MIT's Oldest and Largest Newspaper



WEATHER, p. 2 TUE: 44°F | 35°F WED: 49°F | 38°F THU: 55°F | 41°F

Sunny

tech.mit.edu Volume 131, Number 13 Tuesday, March 15, 2011

Lone ticket participates in UA debate

Miramonti and Lai, sophomores, lay out plan for next year

By Robert McQueen NEWS EDITOR

This year, the Undergraduate Association debate was anything but a debate. With only one ticket in the running for the UA President and Vice President, candidates Allan E. Miramonti '13 and Alec C. Lai '13 took the time this past Sunday to answer questions regarding

their campaign platform.

Only about ten students came to watch the debate, a majority of them members of the UA. Topics discussed included dining, orientation, student engagement, and the UA itself. Of the running pair, Miramonti handled the response to most questions asked by the panel of Tech editors.

Questions initially focused

on the state of the UA. In the past two months, the UA has seen multiple resignations. Suan L. Tuang '14 resigned as Senator for New House, William F. Steadman '12 resigned as Senator for Senior House, Cynthia A. Bouldrick '11 resigned from the UA Finboard, and Ellen B. McIsaac '12 resigned as UA Treasurer. When asked about the resignations, Miramonti answered, "If

we have a more efficient body, a body that gets a lot more done, people will be less likely to leave."

Also, according to Lai, the UA Senate and Executive branches have been in conflict on some issues in the past year. Lai said that as UA VP, he will work more on internal issues, including conflicts like these. "If the two

UA Debate, Page 8



Undergraduate Association Presidential and Vice Presidential candidates Allan E. Miramonti '13 and Alec C. Lai '13 are seen in this screen capture from the UA Presidential Debate, held Sunday evening on the first floor of the Stratton Student Center. Miramonti and Lai are the only ticket running in the election.

UA, Grimson talk student engagement

New chancellor wants to collect diverse input

By Ethan A. Solomon EDITOR IN CHIEF

Replete with graying beard and Canadian accent, Saskatchewan native and newly appointed Chancellor W. Eric L. Grimson PhD '80 met with the UA Senate for the first time Monday evening. Echoing concerns raised two weeks ago when the Senate met with MIT Corporation Chairman John S. Reed '61, students grilled the new chancellor on student engagement, culture, and communication.

Noting that most students have only a vague idea of what role the chancellor fills, Grimson stated his job simply: "All things

"All things that deal with the students have to flow up to my office," added the 27year faculty member. The Chancellor's office oversees the offices of the deans for graduate education, undergraduate education, and

In that vein, the Chancellor laid out his top three priorities as he assumes his new role.

"My first priority is to listen," said Grimson, adding that he would talk to student groups, student leaders, and students in general to find the "common threads" from a multitude of voices. He emphasized the need to hear from as many groups as possible, including "collections" of students those who may not be explicitly identifiable as leaders of student groups.

"I need to hear from people," Grimson said to the full audience — a line he would repeat throughout the night.

Secondly, Grimson plans channels of communication between students and administrators — an issue that has largely defined recent campus controversies over dining reform and orientation.

Grimson, Page 8

Clubs fly and unicycles whirl at Juggle Mania



MIT freshman Stephen A. McCrory (front left) passes clubs with professional jugglers Peter Panic, Dan Foley, and Joel Harris while all four balance atop 5-7 foot tall unicycles. This performance rounded out a night of juggling last Friday evening at Juggle Mania in

Napolitano delivers Compton Lecture



Secretary of Homeland Security Janet Napolitano spoke on Monday.

Department of Homeland Security Secretary Janet Napolitano presented the Karl Taylor Compton Lecture yesterday before a modest turnout in Kresge Auditorium. Napolitano is the first woman in the Compton Lecture Series, which has included Niels Bohr, two-time Nobel Prize winner Linus Pauling, and Senator Ted Kennedy. Napolitano, Page 13

IN SHORT

Admission decisions for the Class of 2015 were released last night. The admit rate was 9.6 percent, a decrease from last year despite the increase in class size. Check http://

tech.mit.edu this week for admissions updates.

The Japanese Association of MIT will be collecting donations and messages for people affected by Friday's earthquake in Lobby 10 from

9 a.m. to 12 noon and from 3p.m. until 6 p.m. until Friday.

An info session on the Japan nuclear crisis, hosted by Course XXII, will take place this afternoon at 4 p.m. in Nominations for the Award Convocation are due on Friday, March 18. Nominations can be submitted online at http://awards.mit.edu/.

Send news information and tips to news@tech.mit.edu.

Clinton spokesman resigns after remarks at MIT

State Department spokesman Philip J. Crowley resigned on Sunday amid controversy over remarks he made last week at MIT about the treatment of Army Pfc. Bradley E. Manning. At a talk on Thursday, he called the U.S. military's treatment of Manning, who is suspected of providing classified information to WikiLeaks, "ridiculous, counter-productive, and stupid."

Human rights groups, including Amnesty International, have expressed concern over the treatment of Manning, who has been held in solitary confinement at the Marine Corps brig in Quantico, Va., since July. Recent reports have indicated Manning is forced to strip naked every night and wear a special smock designed to prevent him from committing suicide, a practice Manning yer has called degrading.

Crowley's remarks first came under the national spotlight when President Barack Obama was asked about the remarks during a press conference on Friday. Obama neither condemned nor condoned Crowley's remarks, but he stated that military officials have said the treatment of Manning was appropriate and within basic standards.

Thirty-five graduate students, professors, and researchers — mostly from MIT — responded to Crowley's resignation with an open letter to Secretary of State Hillary Rodham Clinton, expressing concern that the remarks at MIT led to his resignation. "If public officials are made to fear expressing their truthful opinions, we have laid the groundwork for ineffective, dishonest, and unresponsive governance," the letter said.

—Elijah Jordan Turner

NUCLEAR ISN'T SCARY

The western media shouldn't freak out about a reactor that proves nuclear safety. OPINION, p. 5

MOBILE IMOBILARE

MIT's breakdancing club has got the moves. CAMPUS LIFE, p. 10

CAROL LIVERMORE SPEAKS

MechE professor shares her career insights. CAMPUS LIFE, p. 11



CHEESE ADDICTION

Did you know that calorierestricted diets for lab mice has been known to prolong their lives to over 200 mouse years? FUN, p. 7

MAD ABOUT MARCH MADNESS

Check out The Tech's picks for the Men's Div. I NCAA basketball championships. SPORTS, p. 14

SECTIONS

World & Nation	2
Opinion	4
Fun Pages	6
Campus Life	.10
Snorts	1/1

Pakistan defers ruling on murder by CIA operative

LAHORE, Pakistan - The Pakistani government on Monday further postponed the resolution of the question of whether a CIA operative being investigated for a double murder is entitled to diplomatic immunity.

At a hearing at Punjab High Court here, the government said the Foreign Ministry had not clearly stated that the operative, Raymond A. Davis, was entitled to immunity.

The court ruled that the issue could be decided by the trial court in the murder case, which may begin Wednesday.

Davis, a former Green Beret employed by the CIA, fatally shot two motorcyclists in Lahore in January. He has said he did so in self-defense, and the United States has said he is a diplomat and entitled to immunity.

The Pakistani government has sought to delay decisions on the case to allow public anger over the shootings to subside. Under pressure from opposition parties and facing widespread discontent over the economy, the government has avoided making any decision that could be seen as pro-American and unpopular, and has left it in the hands of the Foreign Ministry and the High Court.

Ceding the decision of whether Davis has diplomatic immunity to the trial court will draw out the process and will not please the U.S. government.

-Waqar Gillani and Carlotta Gall, The New York Times

Rajaratnam jury hears calls

NEW YORK — Anil Kumar lived the peripatetic life of a management consultant, traveling 30,000 miles a month to visit clients across the globe. But wherever he was — Tokyo. Dublin, Mumbai — he found the time to call Raj Rajaratnam, the hedge fund billionaire, back in New York.

On Monday, federal prosecutors played more than a dozen of their secretly recorded telephone conversations, showcasing what they believe is overwhelming evidence of insider

Kumar took the witness stand for the second day in the trial of Rajaratnam in Federal District Court in Manhattan, which is the centerpiece of a broad government investigation into insider trading on Wall Street.

A former senior executive at McKinsey & Company, Kumar has pleaded guilty to being paid nearly \$2 million for passing illegal tips about his clients to Rajaratnam. He told the jury how he routinely shared confidential information about his client, Advanced Micro Devices. His testimony centered on two deals: an investment of as much as \$8 billion in AMD by an Abu Dhabi sovereign wealth fund and AMD's acquisition of ATI, a graphics chip maker.

–Peter Lattman, The New York Times

Abbas condemns killing of Israeli Jewish family

JERUSALEM — The Palestinian president, Mahmoud Abbas, expressed abhorrence Monday over the killing of five members of a family in a Jewish settlement in the West Bank. The emphatic condemnation, delivered over Israel's public radio, came after Israel criticized the Palestinian leadership for what it considered to be an initially mealy-mouthed response.

'This act was abominable, inhuman and immoral," Abbas said in a rare interview with Israel Radio, conducted in Arabic. Referring to the killing of three of the family's young children, including a baby, he added, "Any person who has a sense of humanity would be pained and driven to tears by such sights."

The victims, Udi and Ruth Fogel, and three of their children, ages 11, 4, and 3 months, were knifed to death in their beds late Friday in the settlement of Itamar, near Nablus in the northern West Bank. The assailants, who are still at large, are widely suspected to be local Palestinians.

–Isabel Kershner, The New York Times

Third explosion threatens Japanese nuclear core

By Hiroko Tabuchi, Keith Bradsher, and Matthew L. Wald

THE NEW YORK TIMES

TOKYO — Japan faced the likelihood of a catastrophic nuclear accident on Tuesday morning as an explosion at the most crippled of three reactors at the Fukushima Daichi Nuclear Power Station damaged its crucial steel containment structure, emergency workers were withdrawn from the plant, and much larger emissions of radioactive materials appeared imminent, according to official statements and industry executives informed about the developments.

The sharp deterioration came after government officials said the containment structure of the No. 2 reactor, the most seriously damaged of three reactors at the Daichi plant, had suffered damage during an explosion shortly after 6 a.m. on Tuesday, local time.

Government officials initially suggested that the damage was limited and that emergency operations aimed at cooling the nuclear fuel with seawater at the three stricken reactors would continue. But industry executives said that the situation had in fact spiraled out of control and that all plant workers needed to leave the plant to avoid excessive exposure to radioactive leaks.

If all workers do indeed leave the plant, the nuclear fuel in all three reactors is likely to melt down, which would lead to wholesale releases of radioactive material, resulting in by far the largest accident of its kind since the Chernobyl disaster that took place 25

Reports of an imminent worsening of the problem came after a frantic day and night of rescue efforts focused largely on the No. 2 reactor. There, a malfunctioning valve prevented workers from manually venting the containment vessel to release pressure and allow fresh seawater to be injected into it. That meant that the extraordinary remedy emergency workers have been using to keep the nuclear fuel from overheating no longer worked.

As a result, the nuclear fuel in that reactor was exposed for many hours, increasing the risk of a breach of the container vessel and more dangerous emissions of radioactive particles.

By Tuesday morning, the plant's operator, Tokyo Electric Power, said it had fixed the valve and resumed seawater injections, but that they had detected possible leaks in the containment vessel that prevented water from fully covering the fuel rods.

Then the explosion hit the same reactor. The operator initially reported that the blast may have damaged the bottom part of the container vessel, but later said radiation levels had not risen high enough to suggest a major escalation of the problem. While they did not immediately provide a detailed account of what happened at the reactor, government and company officials initially ruled out a serious breach that could lead to massive radioactive leaks or a full meltdown of the nuclear

Clinton meets with Libyan opposition leader Mahmoud Jibril

By Steven Lee Myers

THE NEW YORK TIMES

PARIS - Secretary of State Hillary Rodham Clinton met late Monday with a leader of Libya's increasingly beleaguered opposition, but did so privately and without a public statement.

