Urgency of Climate Change, New Research Emerges at MIT Forum

By Noah Spiles (Course 15)

A sense of urgency pervaded Monday’s clean-energy forum, which was sponsored by the MIT Energy Initiative and featured a who’s-who of energy and climate policy. The forum was moderated by Rep. Edward J. Markey (D-Malden, right), who is co-authoring legislation designed to tackle technologically and politically difficult global warming and clean energy issues. The forum featured a presentation by John Holdren ’65, director of the White House Office of Science and Technology Policy. Holdren noted that the rate of global warming continues to outpace predictions, including those made within a 2007 report by the Intergovernmental Panel on Climate Change.

As a student at MIT in the 1960s, Holdren was inspired by the race to put a human on the moon. However, Holdren said that the U.S. faces a far greater task in reducing human greenhouse gas emissions to avoid catastrophic climate changes.

In his presentation, Holdren outlined a number of cost-effective measures that could reduce carbon dioxide emissions. As a result of Holdren’s presentation, Markey noted that his bill would support the realization of many of these measures by spurring energy-efficient retrofits of existing buildings and increasing efficiency in energy utilities.

Markey emphasized the role research would play in further achieving these goals and highlighted the MIT spinoff company Statox, which systems, which are designed to dramatically improve the efficiency of existing batteries.

The forum also featured Daniel Yiorgos, Chairman of Cambridge Energy Research Associates and a Pulitzer-prize winning author, as well as Prof. Ernst Moniz, Director of the MIT Energy Initiative.

The proceeds of the Grunsfeld Fundraiser raised upwards of $1,500, and 2007’s raised $2,919. As a student at MIT in the 1960s, Holdren was inspired by the race to put a human on the moon. However, Holdren said that the U.S. faces a far greater task in reducing human greenhouse gas emissions to avoid catastrophic climate changes.

In his presentation, Holdren outlined a number of cost-effective measures that could reduce carbon dioxide emissions. As a result of Holdren’s presentation, Markey noted that his bill would support the realization of many of these measures by spurring energy-efficient retrofits of existing buildings and increasing efficiency in energy utilities.

Markey emphasized the role research would play in further achieving these goals and highlighted the MIT spinoff company Statox, which systems, which are designed to dramatically improve the efficiency of existing batteries.

The forum also featured Daniel Yiorgos, Chairman of Cambridge Energy Research Associates and a Pulitzer-prize winning author, as well as Prof. Ernst Moniz, Director of the MIT Energy Initiative.

The proceeds of the Grunsfeld Fundraiser raised upwards of $1,500, and 2007’s raised $2,919.

Students Abduct Tim The Beaver, Demand Sports Teams Spared

By Shreyes Seshasai (20)

Proving once again that nothing is safe in this economy, MIT’s mascot Tim the Beaver was kidnapped Saturday afternoon. The kidnappers, who said they were going to action while varsity sports at MIT were being threatened, demand that students’ voices be heard and are seeking a guarantee that all 41 varsity sports will be kept at MIT for at least one more year.

Last week, the Department of Athletics, Physical Education, and Recreation (DAPER) announced that amid a budget cut of $1.45 million over the next three years, it would cut some varsity sports programs, reining MIT’s claim to having the most varsity sports of any university in the country. DAPER’s decision on which sports will be cut has not yet been made.

With the decision not expected this week, the question remains: will the face of MIT athletics be back in time to greet the incoming class of 2013 during Campus Preview Weekend? The answer, it appears, is yes; the kidnappers stated that Tim will be returned by Wednesday.

The kidnappers agreed to speak to this reporter on the condition that they not be identified. Tim was taken during the inaugural Beaver Bowl, a competition between the Athletics and Midway would be out soon; they have been delayed because to announce that assignments for the Campus Preview Weekend Antarctica Center wearing ski masks and wielding hatchets in Washington to talk about the Hubble, the center was delayed by the loss of the an astronaut, Grunsfeld had twice journeyed to space to make repairs on humans’-most-studied satellite. Experiences he had described at a high-level White House meeting that the center was delayed by the loss of the an astronaut, Grunsfeld had twice journeyed to space to make repairs on humans’-most-studied satellite. Experiences he had described at a high-level White House meeting. Grunsfeld’s stay only a few months before the most meaningful in his life. He was looking forward to leading the third and final servicing mission, which had been delayed by the loss of the shuttle Columbia and its crew the year before.

