



# Plans for academic entity move forward

## *New grad, undergrad curriculum in socio-technical systems, statistics*

By Stan Gill  
CONTRIBUTING EDITOR

Provost Martin A. Schmidt PhD '88 announced last week plans to move forward to create a new institutional entity at MIT. The entity will incorporate values from several programs, including the Engineering Systems Division (ESD) and Laboratory for Information and Decision Systems (LIDS), to create a new center focused on complex and socio-technical systems, information and decision systems, and statistics.

In his most recent email to the MIT community, Schmidt said that the final proposal for the new entity was the result of deliberation across four committees over five months. Professor Munther A. Dahleh, currently the acting director of the Engineering Systems Division (ESD), is the entity's director-designate.

The original proposal, released in May, stated that the new entity hopes to have a substantial impact on critical societal systems, defined in the report as engineered or natural physical systems, social behavior of people interacting with these systems, and institutional behavior

of organized units governing these systems.

The core mission of the entity addresses two main points in setting up an infrastructure to make these goals a reality. The first is to create a research and educational environment that enables analyzing, predicting, designing, and controlling complex societal and technical systems. Secondly, the proposal suggests creating an Institute-wide focal point for advancing MIT's research and educational programs related to 21st century statistics.

The formation of the entity will create several new interdisciplinary graduate programs. The two core programs will be the PhD in complex systems and the PhD in statistics. The complex systems PhD is slated to rely on research driven by "systems-level issues that arise in various engineering and societal domains." The PhD in statistics is meant to be a unique degree track, covering probability theory, modern statistics theory, and data analysis.

The report on the entity also proposed a masters in statistics, a refo-

Entity, Page 9

## MIT campus upgrades wireless network

Just in time for the beginning of the new school year, MIT upgraded its wireless network to include a new Distributed Antenna System (DAS) as part of a push to strengthen wireless coverage on campus, according to a press release by AT&T.

DAS provides an improved wireless connection in heavily trafficked areas through the use of multiple antennas. AT&T reports the new system has been installed in 75 MIT buildings so far, including the David H. Koch Center for Integrative

Cancer Research and the Tang Center. More installations are underway.

In a press release, Patricia Jacobs, President of AT&T New England, emphasized the value of a "fast, reliable network" for MIT students and faculty in their work.

MIT's network upgrade is part of AT&T's larger effort to bring high-speed Internet access to its customers through Project Velocity IP, a program that launched in 2012.

—Drew Bent

## Great Dome hacked in honor of 9/11 anniversary



LONDON CARTER—THE TECH

Hackers placed a giant American flag on the big dome in commemoration of the 13th anniversary of 9/11.

# All-FSILG ban is for rush fairness

## *MIT extended Boston restrictions to Cambridge, Brookline*

By Austin Hess  
EDITOR IN CHIEF

When Boston decided to impose a 49-person limit on gatherings at MIT fraternities, sororities, and independent living groups in the city last week, MIT extended the restriction to those in Cambridge and Brookline to "maintain equity among the FSILGs during new member recruitment," according to Matthew D. Bauer, a spokesman for the Division of Student Life.

According to Interfraternity Council President Haldun Anil '15, "The IFC did not suggest or push for the expansion to all FSILGs; the decision came from senior administrators." He added that there was no word yet on when the restrictions would end for any FSILGs.

The limits, announced to fraternities last Wednesday, came after a female student unaffiliated with MIT survived a fall from a window at Lambda Chi Alpha during a party late Sunday, Aug. 31 during rush

week.

That incident was just days after MIT told its fraternities that they could once again hold events at their houses exceeding their maximum number of residents, an apparent end to restrictions in place since Boston revoked fraternities' assembly licenses after student fell four stories through a skylight in September 2013 at Phi Sigma Kappa. MIT gave its blessing to gatherings under much more generous caps (up to 249 people for some houses), citing a new policy for FSILG events introduced shortly before the start of rush.

Statements by members of Boston's Inspectional Services Department to the *Boston Herald* this September, however, indicated that the city still viewed the assembly licenses as prerequisites for gatherings but had not received any applications for the licenses from MIT fraternities since January. The statement called into question whether MIT's new event policy had ever provided legal

justification for renewed events, and seemed at odds with MIT administrators' assurances to fraternities that MIT and the ISD had been in "long and productive collaboration" regarding the matter.

In an email to *The Tech*, Tom Stohlman, a building code contractor hired through MIT's Association of Independent Living Groups, indicated that some types of events do not need assembly licenses under normal conditions: "There are important differences between restaurants, bars, theaters, and other places of public assembly and having a party, dinner, movie night, or rush event among friends and acquaintances at one's house. There comes a point when the crowd size and makeup makes the distinctions moot."

It seems that the events policy introduced before rush aimed to keep FSILG events limited to those not considered instances of pub-

FSILG, Page 9

## MIT Professor wins \$500,000 Lemelson-MIT Prize

Sangeeta N. Bhatia SM '93, PhD '97, the John J. and Dorothy Wilson Professor of Health Sciences and Technology & Electrical Engineering and Computer Science at MIT, has been awarded the \$500,000 Lemelson-MIT Prize for her work in applying small-scale technologies to create clinical solutions that can be implemented on a global scale. The annual prize is awarded to mid-career inventors who develop products that have societal

value.