The meeting reflected the Obama administration's struggle over how much support it would, or could, provide to the rebels seeking to overthrow Libya's leader, Moammar Gadhafi.

Clinton met the opposition leader, Mahmoud Jibril, at her hotel here after attending a dinner with foreign ministers of the countries of the Group of 8, who discussed ways to increase pressure on Gadhafi's government, including imposing a nofly zone over Libyan territory. Clinton and Jibril met for 45 minutes but did not appear publicly out of concern for his security, an aide said.

Although aides to Clinton said the foreign ministers shared a sense of urgency, they announced no new actions or proposals.

The Arab League called over the weekend for action to halt Libyan airstrikes - without saying explicitly which countries would enforce it but a senior administration official said early Tuesday that the G-8 ministers "wanted further clarification of what it meant."

The United States appears ambivalent about a new military operation in the Middle East, and other countries have outwardly opposed it, including Turkey, a fellow member of NATO.

The Turkish prime minister, Recep Tayyip Erdogan, said a military intervention in Libya would be "extremely unbeneficial."

In Washington, President Barack Obama again said it was time for Gadhafi "to leave."

But Obama, too, stopped short of

promising specific new action.

"It's going to be very important for us to look at a wide range of options that continue to tighten the noose around Gadhafi and apply additional pressure," he said during an appearance with the Danish prime minister, Lars Loekke Rasmussen.

"And so we will be continuing to coordinate closely both through NATO as well as the United Nations and other international fora to look at every single option that's available to us in bringing about a better outcome for the Libyan people."

The meeting between Clinton and Jibril was the highest-level contact yet between the administration and the increasingly disorganized forces battling troops loyal to Gadhafi. Libyan troops continued to push back on Monday, using overwhelming military superiority to drive rebel forces from towns they seized after a popular uprising began last month.

WEATHER

A gradual warm-up is coming next week

By Roman Kowch

STAFF METEOROLOGIST

Sunny skies and seasonable temperatures are in store for today. These conditions are compliments of a strong high pressure area, which will move through New England and reach the ocean by evening. By tonight, clouds will move in as a developing low pressure center moves northward through the Mid-Atlantic states. This system seems plentiful with moisture, and umbrellas will be needed for Wednesday until

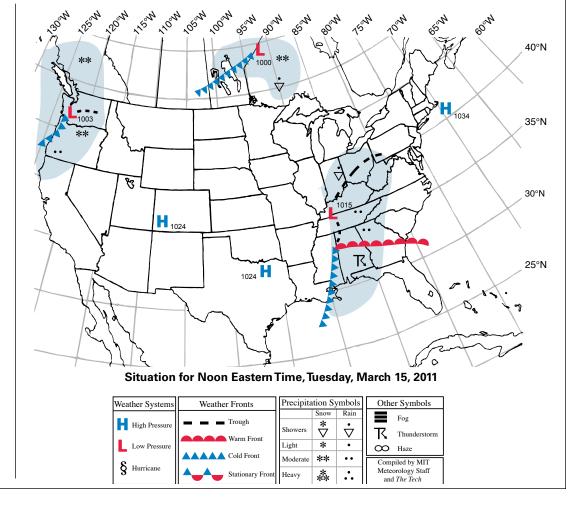
the rain ends sometime at night. Minor river flooding in nearby areas may occur but is not likely since most of the winter snowpack has already melted. Temperatures will also be warmer as southerly winds sweep in moist air off the ocean. By St. Patrick's Day, clear skies and an even warmer air mass will return. A large high pressure area forming near the Carolinas should push highs to near 60°F (16°C) by Friday as well. A steady breeze from the south will maintain the climb in temperatures by that time.

Extended Forecast

Today: Sunny. W wind at 10-15 mph. High 44°F (7°C). Tonight: Increasing clouds. S wind at 10 mph. Low 35°F

Tomorrow: Rain, with totals near 0.5 inch. S wind at 20 mph, gusting to 30 mph. High 50°F (10°C). Tuesday: Sunny. High 50°F (12-14°C). Lows near 40°F (4°C).

Wednesday: Partly cloudy. High 60°F (16°C). Lows near 40°F (4-6°C).



VORLD & NATION WORLD & NATION

Saudis, fearful of Iran, send troops to Bahrain protests

By Michael Slackman and Ethan Bronner

THE NEW YORK TIMES

DUBAI, United Arab Emirates — Saudi Arabia's military rolled into Bahrain on Monday, threatening to escalate a local political conflict into a regional showdown with Iran.

Saudi Arabia has been watching uneasily as Bahrain's Shiite majority has staged weeks of protests against a Sunni monarchy, fearing that if the protesters prevailed, Iran — Saudi Arabia's bitter regional rival — could expand its influence and inspire unrest elsewhere.

The Saudi decision to send in troops could further inflame the conflict and transform this teardrop of a nation in the Persian Gulf into the Middle East's next proxy battlefield between regional and global powers.

By midday, about 2,000 troops — 1,200 from Saudi Arabia and 800 from the United Arab Emirates — entered Bahrain as part of a force operating under the aegis of the Gulf Cooperation Council, a six-nation regional coalition of Sunni rulers that has grown increasingly anxious over the sustained challenge to Bahrain's

king, Hamad bin Isa Al Khalifa.

"This is the initial phase," a Saudi official said. "Bahrain will get whatever assistance it needs. It's open-ended."

The decision is the first time the council has used collective military action to help suppress a popular revolt — in this case a Shiite popular revolt. It was rejected by the opposition, and by Iran, as an "occupation." According to Iranian news reports, Iran even went so far as to call the troop movement an invasion. Iran has long claimed that Bahrain is historically part of Iran.

The troops entered Bahrain at an especially combustible moment in the standoff between protesters and the monarchy. In recent days protesters have begun to move from the encampment in Pearl Square, the symbolic center of the nation, to the actual seat of power and influence, the Royal Court and the financial district. As the troops moved in, protesters controlled the main highway and said they were determined not to leave.

"We don't know what is going to happen," Jassim Hussein Ali, a member of the opposition Wefaq party and a former member of Parliament, said in a phone interview. "Bahrain is heading toward major problems, anarchy. This is an occupation, and this is not welcome."

Rasool Nafisi, an academic and Iran expert based in Virginia, said: "Now that the Saudis have gone in, they may spur a similar reaction from Iran, and Bahrain becomes a battle-ground between Saudi and Iran. This may prolong the conflict rather than put an end to it, and make it an international event rather than a local uprising."

An adviser to the U.S. government, who spoke on the condition of anonymity because he was not authorized to talk to the media, agreed.

"Iran's preference was not to get engaged because the flow of events was in their direction," he said. "If the Saudi intervention changes the calculus, they will be more aggressive."

Although Bahrain said it had invited the force, the Saudi presence highlights the degree to which the kingdom has become concerned over Iran's growing regional influence and demonstrates that the Saudi monarchy has drawn the line at its back door

Wall Street falls amid concerns in Japan earthquake aftermath

How far will the financial shockwaves from Japan's earthquake reach? Investors wrestled with that question on Monday as stock markets dipped across the globe and fears mounted about the impact of a partial shutdown of the world's third-largest economy.

Despite the damage in the wake of the earthquake and tsunami and their threat to global supply chains, economists said that unless the crisis at Japan's nuclear reactors worsened, the effect would probably be limited. Still, it comes at a precarious time for the world economy, with the United States and parts of Europe only recently showing signs of job growth and a broader economic recovery.

"This is a major catastrophe for Japan, and it is yet another negative shock for the rest of the world," said David G. Blanchflower, an economics professor at Dartmouth College and a former member of the Bank of England's monetary policy committee. "The question is: How much does it set back world growth, and the answer is a bit."

—Graham Bowley, The New York Times

Eleven killed when car bomb

BAGHDAD — A suicide bomber detonated a car packed with explosives outside a military headquarters on Monday in the city of Kanan, about 40 miles northeast of Baghdad, killing 11 Iraqi soldiers, according to local security officials.

detonated at Iraq base

The attack demonstrated the tenuous security situation in the Sunni-dominated cities north of Baghdad where members of al-Qaida's Iraq chapter have struck at pilgrims and military and police

"There are some sleeper cells that are waking up and trying to attack innocent people," said Hassan Dellir, the head of the security committee for Diyala province, where Kanan is located.

Security officials said 16 Iraqi soldiers and 14 civilians were injured in the attack.

-Michael S. Schmidt and Duraid Adnan, The New York Times

Are you a tetris ninja?

Use your powers for good!

news news news newsnews newsnews newsnews newsnews

...by joining the production department at The Tech!

join@tech.mit.edu

opn
opn
arts opn
arts opn
arts opn
arts opn
arts opn
arts arts opn
ospo arts arts opn
arts arts opn
ospo arts arts opn
ospo arts arts opn
ospo life arts fu n opn
ospo pandarts fu n opn
fe life ife fu n fu n fu n
te life ife fu n fu n fu n

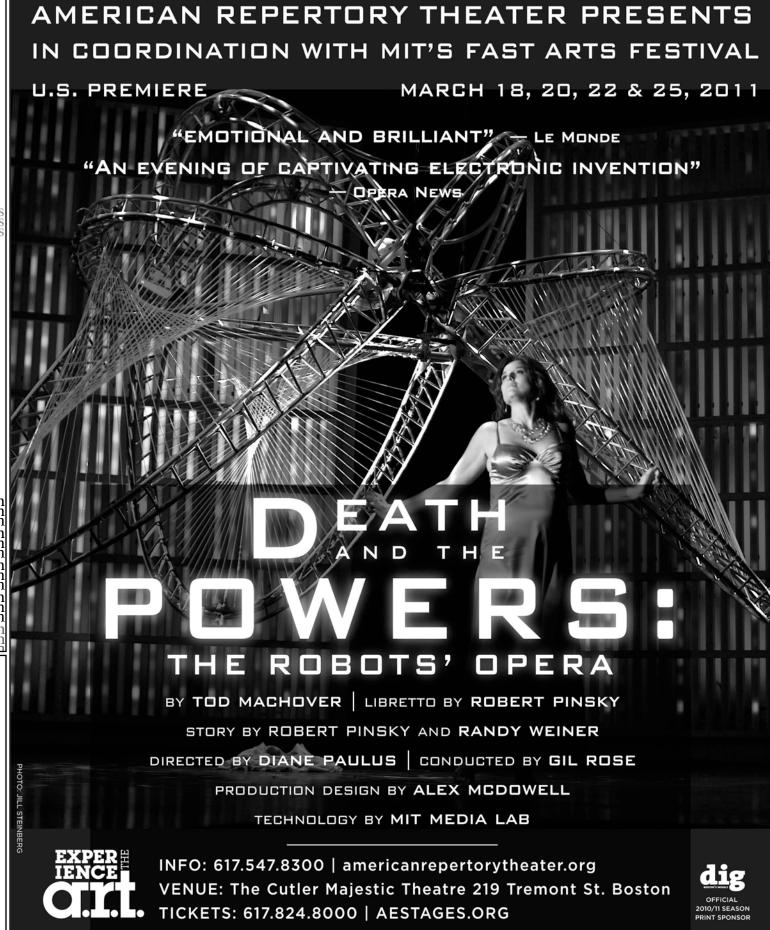


Are you dying to tell someone your latest ephiphany?

Write about it!

Join Campus Life @ The Tech!

E-mail join@tech.mit.edu





Chairman Joseph Maurer '12 Editor in Chief

Ethan A. Solomon '12 **Business Manager**

Greg Steinbrecher '12

Managing Editor
Connor Kirschbaum '13

Executive Editor

Aislyn Schalck '13

NEWS STAFF

News and Features Director: Pearle Lipinski '12; News Editors: Elijah Jordan Turner '11, Jingyun Fan '12, Robert McQueen '12, Jessica J. Pourian '13; Features Editor: Ana Lyons '12; Associate News Editor: Margaret Cunniff '13; Staff: John A. Hawkinson '98, Arkajit Dey '11, Liz Tsai '11, Danielle Gorman '12, Ziwei Hao '12, Jiyeon Baek '13, Joy E. Lee '13, Divya Srinivasan '13, Aparna Sud '13, Anne Cai '14, Derek Chang '14, Deborah Chen '14, Stan Gill '14, Evan Moore '14, Isabella Wei '14, Leo Zhou '14; Meteorologists: Allison A. Wing G, Vince Agard '11, Roman Kowch '12.

