screen all patients, even though a number of dental groups in this country and in Europe have questioned whether the benefit of routine use justifies the added risk.

"All these different cone-beam CT scanners came out to a world that was unprepared," said Keith Horner, a professor of oral radiology at the University of Manchester in Britain, who is coordinating a study of cone-beam scanners for the European Commission.

One popular new brand of braces has helped cone-beam sales because it requires 3-D images, which doctors can obtain using either a cone-beam scanner with radiation, or a digital camera without it. Many orthodontists opt for radiation, because it is quicker.

Even those troubled by the widening use of cone-beam technology acknowledge that by itself, the risk from a single scan is relatively small. But patients often get more than one scan, and the lifetime risk increases with each exposure. Without a clear benefit, they say, there is only risk.

"So let me ask a question to the mother of a prospective orthodontic patient," said Dr. Stuart C. White, former chairman of oral radiology at the UCLA School of Dentistry. "Would you like me to use a tool that is entirely safe — a camera — to record the position of your child's teeth, or another method that may rarely cause cancer so that we can save time?"

The cone-beam business is lucrative for manufacturers and dentists. According to one industry estimate, more than 3,000 scanners and about 30 different models have been sold, at prices up to $250,000.

Marketers increase interest in the technology by holding drawings for free cone-beam CT scanners and other gifts. A Washington State orthodontist, who gave an online lecture sponsored by Imaging Sciences, offers dentists coupons for free scans for their patients as a way to build referrals.

And then there is the "wow" factor, said Dr. Terry Sellke, an orthodontist in Illinois.

"Kids love to see that 3-D image," Sellke said in a Webcast sponsored by Imaging Sciences. "They can go into our computer and look at their skull." Another orthodontist talked about coloring 3-D skulls in green and purple. "Fun for the kids," he said.

Dr. Allan G. Farman, president of the American Academy of Oral and Maxillofacial Radiology, cautions doctors not to become overly enamored of the new technology, citing the example of how shoe stores once took X-rays of customers' feet to see if shoes fit.

Regulators are just now recognizing how ill equipped they are to oversee this new technology. "There is not a lot of radiation exposure data out there," said Jerry Hensley, a state radiation protection official in California.

While protocols and guidelines exist for other types of imaging, Hensley said, "cone beams are off in their own land right now."

'A lack of understanding'

Even before cone-beam scanners, the dental profession had problems keeping radiation levels low.

For years, dentists have been advised to stop using slow, D-speed film for X-rays because it requires more radiation than faster film. Yet, most still use the slower film, which requires up to 60 percent more radiation, according to dental experts and government records.

Brian Smith, a spokesman for Carestream Dental, the market leader in dental film, said 70 percent of its film sales in the United States are D-speed. The percentage is lower globally, suggesting that dentists elsewhere do a better job of reducing radiation.

There is no excuse for not switching, the Food and Drug Administration said, because faster films offer the same quality for only pennies more.

Dr. John B. Ludlow, a University of North Carolina professor who has published widely quoted studies on dental radiation, said he suspects that some dentists avoid faster film because they mistakenly believe it is harder to process.

A check of state dental boards found none that were aggressively pressing dentists to use the faster film. Digital X-rays use even less radiation than film, but a minority of dentists use them.

One expert in dental radiation, Dr. Joel E. Gray, said he has found as much as a 500 percent difference in radiation levels because of sloppiness in developing film, including using chemicals that were degraded or at the wrong temperature. To get clearer images, dentists compensate by increasing exposure time — and radiation, said Gray, whose company, Diquad, has contracts with three states, including California, to try to keep dental radiation in check.

New Jersey, which collects data on radiation exposure, found that 20 percent of its dental offices had high or "extremely high" radiation levels.

"There is a lack of understanding of the radiation in dental offices," Gray said.

That has become even more important with the emergence of cone-beam CT scanners. When first introduced in the United States about a decade ago, they were viewed mostly as a cheaper, lower-radiation alternative to big, medical CT scanners that were often needed to diagnose serious ailments of the mouth and face.

But through aggressive marketing and technological improvements over the last several years, their use has rapidly expanded into other areas, including orthodontics. For many teenagers, getting scanned is now part of the ritual of getting braces.

Quick and easy

In October, 26,000 people gathered in Orlando, Fla., for the annual conference of the American Dental Association.