Bhatia and her team developed synthetic biomarkers that can detect the presence of diseases such as cancer and fibrosis. These biomarkers are then used to devise a simple paper urine test that is cost-effective and scalable to regions that lack extensive medical resources.

The prize-winning team also pioneered into the production of artificial microfluids, which can be used to model the behavior

of infections, such as malaria, that originate in the liver. The microfluids may even lay the groundwork for engineered livers that supersede the need for transplants.

Professor Bhatia is a member of the Koch Institute for Integrative Research and a senior associate member at the Broad Institute, as well as a faculty member at the Institute for Medical Engineering and Science.

—Rohan Banerjee

## IN SHORT

**September 15 is the last day to sign the 2014-2015 waiver for MIT health insurance if you are using your family's insurance plan.** Be sure to waive individual coverage through the MIT Student Extended Health Plan. You can waive coverage for just the fall semester or the full academic year. Go to <http://medweb.mit.edu/healthplans/student/waiver.html>.

**Career Fair is next Friday!** Be sure to sign up at <https://career-fair.mit.edu>. The Career Fair will take place

next Friday, September 19 in the Johnson Athletics Center and Rockwell Cage

**The ESP Splash Teacher Registration** is open at <https://esp.mit.edu/teach/Splash/index.html>. Be sure to sign up by Friday, Sept. 26.

**It's your last chance to pick up art through the MIT List Visual Arts Center.** Make sure to claim artwork on a first-come first-serve basis tomorrow starting at noon in E15.

**Send news information and tips to [news@tech.mit.edu](mailto:news@tech.mit.edu).**

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PhD on the struggle of writing those papers. **FUN, p. 5**



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# Documents unsealed in Yahoo’s case against US data requests

By **Vindu Goel and Charlie Savage**  
*THE NEW YORK TIMES*

The federal government was so determined to collect the Internet communications of Yahoo customers in 2008 that it threatened the company with fines of \$250,000 per day if it did not immediately comply with a secret court order to turn over the data.

The threat — which was made public Thursday as part of about 1,500 pages of previously classified documents that were unsealed by a federal court — sheds a rare spotlight on the fight between Internet companies and the government over the ground rules and procedures for the secret surveillance of Americans and

foreigners following the 9/11 terrorist attacks. Under the Foreign Intelligence Surveillance Act, companies that receive data requests are prohibited by law from talking about the substance of the interactions or even acknowledging they occurred.

Yahoo’s 2008 challenge to the warrantless surveillance law and an appeals court’s rejection of that challenge were first reported by The New York Times last year, shortly after Edward J. Snowden, a former National Security Agency contractor, exposed a more extensive government surveillance program called Prism through classified documents leaked to The Washington Post and The Guardian. The court documents released Thursday show that Yahoo was forced to comply with the order

to turn over data even though the government and the appeals court had yet to set out clear rules to minimize the amount of data collected from Americans, who were supposed to have special protection under the law, which was principally aimed at foreigners. The records also provide perhaps the clearest corroboration yet of the Internet companies’ contention that they did not provide the government with direct access to vast amount of customer data on their computers.

Overall, the cache of documents shows how Yahoo fought the government and eventually lost its appeal. That helped to set the stage for a vast expansion of the federal government’s surveillance of Internet users through the secret Prism program.

# US, Europe back new economic sanctions against Russia

By **James Kanter and David M. Herszenhorn**  
*THE NEW YORK TIMES*

BRUSSELS — The United States and Europe agreed on Thursday to place additional economic sanctions on Russia over its role in promoting separatist warfare in eastern Ukraine despite a fragile new cease-fire that went into effect last week.

European leaders overcame resistance among some of their colleagues who wanted to continue delaying additional measures to see if the shaky truce holds. President Barack Obama

then followed suit shortly afterward by announcing that he would match the new European moves when they take effect on Friday. “We are watching closely developments since the announcement of the cease-fire and agreement in Minsk, but we have yet to see conclusive evidence that Russia has ceased its efforts to destabilize Ukraine,” Obama said. He added: “If Russia fully implements its commitments, these sanctions can be rolled back. If instead Russia continues its aggressive actions and violations of international law, the costs will continue to rise.”

Herman Van Rompuy, the president of the European Council, the body representing the European Union’s leaders, said the sanctions to be put into effect on Friday would be reviewed by diplomats before the end of the month and could be revised swiftly if events warranted. “We have always stressed the reversibility and scalability of our restrictive measures,” he said.

Neither side publicly announced the specific actions to be taken, leaving that until Friday, but officials said they would be aimed at Russia’s financial, energy and defense sectors.

# NFL stands ground on Rice, despite report it received video

Two days after a graphic video surfaced showing star running back Ray Rice knocking out his then-fiancée, NFL Commissioner Roger Goodell continued to scramble to get ahead of the brewing controversy about whether he had seen the video before suspending the player for two games.

Late Wednesday night, Goodell said that he asked former FBI Director Robert S. Mueller III to conduct an independent investigation into the league’s “pursuit and handling of evidence in the Ray Rice domestic violence incident.”