PRODUCTION STAFF

Editors: Judy Hsiang '12, Sarah Ritter '14; Associate Editor: Stephanie L. Ku '14; Staff: Fareeha Safir '13, Ben S. Frank '14; Illustrators: Monica Gallegos '11, Robin L. Dahan '12, Rachel Fong '12, Alison Malouf '12.

OPINION STAFF

Editors: Nina Sinatra '12, Ryan Normandin '13; Staff: Florence Gallez G, Ronan Killian McGovern G, Alejandro Rogers B. G, Keith A. Yost G, Vinayak Ranade '09, Rachel C. Bandler '13, Andy Liang '14, Nils Molina '14, Mike Veldman '14.

SPORTS STAFF

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

ARTS STAF

Editors: Maggie Liu '12, Kathryn Dere '13; Associate Editor: Samuel Markson '12; Staff: Sudeep Agarwala G, Bogdan Fedeles G, Joyce Kwan '10, Joanne Y. Shih '10, Philipp Diesinger '11, Tracy Kambara '11, Sun K. Kim '11, Jeff Z. Chen '12, Yü Linlin Huang '13, Emily Nardoni '13, Jenny Xie '13, Natthida Wiwatwicha '14.

PHOTOGRAPHY STAFF

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

Editor: Joanna Kao '13; Staff: Christine Yu '11, Paul Woods '13, Amanda Aparicio '14, Deena Wang '14; Cartoonists: Joshua Meisel G, Emily Ruppel G, Irving E. Wang G, Michael Ciuffo '11, Letitia W. Li '11, Michael Benitez '12, Elise Stave '13.

BUSINESS STAFF

Advertising Manager: Moya Chin '13; Operations Manager: Jennifer Fong '13; Staff: Mark Thompson '11, Wendy Cheng '13, Emmanuel Carrodeguas '14, Sarine Shahmirian '14

TECHNOLOGY STAFF

Director: Quentin Smith G.

EDITORS AT LARGE

Contributing Editors: David M. Templeton '08, Jeff Guo '11, Steve Howland '11, Michael T. Lin '11, Natasha Plotkin '11, Maggie Lloyd '12, Michelle E. Szucs '14; Senior Editors: Brian Hemond G, Charles Lin G, Satwiksai Seshasai G, Vibin Kundukulam '11, Sherry Yan '11.

ADVISORY BOARD

Karen Arenson '70, Paul E. Schindler, Jr. '74, V. Michael Bove '83, Barry S. Surman '84, Robert E. Malchman '85, Deborah A. Levinson '91, Jonathan E. D. Richmond PhD '91, Karen Kaplan '93, Saul Blumenthal '98, Frank Dabek '00, Daniel Ryan Bersak '02, Eric J. Cholankeril '02, Jordan Rubin '02, Nathan Collins SM '03, Keith J. Winstein '03, Akshay R. Patil '04, Tiffany Dohzen '06, Beckett W. Sterner '06, Marissa Vogt '06, Andrew T. Lukmann '07, Zachary Ozer '07, Austin Chu '08, Michael McGraw-Herdeg '08, Omari Stephens '08, Marie Y. Thibault '08, Ricardo Ramirez '09, Nick Semenkovich '09, Angeline Wang '09, B.

PRODUCTION STAFF FOR THIS ISSUE

Editors: Connor Kirschbaum '13, Aislyn Schalck '13, Ben S. Frank '14, Sarah Ritter '14; Copy Editor: Michelle E. Szucs '14.

The Tech (ISSN 0148-9607) is published on Tuesdays and Fridays during the academic year (except during MIT vacations), Wednesdays during January, and monthly during the summer by The Tech, Room W20-483, 84 Massachusetts Avenue, Cambridge, Mass. 02139. Subscriptions are \$50.00 per year (third class). POSTMASTER: Please send all address changes to our mailing address: The Tech, P.O. Box 397029, Cambridge, Mass. 02139-7029. TELEPHONE: Editorial: (617) 253-1541. Business: (617) 258-8324. Facsimile: (617) 258-8226. Advertising, subscription, and typesetting rates available. Entire contents © 2011 The Tech. Printed on recycled paper by Mass Web Printing Company.

EDITORIAL

UA in a tough spot

Miramonti, Lai should prepare for a challenge

The Undergraduate Association has had a rough year. Issues of dining, orientation, and enrollment all hit within a short span of time and tested the ability of UA leaders to balance their dual roles as students and elected representatives. More recently, the UA has been racked by numerous resignations, including two senators who resigned during a sixhour senate meeting two weeks ago. As a whole, the UA is younger and less experienced now than it has been in recent memory.

Allan E. Miramonti '13 and Alec C. Lai '13 — the only ticket running this year - are a product of that organizational culture. Miramonti, running for president, is the current senator from Random Hall and chairs the UA Printing Commitee. Lai, the vice presidential running mate, is the UA secretary general and president of Next House. Both are UA "insiders" — to whatever extent they can be as sophomores. Lai, in particular, has shown great dedication to the association by producing the UA newsletter — part of the UA's broad focus on increasing transparency.

Their records within the UA are perfectly reasonable, but not spectacular. Their performance during the debate was similar — nothing striking. Miramonti and Lai lack the vision, student support, and charisma that the UA needs at this weakened point in its history. Lai will also be faced with the challenge of serving as Next House president and UA vice

president simultaneously, in addition to facing a junior course load. *The Tech* expects Lai, as we would any candidate in his position, to carefully consider time management issues.

Their records within the UA are perfectly reasonable, but not spectacular. Their performance during the debate was similar — nothing striking.

In the past, our Editorial Board has interviewed multiple candidacies for the UA presidency and vice presidency. We've asked each candidate about his or her strengths and weaknesses in order to be confident that our final choice was well-vetted and capable of handling the challenges of the position. We attempted to do the same this year by holding a debate and interviewing the lone ticket. But if the low turnout at this weekend's debate is any indication, even more undergraduates than usual are apathetic about the future of student government.

The Tech finds itself in a similar position as the student body. Miramonti and Lai are not bad candidates. In contrast to years past, where members of our board found themselves

arguing for the good a specific candidacy could do for the UA and the student body, the mood this year was reserved. We reached consensus early: Miramonti and Lai have no fatal flaws, but they have not proven themselves to be on the same level as many past candidates.

Regardless of what we say, however, as the only legitimate candidates running this year, Miramonti and Lai will be the next UA president and vice president.

They will need to work hard in the months ahead to get up to speed and able to effect change during their term. A year is a short amount of time to be productive when the first few months are spent simply learning, and the candidates have few concrete goals for the student body to hold them to. We urge the candidates to quickly establish relationships with former UA presidents and use this network frequently for advice. All in all, Miramonti and Lai have their work cut out for them. In a few months we'll have to ask ourselves: were these the best candidates for the job, or did they simply fill a vacancy in lieu of a stronger ticket?

Some may argue that *The Tech* should support Miramonti and Lai now because failing to do so will leave them handicapped in their dealings with administrators and within the UA. However, margin of victory will not give the ticket clout; their success will be determined by their own abilities

Lunch with Dan

The Republicans are finally turning around and working hard to bring about meaningful change on Capitol Hill

By Andy Liang

STAFF COLUMNIST

Ard d COD d 1

With the GOP recently dropping the budget knife on Planned Parenthood, I have lost hope. My faith in the GOP to bring about change grew as questionable as the skin tone of Boehner's face. I was ready to turn my back on the Grand Ol' Party Pooner.

But after reading about the work conditions within Capitol Hill, I have had a change of heart. I see why the GOP members are so upset that they feel the need to scrape every penny from government spending.

Forks. Since then-Speaker Nancy Pelosi implemented the "Green the Capitol" initiative in 2007, the cafeteria in Capitol Hill has been pushing House members to use biodegradable corn-based forks, spoons, and knives. Many members complained that the utensils were literally like compost. One joked that the only butter the knives are capable of cutting is "warm butter." Our politicians eating with ropey utensils. That's just inhumane.

But Pelosi didn't stop there. She replaced Styrofoam containers with biodegradeable containers, incandescent lights with fluorescent lights, and "trash cans ... with a bewildering array of recycling bins that few have mastered," as put by columnist Michael McGough of the *L.A. Times*. With corn spoons mixing into corn soups and recycling bins spawning in corner offices, Capitol Hill had become an inhospitable place to work.

Follow the life of Congressman Dan Lungren (R-Calif.). He wakes up to see his six grandchildren greet him in bed. He then walks into the kitchen for morning coffee, served in a sturdy mahogany mug reading "Number One Grandpa." On his plate are sausage and bacon fuming with scents of cinnamon and maple. Next to them are silver forks and knives, sturdy like they should be. He enjoys his breakfast, eating slowly, enjoying each bite. He leaves his house for Capitol Hill, full and satisfied. But in his office, he glances at his clock as the minute arm inches toward twelve. Once lunch hour strikes, he drags himself to the counter to retrieve a wimpy lunch tray and coggy utensile. In his mind he might as well be holding a patch of grass and a long stick of cardboard. He tries to fill his coffee, but he has to use

the biodegradable cups. While pouring, he tries to hold the cup, but the hot coffee burns him. He lifts the cup by the rim, but gingerly, trying to not crush the cup and spill the coffee. He thinks of his breakfast. After he's done eating, he prepares to dump his leftovers in the recycling bins he never understood.

After countless miserable lunch hours, Dan chose change. Dan is the chairman of the House Admissions Committee, and he has ended the three-year compost program. He brought back Styrofoam cups. And I applaud him. I have been burned too many times by cheap cups. We should all have cups like those Dunkin' Donuts cups. They're fancier.

Not everyone agrees that Styrofoam is a change for the better: the World Health Organization's International Agency for Research on Cancer has named Styrofoam as a possible carcinogen. The opposition presents this argument, but Lungren cleverly responds, "Styrofoam is cheap." His answer carries the spirit of the GOP I know and love. Why spend more when you can enjoy yourself in the short term? Just do what makes you feel good. And be angry about taxes.

OPINION POLICY

Editorials are the official opinion of *The Tech*. They are written by the editorial board, which consists of Chairman Joseph Maurer, Editor in Chief Ethan A. Solomon, Managing Editor Connor Kirschbaum, Executive Editor Aislyn Schalck, Opinion Editors Nina Sinatra and Ryan Normandin, Contributing Editors David M. Templeton and Steve Howland, and Advisory Board member Andrew T. Lukmann.

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

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

Letters, columns, and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will

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

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

TO REACH US

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

Why America is going to make a big mistake in Libya

Establishing a no-fly zone is something best left to other nations

With the unfolding of a civil war in Libya one that is pathetically unbalanced between the arms-bearing pro-Gaddafi forces and the civilian rebels - what action will the international community take? France has officially recognized the Transitional National Council (TNC) as the legitimate government of Libya, and the Arab League countries have called for the establishment of a no-fly zone over Libya. It is America's turn now, and Obama's excuses for inaction no longer suffice, so America is finally going to make a move — and we're going to

America's fiscal health is abysmal, and we should not be spending any more money on wars we can't afford to fight.

America's move

The last time Gaddafi was subject to sanctions was in 1992 over the Lockerbie bombing, and it took him seven years to cooperate to the extent required for the lifting of the sanctions; at the rate civilians in Libya are being killed today, in seven years about four percent of Libya's population would be dead. This time around, however, the U.S. has frozen \$32 billion in Libyan government assets — in addition to sanctions. Although these combined approaches are more effective, they're hardly enough.

