Errors, Ambiguities Plague U.S. News Rankings; Data Uncertain

By Gregory N. Price

MIT’s fall from fourth to seventh place in this year’s U.S. News and World Report college ranking was driven in part by changes in how MIT defines and computes class sizes. Corrections in how MIT reports its entering-class’s SAT scores also contributed to the drop.

“The language is muddy,” Director of Institutional Research Lydia S. Snover said of the class-size definition used by U.S. News. “We’ve been having these debates on and off over what is a class.” Ambiguities in MIT’s administrative databases, resolved differently from year to year, also affected the data.

Similar errors and uncertainties affect data reported by other colleges. Schools’ reported numbers changing with interpretation from year to year “happens regularly, but not too often,” said Robert J. Morse, director of data research at U.S. News, who manages the rankings. As for outright errors, “There are many, many schools that make mistakes in their data” and correct them privately, Morse said, but “there are so many schools and so many pieces of data that [the fraction of] really shocking mistakes is probably under 1 percent.”

Since 1994, MIT’s ranking in the annual survey has ranged as high as third, in 1999, and as low as seventh, in 2005 and this year. (See table on page 17.) The precise formula is not published, but the rankings are based on measures of admissions selectivity, reputation among other schools’ administrators, faculty and financial resources, graduation rates, and alumni generosity.

Sodium Still Under Investigation

By Nick Semenkovich

The Massachusetts State Police continue to investigate last week’s Charles River accident involving a block of sodium. No suspects have yet been named in the investigation, and MIT has only been associated with the event by Boston media sources who speculate that the traditional East Campus sodium drop caused the injuries.

It has become increasingly apparent that, however, that the well-known East Campus drop may not be responsible for the incident.

A volunteer crew cleaning the Charles River last Thursday, Sept. 6, reportedly picked up a block of sodium near the Boston side of the Harvard Bridge and threw it into a container with other debris. The sodium then exploded, thermally and chemically burning two volunteers. Three paramedics responding to the explosion suffered chemical burns.

UA President Tells of Goals, Daily Tasks

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This is the final interview in a seven-part series introducing incoming students to some of MIT’s faculty, staff, and student leaders. Today, The Tech interviews Martin F. Holmes ‘08, president of the Undergraduate Association. Holmes talks about the UA and his goals for the upcoming year.

The Tech: Tell me about your role with the MIT undergraduate community.

Martin Holmes: I am the president of the Undergraduate Association. In that role, I administer the internal UA functions and work to represent student interests to the administration so that we were able to secure funding for this entire academic year as well.

TJ: What are some of your upcoming goals this year as UA president?

MH: The big ones that I’m dealing with right at the moment are:

hiking, Dining, and the Career Fair. It looks like there will be revisions to the stated MIT hiking policy. There is a committee of pretty high-level people…

Holmes, Page 19

Bedbug Infestation Irks Ashdown House Students

By Danielle Piskor

A bedbug problem that has been plaguing Ashdown House since last spring is close to being resolved. An exterminator contracted to MIT has been visiting rooms several times a week over the course of the summer, and sticky-trap style bug monitors newly installed in each room show no sign of new activity.

According to Anurag Bajpayee, director of the Ashdown House Executive Committee, the source of the bedbug problem “has been traced to used furniture,” purchased by residents of new activity.

Sodium, Page 15

In Short

The MIT endowment grew by $1.6 billion this year, bringing the endowment to a total of $98.9 billion. MIT reported returns of 22 percent. Harvard’s endowment grew by $5.3 billion, to a total of $34.9 billion. Harvard reported returns of 23 percent.

The Dormitory Council elected Boston-Conner President Colin P. Mckee ’99 as their vice president Wednesday. Fun fact: Voting at DormCon is by residence hall, with interpretation from year to year, also affected the data.

The Air Force Band of Liberty will receive a free shirt and pizza. The band will perform at 7 p.m.

student reported waking up with bite marks. Housing initiated exterminator procedures.

Ashdown is not alone; bedbugs were found in several other buildings last year. The existence of bedbugs at MIT has been a concern for students for some time. The College’s housing department has been bringing in used furniture for the past few years, but the issue has remained unresolved.