John Mara, the co-owner of the New York Giants, and Art Rooney II of the Pittsburgh Steelers, who are both lawyers, will oversee the investigation, the final results of which will be made public. Goodell said Mueller, who was director of the FBI for 12 years, will have access to all NFL records.

Mueller’s report, though, is unlikely to quell the immediate calls by women’s advocacy groups for Goodell to resign. Earlier Wednesday, he sent a letter to team owners and presidents reiterating that the league had not seen video of what transpired in an elevator between Rice and Janay Palmer, now his wife, until it was made public by the website TMZ on Monday.

Yet The Associated Press reported Wednesday that a law enforcement official, speaking on condition of anonymity because of the continuing investigation, sent the footage to an NFL executive months ago, before Goodell suspended Rice.

“We have no knowledge of this,” Greg Aiello, an NFL spokesman, said in a statement. “We are not aware of anyone in our office who possessed or saw the video before it was made public on Monday. We will look into it.”

In July, Goodell disciplined Rice, who played for the Baltimore Ravens, with a two-game suspension for being accused of assaulting his fiancée, a penalty that was widely criticized as too lenient. In a rare mea culpa in August, Goodell acknowledged that he had mishandled the Rice case and announced that he would toughen the league’s policy on domestic violence.

“Our longstanding policy in matters like this — where there is a criminal investigation being directed by law enforcement and prosecutors — is to cooperate with law enforcement and take no action to interfere with the criminal justice system,” Goodell wrote in the letter.

He added: “As always, we will continuously examine our procedures. I believe that we took a significant step forward with the enhanced policies on domestic violence and sexual assault that were announced last month.”

But as he tried to explain his reasoning, Goodell also had to fend off calls for him to step down from the most prominent and lucrative job in sports.



“The NFL has lost its way,” said Terry O’Neill, the president of the National Organization for Women. “It doesn’t have a Ray Rice problem; it has a violence against women problem.”

—Ken Belson, *The New York Times*

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# Indiscriminate surveillance at MIT

*Logging of card access data at CSAIL has no clear benefit*

In the Stata Center, the doors to enter the building and then to enter the lab areas are opened by RFID cards (I call them “pox cards”) instead of metal keys. When the Computer Science and Artificial Intelligence Lab (CSAIL) moved into Stata in 2004, the MIT administration decided, without consulting the personnel of CSAIL, to make the system log which cards are used to open which doors and when.

At first, many of us were incensed about this; I remain so. A committee was launched to study the issue, but it dragged on, petered out, and never made a formal recommendation.

Thanks to Edward Snowden's heroism, we know

Perhaps we could trust MIT on this if this were really under MIT's control, but the USA PATRIOT Act allows State Security forces to collect all of this data

# On the 'startup craze'

## *Differences between Silicon Valley and MIT*

I found that the Startup

## When it comes to entrepreneurship, Silicon Valley and MIT are like day and night.

Two realtors approached me telling me that they had the idea of starting a search engine that locates only healthy restaurants nearby, very much like Yelp, and that they were looking for programmers to create the app for them. When I asked, “Besides restaurants,

**MIT can't refuse  
government  
requests for data,  
or even tell us  
how often such  
requests happen.**

MIT has not even tried to tell us what good it has achieved by surveilling people who work in Stata. I decided to ask. I emailed MIT Police Chief John DiFava to ask for information on whatever tangible good

perience at MIT gave me four years of discussions around carefully thought-out ideas, be they a different mode of space travel, a novel drug delivery technique, or a computer vision model. Just watch annual 2.009 presentations.

## Newcomers to Silicon Val-

*Dr. Richard Stallman is the founder of the Free Software Foundation and a free software activist, as well as a visiting scientist at CSAIL.*

With garbage apps like FlappyBird or Yo, it is easy to think that a “Me-too” app would trick the public once again into downloading it. But entrepreneurship calls for serious product development; it should take time to think as well as time to build. While I think that everyone can do a startup, they must first ask themselves: why?

*Andy Liang is a member of the class of 2014 and a former Opinion Editor of The Tech.*

## CORRECTIONS

An article about MIT's BitComp in the Tuesday, Sept. 9 issue of *The Tech* mistakenly said Nelson Liu was an MIT senior. He is in fact a current high-school senior.