It is therefore appropriate that Obama announced the appointment of a special U.S. representative to Libya's rebel leaders a day after France became the first nation to recognize the Libyan rebel leadership. The U.S. also started to shut down the Libvan embassy in Washington; both are steps toward the United States' formally cutting diplomatic ties with the Gaddafi government and officially recognizing the TNC. And this is the first mistake made by the United States: we are still taking the first steps towards this potentially game-changing and economically inexpensive move of recognizing the opposition, instead of lead-

The second and far bigger mistake the United States is going to make is the establishment of a no-fly zone.

Why it's a mistake

A no-fly zone over Libya is an excellent idea. Gaddafi's military has the equipment required to launch air attacks, and the nofly zone would protect the civilian protestors from the equipment being used against them. It is, however, not an excellent idea for the United States to be the one to establish the no-fly zone.

A no-fly zone over Libya could cost from \$25 million to \$300 million a week, depending on how much air space it would cover. This figure reflects only the maintenance cost and does not include the one-time cost of taking out Libya's air defense systems, which is required to set up such a no-fly zone; that operation alone is estimated to importantly, the imposition of a no-fly zone is tantamount to a declaration of war - one that Gaddafi has warned he will fight. The cost of a full-fledged war on Libya is a lot more than \$300 million a week.

The imposition of a nofly zone is tantamount to a delcaration of war one that Gaddafi has warned he will fight.

The United States is in the middle of two wars. Iraq and Afghanistan have cost us more than \$1 trillion to date, and we are far from finished with them. These wars have been an enormous burden on America's already-hurting economy. America's fiscal health is abysmal, and we should not be spending any more money on wars we cannot afford to fight.

Why it's going to be made

Of the permanent member states of the U.N. Security Council, France and the U.K. support the establishment of a no-fly zone, while Russia and China oppose it. The U.S., in its characteristic manner, has not yet taken a clear stand. These deliberations moved forward on Saturday when the Arab League, an important party in this decision, called on the Security Council to establish a

The U.S. should support the establishment of a no-fly zone, since it's an excellent idea. If that happens, we then have two choices for our involvement in its implementation: first, we could let France or the U.K. take the lead on this one. The United States would be a significant contributor both monetarily and in equipment — but we would not be the ringmaster as we were in Iraq and Afghanistan. The second option

The United States is going to choose option two because we if we don't, we may lose out on "getting with" the new regime that will govern Libya and, more importantly, it could be a blow to our image as a world leader. The first concern is easily addressed by recognizing that the U.S. can still play a leading role in the aftermath of the intervention, a far less costly option. The second concern is justified but invalid; if the U.S. splits the "glory" of leading this particular military endeavor with a few other countries, it is not going to affect how much the U.S. pays the U.N. or NATO, nor is it going to affect the other criteria that make the U.S. the world's only superpower.

If the United States does continue to grow its vast federal deficit and national debt by engaging in trillion-dollar wars, however, we are in danger of losing our economic power, and consequently our military and political power. With the loss of three of the four axes of power, we will lose superpower status.

To maintain our image as a superpower, the United States is going to lead the intervention in Libya, a move that will cost us billions of dollars and, ironically, maybe our "superpowerdom."

What happened at the Fukushima reactor? Events in Japan confirm the robustness of modern nuclear technology — not a failure

By Keith Yost

As a nuclear engineer, it is depressing to read the recent reports on the Fukushima nuclear incident - not because of the incident itself (at this point I strongly believe that we will remember Fukushima as evidence of how safe nuclear power is when done right) — but because the media coverage of the event has been rife with errors so glaring that I have to wonder if anyone in the world of journalism has ever taken a physics class. My favorite: in one article, boric acid was described as a "nutrient absorber" instead of a "neutron absorber." How many editors signed off on that line without asking, "Why would a nuclear reactor need to absorb nutrients?"

Whether it is confusion of radiation with radioactive material, flailing comparisons to past accidents, or hopeless misuse of terminology, reporting on Fukushima has been a mix of hype and speculation entirely devoid of useful information. Let's set the record straight: the situation is under control, it is unlikely that the nuclear fuel has melted, the risk to the public is effectively zero, and, depending on whether facts on the ground have been reported correctly, it is possible that the reactors will remain capable of producing power in the future.

The Nuclear Basics

A nuclear reactor is effectively a big device for boiling water. Instead of using the combustion of fossil fuel as its heat source. a nuclear power plant uses atomic fission, mostly of uranium. This method presents two major risks. The first — which occurred at Chernobyl but is virtually impossible in a responsible reactor - is a criticality accident, in which the nuclear chain reaction becomes uncontrolled. The second, which we are dealing with today, is an overheating of the reactor core. Unlike coal, which quits generating heat as soon as combustion ceases, nuclear fuel does not stop generating heat when you stop splitting atoms.

There are several layers of protection that keep nuclear fuel contained within a nuclear plant. The first barrier is what is called the cladding - a zirconium alloy sheath that surrounds the fuel, keeps it in a geometry that is conducive to reactor management and cooling, and contains any gaseous fission products.

The second layer of protection is the reactor vessel, a steel container that houses the reactor and its coolant and makes up part of the coolant loop. Damage to the reactor vessel would mean a loss of coolant and make it difficult to keep the nuclear fuel cool.

A third layer of protection is the containment building. This is a thick, steel-reinforced concrete structure built to withstand very high heat and pressure. If the reactor vessel is breached, the job of the containment building is to withstand incredible force and contain the nuclear fuel.

Finally, in the case of Fukushima, there is a fourth layer of protection, which is essentially a dry-wall building surrounding the containment building. This building is not designed to withstand force or heat, and is basically just meant to protect workers from the weather as they work around the containment building.

The media coverage of Fukushima is so rife with errors that I wonder if anyone in the world of journalism has ever taken a physics class.

Unlike most of the world's nuclear power plants, which are pressurized water reactors (PWRs), Fukushima uses boiling water reactors (BWRs). In a BWR, the game plan is simple: just keep pouring water on, and if pressure gets too high, vent steam into the containment building. Fukushima's engineers likely had a very clear strategy for accident mitigation in the aftermath of the earthquake. Moreover, BWRs often have large chimneys (empty volume above the fuel rods within the reactor vessel). During regular operation, this chimney would be filled with a liquid/steam bubble mixture from the boiling water — in an emergency, this volume can be packed with surplus coolant, effectively raising the thermal capacitance of the reactor vessel. Given the reactor type and the engineering rigor of the Japanese, I think we have good reason to be optimistic.

What happened?

The earthquake struck at Friday, 14:46 local time, at which point the reactor automatically inserted its control rods (neutron absorbers) into the core and ceased the fission of the nuclear fuel. At this point, reactor power was at 6.5 percent, and full cooling was in effect — a combination that should reduce the temperature of the reactor from its normal operating temperature. At 15:41, the tsunami hit and destroyed the on-site generators that were powering the coolant pumps. Once the generators were destroyed, the pumps switched to battery power. Here, the timeline gets murky - either coolant flow continued until roughly 19:46, at which point a pump failure caused flow to stop or be reduced, or it continued until roughly 23:41, at which point the battery life ran out. In either case, problems with mobile generators that had been brought in to replace the batteries prevented cooling from being immediately reestablished. During this time the reactor's power output continued to fall - at 5-9 hours after shutdown, power should have been 0.8 percent of normal. Coolant flow was re-established on Saturday, around 01:30. It is also likely that there were small coolant leaks due to the earthquake breaking seals in the coolant system, which might have further reduced water levels in the core, but not by much — I would think only 1 percent of core volume could have been lost through small seal breaks, and no larger leaks were reported.

This is the window of time in which core damage, if it occurred, had to occur. My back-of-the-envelope calculation looks like this: The Fukushima 1 Nuclear Power Plant produces about 1350 MW of thermal power during normal operation and has a core volume of roughly 300 cubic meters, made up of about three-quarters water and onequarter uranium dioxide. Coolant flow was interrupted for a period of 2-6 hours, during which time the core's power output was roughly 1 percent of normal, or 13.5 MW. eans that 100-300 GJ were dumped into the core without active cooling to remove the heat. Assuming the core began at 250°C, two hours without forced cooling would be insufficient to cause any damage, while six hours brushes against an uncertain region in which cladding melt might be possible, depending on the heat distribution within the core and the assumed heat removal rate from the primary loop without forced coolant flow.

Without exact knowledge of how long the core went without pumped coolant flow, it is difficult to determine the degree of damage the reactor might have sustained. We have two pieces of information to use, neither of which is conclusive.

The first piece of information is an explosion on Saturday at 15:30, which destroyed the outer containment building (the drywall "fourth" layer). The explosion itself was not a serious risk — the building was never meant to be a serious form of containment, but it suggests that the vapor vented out of the reactor vessel and inner, "real" containment building included some amount of hydrogen. Hydrogen can be formed from a number of pathways, including the oxidation of Zircaloy, which would suggest that somewhere in the core, the temperature

had risen past 2200°C.

The second piece of information is the detection of cesium and iodine in the vented steam. The presence of these isotopes suggest, at minimum, a degradation of the fuel clad. Whether this degradation was merely an existing point defect in the cladding (not an uncommon occurrence during normal operation) or from a melting of the clad is difficult to determine without knowing how much fission product was detected. It also raises the possibility of a partial fuel

The widely-hyped possibility of some Chernobyl-like event is inconcieveable without a new disaster.

It has been widely reported that engineers are pumping seawater into the reactor vessel to keep the fuel cool. If this is true, the reactors are effectively scrap — pumping seawater into the core would introduce too many contaminants for the reactor to remain viable. However, I think that the reporters have misunderstood. Yes, Japanese officials say that they are pumping seawater into the reactor containment. But this is likely a confusion of terms: the officials have been referring to the outer building the one that exploded — as the "containment building" and calling the containment building the "reactor containment." If they have been consistent in their terms, then actually, the volume between the containment building (the third layer) and the reactor vessel (the second layer) is being filled with seawater to aid in cooling.

From the information we have, we can draw a conclusion anywhere between "the reactor is undamaged and being cooled" to "the reactor cladding and/or fuel has been partially damaged, but the damage is contained and the reactor is being cooled." The question that should be asked now is whether the reactor has any future value as an electricity-producing asset. The widelyhyped possibility of some Chernobyl-like event is inconceivable without a new, catastrophic disaster. Coolant flow has been re-established and the public is in no danger. Given the magnitude of the precipitating event - a 9.0 earthquake - and the vast property damage it caused, the events at Fukushima are not a serious reason to re-evaluate our own nuclear policy in the

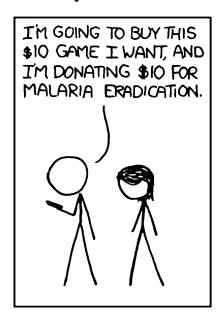
What is the take-away?

6 THE TECH
TUESDAY, MARCH 15, 2011

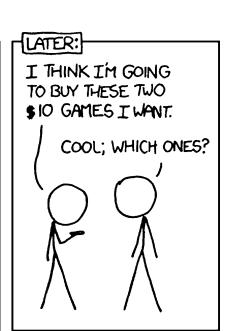


A WEBCOMIC OF ROMANCE, SARCASM, MATH, AND LANGUAGE by Randall Munroe

Charity





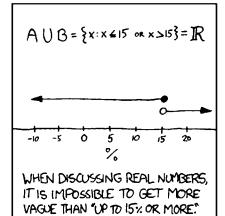


.sınən

I usually respond to someone else doing something good by figuring out a reason that they're not really as good as they seem. But I've been realizing lately that there's an easier way to handle these situations, and it involves zero internet arguseem.

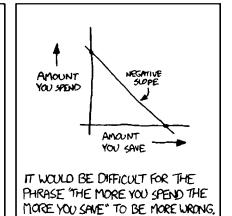
Advertising

MATHEMATICALLY ANNOYING ADVERTISING:





IF SOMEONE HAS PAID \$X TO HAVE THE WORD "FREE" TYPESET FOR YOU AND N OTHER PEOPLE TO READ, THEIR EXPECTED VALUE FOR THE MONEY THAT WILL MOVE FROM YOU TO THEM IS AT LEAST $\$\frac{1}{N+1}$.