That the mission was now being scheduled, Grunsfeld raced to get back to Earth to learn that Sean O’Keefe, NASA’s administrator, had canceled it on the ground that it was too expensive. O’Keefe was renewing his other hat as NASA’s chief scientist, Grunsfeld, who had the job of telling the world that the space agency was basically abandoning its greatest-scientific instruments in the same time that it was laying plans for the even more expensive, more aggressive effort to return humans to the Moon.

He said that as if he had been hit by a two-by-four.

“Being an astronaut, there are a lot of things that have really shocked me in my life,” Grunsfeld has not been able to re-identify what it was to be on the moon. However, Holdren said that the U.S. faces a far greater task in reducing human greenhouse gas emissions to avoid catastrophic climate changes.

In his presentation, Holdren outlined a number of cost-effective measures that could reduce carbon dioxide emissions. As a result of Holdren’s presentation, Markey noted that his bill would support the realization of many of these measures by spurring energy-efficient retrofits of existing buildings and increasing efficiency in energy utilities.

Markey emphasized the role research would play in further achieving these goals and highlighted the MIT spinoff company Statox, which systems, which are designed to dramatically improve the efficiency of existing batteries.

The forum also featured Daniel Yiorgos, Chairman of Cambridge Energy Research Associates and a Pulitzer-prize winning author, as well as Prof. Ernst Moniz, Director of the MIT Energy Initiative.

The proceeds of the Grunsfeld Fundraiser raised upwards of $1,500, and 2007’s raised $2,919.

Students Abduct Tim The Beaver, Demand Sports Teams Spared

By Shreyes Seshasai (20)

Proving once again that nothing is safe in this economy, MIT’s mascot Tim the Beaver was kidnapped Saturday afternoon. The kidnappers, who said they were going to action while varsity sports at MIT were being threatened, demand that students’ voices be heard and are seeking a guarantee that all 41 varsity sports will be kept at MIT for at least one more year.

Last week, the Department of Athletics, Physical Education, and Recreation (DAPER) announced that amid a budget cut of $1.45 million over the next three years, it would cut some varsity sports programs, reining MIT’s claim to having the most varsity sports of any university in the country. DAPER’s decision on which sports will be cut has not yet been made.

With the decision not expected this week, the question remains: will the face of MIT athletics be back in time to greet the incoming class of 2013 during Campus Preview Weekend? The answer, it appears, is yes; the kidnappers stated that Tim will be returned by Wednesday.

The kidnappers agreed to speak to this reporter on the condition that they not be identified. Tim was taken during the inaugural Beaver Bowl, a competition between the Athletics and Midway would be out soon; they have been delayed because to announce that assignments for the Campus Preview Weekend Antarctica Center wearing ski masks and wielding hatchets in Washington to talk about the Hubble, the center was delayed by the loss of the an astronaut, Grunsfeld had twice journeyed to space to make repairs on humans’-most-studied satellite. Experiences he had described at a high-level White House meeting. Grunsfeld, who had the job of telling the world that the space agency was basically abandoning its greatest-scientific instruments in the same time that it was laying plans for the even more expensive, more aggressive effort to return humans to the Moon.

He said that as if he had been hit by a two-by-four.

“Being an astronaut, there are a lot of things that have really shocked me in my life,” Grunsfeld

John Grunsfeld ‘80 was sitting in an astronomical meeting in Atlanta in January when he got a message to come back to headquarters in Washington to talk about the Hubble. Grunsfeld, who has been the center of media attention since the fall, said that he was excited to be back in the meeting.

To say that he was excited would be an understatement. When asked if an astronaut, Grunsfeld had twice journeyed to space to make repairs on humans’-most-studied satellite. Experiences he had described at a high-level White House meeting. Grunsfeld, who had the job of telling the world that the space agency was basically abandoning its greatest-scientific instruments in the same time that it was laying plans for the even more expensive, more aggressive effort to return humans to the Moon.

He said that as if he had been hit by a two-by-four.