The presence of cone-beam CT scanners could be seen and heard at every turn. There was the 3-D imaging center, cone-beam exhibits, demonstrations and continuing education lectures.

An open forum on cone-beam imaging was co-moderated by Dr. Michael Glick, editor of the Journal of the American Dental Association. Of the four panelists, one was a founder of Imaging Sciences, another was a consultant to the company's distributor and a third was a paid speaker for another cone-beam company.

Cone-beam scanners are quick, easy to use, versatile and do not require much space. In most models, the patient sits in a chair for less than a minute while a small scanner circles the head. Enthusiasm for the technology is echoed by dentists around the country.

Dr. Steven A. Guttenberg of Washington said he uses the scanner "for every single implant that I do." Dr. Rik Vanooteghem of Sunnyvale, Calif., added: "I really feel blindfolded if I don't use it."

Dr. Bradford Edgren of Greeley, Colo., said his scanner had found hidden teeth — among other things. "I found a rock in one child's ear," Edgren said. "Now she can hear and her grades have gone up."

A California lawyer, Arthur W. Curley, suggested that dentists might even face legal liability for not using 3-D imaging. "Negligence may be the failure to incorporate new technologies that meet well-defined legal standards," Curley said in a Web presentation.

Curley, along with Vanooteghem, Guttenberg and Edgren, share more than their enthusiasm. They have all received speaking fees from Imaging Sciences.

At the ADA's conference last month, six manufacturers spent nearly $290,000 to promote 3-D technology. And the ADA said it had accepted somewhere under $100,000 from Imaging Sciences and its sister company — a specific figure was not given — for the cone-beam supplement that came out around the time of the conference.

The company's i-CAT scanner is one of the most popular on the market.

Farman, the radiology academy president and a professor at the University of Louisville School of Dentistry, calls the i-CAT an excellent device, but said there is not yet proof that it is better and safer than conventional imaging in all applications.

This month, the academy and the American Association of Endodontists issued a joint statement saying that cone-beam CT "must not" be used "for screening purposes in the absence of clinical signs and symptoms."

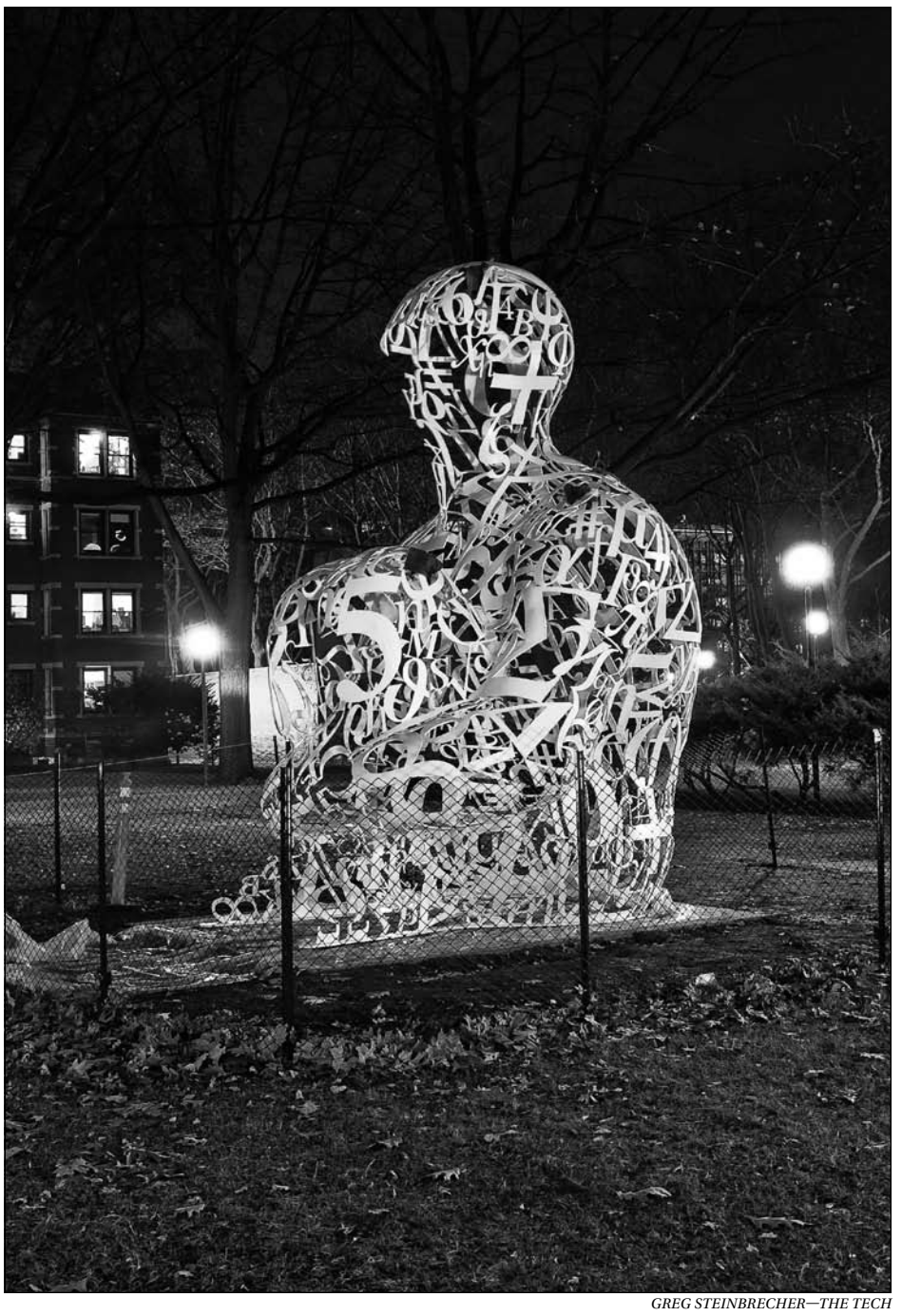
Dr. Lee W. Graber, president of the American Association of Orthodontists, praises the technology and said dentists have worked to reduce radiation over the years. In his suburban Chicago practice, Graber has a machine capable of delivering both cone-beam scans and conventional images, but only uses the higher radiation method when necessary. "Our goal as clinicians is to try to minimize the risk," he said.