## OPINION POLICY

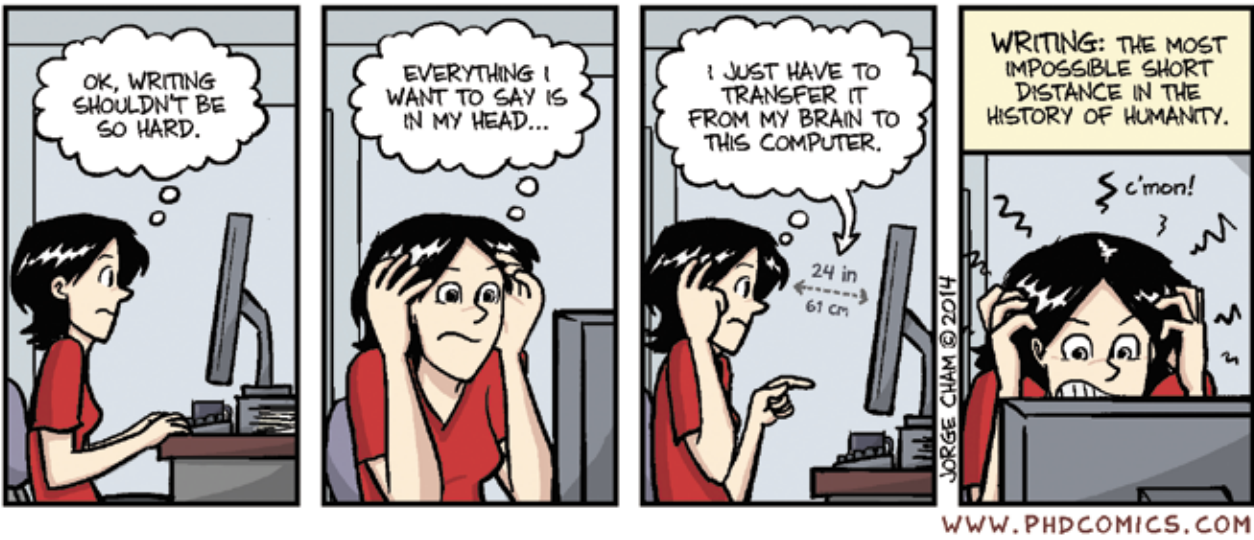
Letters, columns, and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. *The Tech* reserves the right to edit or condense letters; shorter letters will be given higher priority.

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

## TO REACH US

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



Double-Theming by S.N

Solution, page 10

- ACROSS**

  - 1 Grind, as teeth
  - 6 Read on the run
  - 10 Memo directive
  - 14 Slow tempo
  - 15 Verdi work
  - 16 Venetian voyager
  - 17 TV-commercial phrase
  - 19 Garlic trait
  - 20 Peter Pan-like
  - 21 TV-commercial phrase
  - 23 Microbe
  - 25 Said aloud
  - 26 Highest point
  - 29 Erode
  - 31 Clock-radio button
  - 35 Dutch South African
  - 36 Air of mystery
  - 38 Give the boot to
  - 39 Qty.
  - 40 Themes of the puzzle (as one word, or two)
  - 42 Literary preposition
  - 43 Sitting Bull, for one
  - 45 Abate
- 46 Heavy metal
  - 47 Out of the ordinary
  - 49 Large quantity
  - 50 Hombre's home
  - 51 Ultimate cause
  - 53 Warm up, in a way
  - 55 TV-commercial phrase
  - 59 Islamic holy city
  - 63 Trade syndicate since 1961
  - 64 TV-commercial phrase
  - 66 The two together
  - 67 Bit of gossip
  - 68 Smallest possible
  - 69 Pinpoint
  - 70 Jamboree quarters
  - 71 Puts (away)
- DOWN**

  - 1 Whipped-cream serving
  - 2 Infamous emperor
  - 3 Toy Story youngster
  - 4 In the Heat of the Night Oscar winner
  - 5 Gymnastics equipment
  - 6 \_\_ Paulo
- 7 Isn't serious
  - 8 Snake River state
  - 9 Civic leaders
  - 10 Lunar orbiter of 1969
  - 11 Bar mixer
  - 12 Considerably
  - 13 Ponder (over)
  - 18 Bookbinder's material
  - 22 Glazier's wares
  - 24 Purple shade
  - 26 Belittle
  - 27 Underground cartoonist's products
  - 28 "Same here!"
  - 30 Weimaraner reward
  - 32 Singing phantom's haunt
  - 33 Goose eggs
  - 34 Justice who succeeded John Paul
  - 37 Property crime
  - 40 Self-evident truth
  - 41 Deprive of feeling
  - 44 Dutch city
  - 46 Summer refresher
  - 48 "Slow down, fella"

1	2	3	4	5		6	7	8	9		10	11	12	13
14						15					16			
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55	56	57					58		59			60	61	62
63						64		65						
66						67				68				
69						70					71			

- 52 Unimaginative
  - 54 Topples, with "over"
  - 55 Sad sounds
  - 56 Each, so to speak
  - 57 Literally, "I forbid"
- 58 All square
  - 60 Proofreader's notation
  - 61 Home for hornets
  - 62 Pursuits with patrons
  - 65 Rescue squad VIP

CONCERT REVIEW

# Boston Calling returns for round four

The three-day music festival showcased variety despite adverse weather

By Brianna Berrios

The fourth installment of Boston Calling this past weekend had its ups and downs but was overall an exciting, enjoyable festival that catered to Boston's immensely diverse music scene.

While this year's spring lineup was mostly centered around the type of indie, alternative rock that is becoming increasingly popular these days, the fall lineup had a more varied mix, including rap artists Nas (in a collaboration with The Roots) and Childish Gambino, pop stars Lorde and Sky Ferreira, hard rock bands White Denim and the Replacements, and of course well known names in the indie scene Neutral Milk Hotel and Lake Street Dive.

The concert also hosted the annual Samuel Adams Boston Octoberfest, which gave concertgoers over 21 the chance to enjoy good music while drinking Sam Adams, munching on grilled sausage, or playing one of the assorted lawn games. All this made for a very loose, fun-filled atmosphere that at times was suitable for some eccentric dancing.