A blood drive will take place Monday through Friday next week in the Student Center. The blood drive will be open from noon to 6 p.m., except Thursday, when it will be open 8 a.m. to 2 p.m. All donors will receive a free T-shirt and pizza.

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**Situation for Noon Eastern Daylight Time, Friday, September 14, 2007**

- The high-pressure system that dominated the nation for much of the week continues to shift east, bringing a mix of sunny and cloudy conditions across the country. The Northeast, Midwest, and parts of the South are expected to see mostly sunny skies, while the Mountain and Pacific regions will experience scattered showers and storms.

**Extended Forecast**

- **Today:** Mostly sunny. High 75° (24°C).
- **Tonight:** Clouds and showers in the morning, clear and breezy afternoon. High 72° (22°C).
- **Saturday:** Mostly sunny. High 68°F (20°C).
- **Sunday:** Mostly sunny. High 65°F (18°C).
**Fifteen Pakistani Commandos Killed in Apparent Suicide Blast**

By Salman Masood and Marc Santo

The New York Times

At least 15 soldiers from an elite commando unit were killed Thursday evening when a bomb, apparently set off by a suicide bomber, tore through the dining hall of a military installation in northwestern Pakistan, military officials said.

The blast was the second time this month that a high-severity explosion has occurred in northwestern Pakistan, military officials said.

A kind of rapid reaction force, the unit's operations have included conducting raids in the restive South Waziristan tribal region, and north Waziristan tribal region, which are hotbeds of terrorism, and al-Qaeda, with a rising number of deadly attacks on military targets.

The attack on the military installation, located near the border with Afghanistan, is being investigated. The cause of the explosion was still being investigated.

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Fourteen of the soldiers were wounded, six were critical in condition.

The soldiers were killed belonging to a Special Operation Task Force. Pakistan's military spokesman, Gen. Pervaiz Musharraf, who is the military chief, belongs to the Sikh community.

**Two More Earthquakes Hit Indonesia; Strongest Shock Was 8.4 in Magnitude**

By Peter Gelling and Seth Myers

The New York Times

Two more earthquakes struck the island of Sumatra on Thursday evening, apparently set off by a suicide bomber, tearing through the dining hall of a military installation in northwestern Pakistan, military officials said.

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**World & National**

Bernanke and other Fed officials have said they do not want to be

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MIT Should Take Responsibility For Sodium Incident

As an alumna of MIT I am embarrassed and outraged at MIT's "not our behavior" attitude regarding the sodium drop and the injury of workers and damage to the river clean up boat. What kind of example is this administration setting for students by failing to compensate a struggling student for expenses incurred due to negligence with hazardous materials? I don't accept this "you can't prove it and you can't make me" attitude from my nine-year-old --- why should I think it appropriate from an institution supposedly run by adults?

When I was at MIT in the late 1980s, the filth in the river was horrendous. We frequently rowed through rafts of debris and trash that concentrated as one moved upstream. The general lack of cleanliness of the river and the area in general was very off-putting to prospective freshmen and their families. For the last few years, the "future of MIT" has encountered a much cleaner river during campus visits, one that makes MIT more welcomig. MIT shouldn't just compensate those who were injured by this "mystery" sodium; MIT and Harvard and BU should be bankrupting the entire cleanup effort on a regular basis!

Kate Adams '89

Institute Has Duty To Keep Charles Safe

The connection to an MIT tradition may not have been entirely proven, but I would like to join a fellow alumna who 10 years ago called for the abolition of this destructive and unnecessary custom (http://www-tech.mit.edu/v117/39hullah.html). It is right, even more so now than at the time, that millions of dollars have been spent in a large scale effort to restore the ecological health of the Charles River and is now considered swimmable most summers. MIT has actively participated in these efforts and there is even talk that the required swimming test some day may be held in the Charles, all of which makes it even more crucial that the Institute has not done anything necessary to compensate the volunteers for their hard work and the area in general was very off-putting to prospective freshmen and their families. For the last few years, the "future of MIT" has encountered a much cleaner river during
campus visits, one that makes MIT more welcoming. MIT shouldn't just compensate those who were injured by this "mystery" sodium; MIT and Harvard and BU should be bankrupting the entire cleanup effort on a regular basis!