“Being an astronaut, there are a lot of things that have really shocked me in my life,” Grunsfeld

John Grunsfeld ‘80 was sitting in an astronomical meeting in Atlanta in January when he got a message to come back to headquarters in Washington to talk about the Hubble. Grunsfeld, who has been the center of media attention since the fall, said that he was excited to be back in the meeting.

To say that he was excited would be an understatement. When asked if an astronaut, Grunsfeld had twice journeyed to space to make repairs on humans’-most-studied satellite. Experiences he had described at a high-level White House meeting. Grunsfeld, who had the job of telling the world that the space agency was basically abandoning its greatest-scientific instruments in the same time that it was laying plans for the even more expensive, more aggressive effort to return humans to the Moon.

He said that as if he had been hit by a two-by-four.

“Being an astronaut, there are a lot of things that have really shocked me in my life,” Grunsfeld

John Grunsfeld ‘80 was sitting in an astronomical meeting in Atlanta in January when he got a message to come back to headquarters in Washington to talk about the Hubble. Grunsfeld, who has been the center of media attention since the fall, said that he was excited to be back in the meeting.

To say that he was excited would be an understatement. When asked if
The New York Times
By David Segal

It does not seem to matter that these women — they are nearly all women, most of them young and attractive — work part-time for marketing firms and talent agencies with contracts to staff the exhibits. Many know little about the car companies they are sheltering for beyond the speeches the CEOs have memorized.

“I try to explain that we’re not involved in corporate decisions, so complaining to us doesn’t really make a lot of sense,” said Kerr Moss, standing on a large table behind a sign that read “Bets 4 X 4 4 Laredo, a Chrysler product. Recently laid off from her job as a teacher, she is trying to earn some money on the car-show circuit, which runs from September to May. “And if that doesn’t work, I tell them we’re doing the best we can.”

**Militants Joining Forces To Advance Into Pakistan**

By Sabrina Tavernise

Taliban insurgents are teaming up with local militant groups to make inroads in Punjab, the province where the rival Taliban have by now moved to more than half of Pakistan, reinvigorating an alliance that Pakistani and American officials say poses a serious risk to the stability of the country.

The deadly assault in March in Lahore, Punjab’s capital, against a CIA-trained Pakistani Lankan cricket team, and the bomb that last fall at the Marriott Hotel in Islamabad, the national capital, were only the most spectacular examples of the joint campaign, they said.

Now police officials, local residents and analysts warn that if the government does not take decisive action, these deadly, improvised fringes of Punjab could be the next areas facing the insurgency. Ameri- can intelligence and counterterrorism officials also said they viewed the developments with alarm.

“Don’t talk of a lot of people un- derstanding the gravity of the issue,” said a senior police official in Punjab, who declined to be named because he was discussing threats to the state.

“If you want to destabilize Pakistan, you have to destabilize Punjab,” said a senior police official in Punjab, who declined to be named because he was discussing threats to the state.

The New York Times
By Motoko Rich

...continued.

**Strife Swells In the Streets of Bangkok**

By Seth Mydans and Thomas Fuller

Soldiers armed with assault rifles fought running street battles with un- go-government protesters in Bangkok on Monday as unrest spread through some Bangkok neighborhoods.

On Monday, security forces had cleared an island of insurgents that had taken over a major intersection in the city of the New Year’s water festival. Section attacks, dormant here since the 1990s, have erupted once again. The gunfire appeared to be aimed into the air above the protesters, but hospital officials reported that more than 40 people had been shot and wounded.

Last week’s violence came on what is normally a day of animated celebra- tion, the New Year’s Water Festival. Street parties and revellers continued in some Bangkok neighborhoods un- touched by the strife, but the center of the city remained tense. At least one dozen streets were barricaded by protesters, many of whom were armed with clubs and slingshots.

The Punjabi militants have had links with the Taliban, who are mostly Pashtun tribesmen, since the 1980s. Some of the Punjabi groups are veterans of Pakistan’s state-sponsored insurgency against Indian forces in Kashmir. Others made tar- getes of Sikhs.

The Pakistan government has linked the Punjab violence with the vasts Muslim groups that have lived in the Punjab, who are mostly Pashtun tribesmen, since the 1980s. Some of the Punjabi groups are veterans of Pakistan’s state-sponsored insurgency against Indian forces in Kashmir. Others made tar- getes of Sikhs.