But the massive storm front that quickly took over Saturday night's festivities was what really stole the show this weekend. Right after The Hold Steady finished their decently entertaining bluesy rock set, the crowd had to leave premises due to safety issues regarding a fast-approaching storm. After nearly three hours of waiting for two downpours to pass, everyone was anxious to get in and resented the police officers that kept pushing them back.

Although things didn't go very smoothly, it was pretty impressive how fast security was able to get the thousands of people back in time for Lorde's performance at 9 p.m. and Childish Gambino's at 10 p.m.

Unfortunately, Volcano Choir and Girl Talk were cut from the set because of time constraints. Although this left the audience disappointed, they still had plenty of energy to cheer for the two remaining artists' killer sets. Lorde, with her mystical dancing and deep yet catchy tunes, had her "Praise the Lorde" tee-wearing crowd swaying and singing the whole time.

**This fall's lineup had a varied mix of artists, from rap to hard rock to well known indie bands.**

Even the rap fans waiting in front of the other stage for Childish joined in on her fabulous performance of "Royals." Childish Gambino started the night off with "Crawl," a popular track off his newest album *Because the Internet*, and had the crowd jumping around with insane enthusiasm. Running through almost the entire album, the comedian-turned-rapper ended the night on a strong note by playing some old favorites like "Heartbeat" and "Freaks and Geeks".

Luckily, the other two days went

without a hitch, with more good music and beer. Future Islands kicked off Friday night opening the concert and, with their soothing voices that quickly became deep growls at times and unforgettable theatrical dance moves, they proved to be a great start and set the mood for an awesome weekend. Sporting beards of various lengths, indie favorite Neutral Milk Hotel came on next, for the most part playing songs off their last album *In the Aeroplane Over the Sea*, as they recently came off their ten year hiatus and have yet to come out with new material.

The National ended the night as the only repeating act in the festival's short history. Their long set was worth seeing through to the end as they closed their set with fan favorites "Fake Empire" and "Graceless."

On Sunday, a large chunk of people didn't start pouring in until Twenty One Pilots began their set. Pulling from many genres, including rock, pop, and rap, this band's style is hard to place, though the fact they appeared on stage in full body suits says a lot about their quirky style.

They were followed by The 1975, a popular Brit pop band whose smooth vocals and upbeat style makes for plenty of dancing. Spoon had a lot of hype from the audience but personally fell a bit flat. Their popular songs "The Underdog," "The Way We Get By," and "I Turn My Camera On" should've made the crowd excited but instead left them swaying and not much else. What should've been a memorable performance was overshadowed by

the next two performances.

The Replacements came together afterwards, playing their first show in Boston in about 20 years. In between playing favorites like "Valentine" and "Androgynous," lead singer Paul Westerberg managed a quip about the festival's copious amount of drug consumption, stating, "I smell weed... [censored] hippies!"

**Though Nas played tunes the crowd loved, The Roots brought the energy down with jazz-like pieces.**

Ending the weekend was the collaboration Nas x The Roots. Or at least that's what they claimed to be. Instead of a brilliant mix of the two different styles that the audience expected, it turned out to be Nas opening the set with a few illmatic favorites and then handing the stage over to The Roots.

Though Nas did play tunes the crowd loved, such as "If I Ruled the World," "One Mic," and "N.Y. State of Mind" (replacing 'New York' with 'Boston'), The Roots brought the energy down to play some of their more jazz-influenced pieces, leaving the crowd confused and causing many of them to leave early to catch the relatively empty T. Not a completely disappointing ending, but a little more Nas never hurt anybody.



1



2



3

- 1. **The National was the closer for the first night of the festival on Friday.**
- 2. **Lorde performed Saturday evening at Boston Calling** after the festival reconvened after a severe weather delay.
- 3. **Nas performed in the closing slot of the festival** Sunday evening with The Roots.
- 4. **twenty one pilots performed Sunday afternoon and both members left stage to join the crowd.** Here drummer Josh Dun crowdsurfed on a platform with a small drum kit.
- 5. **The Replacements continued their string of shows following their reunion** in 2012 playing on Sunday evening.
- 6. **Childish Gambino closed out Saturday evening** of the festival performing a shortened set due to weather.