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Letters To The Editor

Opinion Policy

Editorials are the official opinion of The Tech. They are written by the editorial board, which consists of Chairman Michael McGraw-Herd, Editor-in-Chief Angeline Wang, Managing Editor Austin Chu, Opinion Editor Adriya Kohli, and Contributing Editor Rosa Cara. Disseants are the opinions of signed members of the editorial board, choosing their disegnment with the diseditor.

Letters to the editor, columns, and editorial cartoons are written by individuals and represent the opinion of the author, not necessarily that of the newspaper. Electronic submissions are encouraged and should be sent to letters@the-tech.mit.edu. Hard copy submissions should be addressed to The Tech, PO 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 publiction.

Letters, columns, and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. Letters to the editor reserve 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 in any other form or medium that becomes known. The Tech makes no commitment to publish all the letters received.

Guest columns are opinion articles submitted by members of the MIT or local community and have the author's name in italics. Columns without italics are written by Tech staff.

To Reach Us

The Tech's telephone number is (617) 253-1541. E-mail is the easiest way to reach any member of our staff. If you are unsure whom to contact, send mail to general@the-tech.mit.edu, and it will be directed to the appropriate person. You can reach the editor in chief by e-mailing cice@tech.mit.edu. Please send press releases, requests for coverage, and information about errors that call for correction to news@tech.mit.edu. Letters to the editor should be sent to letters@the-tech.mit.edu. The Tech can be found on the World Wide Web at http://www-tech.mit.edu.
we need course 6 students to make us software that lets us visualize gigabytes of up-to-the-minute data so that we can better understand how a rally in Colombian bonds affects the price of coffee

Technology Associate

Career Fair:  
9/20 at the Johnson Athletics Center

Info Session:  
9/19 at 8 PM in 4-270

Resume Deadline: 9/25

Bridgewater Associates, Inc. is an Affirmative Action – Equal Opportunities Employer
The menu of Tavern in the Square is the best described as American. There are a wide variety of options, including appetizers, pizzas, salads, sandwiches, and full-sized entrees. Meals are moderately priced, with most lunch options around $10. For appetizers, the chicken fingers ($6.99, lunch price) are listed as either available plain with a honey mustard dipping sauce or the buffalo-style with blue cheese dressing. They can also be ordered with a side barbecue sauce, which we did.

The plain-style chicken was crispy with a thin crust that did not suffer from the common problem of excessive grease. But while the white meat of the chicken was tender, it was a little dry. The barbecue sauce added some flavor and moisture, and I liked the thick and sweet flavor of the brown concoction, however, it obviously wasn’t homemade. Maybe I’m just spoiled, but I think the sauce was pre-made, and the barbecue sauce should have their own barbecue sauces.

For entrees, we tried the pistachio encrusted tuna salad ($11.99) and the arugula and goat cheese pizza ($9.99). The tuna salad consisted of greens, cucumbers, wasabi peapods, and crispy wontons tossed in a light lemon vinaigrette topped with medium-rare tuna slices. The entire dish is wrapped in zucchini strips which made for a pleasing presentation. The tuna was fresh and well-prepared, and the warm fish pieces provided a nice contrast to the cool vegetables. The salad was certainly the best dish of the day though I would have liked some of the dressing — or plain lemon juice — drizzled on the fish to accentuate the flavors. The arugula and goat cheese pizza was a white pizza (i.e. without red sauce) with goat and mozzarella cheese, caramelized onions, and topped with a balsamic vinegar reduction. The balsamic reduction was a satisfying mix of tang and sweetness, and it acted as a sauce for the otherwise sauce-less pizza. In addition, the balsamic reduction provided enough moisture for the somewhat dry crust. Luckily, the crust was not very thick so its dryness did not completely ruin the dish.