Santa talk.

I remember the exact moment in my childhood when I realized, while reading a flyer, that nobody would ever spend money solely to tell me they wanted to give me something for nothing. It's a much more vivid memory than the (related) parental

Sudoku

Solution, page 15

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

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.

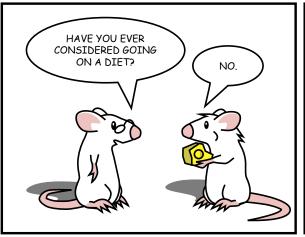
Techdoku

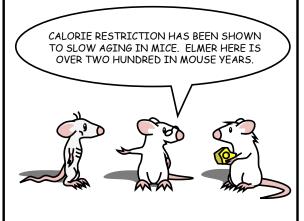
Solution, page 15

100×	i	į	144×	i	i
	i				
24×		12+		–	1
L					
	24×			3–	1
ļ					
		5×	:	90×	
C	_		_		
6×	į	2–	į	2	
6	┪	60×		-	
ľ		1002	i		
				<u> </u>	

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

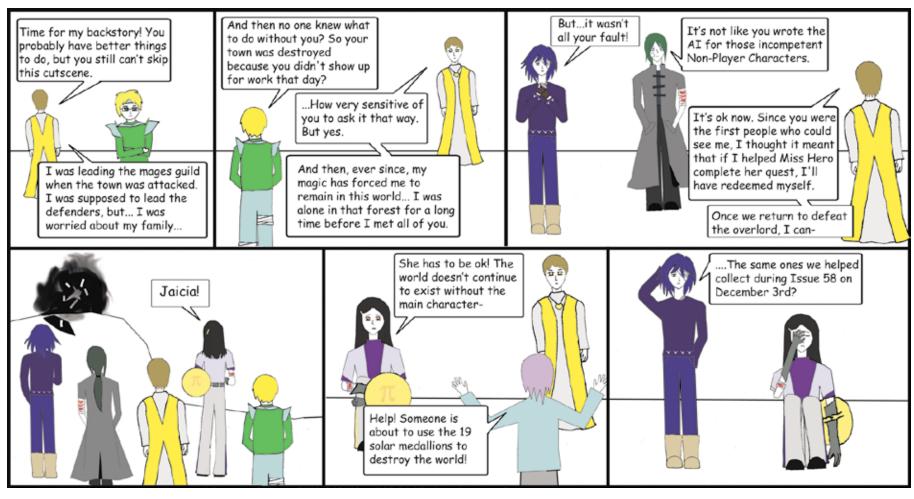
Unnatural Selection by Meisel/Tonn/Wang







Somewhere on the Search for Meaning... by Letitia Li



Dilbert by Scott Adams





Crossword Puzzle

Solution, page 15

ACROSS

- 5 Garbage barge
- 9 Rifle with tiny shot
- 14 Ready and willing partner 15 Home of the NCAA's Bruins
- 16 Bangor's state
- 17 Othello, for one
- 18 Ogler's look
- 19 Relative via marriage
- 20 Give one's verdict
- 23 On the Atlantic, say 24 Pant leg
- 28 Game-hunting trespasser
- 32 Lumberjack's tool
- 33 Li'l Abner's home
- 37 Two-part
- 38 Create a distraction
- 42 Coup d'__
- 43 Supply water to artificially, as farmland
- 44 Singer Garfunkel
- 45 Degrading
- 48 Military utensils set
- 50 Teamsters leader who disappeared in 1975

- 55 Get rid of by promoting, as 11 Hodges who managed the ан еттрюуее
- 59 "__ be?": "Is that possible?"
- 62 Lang. of Rome
- 63 Disorderly type 64 Prefix with structure
- 65 California wine valley
- 66 Chichén __: Mayan ruins
- 67 Idiots
- 68 Counterfeit
- 69 Backyard storage facility

DOWN

- 1 Florida city on the Gulf Coast
- 2 WWII German sub
- 3 Dental thread
- 4 To the point
- 5 "Star Trek" crewman
- 6 Sent a duplicate letter to, briefly
- 7 Cassini of fashion
- 8 Fireside feeling
- 9 Key related to D major
- 10 Language group that includes Swahili

- 12 A, in Abruzzi
- 13 "__ and improved!": ad
- claim 21 Iwo Jima's country
- 22 Before, in verse 25 Sweat spot
- 26 Precise
- 27 Surrenderer to U.S. Grant 29 Polo Grounds slugger Mel
- 30 Hole in one 31 Tennis great Evert
- 33 Reason for talking in one's sleep
- 34 Freakish
- 35 Tiny flying biters
- 36 Racecar's stopping place
- 37 Temperature meas.
- 39 Part of TGIF: Abbr.
- 40 Sea eagle 41 Correct
- 45 Dogs from
- 21-Down 46 Ballpoint brand
- 47 Low-carb diet maven
- 49 Dress bottom
- 51 Kalahari refuge
- 52 Serious arime
- 53 Didn't move a muscle
- 54 Equally poor
- 56 Four Corners state 57 Mama's mate
- 58 Close angrily 59 Spanish hero El __
- 60 365 días
- 61 Org. where you can see the first words of 20-, 38and 55-Across

8 THE TECH
TUESDAY, MARCH 15, 2011

UA welcomes new chancellor

Senators ask about engagement, enrollment, culture

Grimson, from Page 1

He rounded out his priorities by noting that education models change with the times, and MIT needs to keep pace. "We have to think about what the next 20 years of education ought to look like," Grimson said. He explained that "MIT needs to stay at the very forefront of education" by intelligently taking advantage of evolving educational technologies.

Unsurprisingly, senators' questions also focused on issues of student engagement. Timothy E. Robertson '10, a senator from East Campus, asked the Chancellor how he felt students would fit into his new conception of functional communication channels.

"Is there someday in which I could pick a day of the week and say, 'I'm going to be in Forbes Cafe'?" Grimson openly mused, thinking of ways to have informal communication with students. The Chancellor noted that he was still very much "toying" with the idea of open, informal lunch hours — not strictly "office hours" — but that making a commitment now would be premature.

Grimson also noted that he has seen changes in the student-administration relationship in his quarter-century as a faculty member at MIT.

"I've seen times when I think the level of trust has been better than it is now," said Grimson. "Part of my concern is to rebuild that."

The Chancellor also acknowledged that re-establishing trust between students and administrators would require efforts from both sides. "People on my end of the campus should assume that students have the best interest of the campus at heart," said Grimson, adding that the converse is also necessary for a trusting relationship.

Among senators, the impending undergraduate enrollment increase from 4285 to 4350 in the fall — and the eventual increase to 4500 — weighed heavily. Students expressed concern that more students might strain alreadystretched undergraduate facilities and classes.

"We have committed to regrowing the undergraduate class size to 4500," said Grimson. "There have been a lot of people in various offices looking at the

points that are going to feel pressure," like TEAL, Student Support Services, and athletics, added Grimson.

Still, Grimson also explained that students' interests and those of the administration will not always align and that compromises will have to be made.

"I don't want you to come away with the thought that [changes are] purely driven by the finances," said Grimson.

Similarly, Grimson said that the reasons behind some administrative decisions may not be immediately apparent to students, but those reasons are important nonetheless. Sometimes, he said, students may have ideas that aren't practical.

"Where I don't want to go is have students put a ton of effort into something only to have the administration say, 'We can't do that,' for reasons that weren't apparent to you," noted Grimson. But he also gave an example of a student idea reaching fruition on a committee he chaired.

Scratching his beard and smiling, Grimson added, "I hope that students can also understand that gray hair comes with a little bit of additional experience."

Election practically certain for UA ticket

UA transparency top priority

UA Debate, Page 1

branches would get along more and work together more efficiently, more can be accomplished," Lai said.

Miramonti added that, if elected, he would take a more external role. "We are going to have to rebuild some of the trust with the administration and the undergraduates." And when asked to define the goal of the UA, Miramonti answered, "To advocate for students. Pure and simple."

Miramonti and Lai did not outline too many specific plans they have going into the leadership of the UA. "We are open to suggestions. I don't want to call the shots too far ahead, but we're willing to work on things. We're willing to do what it takes."

However, the candidates did note their plan to establish an online UA "Help Desk" to more effectively provide information to students, and to evaluate how student spaces could more efficiently be used. They also emphasized the need to continue current UA practice of maintaining active communication with the student body, like through newsletters.

Increasing student-administration engagement was also a top priority.

Indeed, the first thing Miramonti and Lai want to do as UA leaders is evaluate the slate of questions facing students today. "I'm going to start off thinking about what the students' views on many issues are; I'm going to pick an issue and go for it — hit the ground running, I guess," Miramonti said

When asked about his plans for the UA presidency, Miramonti answered, "Actions speak louder than words. We need to have a series of actions. We have to do them."

The session also touched upon the interaction between the UA and other student governments, including DormCon, Panhel, and the IFC. When asked how the UA fits in with the other student governments, Miramonti noted, "I don't see the UA as a body that represents dorms or fraternities or sororities or any single group. We are a group that represents all undergraduates."

Miramonti also said that he hopes for the relationship between the UA and FSILGs to be "tighter."

A question from the audience raised the issue of the dining referendum, a survey in which students will give their opinion on the new dining plan and their approval of how the dining plan came about. Miramonti said that he voted in favor of holding the referendum — to coincide with the UA elections. "I think this is a good way to get hard data. It allows the UA to form a solid opinion around the issue. I think it's crucial."

Both Miramonti and Lai feel confident that they are prepared to take the positions of president and vice president of the UA. For more information on their platform, visit http://www.engagemit.com.

Elections for UA president, vice president, and class council officers begins Wednesday at 9 a.m. To vote, visit http://vote.mit.edu/.



Want to gain marketable job skills?

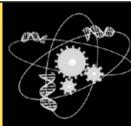
Join
The Tech's
Technology
department
and learn
how to use

- Linux
- Apache
- PHP
- Python
- Perl
- 0SX
- MySQL
- and more!

E-mail join@tech.mit.edu

MIT150 SYMPOSIA

Leaders in Science and Engineering: The Women of MIT



Monday and Tuesday March 28 and 29, 2011

Kresge Auditorium

Leaders in Science and Engineering: The Women of MIT

This symposium will recognize individual and institutional leadership in the success of women in science and engineering. The symposium has two threads. First, progress and current challenges in encouraging gender equity will be discussed. Second, leaders in science and engineering, who are women, will address important and exciting research topics including neurological disease, space and planetary exploration, chemical synthesis, novel materials, microbes in the sea, and gravitational waves. The scientific and policy questions addressed here will be interesting to a broad audience.

A series of six sessions will include:

- Academic Leaders: Perspectives and Current Challenges
- Celebrating Science and Engineering Breakthroughs
- Effective Practices for Recruitment, Mentoring, and Retention
- Shaping Policy in Academia and Across the Nation

More information

A complete program and registration information are available online. **mit150.mit.edu**

Registration required; free for MIT faculty, staff, and students.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY



The Office of Minority Education

Looking for an exciting summer job?