**Amazon Ranking Errors Ignite A Twitter-Fed Outrage**

By Motoko Rich

In response to nearly two days of angry online commentary, particu- larly on Twitter, Amazon.com said on Monday that “an embarrassing lack of information” had caused thousands of books on its site to lose their sales rankings.

The titles that lost their sales rankings during the weekend included James Baldwin’s “Giovanni’s Room,” the gay romance novel “Trans-gresions” and “Unfriendly Fire,” a recently published book about the CIA’s “War on Terror.”

**Weather**

**Situation for Noon Eastern Daylight Time, Tuesday, April 14, 2009**

**Stormy Down South, Dry Up North**

By Vince Ageard

The weather has been whacking havoc in the southeastern United States over the past few days. Over the weekend, severe thunderstorms widespread snow, powerful tornadoes, and surface tornadoes as they carved a path through Tennessee, Georgia, Arkansas, and the Caroli- na. Widespread damage and flooding was reported as severe storms and death. The region was then hit by another storm system on Mon- day, with strong winds, heavy rain, and hail reported across Alabama, Georg- ia, Tennessee, Kentucky, and Florida. More severe weather was expected at the time of this noon Monday night, with severe thunderstorms and tornado watches posted by the National Weather Service across the Southeast.

While severe weather is a concern across the Southeast, United States, severe storms occur much more rarely in the Northeast this time of year. The weather systems currently producing severe weather in the South will not penetrate the Northeast. However, some of the thunderstorms and tornado watches posted by the National Weather Service across the Southeast.

Extended Forecast

**Today:** Partly cloudy and cool, High 51°F (11°C)  **Tonight:** Mostly cloudy, Low 37°F (3°C)  **Tomorrow:** Partly sunny, High 49°F (9°C)  **Thursday:** Sunny, High around 50°F (10°C)  **Friday:** Sunny, High in the mid 60s°F (18°C)
The Obama administration and its European allies are preparing proposals that would shift strategy toward Iran by dropping a longstanding American insistence that Tehran rapidly shut down nuclear facilities during the early phases of negotiations over its atomic program, according to officials involved in the discussions.

The proposals, exchanged in confidence through shuttle sessions with European allies, would press Tehran to open up its nuclear program to wide-ranging inspection. But the proposals would also allow Iran to continue enriching uranium for some period during the talks, a sharp break in the approach taken by the Bush administration, which had demanded that Iran halt its enrichment activities.

The proposals under consideration would go somewhat beyond what President Barack Obama’s promise, during the presidential campaign, to open negotiations with Iran “without preconditions.” Officials involved in the discussion said they were being fashioned to draw Iran into nuclear talks that it had so far shunned. A review of Iran policy that Obama ordered after taking office is still under way, and aides say it is not clear how long he would be willing to allow Iran to continue its fuel production, and at what pace. But European officials said that in talks with Obama officials involved in the discussions, but said that any new American policy would likely require Iran to cease enrichment, as demanded by several U.N. Security Council resolutions.

Goldman’s Profit Topped Forecast; Share Sale Planned

By Louise Story

Six months after accepting a financial lifeline from Washington, a newly profitable Goldman Sachs is pushing to return the billions of taxpayer dollars that it received in an effort to retain itself from heighten
d government control.

Goldman Sachs stood out fi nal, tumultuous months of 2008 with the help of a federal rescue, reported strong quarterly profits on Monday that it would seek to repay the government.

And said that it would seek to raise and the many others that are too weak to go without government funds. But others warned of a looming divide between a handful of banks like Goldman, which may be strong enough to return their TARP money, and the many others that are too weak to go without government funds.

It is unclear how quickly Goldman, which was also a beneficiary of a separate government rescue of the American International Group, might be allowed to return the $10 billion it accepted last October. While Goldman’s latest results bolster its case for unshuffling itself from TARP, federal regulators are nonetheless concerned about the health of the broader financial industry and the implications such a move might have for other institutions.

“The issue is really, will the government give Goldman special dispensation to get out first?” said Brad Hintz, an analyst at Sanford C. Bernstein. “Goldman can walk the halls of Congress waving a check, but is it in the best interest of the marketplace for them to pay it back?”

