

Tang to Be Released On \$10,000 Bail, Kept Under House Arrest

By Arkajit Dey
STAFF REPORTER

Anna L. Tang, who allegedly stabbed her ex-boyfriend Wolfe B. Styke '10 multiple times in his Next House room in October, will be released today after a \$10,000 cash bail is posted on her behalf. By the terms of her release, she will be under house arrest and must wear a GPS bracelet that tracks her location. She has been detained since her Oct. 23 arrest.

Tang was arraigned Monday on charges of home invasion, armed assault with intent to murder, and assault and battery with a dangerous weapon causing serious bodily injury, according to a press release from the Middlesex District Attorney's office. Tang pled not guilty.

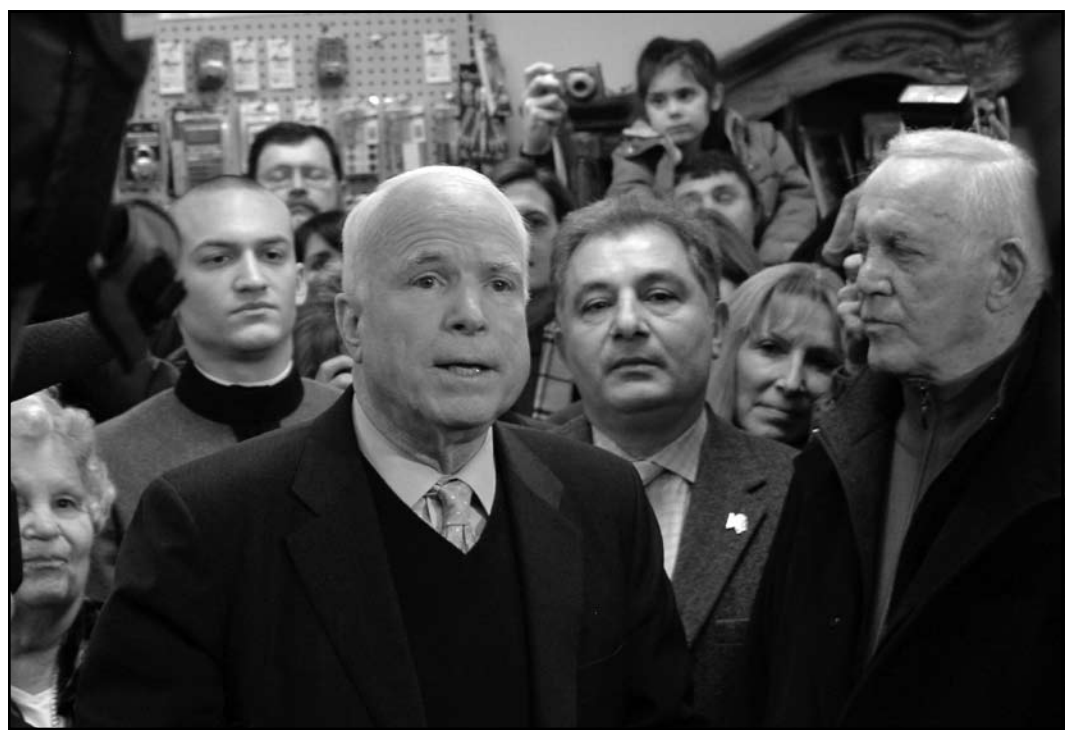
According to the clerk's office of

the Cambridge District Court, \$10,000 in cash is scheduled to be posted as bail today at 2 p.m. Once the bail is posted, Tang will be released under house arrest with "GPS bracelet monitoring," according to the press release.

Assistant District Attorney Suzanne Kontz, chief of the district attorney's domestic violence unit, will prosecute the case. Tang's next hearing is a pretrial conference, scheduled for Feb. 4 at 2 p.m. Both MIT and Cambridge Police are continuing to investigate the case.

On the morning when Styke was stabbed, MIT Police found Tang in Next House with her backpack and jacket covered in blood and in possession of a buck knife, according to the

Tang, Page 12



QUENTIN SMITH

Sen. John McCain speaks at the Hollis Pharmacy in Hollis, N.H. on Jan. 4, 2008. McCain won the Republican primaries in New Hampshire yesterday.

Reactor Cited for Minor Violations By Nuclear Regulatory Commission

Worker Exposed to Nearly a Year's Safe Dose of Radiation in One Day

By Joyce Kwan
NEWS EDITOR

The MIT Nuclear Reactor Laboratory was cited by federal officials for violating regulations because a worker was exposed to nearly a year's worth of radiation in just one day.

According to a U.S. Nuclear Regulatory Commission report, MIT discovered on Oct. 17 that a worker had been exposed to four rems of radiation. This exposure is 80 percent of the yearly safe amount. A reading of 0.5 rem or less is typical for the type

of work which led to the exposure.

The NRC investigated MIT's reactor from October to November. It concluded that MIT had violated two safety requirements at "Severity Level IV," which according to the NRC report means that they have very low safety significance. (Violations are assigned a severity level ranging from Severity Level I for the most significant to Severity Level IV for those of more than minor concern, according to the NRC.)

The worker, whose job was to load and unload material from the nuclear reactor, failed to survey the area for radiation levels as the procedure required, said NRC spokesman Neil Sheehan. The worker failed at least five times to survey the area for radiation levels when working with magnesium-encased silicon ingots. The worker's oversight created "a plane source of radiation to which the

Radiation, Page 12

MIT Admits More Early Applicants, Anticipating More Will Decline Offer

By Yuri Hanada
STAFF REPORTER

Both the number of early applicants and the Early Action admittance rate rose this year, resulting in 522 early admissions (out of 3,928 total applicants) for the Class of 2012. Last year, 390 students were admitted early (out of 3,493) for the Class of 2011.

The Early Action admittance rate increased two percent to 13.3 percent this year. Of this year's early applicants, 322 were not admitted and 3,084 were deferred. Of the applicants admitted early, 47 percent are women and 31 percent are underrepresented minorities.

The 522 early applicants admitted represent an increase over previous years; 390 early applicants were admitted for the Class of 2011 and 377

for the Class of 2010. (For additional data from previous years, see the table on page 12.)

Stuart Schmill '86, interim director of admissions, said the "larger number of really outstanding applicants" was one reason for the rise in acceptances.

Schmill also cited a predicted decrease in the yield for admitted applicants as another reason for the increase in admissions. This year, Princeton and Harvard Universities ended their early application programs; both programs prohibited applicants from applying early to other schools. Because of these changes in the early application landscape, Schmill said that the Admissions Office was expecting fewer admitted students to actually

Early Action, Page 12



MONICA KAHN—THE TECH

A large playing card featuring President Susan Hockfield's face appeared above the door to her office on Dec. 12, 2007. A note was also left on her office door by the hackers.

In Short

¶ The dismissal hearing for Star A. Simpson '10 continues tomorrow, Jan. 10, at 9 a.m. in the East Boston District courthouse. Simpson faces charges of possessing a hoax device for appearing at Logan Airport wearing a circuit board mistaken for a bomb in September 2007.

¶ John Maeda '89 will be the next president of the Rhode Island School of Design. Maeda is currently associate director of research at the MIT Media Laboratory.

¶ Send news information and tips to news@the-tech.mit.edu.

New Discovery Could Lead To Bird Flu Early Warning

By Stephen Smith
THE BOSTON GLOBE

For a decade, disease trackers have watched anxiously as avian influenza has migrated from Asia to Europe and on to Africa, devastating poultry flocks and wild birds. To humans, it has proved — so far — less of a widespread peril, lacking the genetic machinery necessary for efficient person-to-person transmission. Just 348 people have been infected worldwide since 2003.

But the germ, scientists agree, is a time bomb in search of the right fuse.

Viruses evolve rapidly, and a few genetic changes in the right places could enable the avian flu to easily infect people and ignite a firestorm

of human illness akin to the 1918 global flu epidemic that killed tens of millions.

Even more worrisome, scientists fear the pandemic could be well underway before they realize it, unless they can develop an early warning system to detect when the germ has made a lethal change in its genetic clothing.

Now, scientists from the Massachusetts Institute of Technology have discovered new details about how the flu virus interacts with the human respiratory tract — research that could lead to better methods for monitoring the virus and even drugs to stop it in its tracks if it acquires the abil-

Bird Flu, Page 13

This is the first of *The Tech's* IAP issues. *The Tech* will print Wednesdays during January's Independent Activities Period and will resume regular publication for the spring term on Feb. 5.



The MIT Logarithms perform during their annual winter concert. Page 6

NEWS
Universities entice prospectives with their Internet presence. Page 11
Intel leaves One Laptop Per Child. Page 13

World & Nation 2
Opinion..... 4
Arts..... 5
Comics / Fun Pages..... 7
Sports..... 16

WORLD & NATION

In Northeast, Winter Takes a Holiday

By Tania Deluzuriaga

THE BOSTON GLOBE

It was a day for the beach, biking, and bare legs. Wait, isn't it January, the time of year when most New Englanders are chafing at the cold and wondering whether the sun will ever shine again?

Not this week.

A sudden contrast to the Siberian cold of late, Tuesday was like a free vacation for the winter-weary; a 78-year-old weather record was smashed in Boston. The temperature reached 67 degrees, shattering the previous record of 64 set in 1930. It was warmer in Boston Tuesday than it was in Phoenix and San Diego.

Lunch crowds on downtown Boston streets dined outside, shorts-clad runners jogged along the Esplanade, and sunglasses took precedence over winter coats. Like giddy, newly freed prisoners, throngs emerged from January hibernation and flocked to neighborhood parks and outdoor cafes to feel the sun on their faces and breathe fresh air.

Congressional Hearing Pits Teammate Versus Teammate

By Alan Schwarz

THE NEW YORK TIMES

Roger Clemens' plan to testify before a congressional committee next week portends a scene made for the rolling television cameras: a longtime friend and former teammate, Andy Pettitte, being asked questions regarding Clemens' possible use of steroids with Clemens sitting beside him.

The 41-member House Committee on Oversight and Government Reform has called hearings for Jan. 15 and 16 regarding baseball's involvement with performance-enhancing drugs and the report on players' drug use released last month by George J. Mitchell.

The first day will feature testimony from Commissioner Bud Selig, the union president Don Fehr and Mitchell. The second will focus on five others: three former Yankees players and teammates (Clemens, Pettitte and Chuck Knoblauch), and two men identified in Mitchell's report as steroid suppliers to players (Brian McNamee and Kirk Radomski).

Mideast Leaders Agree to Core Talks

By Isabel Kershner

THE NEW YORK TIMES

JERUSALEM

The Israeli and Palestinian leaders authorized the start of negotiations on the delicate core issues of the conflict between them at a meeting here Tuesday, officials for both said.

They acted a day before President Bush was scheduled to arrive in Jerusalem, with Israel and the Palestinians keen to show progress after the U.S.-sponsored peace conference in Annapolis, Md., in November.

Earlier Tuesday, two Katyusha rockets were fired from Lebanon into northern Israel, causing slight damage to property but no casualties, Israeli army and police officials said. Israeli politicians described the attack as an attempt by militants to raise tensions at the border before the Bush visit. It was second time that Katyusha rockets had been fired from Lebanon since the war between Israel and the Lebanese Hezbollah militia in the summer of 2006.

No group claimed responsibility for the rockets, and a Lebanese army spokesman denied that any had been fired, Agence France-Presse reported.

The prime minister of Israel, Ehud Olmert, and the Palestinian president, Mahmoud Abbas, met for two hours, first with their top negotiators and aides present, then alone.

Mark Regev, a spokesman for Olmert, said, "Both leaders agreed to authorize their negotiating teams," led by the Israeli foreign minister, Tzipi Livni, and the former Palestinian prime minister, Ahmed Qureia, "to conduct direct and ongoing negotiations on all the core issues" for a final status agreement.

Clinton Wins N.H., Defeating Obama; McCain Is Also Victor

By Patrick Healy and Michael Cooper

THE NEW YORK TIMES

MANCHESTER, N.H.

Sen. Hillary Rodham Clinton of New York rode a wave of female support to victory over Sen. Barack Obama of Illinois in the New Hampshire primary on Tuesday night. In the Republican primary, meanwhile, Sen. John McCain of Arizona revived his presidential bid with a Lazarus-like win.

The performances of McCain and Clinton followed their defeats in the Iowa caucuses, where Clinton placed third and McCain fourth. McCain's victory was the fruit of a meticulous and dogged turnaround effort; his second bid for the White House was in tatters last summer because of weak fundraising and a blurred political message, leading him to fire senior advisers and refocus his energy on New Hampshire.

Clinton's victory came after her advisers had lowered expectations with talk of missteps in strategy and concern about Obama's momentum coming out of the Iowa caucuses.

Several New Hampshire women, some of them undecided until Tues-

day, said in interviews that a galvanizing moment in the race had been Clinton's unusual display of emotion on Monday, when her eyes filled with tears and her voice cracked as she described the pressures of the race and her goals for the nation.

"As voters began to see the choice they have and heard Hillary speak from her heart, they came back to her," said Mark Penn, Clinton's chief strategist.

Obama leaves New Hampshire with political support that is still considerable, after his victory in Iowa and his growing support in the nominating contests ahead. Clinton had been struggling to stop Obama, turning on Tuesday to new advisers to shore up her campaign team, and both of them are strongly positioned heading into the Nevada caucuses on Jan. 19 and the South Carolina primary days afterward.

McCain's victory dealt another serious blow to Mitt Romney, the former governor of neighboring Massachusetts. Romney campaigned hard and spent heavily as he sought wins in Iowa and New Hampshire, only to come up short in both states. McCain, after watching television reports of his victory in his Nashua hotel room, took

congratulatory calls from Romney and Mike Huckabee, the former Arkansas governor. He then went downstairs to declare victory.

To cheers of "Mac is back," McCain told supporters Tuesday night, "My friends, you know I'm past the age when I can claim the noun 'kid,' no matter what adjective precedes it. But tonight, we've sure showed them what a comeback looks like."

Surveys of voters leaving the polls showed Obama particularly strong among male voters, young people and independents. Obama advisers said he was poised to leave New Hampshire with a competitive edge in South Carolina, where they expect the heavily black electorate to rally around his bid to become the nation's first black president.

Yet Obama, like Mrs. Clinton, has devoted considerable financial resources to Iowa and New Hampshire, and his advisers said they plan to spend carefully in the coming contests. He is scheduled to hold a major fundraiser on Wednesday night in Manhattan — Clinton's home turf — and intends to make new requests for donations from online donors and major party figures.

Clinton Primary Upset Defies Predictions of Pollsters, Pundits

By Adam Nagourney

THE NEW YORK TIMES

MANCHESTER, N.H.

New Hampshire kept Sen. Hillary Rodham Clinton alive.