Now Hiring for Interphase 2011

We are looking for:

Instructors

Residential Facilitators

Office Assistants

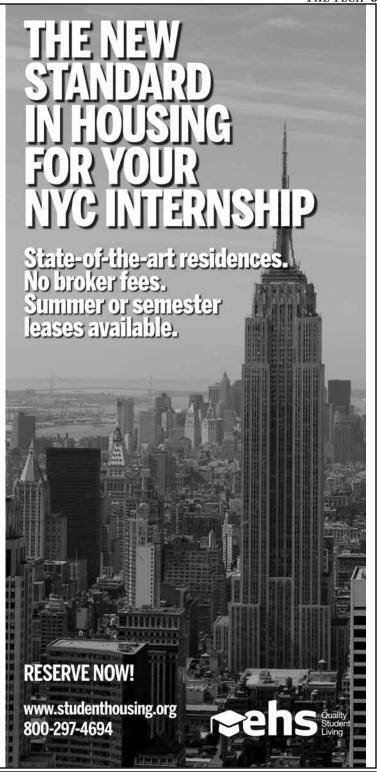
Website: web.mit.edu/ome

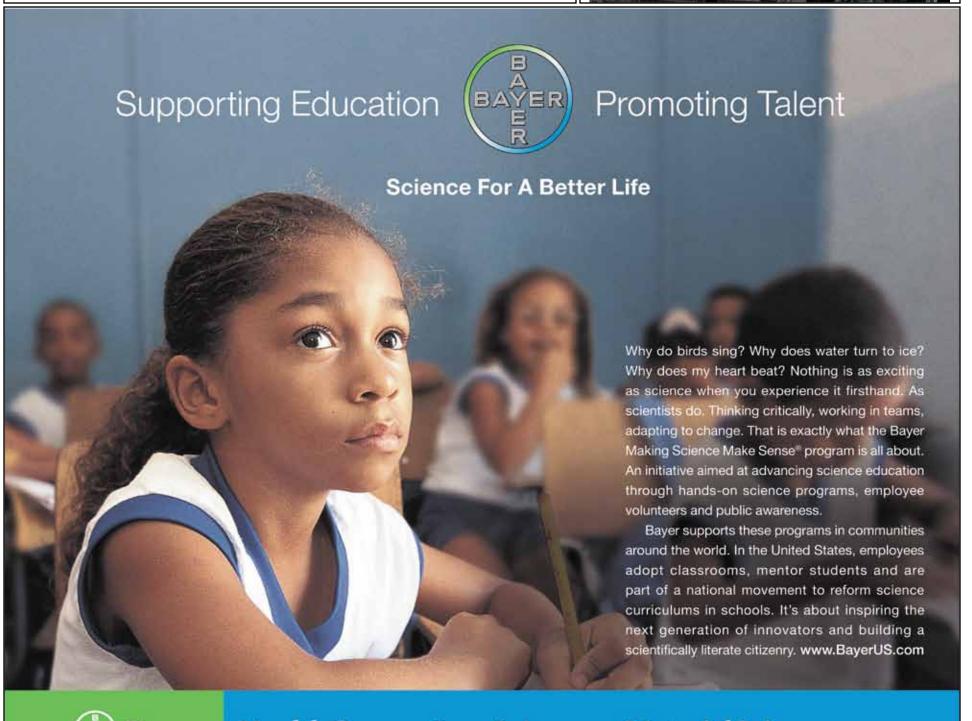
Office: 4-107

Call: 617-253-5010

Deadline:

March 30th, 2011 at 12 Noon

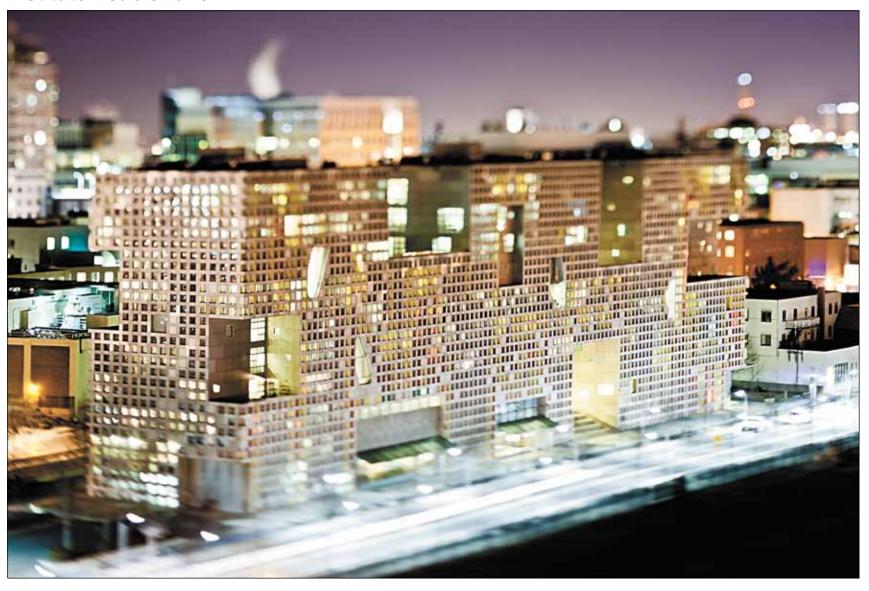




10 The Tech

Tuesday, March 15, 2011

Institute Double Take



By Manohar Srikanth

Drawing a lot of attention because of its architecture, Simmons Hall is one of the most expensive dorms on campus. Unlike other MIT buildings, Simmons always reminded me of a Lego model house. I wanted to create a photograph to capture this aspect of it — the miniature look of a Lego model.

This late-night view of Simmons Hall was photographed

from an elevated point. An illusion of miniaturization is created using a tilt-shift lens, which is based on the Scheimpflug principle. The plane of focus is tilted, throwing the top and bottom parts of the scene out of focus. Why does this simulate an illusion of miniaturization? Because of how we perceive apparent depth and scale of objects from a two-dimensional image.

Aperture: f/2.8 Exposure Time: 15 sec. Sensitivity:

ISO 200

Lens Focal Length: 90 mm Filter: Circular polarizer Tilt: 8 degrees down

CLUB CONNECTION

CAMPUS LIFE CAMPUS LIFE CAMPUS

Breaking into dance

MIT's breakdancing club is anything but immobile

By Deena Wang

STAFF REPORTER

The acrobats of the ground, the mixmasters of moves, the poets of percussion; they are the ones that challenge the laws of physics. Moving in ways you'd hardly believe, their bodies twist into contorted shapes and then pause, fixing the impossible pose for a moment, just to prove that it can be done. But who are "they"? The breakers of Imobilare.

Founded in 1998, Imobilare is a MIT club dedicated to breakdancing, holding MIT-only practices in Lobby 13 on Mondays and Wednesdays and open practices for members of the Boston breakdancing community on Tuesdays and Thursdays. In the crew of less than twenty, there are only two women. Many of the MIT "breakers" had no previous experience in breakdancing but decided to join the club because it seemed interesting.

'I actually didn't [battle my principle investigator] because I would feel so awkward having to battle my 50-year-old professor.'

—Kawin Surakitbovorn '14 CLUB MEMBER

CLUB ME

Said club member Kawin Surakitbovorn '14, "Imobilare was one of the reasons I chose to come to MIT ... I feel like if I went to another school, there'd be so many good people that already do that stuff so I wouldn't be able to join them."

Breakdancing moves can be divided into four elements. Beginners start out with "toprock," or standing moves like the In-

dian Step, which consists of crossing over your feet and stepping in rhythm to the beat. "Downrock" consists of movements on the ground with the hands supporting the body. Many of the downrock moves are variations on the basic 6-step, which is when you place your hands on the floor and step around a point on the ground. "Power" moves are showy and energetic, like the Windmill, when you lie on the ground and rotate your legs in the air, propelling the rest of your body to roll over. Finally, "freezes" are when you hold your body still for a moment, emphasizing the impressiveness of the move. All the elements are combined together with the rhythm of the music to create a dance.

What's commonly known as breakdancing is divided into different styles. "Breaking is the style that everyone is doing right now, what people do with floorwork, like the toprock and the power moves and the windmills, but popping is more of an isolation hitting style [when you alternate fluid movements with sudden stops]," said Lakshman R. Sankar '11, the leader of the club. "Traditionally, we've been more a freestyle pop group. Recently we've been more on the breaking side, but we try during performances to bring out some of the popping."

Each breakdancer develops his or her own style over time. There's no set curriculum of moves to follow. If you see someone perform a move that looks cool, then you ask that person to teach you how he or she did it. By adding your own flair, you make the moves your own. Because of this process, there are fewer injuries than you might expect, because you only learn moves that you feel comfortable with. "A lot of it is less about learning the hardest moves and more about learning moves that you like," said Nicholas A. Pellegrino '12.

Once dancers have learned a couple of moves, they show them off. Imobilare per-



WIVEK DASARI—THE TECH

B-girl Colleen M. Gallagher '11 holds a freeze at Imobilare practice last Monday night.

orms at various MIT events, such as Kanna — them, Wa've reasted them before

forms at various MIT events, such as Kappa Alpha Theta's KATWalk. "We did choreography to Mulan. … We each had our own reflections [for the song "Reflection"] and there was a scene for "I'll Make a Man Out of You" where there was [combat] training, and then a Hun versus Chinese battle scene at the end," Pellegrino said.

On the other side of the spectrum from choreographed dances are the freestyle "battles" done against other b-boy crews. Each crew tries to "roast" the opponent in a manner inspired by street battles. The MIT crew has battled the Harvard crew with predictable results. "We're certainly better than

them. We've roasted them before. It's on the internet," Pellegrino said.

In April, Imobilare hosts its own jam session called "Breakonomics," competing with crews from different states and even other countries. How does the MIT team stack up? "We put in a good effort," Pellegrino said.

You never know who might be a break-dancer. Surakitbovorn had his principle investigator, Pablo Jarillo-Herrero in the physics department, walk in on him break-dancing and challenge him to a battle. "I actually didn't do it because I would feel so awkward having to battle my 50-year-old professor," Surakitbovorn said.

Afterhours with Carol Livermore

MechE professor tells us why she thinks she could win a chocolate-eating contest

By Maeve Cullinane

Carol Livermore is one of three professors who teach 2.001, Mechanics and Materials I. Her research investigates power microelectromechanical systems, which are devices that manipulate large amounts of power but in a small package. Her lab also explores the self-assembly of microscale and nanoscale systems. This week I had the opportunity to sit down with her to discuss why she became a mechanical engineering professor after getting a PhD in physics, how to get a job in MechE, and even her favorite MechE joke.

The Tech: What's the most embarrassing thing that's ever happened to you?

Carol Livermore: I had spent the night at children's hospital. My kid was having emergency surgery, and I was really serious that I was going to teach the next day. So I did my best to look halfway human and came racing straight from the hospital to campus, and I gave my whole lecture. Then I went to put my coat on and head back to the hospital, and I looked down and I had given the whole lecture with this giant teddy-bear decorated, authorized parent/guardian sticker stuck to the front of my clothes. The funniest thing about it was not so much that it happened, but that no one commented. I felt so embarrassed about it. I mean, everybody wears really interesting things, and if I wanted to get away with it, this was the right place to

TT: Did you always know that you wanted to go into mechanical engineering?

CL: When I was sixteen, I figured out what I wanted to be, and that was a physics professor. So I went ahead, and I got a bachelor's and a master's and a PhD in physics. And then I said, what have I done? I want to be an engineer. So I switched.

TT: And what made you decide to make that change?

CL: The value system is different between the two fields. In physics, research is more prized the more fundamental it is. In engineering, the very same piece of



MANOHAR SRIKANTH-THE TECH

Cheat Sheet aka that random stuff that never shows up on the test

The Tech: What kind of jellybean do you avoid at all costs? Carol Livermore: Lime.

TT: If you were forced to enter an eating contest for something, what would you choose?

CL: It would be some form of chocolate. I went to Belgium, so I have proof I could eat a lot of chocolate.

TT: What's the best concert you ever went to?

CL: Jimmy Buffett. I would never wear a parrot hat, but I like the parrotheads [Jimmy Buffett fans].

TT: What's your favorite TV show?

CL: I used to watch TV, but now I have children. Their favorite is Phineas and Ferb and I'm working my way through Battlestar Galactica. I also loved Firefly.

TT: What's your favorite MechE joke?

CL: In the context of mechanical stress and mechanical strain: "I'm getting tensor and tensor!"

research might be prized not just for how fundamental it is, but for how useful it is. So I came to MIT in 1998 for one year as a post-doc and that's how I was going to turn myself into an engineer. I just forgot to leave and I became a professor.

TT: What is it about 2.001 that really attracted you?