Overall, the portions at Tavern in the Square are all large. And the food is, well, OK. It wasn’t terrible, it wasn’t noteworthy. Sure, the outside seating option is nice, but Central Square is not exactly the most picturesque area. If you want a place where everyone can find something, the restaurant’s extensive menu will do the trick. Otherwise, I would recommend trying a more diverse option in Central Square, Harvard Square, or Boston.
Arts

Case Study Workshop

Think Logistics! Solving German Rail (DB) Transportation Issues

October 3, 5-10pm at the MIT Faculty Club E52, 6th floor (Dinner included)

If interested, please send a short letter of application plus a resume to vera.pinkawa@bahn.de by September 15, 2007

Open to all engineering graduate and undergraduate students – other disciplines welcome too! Interviews for the German Rail Trainee Program or for internships at DB can be arranged for the next day.

More info? Contact sberka@mit.edu 3-6982

Arts

Indie rock band Meg & Dia performed at the Middle East restaurant on Sept. 4, 2007. The sister duo returns to the restaurant on Nov. 5 as part of their tour. For more information, see http://www.meganddia.com/.

Hang out with your friends this weekend.

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(corne...
**Pseudoscience** by Daniel Klein-Marcuscheram

**Mad Science** by Scott Berdahl

Figure 14. Average hours of daylight and of sleep per student during the fall semester. Even though the graphs show an initially linear decrease of both daylight and sleep time, the correlation is lost after the first midterm. A healthy sleep cycle is not recovered until the semester ends. A more efficient use of daylight is ensured by the “daylight saving time”, whereas no such policy has been implemented to increase the efficiency of sleep. Several options in this regard have been proposed, for example, (explicit) allowing students to sleep during lectures, cancellation of classes beginning before 10 am, and re-scheduling of television shows that air after midnight.
MIT Career Fair 2007

Thursday, September 20th
Johnson Athletic Center

http://career-fair.mit.edu

Submit Your Resume by September 14th!

Become a Career Fair volunteer!
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Where will you be in five years? You might be advising a CEO on global strategy. Or rising to become a director. Or graduating from a top business school. Or landing a management position in industry. At Oliver Wyman, you’ll get there faster, smarter, better... with exposure to global clients, early opportunities to work internationally, and interaction with the best business minds around. The fastest-growing consultancy in the Top 10 is dedicated to excellence—for our clients, and for our people.

Come to work for us and move your career ahead of the pack.
D-Lab Research Center Targets Developing Countries

By Andrew C. Revkin

Beneath the bustling "innute corridor" linking buildings at the Massachusetts Institute of Technology, just past a boiler room, an assemblage of tinkers from 16 countries welded, stitched and hammer- ed, working on rough-hewn in- stutions aimed at saving the world, one village at a time.

MIT has nurtured dozens of No- bel Prize winners in cerebral realms like astrophysics, economics and genetics. But lately, the institute has turned its attention toward con- crete thinking to improve the lives of the world's bottom billion, those who live on a dollar a day or less and who often die young.

This summer, it played host to a four-week International Develop- ment Design Summit to identify problems, cobble together proto- type solutions and winnow the re- sults to see which might work in the real world.

Mohamed Mashaa, a young British engineer headed for a job with BP on the North Sea this fall, poured water into a handmade plastic backpack worn by a design partner, Bernard Kiwia, who teaches bicycle repair in rural Tanzania and hopes to offer women there an easier way to tote the precious liquid for which they often walk miles to and from the nearest stream. But the challenge of filling a niche with limited materials and tools is simple.

The summit (www.idsummit.org) was the brainchild mainly of Amy Smith, a lecturer at MIT who received her master's there in 1995 and in 2004 won a MacArthur Foundation "genius" award, and Kenneth Polak, a British engineer headed for a job in a Bangladeshi village clinic. Smith, who often dies young.

"We have a real friction prob- lem," Ms. Stupin yelped.

The workshop was developed over the last year by Ms. Smith, Dr. Pickar and others after a meeting to discuss a "design revolution" — a shift in focus among companies, universities, investors and scien- tists toward attacking problems that hamper development in the world's poorest countries. "Nearly 90 percent of research and development dollars are spent on creating technologies that serve the wealthiest 10 percent of the world's population," said Amy Smith, who gathered with Amy's World, the lab which she started.