JESSICA L. WASS—THE TECH



4

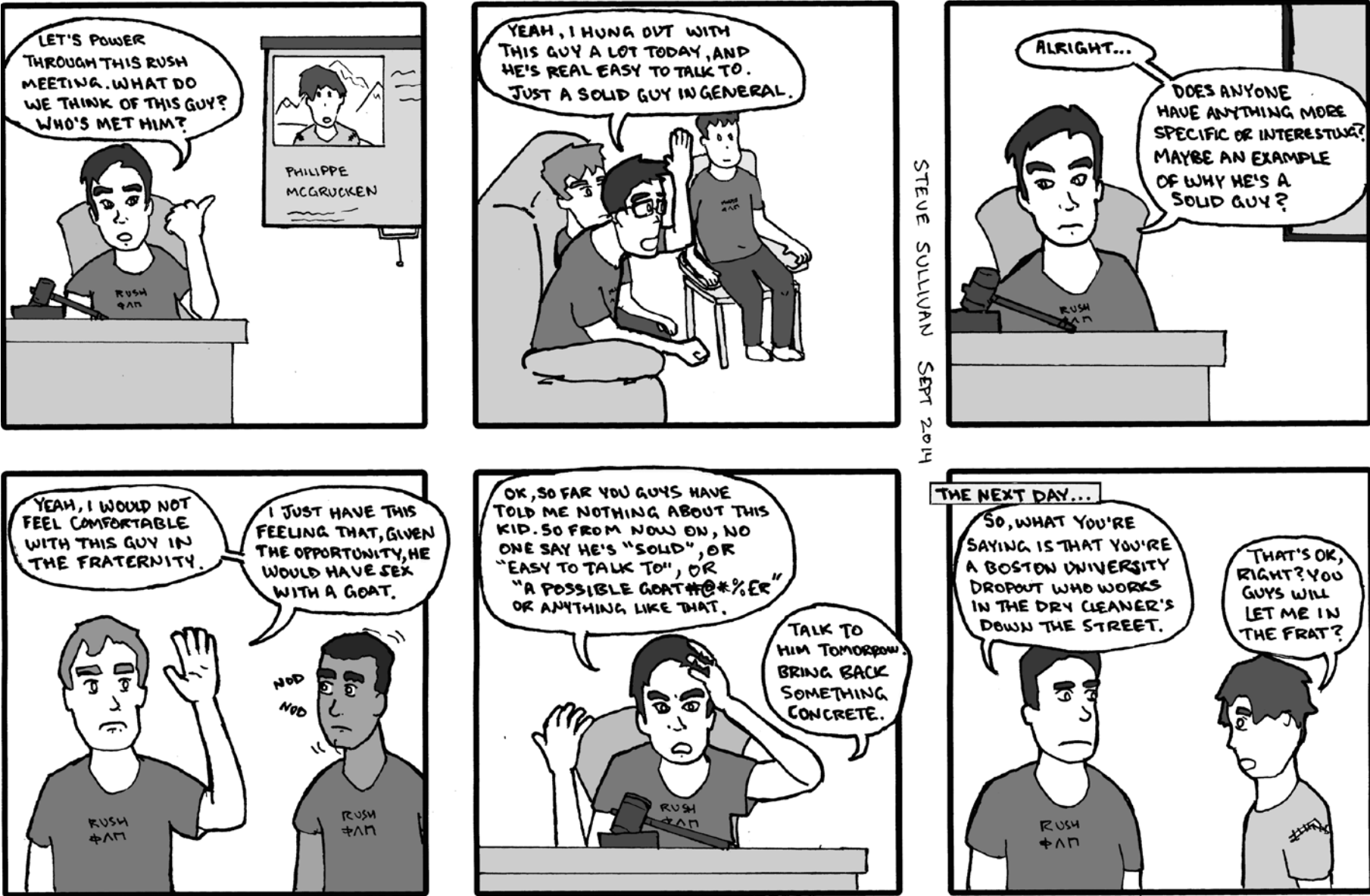


5



6

UPPERCUT by Steve Sullivan



DINING@MIT. BAKER - Pasta in cream sauce - Pasta in meat sauce - Pasta in marinara sauce - Pizza w/ marinara sauce - Tacos.	Next House - Stir fry - Fried rice - Jasmine rice - Basmati rice - Rice rice	MacGregor -	East Campus - Cockroaches - Quarters - Grilled cheese - Prefresh - Frosh	Grier Room - 4-6PM Burritos - 6-8 PM Chinese Food - 8-10 PM Leftover Chinese Food

ccWhy yes, I am Course 6."

Sudoku

Solution, page 10

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

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 10

1-	180x				12x
	480x				
30x			18x		10x
18x		2x		120x	
4			1		6
120x					1

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.

# New program to house new faculty, research

*New curriculum will include several new graduate tracks, undergrad minor*

Entity, from Page 1

cused version of the masters in technology and policy (TPP) program, and an undergraduate minor in statistics.

The report also noted that the development of the statistics programs would not come until after a senior faculty member in statistics is hired. While the proposal committee entertained the suggestion of spinning off the Data Science and Statistics degrees as an individual program, Schmidt mentioned in his email that “further discussions since the report have led to stronger support for proceeding along the proposed path.”

The proposed structure of the entity is similar to that of MIT’s Institute for Medical Engineering & Science (IMES) — an entity able to support academic programs and hire faculty like a department, but with the faculty will holding primary appointments in an established department. The entity will be led by a director, Dahleh, three assistant directors, and a steering group containing the director, assistant directors, and additional faculty members.

Dahleh said in an email to *The Tech* that

the new program would initially house 30 faculty members. The core faculty members will initially be drawn from ESD (which will be dissolved as part of the transition in building the new entity) and LIDS (the director of LIDS will become an associate director of the entity, but its present structure will remain largely unchanged).

The School of Engineering, Sloan, and The School of Science have committed to hiring a total of 16 faculty members over the next three to five years to support the expansion of this entity. The committees assembling and reviewing the comments on the proposal did consider assigning dedicated faculty positions within the entity, but felt that maintaining the entity’s “strong alignment with relevant departments” merited moving forward with the proposed structure.