Vatech America, a cone-beam manufacturer, does not support using its scanner as a screening device, said Travis Harrison, the company's director of business development. "We don't want to just dose everyone with a CT," he said.

Imaging Sciences, a unit of the Danaher Corp., a diversified manufacturing and technology company, declined repeated requests for interviews, saying it granted such requests only to trade publications, according to Dan Gagnier, a company spokesman.

Alchemist materializes in front of Student Center

JOHN A. HAWKINSON—THE TECH



GREG STEINBRECHER—THE TECH

Riggers install *Alchemist* (left) by Spanish contemporary artist Jaume Plensa outside of the Student Center yesterday morning. The work, on loan to MIT from an alumnus for MIT's 150th-year celebration, is, according to artist representative Llibert Casanovas, "in a sense, an homage to all the researchers and the scientists" who have contributed to scientific and mathematical knowledge. Department of Facilities project manager Paul Murphy said *Alchemist* will be lit by five lights at night (right). The lights are connected to timed street lamps outside of the Student Center. The piece will remain outside of the Student Center through the sesquicentennial celebration.

-Pearle Lipinski

Anti-piracy bill stalls in Senate amid controversy

Bill seeks to blacklist, hide domain names believed to host copyright infringements

By Derek Chang
STAFF REPORTER

On Nov. 19, the U.S. Senate Judiciary Committee approved the Combating Online Infringements and Counterfeits Act (COICA), which allows the government to use court orders to shut down websites thought to infringe on copyright. Also known as S.3804, COICA was introduced by Senator Patrick Leahy on Sept. 20 as an attempt to prevent the spread of piracy websites.

Under the bill, a blacklist of domain names is formed, and the Attorney General may blacklist domain names with the consent of the judicial district in which the domain name registrar is located. The legislation allows the government to lock domain names and remove websites from view.

"Each year, online piracy and the sale of counterfeit goods cost American businesses billions of dollars and result in hundreds of thousands of lost jobs," said Leahy. "The Combating Online Infringement and Counterfeits Act will protect the investment American companies make in developing brands and creating content and will protect the jobs associated with those investments. Protecting intellectual property is not uniquely a Democratic or Republican priority — it is a bipartisan priority."