Goldman indicated in early Feb
your that it would seek to repay the funds, and since then, several other banks have said they would like to do the same. Not all banks, however, are likely to bounce back as quickly as Goldman, despite expectations that other banks will report strong results for the first quarter.

Goldman announced profits of $1.66 billion in the quarter, marking a strong comeback from a loss in late 2008.

Goldman announced profits of

— to free itself from government-imposed restrictions on compensation.

Many analysts welcomed the news as the latest in a series of signs that the financial industry is stabilizing. But others warned of a looming divide between a handful of banks like Goldman, which may be strong enough to return their TARP money, and the many others that are too weak to go without government funds.

It is unclear how quickly Goldman, which was also a beneficiary of a separate government rescue of the American International Group, might be allowed to return the $10 billion it accepted last October. While Goldman’s latest results bolster its case for unshuffling itself from TARP, federal regulators are nonetheless concerned about the health of the broader financial industry and the

and his aide during his trip to Eu-

America insistence that Tehran rapid-

and said that it would seek to raise

pay the government.

and the many others that are too weak to go without government funds, and since then, several other banks have said they would like to do the same. Not all banks, however, are likely to bounce back as quickly as Goldman, despite expectations that other banks will report strong results for the first quarter.

Goldman announced profits of $1.66 billion in the quarter, marking a strong comeback from a loss in late 2008.

Goldman indicated in early Feb

your that it would seek to repay the funds, and since then, several other banks have said they would like to do the same. Not all banks, however, are likely to bounce back as quickly as Goldman, despite expectations that other banks will report strong results for the first quarter.

Goldman announced profits of $1.66 billion in the quarter, marking a strong comeback from a loss in late 2008.

Goldman indicated in early Feb

your that it would seek to repay the funds, and since then, several other banks have said they would like to do the same. Not all banks, however, are likely to bounce back as quickly as Goldman, despite expectations that other banks will report strong results for the first quarter.

Goldman indicated in early Feb

your that it would seek to repay the funds, and since then, several other banks have said they would like to do the same. Not all banks, however, are likely to bounce back as quickly as Goldman, despite expectations that other banks will report strong results for the first quarter.

Goldman announced profits of $1.66 billion in the quarter, marking a strong comeback from a loss in late 2008.

Goldman indicated in early Feb

your that it would seek to repay the funds, and since then, several other banks have said they would like to do the same. Not all banks, however, are likely to bounce back as quickly as Goldman, despite expectations that other banks will report strong results for the first quarter.

Goldman indicated in early Feb

your that it would seek to repay the funds, and since then, several other banks have said they would like to do the same. Not all banks, however, are likely to bounce back as quickly as Goldman, despite expectations that other banks will report strong results for the first quarter.

Goldman indicated in early Feb

your that it would seek to repay the funds, and since then, several other banks have said they would like to do the same. Not all banks, however, are likely to bounce back as quickly as Goldman, despite expectations that other banks will report strong results for the first quarter.

Goldman indicated in early Feb

your that it would seek to repay


Opinion

Alumni Reaction to Sports Cuts

Dear President Hockfield, Dean Colombo, and Director Soriero,

I was a member of the MIT gymnastics team in the 1970s. That experience was morally valuable, and possibly even essential to my success at MIT. I had never done gymnastics before, and, except for a brief period in my Freshman year, I would not have participated in any other sport. But gymnastics caught my attention, and today I believe that without MIT gymnastics I would have had a vastly different and far poorer MIT experience. I was a “nervous” person, and did not participate in any high school sport. It was simply not of interest. I had zero expectation of participating in any sport at MIT. Yet I was able to discover to the gymnastics team. I started from scratch, and I don’t think anyone would be able to do the same thing.

I began learning that handstand and building other skills, and later joined the team. Sticking with it was difficult, and I did manage to qualify for (and attend) the NCAA championships in my one event. I also was awarded the George T. for winning my event in our division in the New England gymnastics competition. Yet these were not the most important aspects of my rich experience. MIT gymnastics gave me an invaluable community.

In 1999, I was never a “sports” person, and did not support the athletic department with my contribution. I have supported MIT for many years. I understand that gymnastics has a large “footprint” in terms of equipment and space, and requires special coaching skills. But I am sure that it is unaffordable today. One thing is certain — once it is gone, it will not come back, unless time returns.