Averting the blowout loss that many polls had predicted allowed Clinton's campaign to portray the result in the Democratic primary here on Tuesday night as a stunning turnaround. Given how dire her situation had appeared just hours earlier, the spin was at least plausible.

In the end, she survived because registered Democrats preferred her to Sen. Barack Obama, though independents went for him, according to exit polls. And she benefited from strong support among women, a constituency that she worked hard to appeal to in the campaign's final days here.

Clinton is now likely to find it easier to raise money than she would have if she had been drubbed by

Obama, as he had done in the Iowa caucuses. The internal squabbling about her campaign's management and strategy is likely to be quieted. And she will no doubt go forth making the obvious comparison: that just like her husband 16 years ago, she is now well positioned to battle her way to the Democratic presidential nomination.

In Obama, Clinton is facing an opponent who has seemed over the last week or two to embody a movement rather than to be a mere political candidate. He has at times been an elusive target, lifted on the wind of nationwide anti-Washington climate change. She has often appeared to be frustrated in seeking to challenge his level of experience, his consistency, his positions or his electability against a Republican party certain to fight hard to hold the White House.

"Obama is almost Teflon in terms

of criticism," said Bob Graham, the former Florida senator and a Democratic presidential candidate in 2004, as he considered the challenge Clinton faces. "He doesn't have much of a record you can dissect," adding that his advantages included "his freshness, newness, star status."

The next two contests — the Nevada caucuses and the South Carolina primary — are being fought on what is not particularly welcome terrain for Clinton. In Nevada, the power union of culinary workers has said it will put its muscle behind Obama. The South Carolina electorate is expected to be about 50 percent black.

The fast-paced calendar leading up to the 22 state contests on Feb. 5 gives Clinton a limited amount of time to turn around the story line, to force the examination of Obama that her husband, former President Bill Clinton, said her rival has been spared.

WEATHER

Super High Fuels Record Warmth

By Cegeon J. Chan

STAFF METEOROLOGIST

Most were not here, or perhaps, some had forgotten. But last Thursday, while most of campus was relatively deserted, a -15°F wind chill reading was recorded at Logan

Airport. A strong high pressure system was positioned to our west, and, with clockwise flow, cold air was pulled in from Canada. However, with the same high pressure remaining strong and pushing off to our southeast, this allowed strong mixing all along the eastern half of the United States. In other words, southern states shared the wealth of warm air to its northern counterparts. For instance, with a record high of 67°F yesterday, there was only a 2°F difference between Boston and Atlanta.

In other parts of the country, there were two distinct and extreme weather events that took place in a span of 5 days and 2000 miles. Blizzards and tornadoes are not often found in the same sentence. (Well, maybe in the movie "Day After Tomorrow.") In the mountains near Yosemite Park, Calif. picked up 10 feet of snow in a span of 72 hours. (In comparison, Boston averages only about 3.5 feet of snow for the winter.) Meanwhile, tornadoes have ripped through over a handful states in the Midwest.

Locally, with the high pressure lingering for several more days, there will be several more days of unseasonably warm temperatures. However, each day will be cooler than the previous one. So be sure enjoy the warmth while it lasts!

Extended Forecast

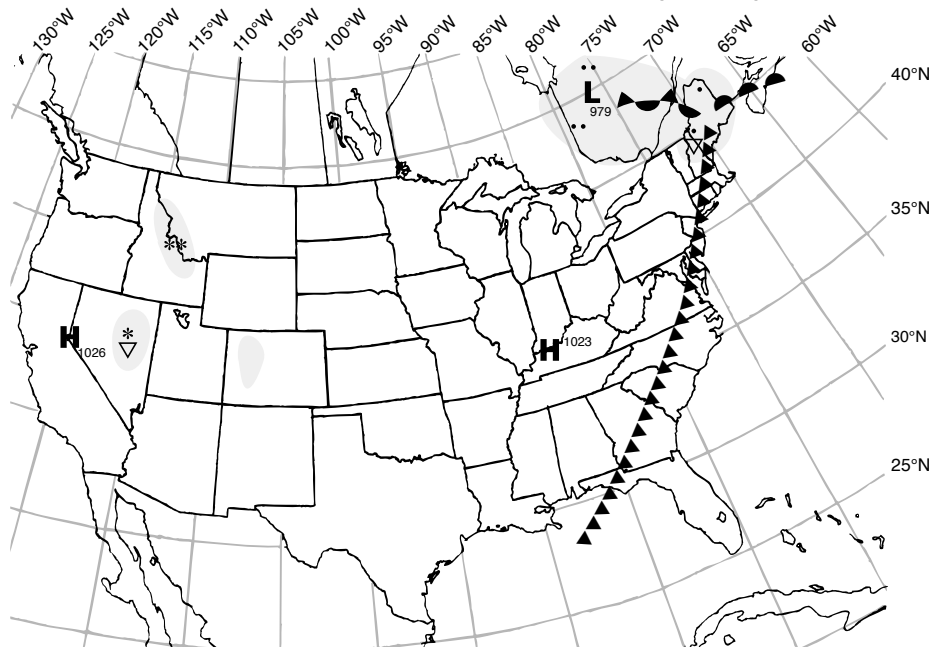
Today: Cloudy with passing rain showers in the afternoon. Windy. Highs in the upper 50s°F (15°C). Southwest winds 15-25 mph.

Tonight: Clear. Lows in the mid 30s°F (2°C). West winds 15-20 mph.

Tomorrow: Sunny. Highs in the lower 50s°F (11°C).

Friday: Rain. Highs in the upper 40s°F (9°C).

Situation for Noon Eastern Standard Time, Wednesday, January 9, 2008



| Weather Systems | Weather Fronts | Precipitation Symbols | Other Symbols |
|-----------------|------------------------|-----------------------|---------------|
| H High Pressure | - - - Trough | Snow * | Fog |
| L Low Pressure | - - - Warm Front | Rain ∇ | Thunderstorm |
| § Hurricane | - - - Cold Front | Light * | Haze |
| | - - - Stationary Front | Moderate ** | |
| | | Heavy *** | |

Compiled by MIT Meteorology Staff and The Tech

Stocks Fall as a Wary Market Considers New Developments

By Vikas Bajaj
THE NEW YORK TIMES

NEW YORK

Shares tumbled late Tuesday after the head of AT&T suggested that consumers may be cutting back and Countrywide Financial denied that it was tumbling into bankruptcy.

The market was up modestly earlier in the day but was rattled by the warning from AT&T, the nation's largest telephone company, and rumors that Countrywide, the nation's largest mortgage company, might file for bankruptcy protection.

The Standard & Poor's 500-stock index fell 1.84 percent, or 25.99 points, to 1,390.19, its lowest close since March 5.

The Dow Jones industrial average declined 238.42 points, or 1.86 percent, to 12,589.07, while the Nasdaq composite index dropped 58.95 points, or 2.36 percent, to 2,440.51.

With the exception of Monday, the S&P has fallen in all five sessions this year. It is down 5.3 percent for the year and 11.2 percent since hitting a high on Oct. 9, meeting the technical definition of a market correction.

In recent days, many investors

have grown increasingly convinced that the problems in the housing market will drive the economy into a recession and that efforts to revive it through interest rate cuts or federal government policy may not be sufficient. (Investors in the futures markets are betting that the Federal Reserve will cut its overnight interbank lending rate by half a point, to 3.75 percent, when it meets at the end of the month.)

A statement by AT&T's chief executive, Randall L. Stephenson, drew a strong response from the market because it suggested the weakness in the economy might start hurting profits of a broader range of companies aside from financial firms, retailers and home builders. Technology shares in the S&P, for instance, are down nearly 10 percent so far this year; telecommunications stocks are down 5.8 percent.

"The market is certainly going to struggle in the first quarter and a half to two quarters as the subprime thing continues to weigh on the economy," said Bruce Bittles, chief market strategist at Robert W. Baird & Co. "And housing will likely not stabilize until

the second half of the year."

Underscoring the uncertainty, President Bush, who had been more optimistic than many investors, told reporters at the White House that the problems in the housing market would "take a while to work through."

"I like the fundamentals; they look strong," Bush said, "but there are new signals that should cause concern."

On Friday, the Labor Department reported that the unemployment rate jumped to 5 percent in December, from 4.7 percent. On Tuesday, the National Association of Realtors said its pending home sales index, which tracks signings of sales contracts, fell 2.6 percent in November after increasing for much of the fall. Recent data on manufacturing has also indicated slowing growth.

Shares of Countrywide fell \$2.17, or 28.4 percent, to \$5.47 on Tuesday after the company issued a statement that said there was "no substance to the rumor that Countrywide is planning to file for bankruptcy." The company has been dogged by rising defaults and foreclosures; its stock fell nearly 79 percent last year.

FTC Asks Whether Carbon-Offset Money Is Winding Up True Green

By Louise Story
THE NEW YORK TIMES

Corporations and shoppers in the United States spent more than \$54 million last year on carbon offset credits toward tree planting, wind farms, solar plants, and other projects to balance the emissions created by, say, using a laptop computer or flying on a jet.

But where exactly is that money going?

The Federal Trade Commission, which regulates advertising claims, raised the question Tuesday in its first hearing in a series on green marketing, this one focusing on carbon offsets.

As more companies use offset programs to create an environmental halo over their products, the commission said it was growing increasingly concerned that some green marketing assertions were not substantiated. Environmentalists have a word for such misleading advertising: "greenwashing."

With the rapid growth of green programs like carbon offsets, "there's a heightened potential for deception," said Deborah Platt Majoras, chairwoman of the commission.

The FTC has not updated its environmental advertising guidelines, known as the Green Guides, since 1998. Back then, the agency did not create definitions for phrases that are common now — like renewable energy, carbon offsets and sustainability.

For now, it is soliciting comments on how to update its guidelines and is gathering information about how carbon-offset programs work.

Consumers seem to be confronted with green-sounding offers at every turn. Volkswagen told buyers last year that it would offset their first year of driving by planting in what it called the VW Forest in the lower Mississippi alluvial valley (the price starts at \$18).

Dell lets visitors to its site fill their shopping carts with carbon offsets for their printers, computer monitors and even for themselves (the last at a cost of \$99 a year).

Continental Airlines lets travelers track the carbon impact of their itineraries.

General Electric and Bank of America will translate credit card rewards points into offsets.

Most suppliers of carbon offsets say that the cost of planting a tree is

roughly \$5, and the tree must live for at least 100 years to fully compensate for the emissions in question. By comparison, an offset sold by Dell for three years' use of a notebook computer costs \$2.

To supply and manage the carbon offsets, big consumer brands are turning to a growing number of little-known companies, like TerraPass, and nonprofits, like Carbonfund.org. These intermediaries also cater to corporations that want to become "carbon-neutral" by purchasing offsets for the carbon dioxide they release.

Majoras of the FTC pointed out that spokesmen for events like the Super Bowl and the Academy Awards have recently started saying they are carbon-neutral (though the Academy Awards drew criticism for the way its offsets were handled).

The FTC has not accused anyone of wrongdoing — neither the providers of carbon offsets nor the consumer brands that sell them. But environmentalists say — and the FTC's hearings suggest — that it is only a matter of time until the market faces greater scrutiny from the government or environmental organizations.

Some Golden Globes Sponsors Withdraw

By Brian Stelter

THE NEW YORK TIMES

Some prominent advertisers have pulled their sponsorships for NBC's strike-subdued Golden Globes coverage and others were weighing their options, media buyers said Tuesday. The decisions came a day after the traditional format for the awards program was scrapped in the face of promised picket lines.

The sponsor of the Golden Globes, the Hollywood Foreign Press Association, said Monday that the winners would be announced at a news conference covered by NBC News. The Writers Guild of America, continuing the two-month-old strike that forced the format changes, intends to picket outside the event.

NBC executives met on Tuesday to try and determine the programs to run before and after the 9 p.m. news conference.

Executives close to the network, who requested anonymity because the schedule had not been announced, said they expected that the "Dateline NBC" Golden Globes preview, originally scheduled for Saturday, would move to Sunday at 7 p.m. NBC is considering showing its new reality competition "American Gladiators" at 10 p.m. A scheduling announcement could occur on Wednesday, the network said.

Trade publications reported on Tuesday that NBC would offer refunds to advertisers who had previously committed to the awards program. The awards telecast has generated \$10 million to \$15 million in advertising revenue in previous years.

Bush Denounces Iran Over Naval Incident

By Sheryl Gay Stolberg and Thom Shanker

THE NEW YORK TIMES

WASHINGTON

President Bush chastised Iran on Tuesday for committing a "provocative act" by confronting U.S. Navy warships in the Persian Gulf over the weekend. The Pentagon released video showing Iranian speedboats maneuvering around the U.S. convoy.

"We viewed it as a provocative act," Bush told reporters in the Rose Garden, just hours before he left for a weeklong trip to the Middle East. "It is a dangerous situation, and they should not have done it, pure and simple."

The incident took place Sunday in the strategic Strait of Hormuz and was initially described by U.S. officials on Monday. They said five armed Iranian speedboats approached three U.S. Navy warships in international waters, then maneuvered aggressively as radio threats were issued that the U.S. ships would be blown up.

The confrontation ended without shots being fired or injuries.

The video runs just over four minutes and, according to Pentagon officials, was shot from the bridge of the guided missile destroyer Hopper. It supported the U.S. version of events, by showing Iranian speedboats maneuvering around and among the Navy warships, quite close to the convoy.

Amazon Consolidates In Growing Area of Seattle

By Kristina Shevory

THE NEW YORK TIMES

Amazon.com, the world's largest online retailer, will soon finally have one place to call home.

The company is moving all of its administrative employees, who are now scattered in offices around Seattle, to a single location in the city. It will be the first time all of these employees are together since the founding of Amazon more than a decade ago.

The company is more than doubling its office space. It is also betting that its profits will remain high. If Amazon exercises all of its options, it may spend as much as \$1.5 billion under a 16-year agreement to lease 11 buildings in South Lake Union, a lakefront neighborhood a little more than a mile north of downtown.

Construction begins this month, and Amazon's 4,000 employees are expected to start moving in a little over two years to a campus that will eventually occupy six blocks. "The beauty of South Lake Union is that it gives us space for now and room to grow," said Patty Smith, an Amazon spokeswoman.

Amazon joins a long list of companies gambling on South Lake Union, a neighborhood largely controlled by Paul Allen, a co-founder of Microsoft.

In only five years, Allen, who owns 60 acres in the area through his company Vulcan Real Estate, has been quickly transforming the neighborhood from an industrial hub into a high-tech playground with soaring condominium towers, eclectic restaurants and sleek office buildings. Vulcan is the lead developer of the Amazon project.