Despite the stiff opposition of public interest groups, such as the Center for Democracy and Technology and the Electronic Frontier Foundation (EFF), COICA passed with a 19-0 vote and is now awaiting the vote of the full Senate. Part of the bill's success was due to its support by entertainment industries, which were losing revenue due to pirated material that was leaked onto the Internet and hoping S.3804 would help alleviate the problem.

Many MIT students also seem to oppose the recently passed bill. "It isn't appropriate for our government to put such a tight control over the Internet," Rex Lam '14 said. "The entertainment industries themselves should be responsible for preventing their produced material from being illegally copied."

> **Despite the stiff opposition of public interest groups, such as the Center for Democracy and Technology and the Electronic Frontier Foundation, COICA passed 19-0.**

Victor Hung '14 agreed that although industries may be losing revenue to Internet copyright infringement, it isn't the government's job to counter this problem. "COICA may have a strong effect on websites with copyright issues, but some of these sites may be able to work around the law and still continue to exist," he said.

The American Federation of Television and Radio Artists, the Directors Guild of America, the International Alliance of Stage Employees, and the Screen Actors Guild noted in a letter to Congress in response to Leahy's proposal of COICA, "Rogue sites look legitimate, but make no mistake — these sites are illegal and they are trafficking in illegally obtained content, with only one goal in mind – making money from films, television programs, and recordings that they had no role at all in creating or financing."

Rick Cotton, chairman of the U.S. Chamber of Commerce's Coalition Against Counterfeiting and Privacy, noted to *The Washington Post*, "There is an epidemic of digital theft on broadband Internet. This bill is actually quite a narrow, focused effort to address a portion of that epidemic."

Peter Eckerslee of the EFF explained to *The Washington Post*, "This helps, but in the end this is still a censorship bill. By taking out entire domain names and making them vanish off the Internet, that domain name can have a huge amount of stuff on it that is non-infringing and should be protected speech."

Many against the bill are convinced the Department of Justice is exercising authority without due process of law. The websites "dedicated to infringing activities" are determined without judicial review. Tim Berners-Lee, who is credited for the invention of the World Wide Web, spoke up as part of an effort to get people to sign a petition against COICA.

"No person or organization shall be deprived of their ability to connect to others at will without due process of law, with the presumption of innocence until found guilty," Berners-Lee said.

Opponents add that another problem resulting from the bill is a breakdown of basic Internet infrastructure. Richard Esguerra, also part of the Electronic Frontier Foundation, spoke out against COICA in a legislative analysis article. "Generally speaking, the bill forces all the Internet 'middlemen' to act as if a part of the Internet doesn't exist, even though that page may otherwise be completely available and accessible," he said.

> **"Generally speaking, the bill forces all the Internet 'middlemen' to act as if a part of the Internet doesn't exist"**
>
> *—Richard Esguerra*
> MEMBER, EFF

While the bill has passed, the final bill is still less restrictive than the original. Important changes were made to the bill after Senator Leahy proposed an amendment on Sept. 20 in response to dissatisfaction from public interest groups, engineers, and Internet service providers.

The largest change was the removal of an originally planned second blacklist, which allowed the addition of domain names without court orders. In addition, to insure that domains are accurately added to the blacklist, the Attorney General is required under the amendment to develop a process of consultation with various law enforcement agencies to execute investigations.

Following the passage of the bill, Eckerslee of the EFF published another blog post, which summarized the legislation as "ineffective, unconstitutional, [and] bad for innovation and the tech economy." While COICA has now passed in the Senate Judiciary Committee, the EFF still holds objections. Senator Ron Wyden, a Democrat from Oregon, also opposes the bill and vows to keep the bill from passing.

Because senators have the power to put holds on legislation, if Senator Ron Wyden continues to oppose the bill, it is possible COICA will be dead following the end of this congressional season. In such a situation, Leahy would have to reintroduce the bill next year for reconsideration. As for now, there is little consensus about the bill outside of the Judiciary Committee; heated debate about COICA continues.

Cross country teams go to Nationals

Women capture 3rd place, their best finish ever, as men finish 12th

By Eric Khatchadourian
TEAM REPRESENTATIVE

The men's and women's cross country teams traveled to Waverly, Iowa on Saturday where Wartburg College hosted the Division III National Championship on their Max Cross Country Course.