Hello Professor Columbo et al,

The minority experience is just as important as the majority’s. To lose MIT gymnastics (and other “marginal” sports) would be cutting off a vital part of that richness of offerings, the diversity that defines the excellence of MIT.

Andy Rebel ’71

More Reaction…

Tom Hafer ’70

Letters To The Editor

Dear Professor Columbo et al,

I have heard that budget considerations will be the deciding factors that are likely to result in elimination of “lesser” varsity sports such as gymnastics. I have supported the athletic department with my contributions over the years and lately I have provided specific support to the gymnastics team. I would greatly disappoint if gymnastics were eliminated as a varsity sport.

Tom Hafer ’70

Editorials

Opinion Policy

Editorials are the official opinion of The Tech. They are written by the editorial board, which consists of Chairman Austin Chu, Editor in Chief Nick Bushak, Managing Editor Steve Howland, Executive Editor Michael McGrass-Herdeg, and Opinion Editor Andrew Polonko.

Letters to the editor, columns, and cartoonists 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. All letters submitted for publication must be signed by the author, and must be typed, double-spaced.

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 be edited for style, and may be published in any other format or medium now known or later that becomes known.

Letters to the editor should be sent to letters@the-tech.mit.edu. The letters to the editor should be 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 the editorial board choosing to publish their disagreement with the editorial. Letters, columns, and cartoonists 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. All letters submitted for publication must be signed by the author, and must be typed, double-spaced.

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 be edited for style, and may be published in any other format or medium now known or later that becomes known. The Tech makes no commitment to publish all the letters received. Guest columns are opinion articles submitted by members of the MIT or local community and have the author’s name in italics. Columns without italics are written by tech staff.

Letters to the editor should be sent to letters@the-tech.mit.edu. The letters to the editor should be 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.
A Research System Set Up to Fail
What Happens to People When Research Pays Off?

Gary Shu

Thomas Friedman has a solution to fix the global energy problem and boost the economy.

In his latest book, Hot, Flat and Crowded, Friedman presents it succinctly. “We need 100,000 people in 100,000 garages trying 100,000 things — in the hope that five of them break through.”

When I hear about these kinds of ideas for entrepreneurship and research that we, as young businesspeople and engineers, are expected to do, I just wonder: what about the 99.995 people that fail?

Yes, I believe and understand the theory — the country needs more research in more varied subjects in order to produce those diminishing marginal returns on new technology advances. There may be few genuine breakthroughs and more incremental advances these days, but the true innovations are so large they make up for all the losses. These breakthroughs can be so great — the Internet, a cure for cancer, cheap renewable energy — that they transform our entire way of life for the better. May glory be heaped upon those who bring them unto us.

But what, Mr. and Mrs. Policymakers, if we don’t want to be part of the hoards of people heaped upon those who bring them unto us.

If we’re going to institute a massive insert your tech here — energy, biotech, pharma, space, etc research initiatives, we need some way of supporting those that fail. We need jobs available for these people to have stable careers instead of squeezing the best years of their life out of grad school and dumping them to a research lab under the thumb of government funds to or in takers in one of Friedman’s garages paying for that big breakthrough. One possibility for supporting such research infrastructures is a greatly expanded network of federally supported research institutions.

We made the mistake once during the decline of the space race. In the wake of Sputnik’s launch during the Cold War, America launched its science education programs to flood into defense and space spending. When these programs became less of a priority, we saw the stomach-churning images of physics PhDs driving taxi cabs during the late 70s.

It’s a reasonable question isn’t it? Why should so many young students work in research when the likely success is chesher? Until the likes of Friedman and our nation’s leading policy makers actually think through the implications of their ideas, I can say without reservation to the best and brightest — stay away.

Vice versa as if we’re the only ones left who can do the math.

Gary Shu is a graduate student in the Technology and Policy Program and the Department of Urban Studies and Planning.

The Dalai Lama Supports a Unique Opportunity
A Case for the Center for Ethics

Kai-yuh Hsiao

At the end of this month, a host of influential people will be coming to MIT to speak at the opening of the Dalai Lama Center for Ethics and Transformative Values at MIT.

The opening event will be headlined by the Dalai Lama and influential composer Philip Glass. The speakers cover a wide range of disciplines, including ethics, political science, environmental policy, technology, economics, history, politics, literature, psychology, and spirituality.