Microsoft Bids for Search Software Firm

By Steve Lohr

THE NEW YORK TIMES

Microsoft bid \$1.2 billion on Tuesday for a Norwegian search software company, in what analysts said was mainly an effort to add more tools to its lucrative Office products, but was also being done with an eye toward fending off Google.

Fast Search and Transfer, based in Oslo, is a specialist in the search technology used inside companies and government agencies to cull information from documents, databases and software applications. Its software helps teams of workers quickly search the corporate storehouse of information for answers about procurement, marketing, manufacturing and product design.

Fast is not a competitor in consumer Web search and advertising, a market dominated by Google and one where Microsoft is investing heavily and struggling to make progress.

Yet the planned purchase, analysts said, does give Microsoft technology that it could potentially use to enhance its Web search business. There are some significant differences between Web search and so-called enterprise search technology. In consumer searches, the popularity of a Web page, for example, is an important factor in determining its relevance, while popularity tends to be less important in ranking corporate information sources.

Massachusetts Drivers Under 18 Feel The Sting of New, Tough Driving Laws

By Matt Carroll
THE BOSTON GLOBE

The number of license suspensions of Massachusetts drivers under 18 has soared over the past year because of a tough new law aimed at curbing bad driving habits by junior operators.

About 3,000 drivers age 16 and 17 had their license or learner's permit suspended between March 31, when the law took effect, and early December, according to data from the Registry of Motor Vehicles. About 1,700 junior operators lost their license or permit during the same period in 2006.

Fatal crashes with junior operators behind the wheel dropped from 27 in 2006 to 17 last year, according to preliminary year-end numbers from the Registry. The tally counts the number of accidents in which there was a fatality, but not how many people died or who was at fault.

While the drop in fatal accidents could be attributed to a number of factors, including weather, state officials are praising the new law in helping to curb dangerous driving

by teenagers.

"It is exactly what we were hoping would happen," said Senator Steven A. Baddour, chairman of the Transportation Committee, who pushed the bill requiring tougher penalties. "We knew as soon as one kid got pinched, every kid in his school would know about it, and it would have an impact."

The new law also stiffened the punishment for many moving violations and required mandatory driver training after suspensions. Coming after several highly publicized fatalities involving young drivers in 2005 and 2006, the law was intended to protect inexperienced and often immature drivers.

Teenage drivers now face a suspension ranging from 90 days for a first-time speeding ticket to one year for a second or later offense. Fines and fees required to get the license back can cost up to \$1,000.

The law also cracked down on other offenses, but about 2,000 of last year's teen suspensions involved at least speeding tickets.

The suspensions represent a dra-

matic increase in the penalties faced by young speeders. Previously, first-time speeders paid a fine that could be as low as \$50. They were also permitted to keep their licenses.

While the law was welcomed by parents, teenagers with suspended licenses complained that the law was draconian.

"It seems slightly overly strict to me," said Isaiah Switzer, 18, of Pittsfield, who lost his license for 90 days for driving 12 miles per hour over the speed limit. His parents had to take three days off from work to drive him to his college exams in Boston, a 2-1/2-hour trip. "It has been quite a problem at times," he said.

Another teenager who lost her license is feeling the brunt of the law.

"Even if I want to visit my friends for an hour, it is a big inconvenience," said Colleen Blanchard, 17, of Shrewsbury, who lost her license for 90 days after getting a ticket for going 46 in a 30-mile-per-hour zone. Now, she needs parents or friends to drive her to and from school and her friends' homes.

OPINION

Letters To The Editor



Chairman

Michael McGraw-Herdeg '08

Editor in Chief

Angeline Wang '09

Business Manager

Cokie Hu '08

Managing Editor

Austin Chu '08

NEWS STAFF

Editors: Valery K. Brobbey '08, Nick Semenkovich '09, Nick Bushak '10, Joyce Kwan '10; **Associate Editors:** Yi Zhou '09, JiHye Kim '10; **Staff:** Waseem S. Daher G, Curt Fischer G, Ray C. He G, John A. Hawkinson '98, Jiao Wang '08, Daniela Cako '09, Mei-Hsin Cheng '09, Diana Jue '09, Ji Qi '09, Kirtana Raja '09, Yiwei Zhang '09, Yuri Hanada '10, Manisha Padi '10, Joanne Y. Shih '10, Arkajit Dey '11, Jeff Guo '11, Ryan Ko '11, Natasha Plotkin '11, Emily Prentice '11, Lulu Wang '11; **Meteorologists:** Cegeon Chan G, Jon Moskaitis G, Michael J. Ring G, Roberto Rondanelli G, Scott Stransky G, Brian H. Tang G, Tim Whitcomb G, John K. Williams G, Angela Zalucha G, Garrett P. Marino '08, Mike Yee '08.

PRODUCTION STAFF

Editor: Jessica Witchley '10; **Associate Editors:** K. Nichole Treadway '10, Steve Howland '11; **Staff:** Yue Li '11, Mark Yen '11.

OPINION STAFF

Editor: Aditya Kohli '09; **Staff:** Josh Levinger '07, Justin Wong '07, Ali S. Wyne '08, Krishna Gupta '09.

SPORTS STAFF

Editors: Shreyes Seshasai '08, Caroline Huang '10; **Staff:** James Zorich '08, Albert Ni '09.

ARTS STAFF

Editors: Jillian A. Berry '08, Sarah Dupuis '10; **Staff:** Bogdan Fedeles G, Kapil Amarnath '07, Tony Hwang '07, Andrew Lee '07, Alice Macdonald '08, Tyson C. McNulty '08, Tina Ro '10.

PHOTOGRAPHY STAFF

Editors: Ricardo Ramirez '09, Eric D. Schmiel '09; **Associate Editor:** Omari Stephens '08; **Staff:** Alex H. Chan G, David Da He G, Dmitry Kashlev G, Andrew T. Lukmann G, Ranya Sankar G, Martin Segado G, Scott Johnston '03, Perry Hung '08, Christina Kang '08, Arthur Petron '08, David Reshef '08, David M. Templeton '08, Martha Angela Wilcox '08, Ana Malagon '09, Peter H. Rigano '09, Jerzy Szablowski '09, Diana Ye '09, Daniel P. Beauboeuf '10, Mindy Eng '10, Helen Hou '10, Catherine Huang '10, Bea Jarrett '10, Monica Kahn '10, Samuel E. Kronick '10, Diane Rak '10, Andrea Robles '10, Aaron Sampson '10, Jongu Shin '10, William Yee '10, Kari Williams '11, Sherry Yan '11.

CAMPUS LIFE STAFF

Editors: Charles Lin G, Marie Y. Thibault '08; **Staff:** Bruce Wu G, Kailas Narendran '01, Elizabeth Zakszewski '06, Victor Cabral '07, Janet S. Lieberman '07, Matt Zedler '07, James Scott Berdahl '08, Michael T. Lin '11; **Cartoonists:** Scott Burdick G, Daniel Klein-Marcuschamer G, Roberto Perez-Franco G, Emezie Okorafor '03, Nancy Hua '07, Jia Lou '07, Andrew Spann '07, Ash Turza '08, Danbee Kim '09, Roxana G. Safipour '09.

BUSINESS STAFF

Advertising Managers: Neeharika Bhartiya '10, Ritu Tandon '10; **Operations Manager:** Michael Kuo '10; **Staff:** Jeffrey Chang '08, Tai Ho Kang '08, Jennifer Chu '10, Kevin Wang '10, Heymian Wong '10.

EDITORS AT LARGE

Contributing Editors: Rosa Cao G, Brian Hemond G, Benjamin P. Gleitzman '09; **Senior Editor:** Satwicksai Seshasai G.

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, Kelley Rivoire '06, Beckett W. Sterner '06, Marissa Vogt '06, B. D. Colen.

PRODUCTION STAFF FOR THIS ISSUE

Editor: Austin Chu '08; **Associate Editors:** Shreyes Seshasai '08, Jessica Witchley '10; **Staff:** Steve Howland '11.

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 \$45.00 per year (third class) and \$105.00 (first 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 © 2008 *The Tech*. Printed on recycled paper by Charles River Publishing.

MIT Does Not Need a Chaplain

I was dismayed to read that MIT has decided, after a hundred years without, that it needs a chaplain.

MIT is about science and engineering and mathematics. There is no place for belief in those disciplines, only doubt — we accept evidence but constantly test it.

Our students, especially the ones from America, have grown up in cultures saturated

with religiosity. We should give them a little break from it while they're here.

MIT needs religion like a bull needs mammaries.

Professor Joe Haldeman

W20 Expansion Could Solve Student Group Space Problem

Your article "ASA Allocates Student Group

Space, Chooses Rooms for More Review" (Dec. 11, 2007) mentioned the possibility of providing more space for student activities by renovating Walker Memorial but did not mention the option of expanding the Stratton Student Center, which would cost around \$100 million.

The Tech has previously covered such a plan ("Inauguration Ceremony Today: Extension to Student Center a Possibility," May 6, 2005; "Proposal Calls for Change, Addition to Space in W20," June 16, 2006). Further information on it is available at <http://diz.mit.edu/>.

Leonard H. Tower Jr. '71



"I suppose this confirms that their victories in Iowa have turned things upside down."



Opinion Policy

Editorials are the official opinion of *The Tech*. They are written by the editorial board, which consists of Chairman Michael McGraw-Herdeg, Editor in Chief Angeline Wang, Managing Editor Austin Chu, Opinion Editor Aditya Kohli, and Contributing Editor Rosa Cao.

Dissents are the opinions of signed members of the editorial board 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@the-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 and have the author's name in italics. Columns without italics are written by *Tech* staff.

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@the-tech.mit.edu, and it will be directed to the appropriate person. You can reach the editor in chief by e-mailing eic@the-tech.mit.edu. Please send press releases, requests for coverage, and information about errors that call for correction to news@the-tech.mit.edu. Letters to the editor should be sent to letters@the-tech.mit.edu. The Tech can be found on the World Wide Web at <http://www-tech.mit.edu>.

ARTS

MOVIE REVIEW ★★★★★

*Who Knew a 16-Year-Old Could Be So Lovable**'Juno' Is a Hilarious and Heartwarming Film Everyone Should See*

By Jillian A. Berry

ARTS EDITOR

Juno

Directed by Jason Reitman

Written by Diablo Cody

Starring: Ellen Page, Michael Cera, Jennifer Garner, Allison Janney, and Jason Bateman

Rated PG-13

Now Playing

Go see "Juno." You can read my review about it first (which would be nice), but at the end of it, you should drop this paper and whatever else you are doing so that you can go and see this movie.

Whenever I write movie reviews, I try to avoid reading any other reviews, lest they cloud my judgment. Usually, this isn't very difficult, but "Juno" isn't a usual movie. Despite seeing a screening of this movie a few weeks before its wide release, I had to consciously avoid any press. Everywhere I looked, headlines were declaring this the best little movie of the year. Still, I willed myself not to click on any links or turn any pages. Now I can say, knowing that I was not unduly influenced, that "Juno" may just be one of the best movies of the year.

People have tried to compare this film to "Little Miss Sunshine" — it is an independent film, has great word of mouth, and stars someone from "Arrested Development" — but I think that is unfair to "Juno." Sure, I liked "Little Miss Sunshine" but it is nothing compared to this movie.

Hilarious and heartwarming, "Juno" follows the 16-year-old title character, Juno MacGuff, as she discovers she is pregnant and decides to give the baby up for adoption. The film begins with a laugh out loud exchange between a store clerk (played by the amazing Rainn Wilson) and Juno (Ellen Page) as she purchases her third home pregnancy test. And the film doesn't slow down until the credits start rolling.

The dialogue is sharp and witty and does not suffer from too much sentimentality, something that usually happens with the birth of a child in a film. Instead, everyone, including Juno herself, recognizes that she has made a mistake and there is no way that she can care for a child. She just wants what's best for the



FOX SEARCHLIGHT

Juno (played by Ellen Page) and Bleeker (Michael Cera) play the guitar together after surviving the many hardships of teenage pregnancy in the movie "Juno."

child so she looks to adoption and finds the "perfect" suburban couple in Vanessa and Mark Loring (Jennifer Garner and Jason Bateman). Through her interaction with her own family and the Loring, we see with Juno that life isn't perfect, but you hope you can find someone who accepts you for who you are. Again, the film manages this without getting overly sentimental.

All of the characters are fully developed, contradictory people who are as easy and dif-

icult to describe as your best friend. But as the title would suggest, this film rests squarely on Juno's very small shoulders. Although the supporting characters are important for the plot and humor of the film — Allison Janney as Juno's harsh but loving stepmother is certainly a scene-stealer — it is Juno who is in nearly every scene, and boy does she deliver. Most of what comes out of Juno's mouth is funny, sweet, sad, truthful, and somewhat offensive. But it's what we all wish we could say. Page

is the perfect teenager who is funny and comfortable in her own skin but also awkward and scared at the same time. A modern day Lizzy Bennet, Juno stays true to her beliefs and uses humor to mask her insecurities.

Even weeks after seeing this film, it is still resonating within me. I may not be able to remember every joke, but I remember how real it felt and how much my stomach hurt from laughing so hard. As I said at the beginning of this review, go see "Juno."

MOVIE REVIEW ★★★ 1/2

*Visually Stunning French Film Flutters Onto American Screens**Beauty of 'The Diving Bell and the Butterfly' Is in the Eye of the Beholder*

By Alice Macdonald

STAFF WRITER

The Diving Bell and the Butterfly(French Title: *Le Scaphandre et le Papillon*)

Director: Julian Schnabel

Screenplay by Ronald Harwood, based on the

novel by Jean-Dominique Bauby

Starring: Mathieu Amalric, Emmanuelle

Seigner, Marie-Josée Croze

Now Playing at Kendall Square Cinema

Based on a true story, "The Diving Bell and the Butterfly" uses some interesting cinematic devices to draw the viewer close and make a strong emotional impact. The film tells the story of Jean-Dominique Bauby (played by Mathieu Amalric), the editor of *Elle* magazine, who was left nearly completely paralyzed after a stroke. Although he could only blink one eye, he still managed to dictate his memoir (published shortly before his death) on which the film's screenplay is based.

The film may be in French, but very little is lost in translation. Unlike many faster-paced or comedic foreign films, you aren't missing much by reading the subtitles. This is partly because "The Diving Bell and the Butterfly" is an essentially visual film. Bad screenwriting can yield movies that fall flat — using actor's lines to tell a story rather than showing it with the images on the screen. It is refreshing to see visual capabilities used to stunning effect in this film.

I was skeptical as to how a film could succeed in entertaining when the hero is unable to move except for blinking a single eyelid. How interesting could two hours of a guy in his bed really be? Director Julian Schnabel succeeds by manipulating the point-of-view, flashbacks to

Bauby's life before the stroke, and sequences from Bauby's imagination.