With temperatures in the high 20s, the men warmed up for an 11 a.m. start. The 32-team field and individual qualifiers took off hard at the gun. Captains Paul D. Welle '11, Richard J. Prevost '11 and Gihan S. Amarasiriwardena '11 led the team with a great first mile. Through the race, Stephen R. Serene '12 and Daniel E. Harper '12 worked well together and closed in on the top MIT runners. Roy A. Wedge '14, having been knocked down early in the race, moved back into contention. The Engineers lost some ground later in the race but managed to push hard in the final mile. Harper finished with a blistering kick, covering the final mile in 4:39. He crossed the finish line in 25:08, just ahead of teammate Serene. The pair claimed 48th and 51st place, respectively. Welle held onto 71st place as Wedge moved up to 134th. Prevost rounded out Tech's scoring squad in 169th place. Amarasiriwardena and Logan Trimble '13 finished as the Engineers sixth and seventh runners.

The team placed 12th overall and finished first among New England schools. This marked the first national appearance for the men's team since 2001.

The women's team started out well and established position in the top third of the field. Alina Gatowski '11 led the way in the first mile. Tania K. Morimoto '12, Katherine J. Eve '12, Anna M. Holt-Gosselin '11, Martina A. de Geus '14 and Emma F. Broderick '14 stuck close together. The lady runners fought hard over the 6K course. By the finish, Gatowski had moved into 24th place, earning All-America honors. Eve closed well and placed 42nd. Morimoto finished in 80th place, just five places ahead of Holt-Gosselin, while de Geus took 100th and closed out MIT's scoring. Claire E. O'Connell '14 and Broderick completed the team finish.

The women claimed a spot on the podium with an impressive third place finish and an NCAA team trophy. This is the highest national finish ever for the women's cross country team. The teams cap off a very successful season and establish MIT XC in the history books.

XUAN YANG

Sydney A. Giblin '12 starts off with butterfly in the 200-meter individual medley during Saturday's swim meet against Bowdoin College and Babson College.

SPORTS SHORTS

Water polo beat Fordham, taking seventh place in CWPA Eastern Championship

The water polo team won against Fordham University in a tight game with a final score of 7-6, taking seventh place in the CWPA Eastern Championship. The game began with a strong offense from MIT, gaining a 2-1 lead. However, Fordham quickly caught up, taking the lead from the Engineers.

Entering the fourth quarter of the game, the Engineers trailed Fordman 6-4. MIT's Brian C. Gardiner '11 and Matthew R. Chapa '12 scored, bringing the game to a tie of 6-6. With 1:34 left on the clock, John V. Preis '11 scored, leading to the Engineers' victory. The team ends this season with a 13-12 record.

—Shelley Ackerman, Associate Editor

Women's basketball beats Wilkes for first win of season

The women's basketball team defeated Wilkes University 62-55 in the Golden Bear Hoop Classic at Western New England College on Saturday for their first win of the season.

In the back-and-forth first half, the Engineers got out to a quick 11-4 lead, but Wilkes responded with a 11-2 lead to go ahead by two. The game remained close, and MIT entered halftime up by three, 34-31.

The MIT offense came alive in the second half, coming out of the break with a 8-3 run. With just under ten minutes left, MIT extended its lead to eleven - the biggest advantage of the night for either team — and held on for the win.

Rebecca Odim '13 led the Engineers with ten points in twelve minutes, and the team got 31 of its 62 points off the bench. They also controlled the glass, outrebounding Wilkes 54-38 and outscoring their opponents 24-14 inside the paint. Anna L. Merrifield '13 contributed 17 of MIT's boards.

After the game, Lauren S. Burton '13 was named to the All-Tournament team. MIT next faces Pine Manor College at home on Tuesday, November 23.

—David Zhu, Sports Editor

UPCOMING HOME EVENTS

Tuesday, November 16

Women's basketball vs. Pine Manor College	*6 p.m., Rockwell Cage*
Men's basketball vs. Curry College	*8 p.m., Rockwell Cage*

It claims good people.
UNTREATED DEPRESSION
#1 Cause of Suicide
Public Service message from SA\VE (Suicide Awareness\Voices of Education) http://www.save.org
This space donated by *The Tech*

CUSTOM PRINTED & EMBROIDERED
T-SHIRTS
SWEATSHIRTS - POLOS - HATS & MORE!
ph - 617-625-3335
email - info@qrsts.com
www.qrsts.com
Somerville, MA
QRST's
Printing - Embroidery and More...
part of R.A.W. (Rinnigade Art Works)