Mr. Brandis noted that the bud- get for developing a peach-sheller for a Malayan village was far differ- ent from that for building a cam- eon or a refrigerator in rural Malaya. "But the challenge of filling a niche with limited materials and tools is similar," he added.

"Everyone calls this an idea whose time has come," said Mr. Brandis, who just arrived from a visit to a Bangladeshi village clinic. "It's, "It's, 'The summit, designed to encourage "tinkerers" to turn crops into products. For four weeks, though, the real world had to come to MIT.

Throughout the workshop, Ms. Smith served as scissormen, chair- leader, cook and personal shopper (the food flowed deep into the night), and she provided periodic reality checks.

She seemed dazed at times, but never fazed. "Everyone calls this an idea whose time has come," said Ms. Smith of the workshop, the first of its kind. "I call it the realization of a vision."

The work itself was often two steps back, not one step forward. As Lamhatola, a young woman from Tibet, and Laura Stupin, who just graduated from Olin, wrestled with their Rube Goldberg mash-up of bicycle and grain mill, the chain slapped with a loud clang.

"We have a real friction prob- lem," Ms. Stupin yelped.

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Information Session
Tuesday, September 18th
Cambridge Marriott
6:00 pm – 8:00 pm
Other Living Groups Have Sodium Drops

MIT Police Not Involved in Investigation

Sodium, from Page 1

a focus of the investigation. “At this point, we have not named anyone,” said Wark. “The media has made those conclusions.”

The East Campus drop took place this year at the 620-meter long Harvard Bridge in the early morning hours of Friday, Aug. 31, according to a sophomore who attended the event. That would leave roughly six-and-a-half days for the sodium to remain unreacted.

In past years, the East Campus drop has taken place on the Longfellow Bridge. This year, the venue may have changed due to construction on the Longfellow.

The sodium was thrown from “maybe 150 smoots in [roughly 250 meters]” and was closer to the Cambridge side than the Boston Side, said the sophomore attendee. “The audience was stationed along [the bridge] and Memorial Drive,” the student said.

The sophomore did not observe any sodium chunks traveling toward the Boston shore.

The Tech was unable to reach organizers of the East Campus sodium drop for comment.

While most students associate the idea of a sodium drop with the East Campus drop, in past years, there have been multiple sodium drops by a variety of groups.

Most notably, the fraternity Tau Epsilon Phi has previously dropped sodium and potassium into the Charles River.

According to a participant in some of TEP’s rush events, the fraternity planned a drop this year for early Monday morning on Sept. 3, 2007 approximately three-and-a-half days before the incident. The participant said it was possible the drop had been delayed.

This year, TEP may have dropped sodium into the Charles River. “I heard many people say [sodium], but I don’t know if … that was just a way of saying some Group I metal,” wrote the participant in an e-mail.

A male individual who answered the TEP house phone declined to personally comment on the matter. The Tech was unable to reach other house members for comment.

MIT Police Chief John DiFava said that the investigation was out of the hands of the MIT Police and that state police were in charge of the matter.

Asked about possible fraternity involvement, Senior Associate Dean for Students Barbara A. Baker said that MIT would wait for the Massachusetts State Police investigation to finish. “Right now, it’s a police matter,” Baker said. Baker would not comment on the culpability of organizers of a sodium drop or of bystanders at the event. “We’re waiting for information … but we’re very concerned about safety — anything that jeopardizes safety … or impacts the environment,” Baker said.

David Deegan of the U.S. Environmental Protection Agency said the agency was aware of the sodium fire but declined to comment as to whether an EPA investigation was ongoing.

Joe Persson, media contact for the Massachusetts Department of Environmental Protection, said the agency was aware of sodium drops and was not investigating further. MassDEP “determined that [the sodium] was below reportable quantities,” Persson said. Section 311 of the Clean Water Act defines reportable quantities of sodium as those exceeding 10 pounds (roughly 4.5 kg).