The film opens from Bauby's point-of-view as he is just awakening from his coma and realizes his devastating condition. Much of the film is shown from Bauby's perspective, giving the film a unique feel. The camera is completely still as his paralyzed head would be and we only see what Bauby could see from his limited range of vision. We see him blink, focus on objects, and cry from his perspective as if we were also trapped in an uncooperative body.

Although it is interesting, thankfully the entire film is not shot from this limited perspective. Just when you can't stand this restricted vision any longer, the film cuts to scenes from Bauby's past — including gut-wrenching depictions of Bauby's ailing father, beautifully portrayed by Max von Sydow. There are also several fantasy sequences set to a gorgeous original soundtrack with music by Paul Cantelon. These dreamy interludes are linked with limited scenes showing Bauby in his handicapped state, but the film refuses to linger on his pathetic form too long in order to just make us pity Bauby. When Bauby's lifeless face is shown, void of life except for his highly animated left eye, the effect is unexpectedly powerful.



ETIENNE GEORGE—MIRAMAX FILMS

Claude, Jean-Dominique Bauby's transcriber (played by Anne Cosigny), shows Bauby (Mathieu Amalric) his finished work in "The Diving Bell and the Butterfly."

Some viewers may find this creative direction gimmicky, and that is fair, but it is still interesting, and the film manages to avoid many of the clichés that can ruin this sort of "man overcoming adversity" film. "The Diving Bell and the Butterfly" manages to be at once emotionally powerful and beautiful without falling into melodrama.

Highly acclaimed critically, "The Diving

Bell and the Butterfly" has been nominated for and won scores of awards including best director at this year's Cannes Film Festival. The film is also nominated for three Golden Globes, including best director and best screenplay — impressive for a small foreign film. Look for it to be a contender for best foreign film at the Academy Awards later this year.



Logarhythms Bring Holiday Cheer in Annual Winter Concert

The MIT Logarhythms perform to a full crowd in Kresge Auditorium at their annual winter concert on Dec. 14, 2007. The Wellesley Tupelos accompanied the MIT a cappella group, warming up the crowd for the big performance.

(clockwise from top)

The Logarhythms and their alumni perform "In Praise of MIT (Take Me Back to the Tech)."

Kevin P. Schoenfelder '09 sings to "Here (In Your

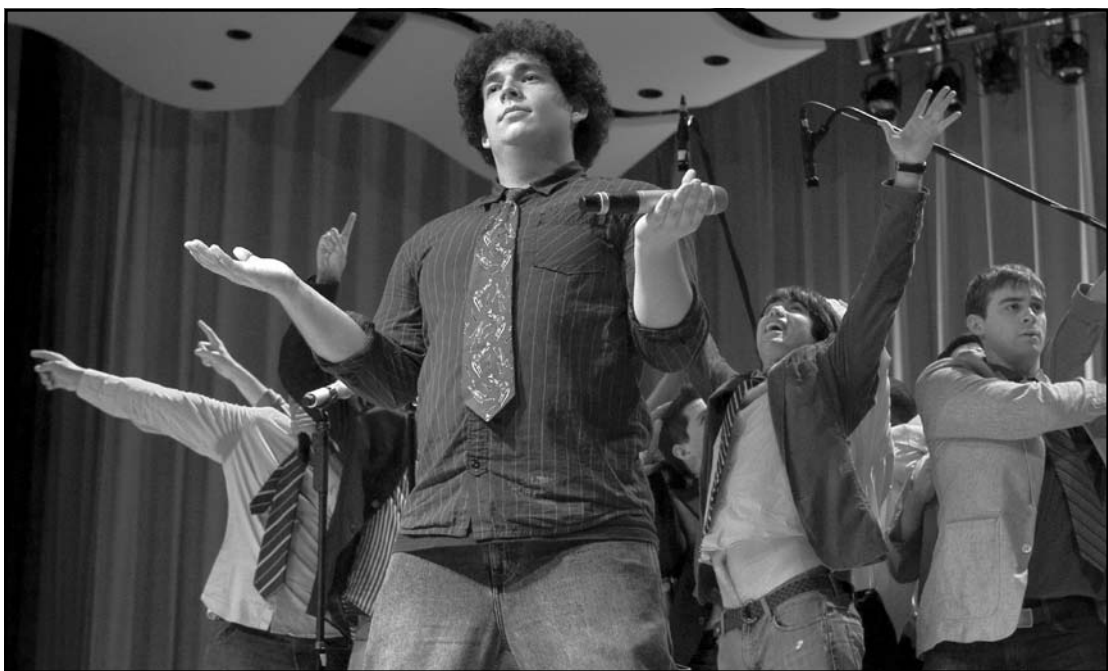
Arms)" by Hellogoodbye.

Jonathan S. Varsanik G, a Logarhythm alum, returns to campus to sing "Learn to Fly" by the Foo Fighters.

The Logarhythms wave goodbye at the end of the concert.

Justin W. Sousa '10 sings to the song "Jump," by rock group Van Halen.

Photography by Andrea Robles



Pseudoscience

by Daniel Klein-Marcuschamer

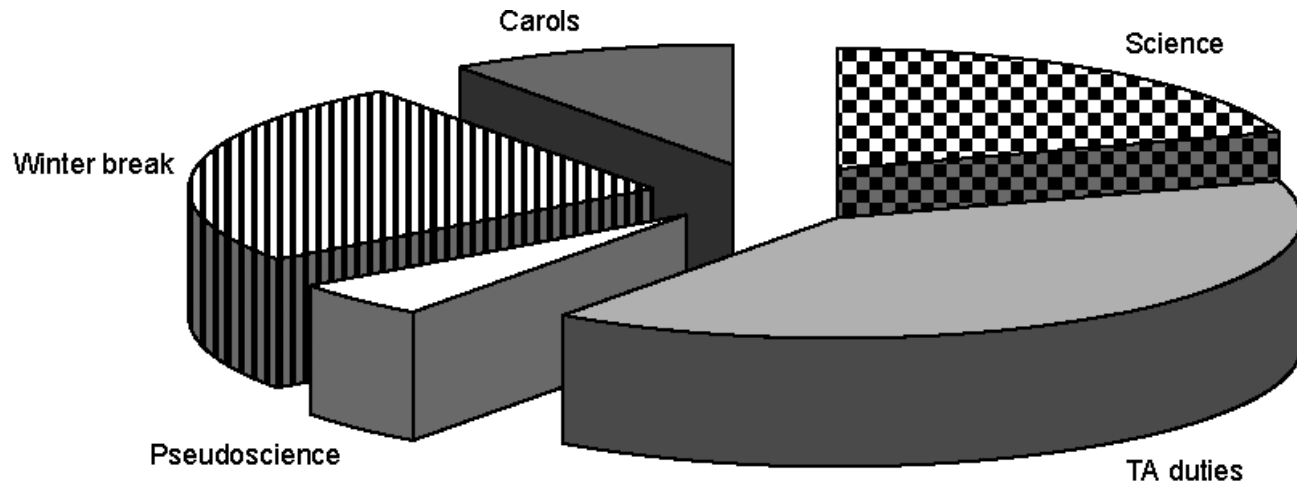
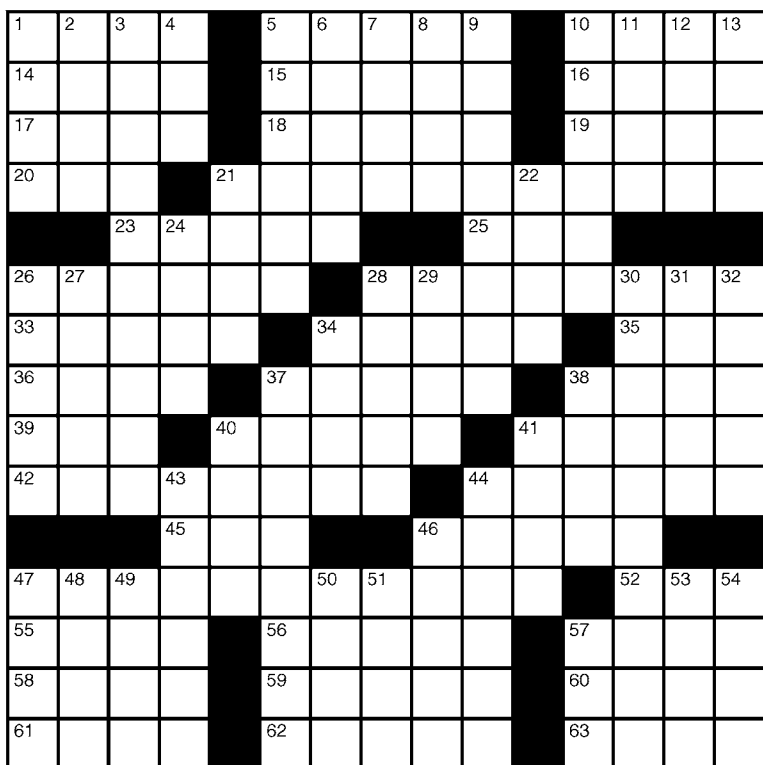


Figure 23 (from 12/14/07): The pie chart shows the allocation of CPU time of the author's brain during the last week of the semester. The small percentage devoted to Science is to blame for the delay in expected graduation date. The large fraction allocated to carols is the result of listening to radio, and is particularly troubling given the fact that the author is Jewish. The small fraction of CPU time left for Pseudoscience is to blame for the brevity of this explanation. A small, but necessary fraction (not shown) has been used for remembering to wish the readers Happy Holidays.

Crossword Puzzle

Solution, page 13



ns | do | ku
 su | do | ku

© Puzzles by Pappocom

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. Solution on page 13.

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

Solution, tips, and computer program at <http://www.sudoku.com>

ACROSS

- 1 Royal Peruvian
- 5 Alphabetizes
- 10 Computer info
- 14 Audition for a part
- 15 Fine-tune
- 16 Showy bloom
- 17 Beheaded Boleyn
- 18 Boredom
- 19 Hiking housing
- 20 Actor Beatty
- 21 Ocarina
- 23 Swerved off course
- 25 Rene

- Auberjonois role
- 26 Pregnant
- 28 Really big
- 33 Transplant, as a plant
- 34 Lower in spirits
- 35 ET's vehicle
- 36 Armchair athlete's channel
- 37 Lawn
- 38 The work week is over!
- 39 Moray ___
- 40 Point of view
- 41 Map
- 42 Making a weak,

- chirping sound
- 44 Stock items
- 45 Boxer's punch
- 46 In an upright position
- 47 Ratel
- 52 Unser and Kaline
- 55 Clapton or Carmen
- 56 Keep clear of
- 57 June 6, 1944
- 58 Wild speech
- 59 Passover feast
- 60 Husband of Frigg
- 61 Billfold bills
- 62 Across: pref.

- 63 Bronte governess Jane
- DOWN**
- 1 Iraq's neighbor
- 2 Oahu goose
- 3 Bright red color
- 4 Fruit juice drink
- 5 Three sheets to the wind
- 6 Had title to
- 7 Philosopher
- 8 Tightly stretched
- 9 T-bar totes
- 10 Marks meaning repeat