The next steps to form the new entity will be to reorganize the existing programs. Schmidt said that President L. Rafael Reif and Professor Steven R. Hall ScD ’85, the Chair of the Faculty, will form a committee to get started on this process. Schmidt estimates that this phase of the process will take “a couple of months.”

## Students discuss their concerns with nuclear energy industry leaders and policy-makers

The 2014 Nuclear Engineering Student Delegation (NESD), a 17-member body including MIT graduate students Daniel J. Curtis and Jake M. Jurewicz from the department of nuclear science and engineering and Matthew C. Ellis of the MIT Lincoln Laboratory, met last Thursday with various nuclear energy leaders and industry representatives. They also met with executive and legislative offices, according to the MIT News Office.

The News Office stated the MIT group met with Senator Elizabeth Warren and discussed the special scientific value of the Alcator C-Mod tokamak facility and expressed its grati-

tude for her support of the facility’s funding. They also discussed NESD policy priorities, particularly their concerns about the funding of both undergraduate and graduate-level education in nuclear engineering.

Additionally, the group met with energy and technology specialists from the offices of members of Congress from Massachusetts and from their home states.

One of the goals of the student-run organization was to gain insight on current government operations in nuclear science and engineering.

—Czarina Lao

## No end set for FSILG limits

*Boston limits extended to all FSILGs by MIT*

FSILG, from Page 1

lic assembly, but that the ISD raised new concerns after the incident at LCA. In his email to *The Tech*, Bauer did not answer questions about how the events policy was meant to interact with Boston law to mitigate the original restrictions from 2013.

Unlike the restrictions from 2013 that limited the number of people inside each fraternity house to the house’s maximum number of residents, the new restrictions set a hard cap of 49 people for gatherings at houses. Stohlman said that while he did not have direct knowledge of the origin of the 49-person cap,

Boston building code often refers to a 49-person requirement for building egress systems to support.

He added that the limit varies among houses, sometimes exceeding 49, and said that while MIT’s new event policy recognizes the differences, “Boston’s limit now prevails.”

## Profs Danheiser and Poonen awarded School of Science Teaching Prizes

The MIT School of Science recently awarded its annual Teaching Prizes for Graduate and Undergraduate Education to two faculty members. The honor is for excellence in the classroom.

The two recipients this year are Rick L. Danheiser, the A. C. Cope Professor of Chemistry, and Bjorn Poonen, the C. E. Shannon Professor in Mathematics. Professor Danheiser teaches the graduate-level class 5.511 (synthetic organic chemis-

try), and Professor Poonen is the instructor for 18.03 (differential equations).

Both professors were nominated last spring by their students and fellow faculty members. The award has existed for over 30 years.

Last year’s recipients of the award were Professor Timothy F. Jamison for his instruction in chemistry, and Associate Professor Joshua N. Winn for his teaching in physics.

—Ray Wang

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```
from new_skills import *

def learnMarketableJobSkills():
    return linux, OSX, javascript, applescript, perl, python, PHP