Students Barbara A. Baker said that MIT Police were in charge of the matter. Baker would not comment on the involvement, Senior Associate Dean for Students Barbara A. Baker said that MIT Police were in charge of the matter. Baker would not comment on the involvement, Senior Associate Dean for Students Barbara A. Baker said that MIT Police were in charge of the matter. Baker would not comment on the involvement, Senior Associate Dean for Students Barbara A. Baker said that MIT Police were in charge of the matter. Baker would not comment on the involvement, Senior Associate Dean for Students Barbara A. Baker said that MIT Police were in charge of the matter. Baker would not comment on the involvement, Senior Associate Dean for Students Barbara A. Baker said that MIT Police were in charge of the matter. Baker would not comment on the involvement, Senior Associate Dean for Students Barbara A. Baker said that MIT Police were in charge of the matter. 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Information Session
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This space donated by The Tech
Inconsistent Data Common in College Ranking Stats

U.S. News, from Page 1

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MIT-Reported SAT Scores For Freshmen

<table>
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<tr>
<th>Year</th>
<th>Total # Classes</th>
<th>Percent ≤ 20 students</th>
<th>Percent ≤ 50 students</th>
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<td>2006</td>
<td>709</td>
<td>64%</td>
<td>15%</td>
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<tr>
<td>2007</td>
<td>1036</td>
<td>66%</td>
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<tr>
<td>2008</td>
<td>977</td>
<td>62%</td>
<td>14%</td>
</tr>
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</table>

In reporting rankings, U.S. News bases its recommendations for the next year on the previous year’s data. The “America’s Best Colleges 2008” list is based on data from 2007. All dates in these tables and this article refer to the data, not the date U.S. News uses in advertising its ranks.

MIT-Reported Class Size Distributions

Year 25th percentile 75th percentile
2005 680 1430
2006 690 1430
2007 660 1380
2008 670 1380

Inconsistent Data Common in College Ranking Stats

For the class size distribution, MIT’s Student Information System central database lacks information required to precisely answer the Common Data Set questions, leaving the central database lacks information. The “America’s Best Colleges 2008” list is based on data from 2007. All dates in these tables and this article refer to the data, not the date U.S. News uses in advertising its ranks.

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- **Tuesday, September 25th** at 6:00pm in 32-141
- **Wednesday, September 26th** at 7:00pm in 32-141

---

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Holmes Discusses Textbook Pricing, UA Involvement

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Holmes, from Page 1

administrators together working on that, and since Ali [S. Wyne ’08, UA vice president] and I have returned to campus we’re going to be joining them and members of the hacking committee to really try to come up with a good solution or some type of a better answer to how MIT deals with hacking.

Dining obviously was a huge issue last year with Pritchett, Baker, all kinds of disasters. So we’ve really been working to pull that together. We were able to close Pritchett which was just a sinkhole for money. We’ve revamped a few things: the Dining program — the cost of that went down from $325 to $300 — and the administration is putting together some type of blue ribbon administrator representation to finally convince the Coop that they’re willing to work with us on the textbook issue. We’re not exactly sure how the details will be hammered out yet, but we have some meetings … Hopefully, by the spring semester, we’ll have the Web site up and running so that you can just go online and figure out what books you need.

TT: What would you suggest are ways for incoming freshmen who are concerned about something on campus to get involved with student government and the community?

MH: There are lots of ways you can get involved on a lot of different levels. If you’re interested in the UA you could run for UA senator. Each of the different dormitories and living groups has senators. So you’d come together in our big meetings and discuss legislation, write bills, and be involved that way.

There are lots of committees that you can be involved with — just join a committee and work on some specific issue. There are also class councils which serve more of a social function in terms of bringing the class together, giving them the opportunity to relax, meet new people. They throw all kinds of events — it really runs all the gamut from ski trips to formals. …

There are lots of leadership roles that people can take on, from within their dorm or living group, to the larger Dormitory Council, to the Interfraternity Council and the Panhellenic Association. … There is also the [Association of Student Activists] and plenty of student groups. There are leadership opportunities everywhere. It’s really smart to be involved in some type of leadership activity on campus.

TT: Any general advice you’d share with freshmen?