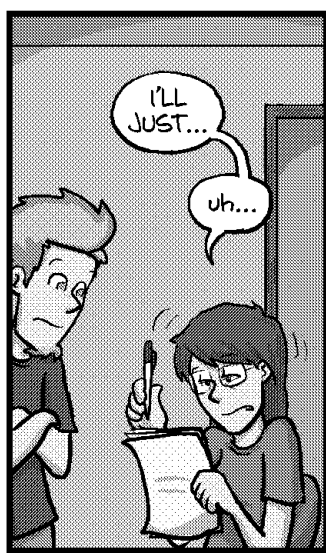
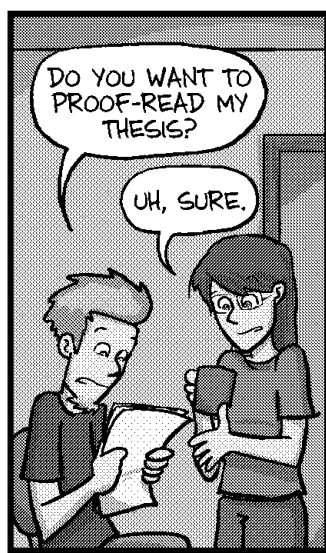
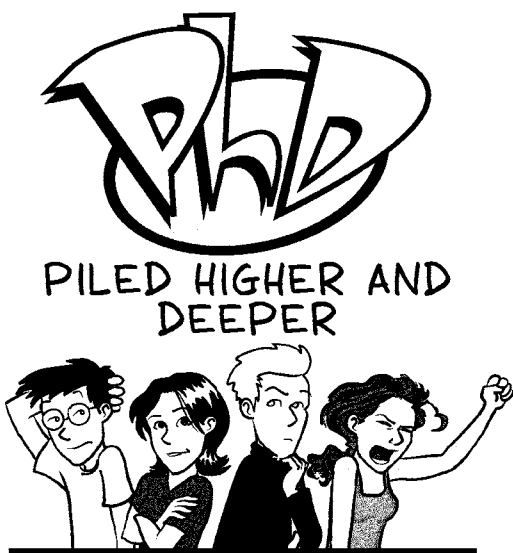
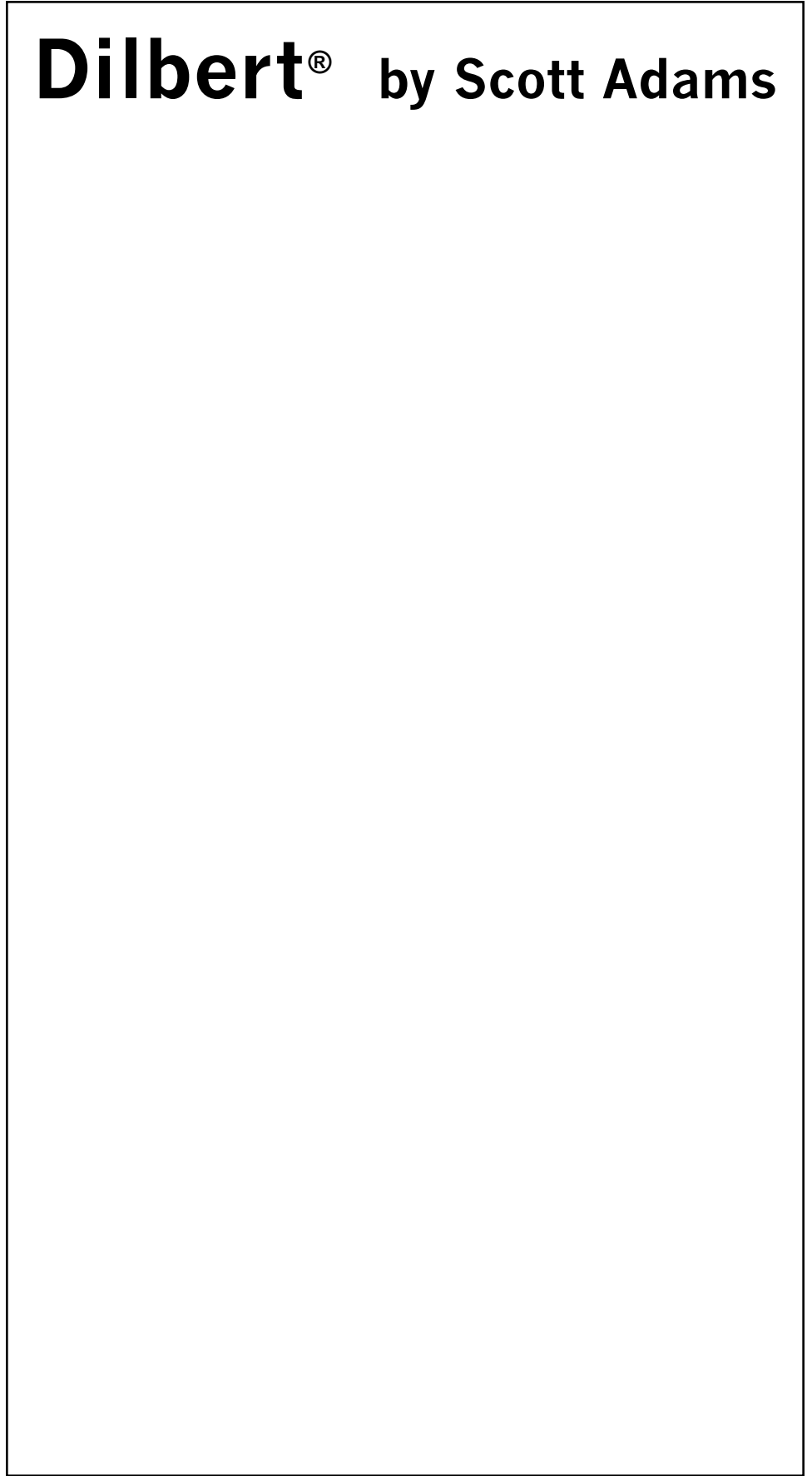
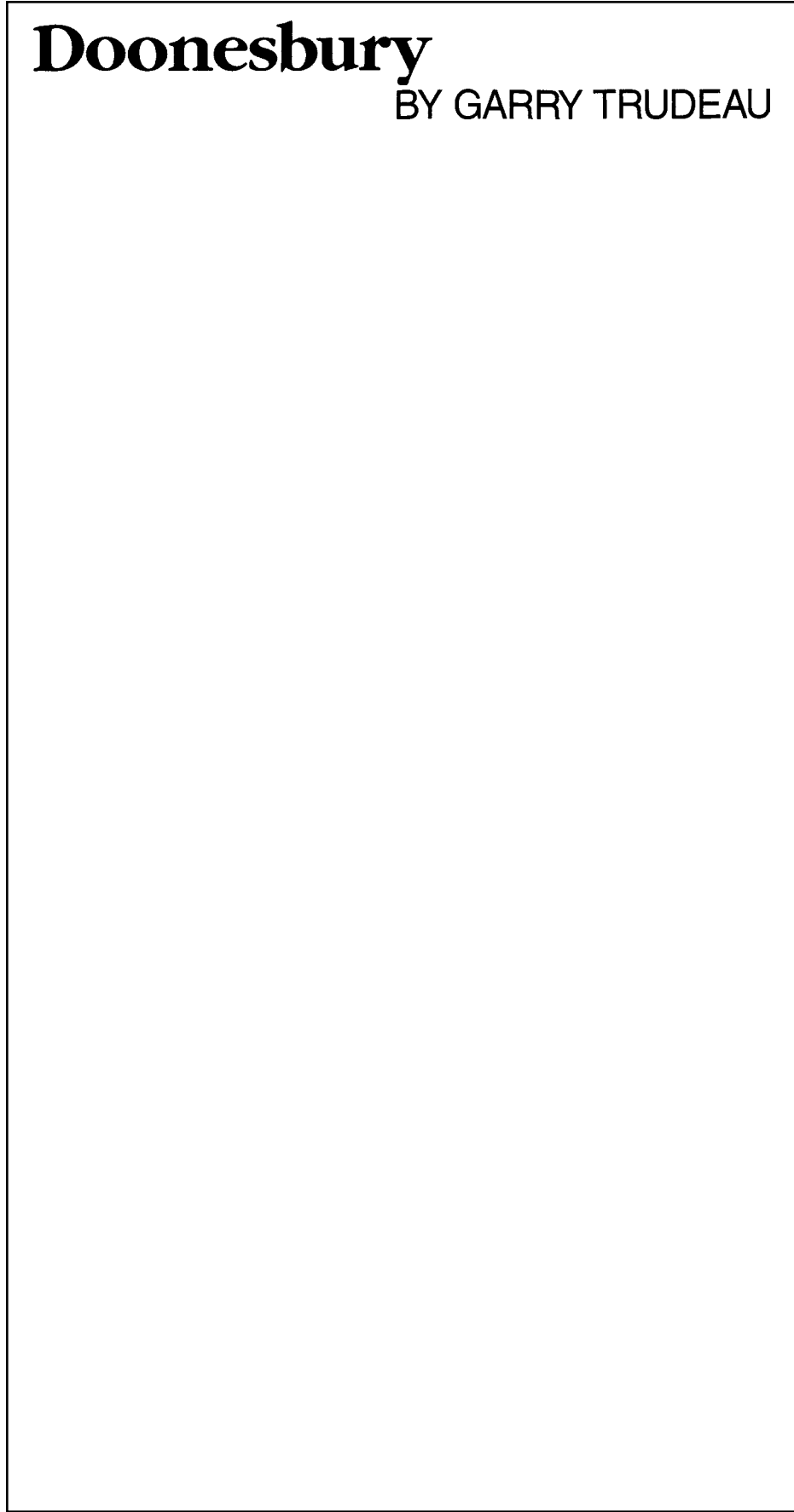
- 11 Domain
- 12 Add color to
- 13 Concerning
- 21 Loretta of "M*A*S*H"
- 22 Olfactory offense
- 24 Stratford's river
- 26 Welcome
- 27 Stitch again
- 28 Loud, resonant, metallic sound
- 29 Kick out
- 30 Gold digger's meal ticket
- 31 Fully in flames
- 32 Garrets

- 34 Grain husks
- 37 Most smooth-tongued
- 38 Holier___-thou
- 40 Stick around
- 41 "Mask" star
- 43 Tosses out
- 44 Exhibits scorn
- 46 Versifier Nash
- 47 Big sandwich
- 48 Algerian port
- 49 Upside-down six
- 50 Affirm
- 51 Arp's art
- 53 Den
- 54 Ago in Scotland
- 57 Unknown John

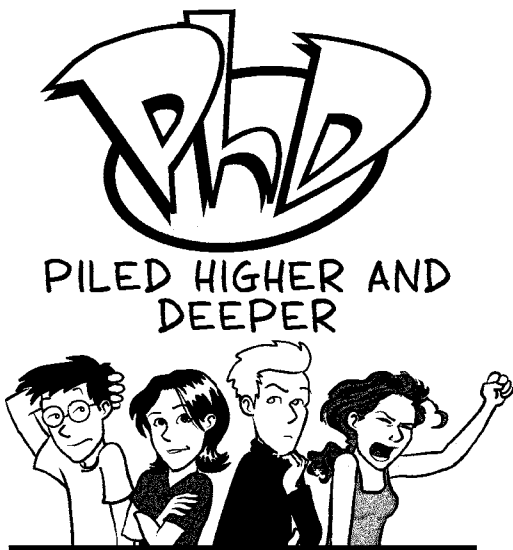
Doonesbury

BY GARRY TRUDEAU

Dilbert® by Scott Adams



WWW.PHDCOMICS.COM



WWW.PHDCOMICS.COM



ERIC D. SCHMIEDL—THE TECH

Record Amount of Snow Falls During December Storm

The first snowfall of the season dumped 10.1 inches of snow, according to the National Weather Service, bringing much of the Greater Boston Area to a standstill on Dec. 13, 2007.

(clockwise from top right)

An electric snowman sits outside of East Campus.

Snow falls on the Stata Center.

A fire engine backs off the patio in front of the Media Laboratory after firefighters responded to smoke in the building resulting from a failure of the hydraulic system of one of the building's elevators.

Media Lab occupants huddle outside as firefighters confer on the first floor of the building.

Piles of snow surround the emergency call button on the walkway leading from 77 Massachusetts Ave. to the Student Center on Dec. 21.



MONICA KAHN—THE TECH



OMARI STEPHENS—THE TECH

OMARI STEPHENS—THE TECH



MONICA KAHN—THE TECH



Experience the *other* Cambridge!



**Cambridge-MIT Exchange (CME)
Application deadline is
January 15, 2008**



Please submit all materials to your CME department coordinator. For more information visit web.mit.edu/cmi/ue or contact cme-info@mit.edu

***** New Class, Spring 2008 *****

20.020

Introduction to Biological Engineering Design

Learn how to design and build living organisms that solve real world problems.

9 units, T/R 11:30a - 1p and W 2-5p

No prerequisites.

Instructors: Drew Endy & Natalie Kuldell

Colleges Build Interactive Web Sites to Lure the Class of 2012

By Peter Schworm
THE BOSTON GLOBE

Once dominated by glossy brochures, college fairs, and campus tours, the college admissions landscape is rapidly shifting toward online social media, as schools blanket the Internet with podcasts, blogs, and videos to recruit wired high school students.

With virtual campus tours, live chats with college students, professors, and admissions officers, and videos about campus life, colleges and universities are increasingly turning to interactive and multimedia technology as recruiting tactics to connect with prospective students who are far more likely to scroll down a Web page than thumb through a college viewbook.

Think of it as College Admissions 2.0, college officials and consultants say.

"Higher ed is really trying to embrace it on all fronts," said Nora Barnes, director of the Center for Marketing Research at the University of Massachusetts at Dartmouth. "There's no doubt that's where their audience is."

In a study released this fall, UMass-Dartmouth researchers found that colleges are adopting Internet technologies such as podcasts, message boards, blogs, and social networks faster than Fortune 500 companies. The explosion of social media, higher education specialists say, is revolutionizing the college search process and the way colleges and prospective students interact.

Eager to prove their cutting-edge credentials to tech-savvy teenagers, colleges are accelerating efforts to bolster their online presence amid sharp competition for students and the proliferation of Web video and broadband Internet access.

"It's not about staying ahead of the students, it's about keeping up with them, but without seeming desperate to be hip," said David Hawkins, director of public policy and research for the National Association for College Admission Counseling.

Prospective students can now instant-message recruiters and befriend them on Facebook, where scores of their future classmates are just a click away. They can take in classes on iTunes, tour campuses on YouTube, and create a profile on college Web sites to receive customized news a la Amazon.com.

At Colby College, which last year scrapped its traditional admissions brochure in favor of a student-run magazine, online visitors can view photo galleries and video podcasts with interviews with students and professors. The Massachusetts Institute of Technology features a range of student blogs to give prospective students an unvarnished look at the college, while Northeastern University posts video clips of campus life on iTunes. The College of the Holy Cross lets high school students create quick profiles as they would on Facebook to connect them with Holy Cross students who share their interests.

"This is their world," said Ann McDermott, Holy Cross director of admissions. "We want to make them feel at home."

Students say they are most drawn to features that give them a genuine glimpse of what the college is like and whether they'll like it. Colleen Curran, who went to high school outside Atlanta, chose to attend Holy Cross after months of reading a student blog.

"I was able to see firsthand what I'd be going through," said Curran, a freshman. "I felt extremely connected."

Ronné Patrick Turner, dean of ad-

missions at Northeastern University, has received 6,000 hits on her blog since it launched in October. As more students fail to respond to direct mailings, the traditional mainstay of college admissions, nearly one in five students apply without having ever contacted the university, she said. The surge in so-called "stealth applicants," who mainly conduct their college search online, is spurring colleges to expand their e-marketing efforts.

"Students find us on the Internet," said Pam McCafferty, dean of enrollment management at Fitchburg State College, which in October launched a video campus tour featuring interviews with students and faculty that has drawn more than 21,000 visits. "It's the most consistent thing we see."

Some colleges, such as Dickinson College in Pennsylvania, have launched marketing videos on YouTube, where Dickinson's president even demonstrates how to tie a bow-tie. Wellesley College's Web site provides a glimpse of the campus from a helicopter. Simmons College admissions counselors have Facebook and MySpace pages and regularly correspond with prospective students and applicants via instant- and text-message.

"This is how they prefer to communicate, and it gives us a chance to build a relationship with them," said Catherine Capolupo, Simmons' director of undergraduate admissions. "Technology is changing the admissions landscape very quickly."

• Discuss the campus issues of the day.
• Get the latest news.
• Avoid spamming scores of -discuss and -talk lists.

Subscribe to MIT-TALK:
<http://mailman.mit.edu/mailman/listinfo/mit-talk>
or
`athena%blanche mit-talk -a $USER`

This space donated by The Tech

Learn two new languages for free this IAP !

Learn Toki Pona

Tuesday-Friday, January 8-11
5:30-7:00pm
Room 2-131

Note: it is not too late to join this class!

Toki Pona is a "maximally minimal" language. With only 120 words and only the simplest to pronounce sounds, Toki Pona is based on the philosophy that "simple is good." In order to lead a simple life, one needs a simple language; or perhaps a simple language will lead to a simpler life. Whether you accept the philosophy or not, Toki Pona is fun to speak. For the first time, in a four-day class to learn the language!

Esperanto for Beginners

Mon-Fri, Jan 14-18, Jan 21-25
Esperanto II
Mon-Fri, Jan 28 Feb 1
5:30-7:00pm
Room 2-131

Esperanto is a simple yet expressive language that is spoken by millions of people in over 120 countries who are interested in communicating with others, regardless of their native languages. Esperanto is easy to learn and use, and in this fun introductory course you'll quickly learn sufficient grammar and vocabulary to begin using the language outside of class. We'll also look at the contemporary culture of Esperanto, showing how young people are using it today around the world.

IAP Events organized by the Societo por Esperanto – MIT's Esperanto Club

For more information: <http://web.mit.edu/esperanto> – spe-ak@mit.edu



Did you know that the Museum of Science hosts rehearsal dinners, weddings, post-wedding brunches, and more?

With endless entertainment options, spectacular views of the Boston skyline, and the unparalleled cuisine and impeccable service of Wolfgang Puck Catering, the Museum of Science is a delightfully unique setting able to accommodate the fresh and the unusual.