CL: I think having switched to engineering is actually an advantage, because I can remember what it's like to not know the stuff. It's actually not so far back in my history because I learned it after I had my PhD. So it's partly that and also partly that I like to teach the first class [in course 2] because it's

an opportunity to try to teach students approaches, not just facts, that will be useful as they go along. I think that if you start somebody off with the wrong kind of experience that you can do a lot of harm. So I try to introduce the subject the same way that it made sense to me, which is kind of 50% math and 50% the cartoon laws of physics, the mental images of physics that we all have. Also, part of what I like about teaching the first class is that you can teach people that it's OK to ask for help. It's good to ask for help.

TT: What do you enjoy the most about being a professor?

CL: I like working with students because you can't get set in your ways if you have this constant stream of people with all these new ideas and different perspectives. I also enjoy the fact that it's entrepreneurial. You get to decide on the direction of your research as long as you can convince someone to pay for it. And you have an unprecedented opportunity to meet people from all over the globe. Not just here on campus, but there's a lot of travel involved, like conferences.

TT: What's the coolest place you've been able to go?

CL: I think the one I enjoyed

the most was probably going to Belgium. The conference was in Leuven, which is a medieval university town. It was just fantastic. The buildings, although a lot of them were rebuilt after World War II, they've maintained the same spirit. And it's full of students, too. It's not a car-centric place because it wasn't built for cars. What you see is students riding bicycles over cobblestones in the snow. A lot of the things here are big, but over there they're tiny. The shops have a lot of character.

TT: What steps would you encourage your students to take if they wanted to get a job or an internship in the field of mechanical engineering?

CL: The most important thing is to network. Informal networking is great, and also don't ever pass up a career fair or whatnot, but also networking with professors. There's plenty of professors who are consulting with industry and so forth and they often have connections that can help too. It's a matter of finding the person with the right opportunity. If you talk to a lot of people, you find out about a lot of different types of jobs and you make a lot of accidental connections too.

I've actually talked to a lot of people who are looking for permanent jobs now. And there's a lot of ways that you can do it. My favorite quote that I've heard recently was "everybody knows that responding to HR is like putting your resume into a black hole." Everybody knows that, so what's the alternative? You talk with people.

TT: If you could give any one definitive piece of advice to your students, what would it be?

CL: It's really easy to think that what's most important is what everybody else says is most important. My advice would be to do what *you* think is most important. People see a very narrow section of what's possible when they're going to college. I think there can be a certain uniformity in what you hear from your professors because they tend to come from similar backgrounds, but you're the one who has the life. It has to work for you, so that needs to come first.

MAR. 15 – MAR. 21

TUESDAY

(8:00 p.m.) MIT Folk Dance Club throws its St. Patrick's Day Party - W20-491

WEDNESDAY

(8:30 a.m. - 5:00 p.m.) MIT150 Symposium: Conquering Cancer through the Convergence of Science and Engineering — Kresge

(11:00 a.m. - 2:00 p.m.) Annual Transportation Fair. Free stuff provided! — Stata Student Street

(3:30 p.m. - 5:00 p.m.) Institute Faculty Meeting — 10-250

THURSDAY

(10:00 a.m. - 6:00 p.m.) 150 D-Lab Projects highlighted for MIT's 150th Anniversary — Lobby 10

(4:00 p.m. – 5:00 p.m.) Howard Hughes Medical Institute Lecture presented by Dr. Thomas Tuschl — Whitehead Auditorium

(5:00 p.m. - 7:00 p.m.) MIT Recreation's Indoor Golf Range Meet and Greet — W32 (DuPont lobby)

(8:00 p.m. - 10:00 p.m.) Saxophonist Arni Cheatham and bass trombonist/tuba player Bill Lowe perform for the Killian Jazz Series — 14-111 (Killian Hall)

FRIDAY

(12:00 p.m. - 1:30 p.m.) 2011 MIT Polymer Poster Contest — Lobby 13

(8:00 p.m. - 10:00 p.m.) MIT Shakespeare Ensemble presents Romeo and Juliet — W20, La Sala de Puerto Rico

SATURDAY

(1:00 p.m. - 6:00 p.m.) Queer Women of Color Media Arts Project (QWOCMAP) Film Fest — 32-155

Send your campus events to events@tech.mit.edu.



Do you want to be a part of starting a new Tech department?

The Tech is looking for bloggers.

E-mail join@tech.mit.edu

CUSTOM PRINTED & EMBROIDERED

SWEATSHIRTS - POLOS - HATS & MORE!

ph - 617-625-3335 email - info@grsts.com www.qrsts.com

Somerville, MA





part of R.A.W. (Rinnigade Art Works)

12 THE TECH TUESDAY, MARCH 15, 2011

PLEASE PRAY FOR JAPAN

日本を応援してください

Donations and messages

collected at Lobby 10 (TBD) 9a-12p / 3p-6p, until Fri

Visit http://web.mit.edu/jam/www/ for more information



Japanese Association of MIT

There's still time to nominate!

web.mit.edu/awards



Tuesday, March 15, 2011

The Tech 13

Napolitano, Page 1

The title of yesterday's speech was "The Future of Science as Public Service." Describing the diverse challenges faced by her department, Napolitano emphasized her goal of developing challenging and rewarding scientific careers in government capable of attracting scientists as much as academia and the private sector do. She said more scientists are needed to apply knowledge across the government and that government and public policy specialists were likewise needed in the science private

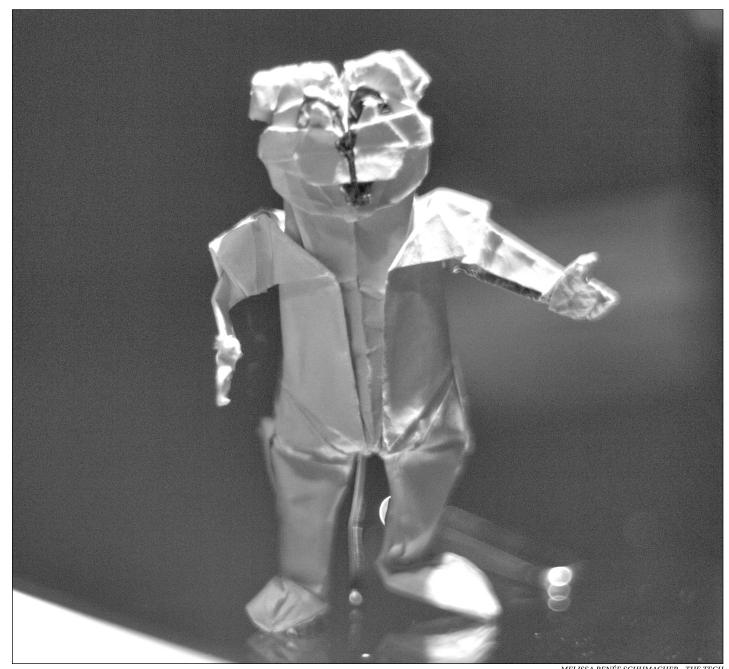
Napolitano said the DHS is responsible for a large amount of data, and it must also balance civil rights and liberties when implementing security measures. She said aviation security must be as non-intrusive as possible, while still effective and fast; technology must be able to easily detect tip-offs that hint at potential danger.

"The challenges we confront constantly change," Napolitano said, adding that policies must be able to adapt to change. She suggested that greater collaboration between government and science would help lead to such policies.

After the speech, MIT President Susan J. Hockfield presented Napolitano with the Compton Bowl, made by MIT's Glass Lab.

During the question-andanswer period, Napolitano fielded a question about racial profiling, saying its use in security is illegal, unconstitutional, and ineffective.

—Derek Chang



Art Gallery in W20. Shown here is Tim the Beaver, designed and folded by Michelle Fung '13. The exhibit runs until the end of April.

MELISSA RENÉE SCHUMACHER—THE TECH
Works of origami art submitted to the 10th Annual OrigaMIT Student Origami Competition are now on display in the Weisner Student

GHANGING HUMAN MINID

TO INFINITE UNIVERSE MAUM MEDITATION SPECIAL LECTURE 2011

Guest Speaker: Margie Conboy
Director of Boston Maum Meditation Center

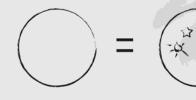
TIME AND PLACE

Wednesday, March 16 7:00pm—8:00pm Room 4—231

maum_officers@mit.edu

ABSTRACT

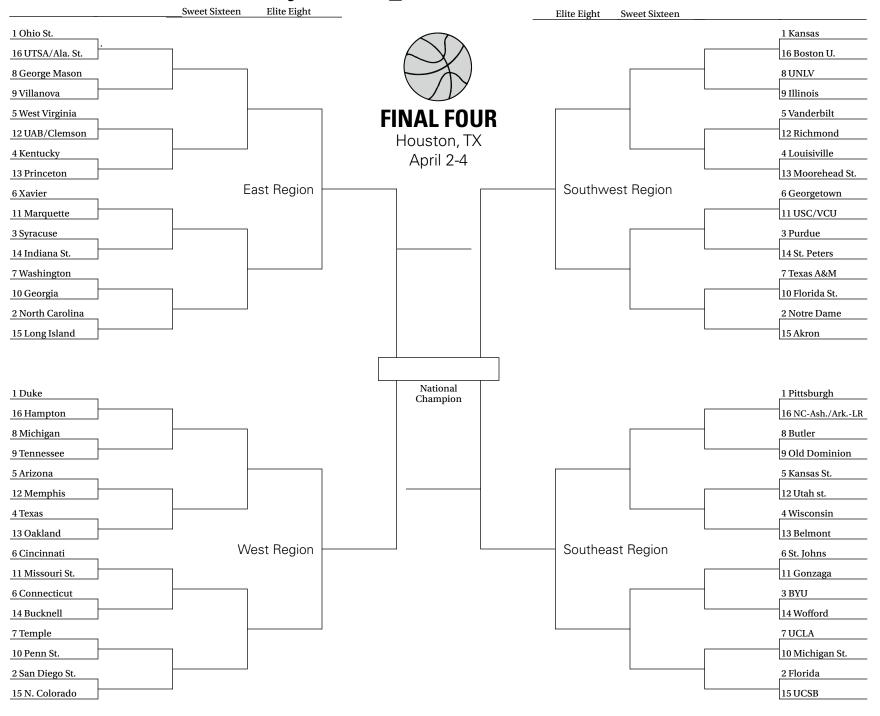
The purpose of humans is to change from the human mind to the infinite mind of the universe. This lecture will illustrate the difference between the human mind and the Universe Mind, explaining why humans are living in an illusion world within their minds. The speaker will also describe the difference between living in the real world verses living trapped inside the human mind, and most importantly, provide the solution to changing human mind to the infinite mind of the universe.



The Tech sports staff NCAA Div. I predictions



Fill in your predictions here



No. 1 seeds prepare for Indianapolis Final Four

By Jere Longman

THE NEW YORK TIMES

Since the NCAA began sponsoring women's basketball in 1982, only once have all four No. 1 seeds reached the Final Four.

If that were to happen again this year, the Final Four in Indianapolis would feature highly anticipated and powerfully balanced matchups with the defending champion, Connecticut (32-1), against its archrival, Tennessee (31-2), in one semifinal and Baylor (31-2) against Stanford (29-2) in the other on April 3.

These No. I seeds, announced Monday, have won a combined 18 national championships, are coached by the nation's highest-profile coaches, and have clearly separated themselves from every other team in the country without being able to dominate one another. During the regular season, UConn beat Baylor, which beat Tennessee, which beat Stanford, which beat UConn.

"I don't feel there's a clear Number 1 this year as there was the past two years," said Stanford coach Tara VanDerveer, who has won two national titles and whose Cardinal ended UConn's record 90-game winning streak in December. "But I think there's been clearly a top four."

As UConn begins its quest for a third consecutive title Sunday at home against No. 16 seed Hartford in the Philadelphia Regional, the Huskies will have the best player in the country in Maya Moore, but also the thinnest bench and the smallest lineup among the No. 1 seeds.