MH: … You’re really not going to be successful at MIT if you focus on extracurricular activities. And you’re really not going to be happy at MIT if you focus on academics. So you really need to come up with a good balance. You need to get yourself in a routine, a schedule, so that every day there’s some type of consistency. [There should be] some level of academics that goes on everyday, whether or not something is due the next day. [There should be] some level of stress reliever, whether it’s exercising, going for a run, reading a book. … Just form some kind of

Got a lot on your mind?
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September 14, 2007
THE TECH
Page 19
WHY DID AN MD/PHD STUDYING CELL SURFACE EVENTS IN THE AMYLOIDGENIC PROCESSING OF THE AMYLOIDPRECURSOR PROTEIN IN ALZHEIMER’S DISEASE JOIN BCG?

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States, from a much-publicized outbreak in New York City last year to several outbreaks in the Boston area the previous summer. Collins suggested travel as one cause, adding that the insects hitch rides easily, on anything from cuffs of clothing to old furniture.

Bedbugs are small, flightless insects that come out at night to bite. At full growth they can reach several millimeters in length and are visible to the naked eye. They live in mattresses, sofas, and upholstery. In old buildings such as Ashdown, cracks in the walls, ceilings, and floors make it easy for the insects to establish themselves once introduced.

In Ashdown, the residents of the infested suites were required to have their rooms and clothes cleaned entirely to rid the area of bugs. They were also given new mattresses with covers to prevent the bedbugs from finding a new place to live. The contracted exterminator used “a clear, odorless, safe treatment” to kill the bedbugs, according to an e-mail sent to Ashdown residents from Denise Lanfranchi, Ashdown’s house manager.

According to Bajpayee, exterminating procedures ran in cycles, with the first spraying killing the adults and the second killing their offspring. A problem arose when the original floor was sprayed for bedbugs and the surviving insects ran up to the next. The total number of rooms affected was eight or nine, said Bajpayee. Ashdown has a total of 264 rooms.

To reduce the probabilities of bedbug problems in the future, MIT Housing may consider banning students from bringing used furniture into the dorms, Collins said. Until then, students should “be conscious of where and how they are buying their used furniture,” Bajpayee said.

For more information, call (617) 253-4471 or email chaneym@mit.edu
Master's Degree Programs Expanding Nationwide

By Hannah Fairfield

The number of students in the University of Chicago program that bestows a Master of Arts degree in social sciences has quadrupled since 1989, jumping to 160 from 40, and despite a tuition price tag of $37,000, every year more students clamor for admittance.

“It’s an expensive degree, but students have calculated how fast they get their investment back,” said John J. Alonzo, an associate dean at the University of Chicago and director of the program. “And it is beneficial for the university because there is a lot of tuition income to be had.

More students than ever have started master’s programs this fall, and universities are using those programs as potentially lucrative sources of revenue. The number of stu-

dents earning these degrees around the country has nearly doubled since 1980. Since 1970, the growth is 150 percent, more than twice as fast as bachelor and doctoral programs.

“Master’s programs are the most obvious targets of opportunity,” said George L. McLaughlin, a vice president of the American Association of State Colleges and Universities. “The de-

grees are in high demand, and this is an optimal time to enter or expand the market.”

For students, the degrees are often expensive, at private universities, many students take out $50,000 in loans for every year of school. And scholarships and fellowships are rare, unlike doctoral programs, which are usually fully financed by universities.

Still, many say the price is worth it. In his two-year master’s program in science technology and environment policy from the University of Minnesota, Craig Nelson had $35,000 in loans. Now, he works in regulatory affairs at the 3M Company.

“Without the degree, I wouldn’t have the job,” he said. “So even though I’ll be paying the loan for 10 years, it was a good move for me.”

Getting into the business of offering these degrees can be a good move for universities, too, with some that have traditionally focused only on undergraduate students now entering the mas-

ter’s market. The California State University system, for example, has introduced many new applied master’s degrees and is expanding its master’s business administra-

tion programs.

“We are really conscious of the fact that master’s degrees are be-

coming the coin of the realm,” said Gary W. Reichard, the executive vice chancellor and chief academic officer for the California system. “And because MBAs can offer tremendous salary boosts down the road, we can charge higher tuition to students.”

Universities also do not have to provide dormitory rooms and din-

ing halls for master’s candidates, because graduate students typically do not live on campus.

Some university officials say the explosion of these programs has less to do with revenue than it does with the marketplace pressures on students to get higher degrees and credentials.