For more information, contact Sarah Pike at 617-589-0191 or spike@mos.org.



Museum of Science.



Wolfgang Puck catering

"The Tech Lodge"
Freemasonry at MIT

RCM.MasonryPage.org
rcm-info@mit.edu

Richard C. Maclaurin Lodge
A.F. & A.M.

Eloranta The Peter J. Eloranta Summer Undergraduate Research Fellowships

Awarded to MIT undergraduates (including seniors planning to graduate in June) for interesting and novel research on student-initiated ideas developed outside the normal curriculum. Each individual fellowship is **\$6,000** for summer research. The stipend may be used to cover living expenses, travel, and/or materials and services costs.

IAP Information Sessions:

Tuesday, Jan. 15, 3-4pm in 1-150
Thursday, Jan. 24, 3:30-4:30pm in 1-150

Deadline for Submitting Proposals:

Friday, April 4, 5pm in 7-104

Questions?
Contact UROP Staff
In 7-104, x3-7306

<http://mit.edu/eloranta/>

Earn \$1,000 This Month

Programmer needed for short online project. Must be skilled with blog software, RSS and major online languages.

Send resume/samples to: bus2econ@yahoo.com

Admissions Office Staff Express Excitement About Class of 2012

Early Action, from Page 1

enroll in MIT.

No changes are planned for MIT's early action program, which does not restrict applicants from applying to other schools and does not require admitted students to enroll. Schmill said, "We are convinced that our early action program is a positive program for students."

Schmill said that the high number of deferred applications illustrated that MIT's applicant pool was very strong. "The number of high-caliber students who apply to MIT has continued to grow, a strong sign that the excitement surrounding our campus and community is being recognized throughout the world," he said.

Of admitted students whose high schools rank students, 43 percent are valedictorians and 94 percent are in the top 5 percent of their class. For all students admitted early, the median SAT math and verbal scores were 780 and 730, respectively.

Demographically, 277 men and 245 women were admitted, includ-

No. of Students Admitted to MIT Through Early Action Program

| Class of | 2012 | 2011 | 2010 | 2009 | 2008 |
|--------------------|-------|-------|-------|-------|-------|
| No. of Applicants | 3,928 | 3,493 | 3,098 | 2,801 | 2,833 |
| No. Admitted Early | 522 | 390 | 377 | 383 | 438 |

These numbers include only students who were admitted early, not those early action applicants whose applications were deferred and who were accepted during MIT's regular admissions process.

ing 160 underrepresented minority students: 9 percent of the admitted class is African-American, 19 percent Hispanic, and 2 percent Native American.

Admitted students represent 400 high schools across 44 states and six foreign countries of residency. Only U.S. citizens and permanent residents are admitted during the early action period; international admissions is conducted during regular action admissions.

"The admissions staff is very excited about the students we admitted to the Class of 2012 from this outstanding applicant pool," Schmill said. "They are an exceptional group

of students with diverse backgrounds, experiences, and talents, and we look forward to the contributions they will undoubtedly make to the MIT community."

The Admissions Office is currently reviewing regular action admissions applications. More applications were received this year than last year; though the admissions deadline was Jan. 1, the number of applicants is not yet available.

The Tech previously reported that there were a total of 3,937 Early Action applications. Nine applications have since been withdrawn.

Austin Chu contributed to the reporting of this article.

'Human Error' Blamed For Radiation Citation

Radiation, from Page 1

individual was exposed during each work period," according to the NRC report.

The worker also improperly attached his dosimeter, a device used to measure radiation levels, Sheehan said. While handling irradiated material, the worker wore the device, a finger ring, backwards — the sensor chip was facing outward instead of inward.

The violations are not serious enough to impose a fine, Sheehan told *The Cambridge Chronicle*. "If they have any additional violations in the next two years, they could face civil penalties," Sheehan said.

The MIT Nuclear Reactor Laboratory responded to the report of irradiation by immediately stopping operations to study the problem, said Claude R. Canizares, vice president for research.

"Basically, a human error took

place," Canizares said. Canizares said the errors revealed the need for more stringent training, and MIT has reviewed its training procedures.

The NRC's findings are "relatively minor," said David E. Moncton PhD '75, director of the MIT Nuclear Reactor Laboratory. The high dosimeter reading was an unexpected consequence of improving the way the worker handled the material, he said.

Handling procedures and the training process, which were "pretty good to begin with" have been revamped, Moncton said. "We don't take [these findings] lightly" even though the dosimeter reading was well below any legal or health limit, he said.

According to MIT's statement on the issue, "The MIT reactor lab has one of the best safety records of any reactor — research or power — in the country, based on routine inspections by the NRC. The situation posed no danger to public health and safety or to the environment."

Tang's Bail Comes After Two Months of Detention

Tang, from Page 1

Cambridge police's arrest report.

Tang was arrested on Oct. 23 and was detained until Nov. 7, when a court found that she posed a danger to the community and ordered her to be held without bail. Tang was indicted by a Middlesex Superior Court grand jury on Dec. 7. She was a Wellesley College junior at the time of the attack.

Although the terms of Tang's release include house arrest, the exact location where she will be held has not been disclosed. Tang is no longer a registered Wellesley student, did not complete the fall semester, and no longer lives in her Wellesley dormitory, said Mary Ann Hill, Wellesley's assistant vice president for public affairs.

It is possible that Tang could be held under house arrest at her family's home, but it is not clear where that is. Articles in the *Boston Globe*, the *Cambridge Chronicle*, and the *Boston Herald* have said Tang is a resident of South Bend, Ind., but Margaret Fosmoe, a reporter for the *South Bend Tribune*, said she had been unable to find any record that Anna Tang ever lived in South Bend or graduated from any high school in the area.

Tang's defense attorney, Robert George, was out of the office on Tuesday and was unavailable for comment.

Amgen-UROP Scholars Program

Undergraduate Research in the Sciences and Biotechnology, Summer 2008

Applications are now being accepted for the **2008 Amgen-UROP Scholars Program**.

Up to 28 students (approximately half from MIT) will be selected to conduct research in MIT laboratories, take part in networking and educational activities, and attend a mid-summer research symposium at UCLA. Participants receive competitive research pay, on-campus housing, and a food allowance.

Applications are due by February 1, 2008. For complete information on eligibility requirements and to access the online application, visit mit.edu/urop/amgenscholars.

The Amgen-UROP Scholars Program is managed by the **Office of Undergraduate Advising and Academic Programming (UAAP)**, and is funded by a grant provided by the **Amgen Foundation**.

For more information, contact UAAP staff at amgen-scholars@mit.edu, or (617) 253-7306.

For details on Amgen Scholars Programs offered at other U.S. universities, visit <http://www.amgenscholars.com>.

mit.edu/urop/amgenscholars



Creative?
Intelligent?
Capable?

Prove it! Join a team and enter MIT's annual IDEAS Competition to design and strategize methods to benefit communities around the globe. It is applied innovation for a better world.

Visit us on the web at <http://web.mit.edu/ideas>
This space donated by *The Tech*

Intel Ends OLPC Partnership, Markets Own Low-Cost Laptop

By John Markoff
THE NEW YORK TIMES

SAN FRANCISCO

A frail partnership between Intel and the One Laptop Per Child educational computing group was undone last month in part by an Intel saleswoman: She tried to persuade a Peruvian official to drop the country's commitment to buy a quarter-million of the organization's laptops in favor of Intel PCs.

Intel and the group had a rocky relationship from the start in their short-lived effort to get inexpensive laptops into the hands of the world's poorest children.

But the saleswoman's tactic was the final straw for Nicholas P. Negroponte '66, the former Massachusetts Institute of Technology computer researcher and founder of the nonprofit effort.

He demanded that Intel stop what he saw as efforts to undermine the group's sales, which meant ceasing to sell the rival computer. Intel chose instead to withdraw its support from One Laptop this week.

The project has been a lightning rod for controversy largely because the world's most powerful software and chip making companies — Microsoft and Intel — had long resisted the project, for fear, according to many industry executives, that it would compete in markets they hoped to develop.

As a result, One Laptop's XO computer comes with a processor built by Intel's rival Advanced Micro Devices and open-source software, rather than Microsoft's Windows and Office software.

After several years of publicly attacking the XO, Intel reversed itself over the summer and joined the organization's board, agreeing to make an \$18 million contribution and begin developing an Intel-based version of the computer.

Although Intel made an initial \$6 million payment to One Laptop, the partnership was troubled from the outset as Intel sales representatives in the field competed actively against the \$200 One Laptop machine by trying to sell a rival computer, a more costly Classmate PC.

The Classmate sells for about \$350 with an installed version of Microsoft Office, and Intel is selling the machine through an array of sales organizations outside the United States.

Even after Intel joined the One Laptop board, in country after country, the two organizations competed to make government sales, Negroponte said Friday in a telephone interview. The relationship first frayed seriously in October, he said, when an Intel salesman gave a Mongolian government official a side-by-side

comparison of the Classmate PC and the XO.

Negroponte said he was infuriated and threatened to throw Intel off the One Laptop board. In response, Intel's chief executive, Paul S. Otellini, agreed to change Intel practices and he accelerated the development of the Intel prototype.

Sean Maloney, the company's top sales and marketing executive, sent e-mail instructions to the sales team that were intended to end the practice of product comparisons.

Negroponte said eliminating the comparisons was required as part of a nondisparagement clause in the partnership agreement the two companies had signed.

In the field, according to Negroponte, nothing changed.

He complained, in particular, that Intel sales representatives were claiming that as a result of the company's board position at One Laptop, Intel had information suggesting that the organization was in trouble.

Intel refused to respond to Negroponte's specific account of the events that led to the end of the partnership.

Instead, Chuck Mulloy, an Intel spokesman, reiterated the company's statement that Intel had decided to leave the organization after it reached a stalemate over whether the chip maker could continue to promote the Classmate.

"Our position continues to be that at the core of this is a philosophical impasse about how the market gets served," he said.

Negroponte said that an Intel representative did not attend a board meeting of the group in Miami last month, citing a potential conflict of interest.

At the meeting, the board agreed that Negroponte should make a final effort to end Intel's efforts to disrupt One Laptop's sales.

A rapprochement never happened, however.

"They played another dirty trick in Peru," he said. "It's a little bit like McDonald's competing with the World Food Program."

In Peru, where One Laptop has begun shipping the first 40,000 PCs of a 270,000 system order, Isabelle Lama, an Intel saleswoman, tried to persuade Peru's vice minister of education, Oscar Becerra Tresierra, that the Intel Classmate PC was a better choice for his primary school students.

Unfortunately for Intel, the vice minister is a longtime acquaintance of Negroponte and Seymour Pap-

ert, a member of the One Laptop team and an MIT professor who developed the Logo computer programming language. The education minister took notes on his contacts with the Intel saleswoman and sent them to One Laptop officials.

In a telephone interview on Friday, Tresierra said that his government had asked Intel for a proposal for secondary-school machines, and it had responded with a proposal offering the Classmate PC for primary grades.

"We told them this is a final decision, we are running the primary-grade project with the XO," he said. "She wasn't very happy."

He said the decision to purchase the XO had come after the government had run a pilot project with the computers. "We were very happy with the results," he said.

Until Intel surprised him by quitting on Thursday, Negroponte said he had still held out some hope that the relationship could be saved. The Intel XO was supposed to be introduced next week at the Consumer Electronics Show in keynote speeches to be made by Negroponte and Otellini, but the prototype will now be set aside.

Intel's decision to leave was announced first in a series of phone calls made by a company spokesman to a small group of reporters. Some time later, D. Bruce Sewell, Intel's senior vice president and general counsel, sent an e-mail message to Negroponte.

The note said that the statement, which had already been reported by wire services, was an inadvertent leak. He apologized for the way the announcement was handled.

For his part, Negroponte said he still hoped to sell 2 million to 3 million computers this year. Negroponte had originally hoped to sell up to 5 million computers.

The group did not get major orders; instead One Laptop has continued with a variety of smaller deals in countries including Uruguay, Peru and Mexico.

The group, based in Cambridge, Mass., announced Friday that its two-month "Give One, Get One" charitable promotion had generated \$35 million and sold a total of 167,000 computers, half of them to be distributed in the developing world.

He said he still believed that the XO could have a big impact.

"If I can sell 1.5 million computers in Iraq, Afghanistan and Ethiopia, I will feel a lot better than other sales we might make."

Researchers Discover Flu Receptors in Birds

Bird Flu, from Page 1

ity to infect large numbers of people, according to a federal scientist not involved in the research.

"It's a big step forward into new territory for helping us to understand another element of transmission," said Carole Bewley, a chemist specializing in the study of infectious diseases at the National Institute of Diabetes and Digestive and Kidney Diseases. "This would help to explain those things that didn't make sense before."

Scientists have long recognized that not all strains of the flu find humans attractive targets. Some prefer pigs or birds. It turns out that the flu virus is like a piece of Velcro hunting for a companion swatch of Velcro to attach itself to.

In scientific terms, it works this way: Before a flu strain can pose a broad threat to a species, a pivotal protein carried on the virus surface has to glom onto sugar that coats cells in the victim's upper respiratory tract. The virus "catches onto the sugar and uses the sugar as a way to gain entry into the cell," said MIT

Biological Engineering Professor Ram Sasisekharan, senior author of Sunday's report in the journal *Nature Biotechnology*.

The current strain of avian flu making the rounds doesn't have much affinity for humans' upper respiratory tract because it can't latch on very well to the type of sugar that coats the surface of human lungs. Flu strains that attack humans prefer a type of sugar known as alpha 2-6.

But not just any alpha 2-6. The MIT scientists, working with the Centers for Disease Control and Prevention, discovered that there are different versions of the important sugar. Some are shaped like cones. Others resemble an open umbrella — and they're the ones most susceptible to invasion by flu viruses that threaten humans. They have a length and shape more compatible with the wider proteins that populate human flu viruses.

The discovery, said University of Minnesota flu tracker Michael Osterholm, "could be an important piece relative to the whole avian flu puzzle. But it doesn't solve the whole puzzle."

JASON STATHAM **LEELEE SOBIESKI** **KRISTANNA LOKEN**

RISE AND FIGHT!