If Huskies coach Geno Auriemma wins his eighth national title, he said, "It would be the most improbable, no question."

Fortunately for UConn, the 6-foot-5 freshman center Stefanie

LEGAL COUNSEL

MIT students, family, employers and start-ups seeking U.S. legal counsel, campus or office consultation. Call:

James Dennis Leary, Esq. 321-544-0012

Solution to Crossword

					- 11	om.	Ιβċ	age	/					
T	U	F	T		s	С	0	W		в	В	G	כ	N
Α	В	L	Е		U	С	L	Α		М	Α	Ι	z	Е
М	0	0	R		L	Ε	Е	R		1	N	L	Α	×
Р	Α	s	S	J	U	D	G	М	Е	N	T			
Α	Т	s	E	Α				T	R	0	υ	s	Е	R
				Р	0	Α	С	H	E	R		Α	Х	E
D	0	G	Ρ	Α	Т	С	Н				ם	Ü	4	L
R	U	z	-	z	Т	E	R	F	Е	R	ш	N	U	Ε
E	Т	Α	T				1	R	R	1	G	Α	T	E
Α	R	T		Α	В	Α	S	_	N	G				
М	Ε	s	S	Κ	1	Т				Н	0	F	н	Α
			Κ	Τ	C	K	U	Р	s	Т	Α	Ι	R	S
С	Α	N	ī	T		Т	T	Α	L		s	L	0	В
ī	N	F	R	Α		N	Α	Р	A		ī	T	Z	Α
D	0	L	Ţ	S		S	Н	Α	М		s	Н	Ε	D

Solution to Suddoku

from page 6

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

Solution to Techdoku

from page 6

5	1	4	2	6	3
3	5	2	6	4	1
4	6	3	1	5	2
2	4	1	5	3	6
1	3	6	4	2	5
6	2	5	3	1	4

Dolson has emerged as a force in the middle, delivering a careerhigh 24 points twice in the Big East tournament. If the Huskies make their accustomed run to the Final Four, though, they will probably have to do so with only one reliable bench player — guard Lorin Dixon.

Dolson cannot afford to get into foul trouble as she did against Baylor's 6-8 Brittney Griner in November, when she played only 12 minutes before fouling out. Since then, UConn's front-line depth has vanished. Forward Samarie Walker transferred to Kentucky, and the sophomore reserve center Heather Buck, lacking in confidence even when healthy, missed the Big East tournament with a stress reaction in her left foot.

"Our guys know what to expect

Open Daily Except Monday

Reasonably Priced Dinners

11:30 am - 11:30 pm

Lunch Buffet \$7.95

come tournament time; that gives you a little confidence," Auriemma said. "At the same time, you keep your fingers crossed about injuries and foul trouble."

Coach Pat Summitt is seeking her ninth national championship at Tennessee and her first appearance in the Final Four since winning consecutive titles in 2007 and 2008. The Lady Vols, seeded first in the Dayton Regional, are tall, deep, and stocked with more interchangeable parts than perhaps any team.

"I think Tennessee is the deepest team," VanDerveer said. "It isn't dependent on one person; they can bring people in without dropping off that much."

The Lady Vols' towering front line ranges from 6-6 to 6-3. Shekinna Stricklen (12.6 points, 7.5 re-

Royal Bengal

Boston's only authentic Bengali Cuisine restaurant

Free delivery for orders over \$10.

Take-out, platters, and catering available.

http://www.royalbengalrestaurant.com/

bounds, 67 assists, 42 steals) is the Southeastern Conference player of the year and can play all five positions. And this may be Summitt's most threatening team from the perimeter; the Lady Vols made 16 3-pointers in the final of the SEC tournament.

"Tennessee may be playing the best of any team right now," said Baylor coach Kim Mulkey, who won the national title in 2005, the last time the women's Final Four was held in Indianapolis.

Only in 1989, however, did all the No. 1 seeds reach the Final

Four. Texas A&M, seeded second to Baylor in Dallas, has lost to the Bears three times this season by a combined 15 points. Xavier, seeded second to Stanford in Spokane, missed the Final Four a year ago because of two blown layups against the Cardinal, while third-seeded UCLA held an 11-point lead before losing to Stanford on Saturday in the Pacific-10 tournament.

"Connecticut is still the team to beat," Mulkey said. "But Stanford gave us hope that not everyone else is playing for second place."

SPERM DONORS

Earn up to **\$1200**

Invest minimal time

Make a real difference in the lives of families

Receive free health and genetic screenings

APPLY ONLINE:

SPERMBANK.com

- convenient Cambridge location

MIT +150 MIT150 SYMPOSIA

Conquering Cancer through the Convergence of Science and Engineering

313 Mass. Ave., Cambridge

T: Red Line, Bus #1 – Central Square

10% Discount on \$15

(or more) order with MIT ID.

(617) 491-1988



Wednesday, March 16, 2011 Kresge Auditorium

8:30 am - 5 pm

In these highly interactive sessions, expert panelists — to include top biologists, leading clinical experts, technologists, and biomedical engineers — will strive to engage the audience in a robust dialogue about the past, present, and future of cancer research.

Each session will contain brief talks followed by moderated panel discussions to engage the audience in an exploration of three topics:

- What were the defining (and teaching) moments in the first three decades of the War on Cancer?
- How is the convergence of biology and engineering changing the cancer research paradigm at MIT?
- What clinical results can we expect from the deployment of new approaches to cancer research?

More information

- A complete program and registration information are available online.

 mit150.mit.edu
- Organized by the David H. Koch Institute for Integrative Cancer Research Registration required; free for MIT faculty, staff, and students.

 A small fee will be charged for other participants.

Пii

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Track goes to Nationals

Women place third overall; men take 28th

By Greg McKeever DAPER STAFF

The MIT Men's and Women's Track & Field squads traveled to Capital University for the NCAA Division III Indoor Championship over the weekend and had a num-

ber of impressive results. On the strength of 14 All-America performances, the women's team brought home a third place finish, while the men placed five athletes on the All-America podium en route

to a 28th place standing. This was the third consecutive third-place result at Nationals for coach Halston W. Taylor's women's program, as the Engineers were also among the top three at this year's Cross Country Championship and the Outdoor meet in 2010.

Hazel L. Briner '11 got things started on Friday morning in the pentathlon. Briner entered the meet seeded ninth and got off to a strong start with a fourth-place finish in the 55-meter hurdles. After ninth (high jump), tenth (shot put) and 11thplace (long jump) results in the next three events, Briner stood on the outside looking in at All-America honors. She saved her best for last, winning the 800 race with an NCAA Championship record time of 2 minutes, 22.51 seconds. However, the win was not enough to propel her onto the awards stand, and she finished just 27 points out of the All-America level.

Later in the day on Friday, Portia M. Jones '12 positioned herself well for Saturday's finals with a pair of solid preliminary races. Jones qualified with the second-fastest time in the 55 hurdles (8.19) and third overall in the 400 (57.01).

In the final event of the night, the Engineers collected their first All-America honors as the Distance Medley Relay team of Louise E. van den Heuvel '14, Martha M. Gross '12, Jamie L. Simmons '12 and Anna M. Holt-Gosselin '11 finished in sixth place with a time of 12:01.83, just a bit over threetenths of second out of fifth.

Nathan E. Peterson '12 landed on the awards stand on Friday as well, setting a new MIT record in the pole vault with a 16-9.50 feet vault, which put him in a tie for fifth place. Peterson has steadily improved down the stretch of the season, improving his height by over a foot in the last two

The women were back in action on Saturday afternoon as three pole vaulters, along with Jones, Holt-Gosselin and the 4x400 relay would take part in event finals during the second day of competition. Karin E. Fisher '11 led the way for MIT in the pole vault, finishing as the national runnerup with a jump of 13-4.25 feet. Lauren B. Kuntz '13 and Briner received All-America distinction and earned quality points for the Engineers with sixth and eighth place finishes, respectively.

Jones went back to work in a pair of event finals on Saturday. The junior was placed in the second of two final heats of the 55 hurdles. Despite winning her heat with a time of 8.11, Jones came in just 0.01 second off the winning overall time which came in the first heat — to finish in third place. Jones collected the ninth All-America honor of her career in the 400 with a fourth-place showing.

In the 5000, Holt-Gosselin was an All-America performer for the second time in the weekend with an eighth-place result in a time of 17:12.00.

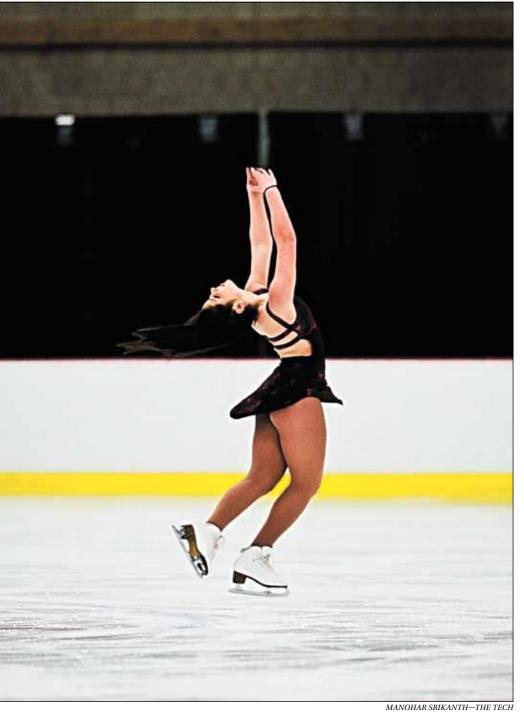
Jones came in just 0.01 second off the winning overall time — which came in the first heat to finish in third place.

The Engineers stood in third place entering the final event of the championship, the 4x400 meter relay, putting themselves in a good position to land on the awards podium once again. Simmons, Briner, Gross, and Jones posted a solid time of 3:54.03, good enough for fifth place and the third consecutive All-America finish for MIT's

Engineers give Bears a fight



Laura M. Wacker '13 rushes toward the goal under pressure from Bridgewater State lacrosse players on Saturday, March 12. The Engineers lost 9-8.



Bryna Oi — sister of Curran Y. Oi '13 — performs at the MIT Figure Skating Exhibition on Saturday. The event drew skaters and spectators from the MIT community and the Boston area

SPORTS SHORT

Figure skaters featured in exhibition

The annual Figure Skating Exhibition presented by the MIT Figure Skating club on Sat-



urday night featured members of the MIT club and other skaters from the Boston area in 21 programs. The

skaters were varied in both their levels of expertise and their styles.

MIT junior Shawn Pan '12, who learned to skate only two and a half years ago, performed his first solo program and received multiple cheers from the crowd.

club president, skated to a jazzed up version of "Simple Gifts" and included a variety of spins.

There were four group programs: three made up of members of the MIT club and one by Team Excel, a synchronized figure skating team based in Boston.

The second-to-last program was the Theatre on Ice. The program was choreographed to the song "Devil Went Down to Georgia." Jessica E. Kesner — who works as a mechanical engineer at Lincoln Laboratory and has been involved with the club since 2002, when she entered MIT as a freshman — played the devil, and Pan played the fiddler.

The program ended with 7 Oi '13, who placed fifth in the World Junior Championships in 2009.

—Joanna Kao, Sports Writer

UPCOMING HOME EVENTS

Tuesday, March 15

Women's Softball vs. Simmons College Men's Lacrosse vs. Husson University

4:30 p.m., Steinbrenner Stadium

Men's Volleyball vs. Rivier College

7:30 p.m., Rockwell Cage

2:30 p.m., Briggs Field

3:30 p.m., Briggs Field

4 p.m., Briggs Field

Wednesday, March 16

Women's Softball vs. WPI Men's Baseball vs. Wentworth Institute of Technology

Women's Softball vs. WPI Men's Volleyball vs. Regis College 4:30 p.m., Briggs Field 7 p.m., Rockwell Cage

Thursday, March 17

Men's Baseball vs. Eastern Nazarene College 3:30 p.m., Briggs Field