Thomas Eitelich, a senior scholar at the Carnegie Foundation for the Advancement of Teaching and a former president of Indiana University, said that although many master’s programs could be good revenue streams for universities, “We’re not in the business of making money.”

He added, “We’re in the business of educating students.”

But some schools are in the business of both. The University of Phoenix, a commercial institu-

tion with 60 brick-and-mortar campuses and around 200,000 students, awarded 24,788 master’s degrees last year, mostly for work completed online in business and education. That was at least a thousand more than the number of bachelor’s degrees it awarded.

Many university provosts say a graduate education can be more expensive to provide than an un-

dergraduate degree, merely because class sizes are usually smaller in graduate courses. But for universi-

ties that already have established doctoral programs, adding paying master’s students to the mix means they get a bump in tuition dollars without a heavy outlay of resourc-

es.

“Sometimes there is unused capacity in graduate classrooms,” Mr. McLaughlin said. “If there are 10 people in a graduate course one year and 15 the next, there is a 50 percent growth but no real drain on the insti-

tution.”

Universities are also luring mas-

ter’s students into staying for mul-

tiple years by offering dual-degree programs: two master’s degrees at twice the cost. Some programs join international affairs and journalism, science and public policy, busi-

ness and education. Other schools extend programs, for example, the University of Wisconsin’s two-year master’s degree in anthropology can be lengthened to three years if stu-

dents want to add a museum studies concentration.

And many students believe that these multiple degrees are highly valuable in today’s competitive job market.

Rey A. Phillips Santos has three graduate degrees, a master’s in public tra-

nu: two master’s and one in law. Af-

ter completing the master’s of arts program in the social sciences from the University of Chicago, he de-

cided to go on to the Chicago-Kent College of Law, in a joint-degree program in environmental man-

agement with the Stuart Graduate School of Business.

“There is a huge demand for credentials in high-level jobs now,” said Mr. Phillips, who is a lawyer for the Chicago city government.

“Each of my degrees helped me to get a leg up in the job market, and earn higher salaries than I would otherwise. They were great in-

vestments.”

Solution to Crossword

Solution to Sudoku
### MIT Career Fair 2007 Information Sessions

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<td>BBN Technologies</td>
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<td>7:00-8:00PM</td>
<td>6-120</td>
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### “Say Cheese!”

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photo@the-tech.mit.edu
Ludum Nets Four Goals in 6-1 Victory Over UMass Dartmouth

By Jim Kramer

Amy S. Ludlum ’08 dribbled in space in the women’s soccer game against the University of Massachusetts Dartmouth Tuesday. The Engineers triumphed over the Corsairs 6-1, despite the heavy rain.

Ludlum, the reigning Steinbrenner Stadium.
Ludlum added her first goal of the afternoon in the 23rd minute on a strong individual effort. After flipping the ball two defenders in the middle of the pitch, Ludlum planted a 15-yard goal in the top corner of the net. MIT struck two more times over the next six minutes on nearly identical plays. Theurer, who set a personal record on Tuesday with six points, set Ludlum on both scores with perfectly executed through balls.

UPCOMING HOME EVENTS

Saturday, Sept. 15, 2007
Sailing, Hatch Brown Trophy
Women’s Tennis vs. Mount Holyoke
Football vs. Framingham

Tech Places Second in Hiram College Tourney

Buchanan Named to All-Team Tournament

By Mindy Brauer

The women’s volleyball team continued its success in this past weekend with a second-place finish at the Hiram College Invitational in Hiram, Ohio. MIT opened the weekend by blanking Carnegie Mellon College 30-22, 30-20, 30-21, but then fell to the host Terriers 30-19, 30-23, 31-29. The Engineers bounced back against Mount Saint Mary’s College (3-2) 39-31, 30-23, 30-25, 31-15, 13-15 and sweeping Thiel College 30-24, 30-22, 30-28. Senior defensive specialist Carrie C. Buchanan ’08 represented MIT (6-1) on the All-Team Tournament.

Carrie C. Buchanan ’08 bumps the volleyball during the second game of the Engineers’ sweep of Smith College Tuesday evening in Rockwell Cage.