IN THE NAME OF THE KING
A DUNGEON SIEGE TALE

BOLL KG PRODUCTIONS PRESENTS IN ASSOCIATION WITH HEROLD PRODUCTIONS AND BRIGHTLIGHT PICTURES AN UWE BOLL FILM
JASON STATHAM "IN THE NAME OF THE KING - A DUNGEON SIEGE TALE" LEELEE SOBIESKI JOHN RHYSDAVIES RON PERLMAN CLAIRE FORLAIN
KRISTANNA LOKEN MATTHEW LILLARD BRIAN WHITE WITH RAY LOTTA AND BURT REYNOLDS MUSIC BY HENNING LOHNER AND JESSICA DE ROOIJ
CASTING BY MAUREEN WEBB AND EYDE BELASCO, CSA COSTUME DESIGNERS CARLA HETLAND AND TONI RUTTER PRODUCTION DESIGNER JAMES STEUART
DIRECTOR OF PHOTOGRAPHY MATHIAS NEUMANN, BVK FILM EDITOR DAVID M. RICHARDSON ASSOCIATE PRODUCER JONATHAN SHORE EXECUTIVE PRODUCERS CHET HOLMES
WOLFGANG HEROLD AND STEPHEN HEGYES BASED ON THE DUNGEON SIEGE GAME DESIGNED BY CHRIS TAYLOR AND GAS POWERED GAMES™
ACTION CHOREOGRAPHER TONY CHING SIU TUNG PRODUCED BY DANIEL CLARKE AND SHAWN WILLIAMSON STORY BY JASON RAPPAPORT & DAN STRONICAK AND DOUG TAYLOR
SCREENPLAY BY DOUG TAYLOR PRODUCER AND DIRECTED BY UWE BOLL

B BRIGHTLIGHT PICTURES **HEROLD** **ASUS** **PRODIGY** **VIVID**

PG-13 PARENTS STRONGLY CAUTIONED
Some Material May Be Inappropriate for Children Under 13
FOR INTENSE BATTLE SEQUENCES

WWW.INTHENAMEOFTHEKING.COM

STARTS FRIDAY, JANUARY 11TH AMC LOEWS BOSTON COMMON 19 175 TREMONT ST. 1-800-FANDANGO #730
ENTERTAINMENT CINEMAS FRESH POND 10 FRESH POND PLAZA 617-661-2900
AMC LOEWS DANVERS 20 LIBERTY TREE MALL RTE. C1 & SQUIRE RD. 1-800-FANDANGO #734
SHOWCASE CINEMAS REVERE 781-286-1660

AND AT THEATRES EVERYWHERE

Solution to Sudoku
from page 7

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

Solution to Crossword
from page 7

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I | N | C | A | S | O | R | T | S | D | A | T | A | |
| R | E | A | D | T | W | E | A | K | I | R | I | S | |
| A | N | N | E | E | N | N | U | I | T | E | N | T | |
| N | E | D | S | W | E | E | T | P | O | T | A | T | O |
| Y | A | W | E | D | O | D | O | | | | | | |
| G | R | A | V | I | D | C | O | L | O | S | S | A | L |
| R | E | P | O | T | B | L | U | E | R | | U | F | O |
| E | S | P | N | G | R | A | S | S | T | G | I | F | |
| E | E | L | S | L | A | N | T | C | H | A | R | T | |
| T | W | E | E | T | I | N | G | S | H | A | R | E | S |
| J | A | B | O | N | E | N | D | | | | | | |
| H | O | N | E | Y | B | A | D | G | E | R | A | L | S |
| E | R | I | C | E | V | A | D | E | D | D | A | Y | |
| R | A | N | T | S | E | D | E | R | O | D | I | N | |
| O | N | E | S | T | R | A | N | S | E | Y | R | E | |

American Repertory Theatre

War. Friendship. Physics. The Bomb. The secret lies in **COPENHAGEN**

by Michael Frayn directed by Scott Zigler with John Kuntz, Will LeBow, and Karen MacDonald

Winner of the Tony Award for Best Play NOW PLAYING!

Loeb Drama Center 64 Brattle St. Cambridge 617.547.8300 amrep.org

got sperm?

SPERM DONORS NEEDED Up to **\$1100** a month!

Healthy MEN in college or with a college degree wanted for our sperm donor program.

Minimal time commitment

Help people fulfill their dreams of starting a family.

Receive free health and genetic screenings.

APPLY ONLINE:

www.SPERMBANK.com

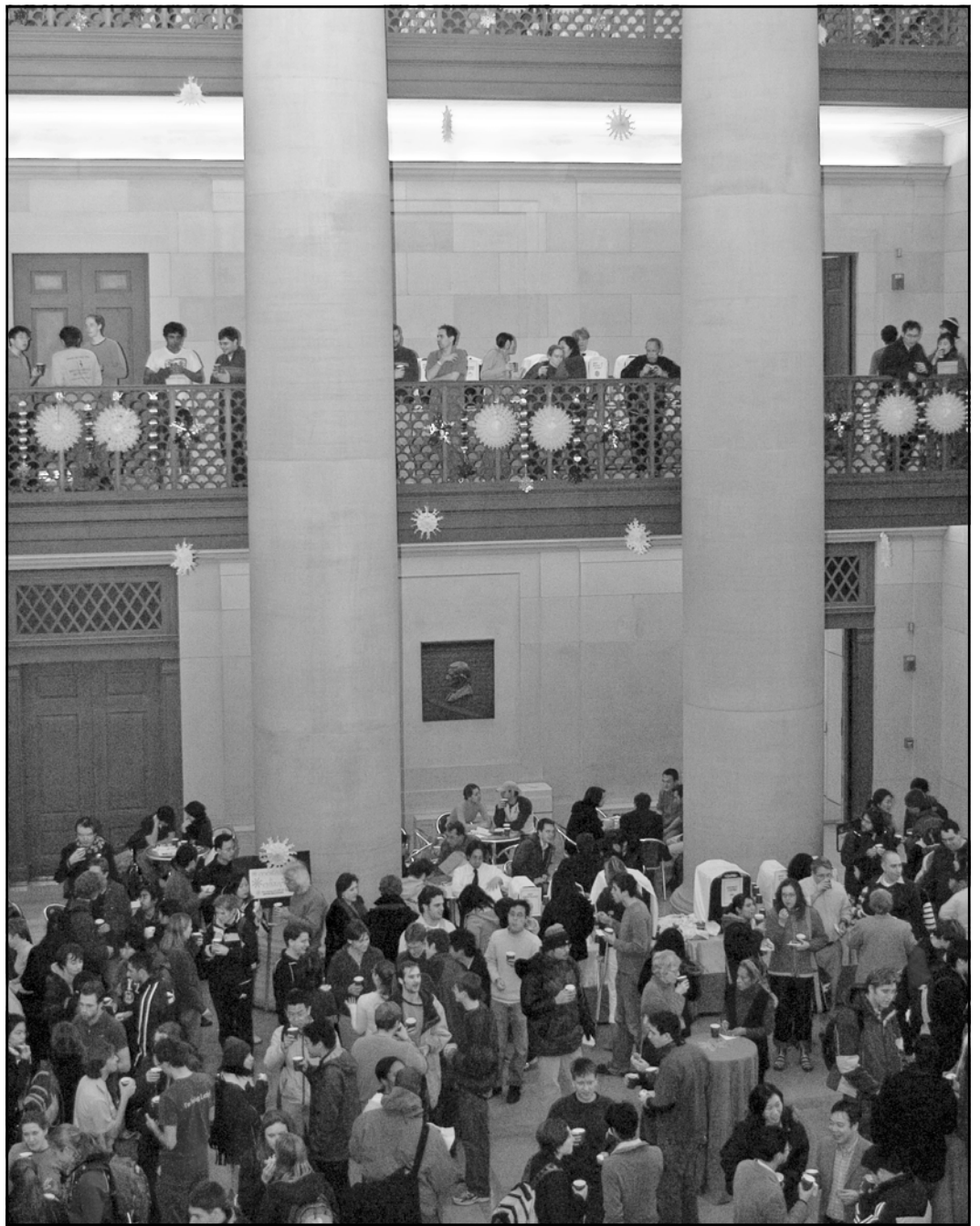
SUMMER 2008

RESEARCH EXPERIENCES FOR UNDERGRADUATES (REU)

MIT HAYSTACK OBSERVATORY

Undergraduate science, mathematics, engineering, and computer science students are invited to apply for summer research positions at the MIT Haystack Observatory in Westford, MA. Research projects include radio astronomical studies, atmospheric physics investigations, and hardware and software development for data acquisition and processing. The program extends from June 2 to August 8, 2008 and carries a weekly stipend of \$400.00. Women, minorities and students with disabilities are encouraged to apply. For further information and application materials, see <http://www.haystack.mit.edu/edu/reu/>.

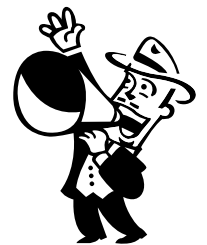
Application deadline is 1 February 2008.



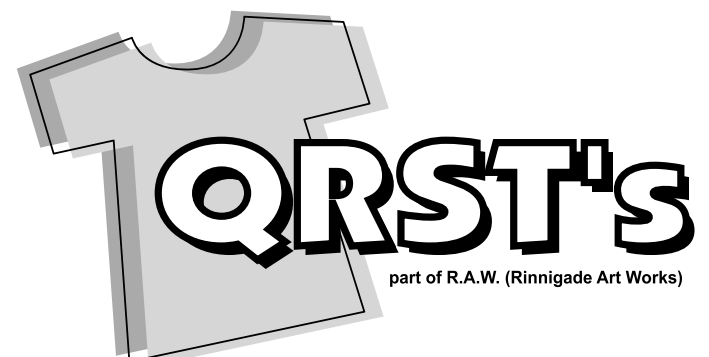
Students and faculty gather in Lobby 7 on Dec. 17, 2007 to take part in the MIT Community Winter Break, sponsored by the Office of the President. The Winter Break was postponed from its original date of Dec. 13 because of a snowstorm.

T-SHIRTS

...a necessary fact of College!



- Deal direct...no middlemen
- Fast turnaround
- Award winning & computer literate art dept.
- Free delivery & reasonable pricing *Cambridge & Boston Area
- Full color t-shirts and coffee mugs - no minimum!
- Locally owned & operated in Somerville, MA.
- ...and best of all - no boring lectures**



ph - 617-625-3335
 email - info@qrsts.com
www.qrsts.com
 serving the M.I.T. Community since 1989

BCS Has Adapted Well With Minor Changes

BCS, from Page 16

teams 1-4) and adding on one more game. Simply re-rank the teams after the current five-bowl structure (pulling in the Capital One or Cotton Bowls), and pit the new No. 1 and No. 2 against each other in the National Championship Game. But would this actually lessen the debates? Take this bowl season, for example. LSU would clearly be the top seed, but who's No. 2?

Is it USC, who dominated Illinois in the Rose Bowl? Or Georgia, who destroyed the previously undefeated Hawaii in the Sugar Bowl? Or West Virginia, who probably today would be tops in the country had it not been for Pat White's injured thumb against Pittsburgh? Or Kansas, the one-loss surprise who validated itself against Virginia Tech? You get my point.

The BCS has also adapted well since its introduction, evolving to problems that come up as unforeseen scenarios emerge. It now provides an automatic berth to winners of one of the "mid-major" conferences, should the team finish in the top 12 in the BCS standings. Teams ranked third (and possibly fourth) in the BCS standings also automatically gain entrance into a BCS Bowl (after No. 3 Kansas State was subjected to the Alamo Bowl in 1998).

These changes have also been coupled with changes to how the actual scoring is done to rank the teams, often for the better. Nearly every year, the scoring — which takes into account both human polling and computer rankings — changes. But with change comes progress, and as a fan, the hour I waste figuring out what's what after the first set of rankings comes out is well worth the trouble.

Any type of large-scale change isn't going to happen easily, and it certainly won't happen soon. Beyond convincing the Big 10 and Pac-10 to stray away from their precious Rose Bowl, the BCS still has a contract with FOX through 2010.

So as the debates continue for the years to come, the least we can do is say, Congratulations, LSU, the BCS has declared you the best team in the country. That's one thing, I hope, we can all agree on.

NFC Matchups Favor Cowboys and Packers

Playoffs, from Page 16

for Chargers wide receivers Chris Chambers and Vincent Jackson, both of whom stepped up nicely against the Titans. Their effectiveness against the Colts secondary, including NFL Defensive Player of the Year Bob Sanders, will be a key factor, assuming the Colts concentrate their efforts on stopping LT.

The Colts will finally get wide receiver Marvin Harrison back and should be the healthiest the team has been in a long time. However, look for them to start out rusty, especially coming off the bye week. They can't afford to get behind early to a Chargers team that is on a seven-game winning streak and confident from beating Indy back in Week 10 (granted, they probably don't expect six interceptions from Peyton Man-

ning this time).

Yes, we know that Manning is a living legend, and we know that the Colts defense gave up the fewest total points this year. But there must be an upset somewhere, and the Chargers are hot.

Pick: *Chargers over Colts*

New York Giants at Dallas Cowboys

Moving to the NFC, the Cowboys won't lose to the Giants. Giants quarterback Eli Manning was lucky to earn his first playoff win opposite an uninspiring Bucs offense, but that won't be the case in Dallas. Cowboys quarterback Tony Romo wants to redeem himself after last year's botched hold to prove he's worthy of elite status (and Jessica Simpson). As for the latest T.O. injury saga, it has all the usual elements: T.O. is

hurt. T.O. is receiving tons of attention. T.O. is going to play well and will be a difference-maker, albeit an annoying one.

Even if not, Eli's newfound confidence may well revert back to skittishness, particularly when the Giants play against a team that vividly remembers beating them 31-20 in New York and 45-35 in Dallas.

Pick: *Cowboys over Giants*

Seattle Seahawks at Green Bay Packers

Can anyone seriously pick against Brett Favre? We don't care how well Seattle's defense stepped up for all but a few minutes against the Redskins, but this is Brett Favre we're talking about.

Green Bay is the more inexperienced team overall, but if anyone can calm and prepare a young team for

a playoff game, it's Favre. Besides, a win on Sunday and Favre might even be back for another year. Who doesn't want to see that?

The Seahawks, known this year for their passing attack, will need a better performance from quarterback Matt Hasselbeck. It is a daunting task without his "12th Man" in Qwest Field. As long as the Packers limit their mistakes, something the Redskins couldn't do, they should prevail in a close one at Lambeau.

Pick: *Packers over Seahawks*

Think our picks suck?

Don't just sit there, let us know why. E-mail nfl@the-tech.mit.edu (before the games), and we'll let the authors of the two best responses publish their picks for next week in next Wednesday's issue of *The Tech*.

Patriots Focus on Super Bowls and Solid Football Before Public Approval

Patriots, from Page 16

er Sammy's friends are Philadelphia Eagles fans, and one of them was talking to him about football. "So, how about those Patriots?" Sammy asked.

"They're not going 19-0," his friend replied.

"Why not?"

"Because — because I don't want them to."

I certainly do not expect you to pity an undefeated team often labeled as a juggernaut. After all, just about every other team would kill to be in the position the Patriots are right now. But people are too quick to write off the Patriots as undeserving cheaters or attempt to negate their victories.