if self.interest == True:
    print "E-mail join@tech.mit.edu"
```

# Sacra recovering from Ebola

*New treatment against Ebola is groundbreaking*

By Martin Finucane  
THE BOSTON GLOBE

Dr. Richard A. Sacra, the Massachusetts physician infected with Ebola while working at a hospital in Liberia, has taken major steps toward recovery, a doctor at the University of Nebraska Medical Center said Thursday.

“His progress has been remarkable,” Dr. Angela Hewlett said at a news conference at the Omaha medical center, where Sacra has been treated since last week.

Hewlett said that, given the progress that Sacra has made, “I would think a relapse would be less likely.”

But she also sounded a cautionary note, saying the treatment was breaking new ground, not only because Sacra had received an experimental drug; he also had received blood transfusions from an American doctor who had contracted Ebola and recovered.

“He is doing a lot better clinically and on paper, but again, we’re really taking things day by day,” she said.

Sacra’s wife, Deborah, said the family was amazed at how quickly his condition improved after he was admitted to the biocontainment unit at the medical center last Friday. She attributed his recovery to both “faith and science.”

“He is humbled and overwhelmed by the words of kindness and support” he has received, she said. “We are also thankful for the research drug and excellent supportive medical care that was available.”

Medical center officials said Sacra had received two transfusions from Dr. Kent Brantly, one of two other Americans who contracted the disease recently and recovered.

Dr. Philip Smith said at the medical center news conference that the idea was to “jump-start” Sacra’s immunity, to “buy him some time” to develop his own defenses against the virus.

“It really meant a lot to us that [Brantly] was willing to give that donation so soon after his own recovery,” said Deborah Sacra.

**The idea was to “jump-start” Sacra’s immunity and “buy him some time” to combat the virus.**

The officials also said that Dr. Sacra had received an experimental drug every night since his arrival at the biocontainment center. Smith said doctors had been asked not to reveal the name of the drug because, for one thing, there is no data yet on whether it actually worked. “We don’t know that this drug had any impact at all,” he said.

The worst Ebola outbreak in history, rooted in Liberia, Sierra Leone, and Guinea, has spread to Nigeria and Senegal, and has been blamed for more than 2,200 deaths across West Africa.

Sacra was not treating Ebola when he contracted the virus. He was working to deliver babies. Deborah Sacra said US Centers for Disease Control and Prevention was investigating how he got the disease, but investigators so far believed it had happened in an “emergency situation.”

Sacra, 51, has spent much of his career working in Liberia. SIM, a

Christian missionary group, sponsors his work. He owns a home in Holden and is a faculty member at the University of Massachusetts Medical School in Worcester.

Deborah Sacra said her husband contacted her on Aug. 30, saying that he had been running a fever since the day before and he was treating himself for malaria, hoping his illness was not Ebola. He was tested for Ebola that Monday; four days later he arrived in Nebraska for treatment.

She said her husband would use his Ebola experience as a “platform... to be able to speak out on behalf of the people who are suffering over there.”

“I know that he would hate all this attention, but if he can use it to make sure that resources are used well in Liberia, Sierra Leone, and Guinea to help lick this thing and build up the health care system so they’re not at risk of this kind of disaster again, . . . he will do everything he can from here on out,” she said.

She warned that the fight against Ebola would take more time and more resources and, if it isn’t addressed, it could spread. “We in America enjoy many benefits from globalization, and we’d like to think we can isolate ourselves.... But every day and every week that we don’t do what we can... we are risking the possibility that Ebola will not stay in West Africa,” she said.

Asked what she would tell her husband if he wanted to return to Liberia, she said she would probably say the same thing — “I know where your heart is” — and let him go.

“Besides now,” she said, “he’ll have immunities. I’m sure that when he gets his strength back, he’s going to be ready to go back.”

# Faneuil Hall under major renovations

*Overhaul done by next summer*

By Casey Ross  
THE BOSTON GLOBE

The operator of Faneuil Hall Marketplace, one of Boston’s most visited yet dated landmarks, is proposing a dramatic overhaul of the historic property that would create a new boutique hotel and shake up a shopping experience that has changed little since the 1970s.

The plan, from Ashkenazy Acquisition Corp., is designed to bring Boston residents back to a central retail district that remains popular with millions of tourists but has lost much of its appeal for locals.

**The plan is designed to bring Boston residents back to a retail district popular with tourists.**

The company’s proposal would turn the marketplace’s crowded central food court into more open retail spaces, bars, and sit-down restaurants. It would add several glass pavilions for shopping and dining, and the South Market building would get a 180-room hotel.

Many of the changes, described to the Globe in interviews Tuesday, could be in place as soon as next summer, pending regulators’ approval.

“We want to create an environment that’s active 12 months a year,” said Barry Lustig, an Ashkenazy vice president. “Our intent is to make this a relevant property to the people of Boston, where families and couples can be in the kind of space you can’t find anywhere else.”

Renovation plans for the city-owned market, one of the most familiar and historic gathering places in Boston, need approval from the Landmarks Commission and the Boston Redevelopment Authority.

Mayor Martin J. Walsh said the plans are “a good first step” and that the city would “continue the conversation” with the developer and the marketplace’s vendors.

Faneuil Hall is steeped in history, which helps make it one of the world’s most visited sites. It served as a rallying point for the American Revolution, and the three buildings constructed near it — Quincy Market, South Market, and North Market — have become a hub of commerce and culture that attracts more than 20 million visitors a year.

The property has been managed in recent decades by a succession of private companies. Ashkenazy bought a ground lease to operate the market in 2011 and has been working on a renovation plan for nearly three years.

The head of Faneuil Hall’s merchants association, Carol Troxell, said she hoped that any changes would not cause vendors to be displaced from the market.

“The local merchants welcome modern upgrades to the property; we just want to be part of the marketplace,” she said. “We recognize that it has to be a mix of vendors. But it’s a local market, and we want it to be primarily local Boston and New England merchants.”

Troxell said merchants are worried about rent increases and whether they will be able to afford rents in the upgraded property. Ashkenazy has said its plan will cost tens of millions of dollars, but its executives declined to be more specific. Lustig said the company intends to retain the vast majority of the current vendors, but acknowledged some will be replaced and others will be moved to new locations in the complex.

“The pushcarts and the food vendors that are truly unique to Boston are going to absolutely be part of the future evolution of this property,” Lustig said. “There are some who are selling goods that are not really Boston, and that’s a little different.”

Lustig said the company intends to add several restaurants and stores in coming years. He declined to name any but promised a mix of national brands and local entrepreneurs.

Solution to Sudoku

from page 8

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

Solution to Techdoku

from page 8

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

Solution to Crossword

from page 5

G	N	A	S	H	S	K	I	M	A	S	A	P
L	E	N	T	O	A	I	D	A	P	O	L	O
O	R	D	E	R	T	O	D	A	Y	O	D	O
B	O	Y	I	S	H	S	H	O	P	L	A	T
			G	E	R	M		O	R	A	L	
A	C	M	E		E	A	T		S	N	O	O
B	O	E	R		A	U	R	A		E	X	P
A	M	T		A	D	V	E	R	B	S		E
S	I	O	U	X		E	A	S	E		I	R
E	X	O	T	I	C		T	O	N		C	A
			R	O	O		T		N	U	K	E
S	A	V	E		M	O	R	E		M	E	D
O	P	E	C		L	I	V	E	B	E	T	T
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S	P	O	T		T	E	N	T		S	A	L
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