For every complimentary comment about Brady reading the field or Moss reeling in "uncatchable" passes, there is an equal and opposite negative reaction to New England success. Commentators habitually mention Spygate in the same breath as anything related to Belichick's coaching. (When Belichick won Coach of the Year, the Associated Press lede started with "Spygate be damned!") Writers devote column space to how classless the Patriots were for "running up the score," though that should not even be an issue in a professional league where players are paid to play hard on every down. As for playing dirty, NFL Network analyst Cris Collinsworth mentioned that Wilfork intended to poke Jacobs' eye out. (Hilariously, Bryant

Gumbel replied, "I think it was intent to annoy.")

Granted, everyone is allowed to have his or her own opinion about the Patriots. But the unfortunate result is that the focus is no longer solely on stellar football. Instead, the players' personalities, the coach's brusqueness, and so forth all dominate the commentary.

Luckily, the Patriots have made it amply clear that they do not care what anyone thinks. First and foremost, the Patriots care about being prepared for each and every game. Being liked is not their goal. Winning the Super Bowl is.

And maybe the 2007 New England Patriots are harder to like than the underdogs that won Super Bowl XXXVI. But it took 35 years for another undefeated regular season after the 1972 Miami Dolphins went 14-0, and there is no guarantee it will happen again. If you have to, ignore the logo on the helmets and simply appreciate the football.

Halftime Adjustments Key In Exciting Overtime Victory

Basketball, from Page 16

Bartolotta's determination and great offensive play in the post by Soumare. Trailing 35-19 at the break, MIT outscored Connecticut College 43-27 in the second half and 17-11 in the overtime period.

"We made great adjustments after a really disappointing first half," said Associate Head Coach Oliver W. Eslinger. "It was encouraging to see our guys bounce back and finish the game hard."

Soumare scored eight of the first 11 points in the second half to reduce the Camels' commanding lead to single digits, while a three by Will D. Mroz '08 narrowed the advantage to 41-34 with 12:29 left in regulation. Jeff Young drilled back-to-back threes to once again extend the lead, but Bartolotta answered with six straight points to bring the deficit back to seven.

Another shot beyond the arc by Bartolotta sliced the Camels' lead to one (51-50) with five minutes left in the half, although Connecticut College refused to surrender the advantage. With 2:40 showing

on the clock, the Engineers finally grabbed their first lead of the night after Bartolotta sank a pair of free throws. Trailing 58-57 with 2:17 to go, Young drained another three as the Camels reclaimed the lead.

The Engineers trailed 62-58 with one minute left in the game, but Bartolotta cut the lead in half with a jumper on the left side. On the Camels' ensuing possession, Bartolotta jumped the passing lane and picked off a pass before sinking two more free throws to send the game to overtime.

Bartolotta had only three points in the first half, but finished the heroic effort with another solid stat line as he collected 29 points on 8-of-14 shooting, adding five assists and five steals. The junior wing tied Adam J. Gibbons '05 for 13th all-time on the MIT scoring list with 1,212 points.

MIT's thunderous one-two punch negated a well-balanced effort by Connecticut College, as all five starters finished in double figures. Young led the way with 16 points and eight boards, while Billy Karis closed with 15. Bernier (13), Christian Mosley (12) and Charles Stone (10) rounded out the Camels' double-digit scorers.

WELCOME BACK TO CAMPUS

We hope you enjoyed a safe, relaxing holiday break. Now you are back and ready to get things moving again. At Shell, we've got great opportunities to jump-start your career, whether you're a freshman or a senior.

Check out our internship programs, the Gourami Business Challenge or our full-time career opportunities. At Shell, it's all about creating a

win-win partnership: you maximize your personal development, we enjoy the benefit of your talent.

You'll be contributing from day one. Real projects, real responsibility and a real chance to prove yourself.

Find out what Shell can offer you. Just visit our careers website to apply

www.shell.com/careers

Shell is an Equal Opportunity Employer

Pursue it

A more exciting career experience

Achieving more together

Computation for Design and Optimization

Master of Science Program:
Computation for Design and Optimization (CDO)

→ APPLICATION DEADLINE: JANUARY 10, 2008

The critical role that computation plays in modern complex engineered systems has created a great demand for engineers educated in computational science for design and optimization.

The MIT S.M. program in Computation for Design and Optimization (CDO) meets this demand by focusing on computational issues in modeling systems in engineering and science. Through coursework, hands-on projects and a thesis, students learn and apply advanced computational methods to a diverse range of applications, from aerospace to nanotechnology, from internet protocols to telecommunications system design, and many more.

The CDO master's degree may be pursued as a professional degree, as preparation for a PhD, or concurrently with a PhD program in an MIT department.

More information: <http://web.mit.edu/cdo-program>
Email: cdo_info@mit.edu

IAP Info Session!
Tuesday, January 8, 2008
10-11:30am, Room E51-151

Massachusetts Institute of Technology

SPORTS

Bowl Championship Series Doesn't Need A 'Plus-One' Format

By Shreyes Seshasai
SPORTS EDITOR

I began writing this column with every intention of supporting a playoff system for college football. Perhaps it was because I really didn't think two-loss Louisiana State University was the best team in the nation. Or maybe it was because I felt bad for all of those University of Southern California fans, who clearly were not satisfied with just a whopping on Illinois. Having a playoff just feels fair; it's too sad to turn teams away.

But honestly, a playoff system just wouldn't work.

John Swofford, the outgoing chair of the Bowl Championship Series, discussed this week the possibility of moving to a pseudo-playoff format, dubbed "plus-one." Under this system, the top four teams in the BCS standings would play in two of the bowls, with the winners playing a week later in the national championship game. While this doubles the amount of potential champions going into the bowls to four, would this actually solve anything? Is arguing over the top four teams in the country any different than arguing over the top two?

Had this format been in place this year, joining Ohio State and LSU would be Virginia Tech and Oklahoma (how nice, four different conference champions). But do they all belong? USC won the Pac-10. Georgia came up just short of the SEC Championship game because of their loss earlier at Tennessee. Both teams

were dominant late in the season, and no one would have been surprised if their names ended up in the top four.

Georgia President Michael F. Adams suggested this week to extend this to eight teams. No matter where you draw the line though, the argument over where a team belongs will always dominate the conversations and brood controversy over the results. Every year can't end like the 2005-06 season, when Texas and USC were the only undefeated teams who remained, giving us the most memorable championship of the BCS era.

The greatest aspect of the current bowl system is that every game matters. And I mean every, seemingly innocent game. USC didn't play for the championship game last Monday night because on Oct. 6, over three months ago, it lost to a Stanford team it shouldn't have. Georgia couldn't prove its worth in the SEC Championship game, and potentially the BCS Championship Game, because of a silly early-season loss to South Carolina on Sept. 8, a full four months ago.

In no other sport are the stakes so high so early, and having a playoff would just ruin that. Can you imagine a Heisman trophy candidate sitting the last game of the season to prevent injury, knowing his team is in the "playoffs"? If you think the frustration over NFL teams sitting players in the final weeks is bad, this would only be worse.

Those who sympathize with this point suggest maintaining the current bowl system (so don't seed

BCS, Page 15

Patriots' Likeability Should Not Affect Appreciation of Their Skills

By Caroline Huang
SPORTS EDITOR

If you follow football, you should be quite familiar with the saga of the 2007 New England Patriots.

That is, the 16-0 Patriots, directed by Coach of the Year Bill Belichick and star-studded with players such as National Football League Most Valuable Player Tom Brady (all-time NFL record of 50 touchdown passes) and Randy Moss (all-time NFL record of 23 touchdown receptions).

Unfortunately, these are also the Patriots embroiled in the so-called "Spygate," having been caught videotaping defensive signals in Week 1 against league rules, for which the league took away a first-round draft

pick, fined the team \$250,000, and fined Belichick \$500,000. These are the Patriots accused of running up scores on lesser teams, such as their 52-7 victory over the Washington Redskins. These are the Patriots hit with all sorts of fines, most recently a \$15,000 fine against nose

tackle Vince Wilfork for sticking his finger in New York Giants running back Brandon Jacob's facemask.

Many spectators (and some football players and commentators) have decided that the turmoil should invalidate, or at least lessen, the Patriots' accomplishments thus far. This is not

the first time a team has been disliked for winning at all costs, but it is one of the strongest cases of backlash in recent memory.

Almost overnight the Patriots went from being hailed for their team-first mentality (remember how they chose to be introduced as a team in Super Bowl XXXVI?) to absolutely demonized, on par with the New York Yankees (and recently the Boston Red Sox) as one of the most despised teams in America.

Case in point: many of my broth-

Patriots, Page 15

The unfortunate result is that the focus is no longer solely on stellar football.

Column

By Caroline Huang
and Shreyes Seshasai
SPORTS EDITORS

As the weekend's divisional playoffs approach, we attempt to answer a few burning questions. Will the

Patriots continue their march to perfection? Will Brett Favre demonstrate why he deserved to be named the 2007 Sports Illustrated Sportsman of the Year? Most importantly, which Manning(s) will cry this week? For your enjoyment, we offer our playoff picks.

Jacksonville Jaguars at New England Patriots

Clearly, we should talk about

why the Patriots need the weather to be pristine on Saturday night. Otherwise, quarterback Tom Brady can't possibly find success on a typical cold, windy, and possibly rainy New England night . . . just like it didn't work out against the New York Jets and the Baltimore Ravens.

Otherwise, the Patriots' running game is underrated and overshadowed by the passing game. The question is how much of that is because opponents concentrate on stopping the pass?

Likewise, the Jaguars are able to run the ball, and one of the key matchups will be the Jacksonville run against an older New England defense. If the Jaguars manage an

early lead, their running attack is capable of keeping Brady off the field.

In the end, the Patriots have too many weapons, and we can't pick against a 16-0 team.

Pick: Patriots over Jaguars

San Diego Chargers at Indianapolis Colts

Much of this game depends on how well and how quickly injuries have healed. Chargers tight end Antonio Gates, their biggest offensive threat besides LaDanian Tomlinson, hurt his toe in last week's win. His mere presence on the field would do wonders in opening up spaces

Playoffs, Page 15

Patriots Take Undefeated Season Into NFL Divisional Playoffs Against Jags

Athlete of the Week: All-American Devin M. Lewis '10

By Jeff Lemieux
DAPER STAFF

The Association of Collegiate Water Polo Coaches recently announced its 2007 All-America selections, naming Devin M. Lewis '10 to the Division III Second Team for his contributions to MIT's record-breaking season. The utility player's goal-scoring exploits helped turn the Engineers into an offensive juggernaut, as the team finished the season with a school-record 358 goals.

The water polo team last received All-America plaudits in 2004, when David D. Lohrey '05 was also selected as a Second Team honoree.

Lewis was Tech's third-leading scorer with 55 goals, bringing his career tally up to an even 100 and placing him fourth all-time on the MIT scoring charts. He was also

Why he's Athlete of the Week:

Lewis was instrumental in MIT's ninth-place finish in the final CPWA Division III national poll. He is one of only 21 athletes to receive 2007 All-America recognition in water polo (First Team, Second Team, and Honorable Mention).

the Most Valuable Player of the Division II/III Eastern Championship after scoring 14 times in the tournament, leading the Engineers to both the Division III Eastern Championship and Small College Championship crowns. In addition, he was named to the All-Tournament First Team.

The All-America selection is Lewis' second postseason honor for the 2007 campaign, as he also copped First Team All-North accolades from the Collegiate Water Polo Association.



STANLEY HU—TECH FILE PHOTO

Devin M. Lewis '10 was named to the Division III All-American Second Team by the Association of Collegiate Water Polo Coaches.

Game of the Week: Men's Basketball Beats Camels In Overtime

By James Kramer
DAPER STAFF

James M. "Jimmy" Bartolotta '09 scored 26 of his game-high 29 points in the final 25 minutes of last

Thursday's men's basketball game against Connecticut College (7-2) as MIT erased a 16-point halftime deficit en route to a 79-73 overtime victory. Hamidou Soumare '08 added a career-high 25 points and 11 rebounds in the thrilling non-conference win, which took place in Rockwell Cage.

Sophomore Shavar Bernier connected on a three on the first play in overtime to push Connecticut College in front, 65-62, but Willard J. "Billy" Johnson '09 answered with a trey of his own to negate the Camels' momentum. MIT (7-4) scored the next six points from the free-throw line and kept the visitors at bay the rest of the way.

The Engineers put themselves in position to win after orchestrating a dominating second half paced by

Basketball, Page 15

Why this was Game of the Week:

Trailing by 16 points at the break, the men's basketball team played an inspired second half. Bartolotta and Soumare led a focused offense that used superior free-throw shooting to tie the game in regulation and win it in overtime.

UPCOMING HOME EVENTS

| | | |
|--------------------------------------|----------|-------------------------|
| Wednesday, Jan. 9, 2008 | | |
| Women's Basketball vs. Smith | 6 p.m., | Rockwell Cage |
| Men's Basketball vs. Wheaton | 8 p.m., | Rockwell Cage |
| Friday, Jan. 11, 2008 | | |
| Women's Ice Hockey vs. St. Anselm | 7 p.m., | Johnson Ice Arena |
| Saturday, Jan. 12, 2008 | | |
| Men's Track, Alumni Meet | 12 p.m., | Johnson Athletic Center |
| Women's Track, Alumnae Meet | 12 p.m., | Johnson Athletic Center |
| Women's Ice Hockey vs. UMass-Boston | 3 p.m., | Johnson Ice Arena |
| Pistol, USA Shooting | TBA, | duPont Athletic Center |
| Sunday, Jan. 13, 2008 | | |
| Women's Ice Hockey vs. St. Catherine | 1 p.m., | Johnson Ice Arena |
| Pistol, USA Shooting | TBA, | duPont Athletic Center |
| Monday, Jan. 14, 2008 | | |
| Women's Basketball vs. Newbury | 2 p.m., | Rockwell Cage |

BEST PICTURE
BEST FOREIGN LANGUAGE FILM
GOLDEN GLOBE AWARD NOMINATION

"WHIMSICAL AND DARING."
-A.O. Scott, THE NEW YORK TIMES

PERSEPOLIS
A FILM BY MARJANE SATRAPI AND VINCENT PARONNAUD
BASED ON THE ORIGINAL GRAPHIC NOVEL BY MARJANE SATRAPI

PG-13

STARTS FRIDAY, JANUARY 11TH

VIEW THE TRAILER AT WWW.PERSEPOLISMOVIE.COM

LANDMARK'S **KENDALL SQ.** WEST NEWTON
ONE KENDALL SQ., CAMBRIDGE 1296 WASHINGTON ST.
617-499-1996 617-964-6060