The educational focus of the Center for Ethics is to provide a multi-disciplinary perspective on the skills necessary for technical and managerial leadership. Awareness of the larger global landscape and of the far-reaching impact of every decision must provide leaders with the resources, the wisdom, and the social responsibility to build sustainable, truly valuable enterprises. As a top-tier research institution, MIT must take the initiative to provide students with access to such awareness.

The Center for Ethics is intended to promote this global, multi-disciplinary perspec- tive. As a technology-focused school, MIT is uniquely positioned to provide the kind of leadership needed to create innovations that make the world a better place. However, truly great technical leaders guide their organizations to sustainable success by also being aware of how their innovation impacts the rest of the world, and to balance technology-centered improvement against any potential costs to culture, economy, and environment.

This is not meant to discourage innovation or progress, but to initiate dialogue and to pro- vide awareness of the complex interactions between disciplines. The hope is to enable people to choose principles for themselves that allow them to select the best opportunity to pursue in a balanced manner. Ideally, this balance will enable individual leaders to not only succeed in the short-term, but also to assure each other’s success in building a more sustainable world, socially and environmentally. MIT’s support for the Center for Ethics is a critical step in supporting such awareness, both for the sake of its students and for the sake of the world.

Having the support and the name of both MIT and the Dalai Lama is another key component of promoting this awareness. Nobody doubts that MIT excels at science, technology, and all things related to the future. The Dalai Lama brings a great deal of spiritual minds together to improve the state of the world. What the Center for Ethics adds to this is the clout to add highly-engaged experts in non-technical fields to the discussion. Having the Dalai Lama’s support and name allows the Center, and thus MIT, to engage with a large selec- tion of highly-engaged policy makers, spiritual leaders, and influential thinkers. Likewise, having the direct support of three Nobel Peace Prize winners — the Dalai Lama, Desmond Tutu, and Betty Williams — brings further credibility and encourages sustainability and coexistence. This confluence of minds will provide students with opportunities to join in dialogue with leaders and thinkers from all fields.

Like the Dalai Lama’s mission to train the greatest leaders of the future, it behooves us to bring awareness of global impacts in all dimensions, whether social, spiritual, or environmental, into the educational program. The Center for Ethics’ inception and continuing support of the Center for Ethics is a very encouraging step in this direction.

Kai-yuh Hsiao is a member of the Class of 1999 and received his PhD in Media Arts and Sciences in 2007.

Letters for the Tech
Gregory C. Fu, Professor of Chemistry, talks about growing up in the Midwest, being an MIT undergrad in the 80s, and why he doesn't see work as a chore.

TT: When you look back, do you remember working really hard? Or has that faded now?

GCF: I remember working very hard. At that point it seems less prevalent now, you had HTTP://t-shirts and so on, because it was a very demanding place and people often, at least at the point they were living through it, had mixed emotions. Most of us, when we look back, remember all of the good things, but when we were here, it was pretty intense and there were some people who weren't always happy. But when you talk to people now, they look back on that as a great learning experience and they think all the hard work was worth it.

TT: Do you think it made you who you are?

GCF: My guess is most people came in that way. It's a self-selective group of people who decide to come here and MIT certainly happens during the formative years. But I don't think it completely changes people. MIT attracts people who are predisposed in certain ways.

TT: What kind of extracurriculars did you do? Were you mostly research-focused?

GCF: The thing that I loved the most was UV/Vis. That was for me the most enjoyable thing. But I do like the fact that MIT is in a city. To me that made a big difference, that if you were tired of the academic scene, it was easy to escape, so to speak. I also did IMs. I played ping-pong. I did IM hockey, even though I hadn't skated before I came to MIT, I did bowling. There was actually a bowling alley in the basement of the student center. They also had pool, basketball, football. I think I played in one or two of those games, but I didn't pay football regularly. Table tennis was probably my favorite.

TT: You did your undergraduate research under Barry Sharpless, who won the 2001 Nobel Prize in Chemistry for his work with stereoselective oxidation reactions. Later on, you were a postdoc under Robert Grubbs, who shared the 2005 prize with MIT's Richard Schrock. What does it feel like when your work is recognized for the Nobel Prize, because most people go through their entire career and at places like MIT they obviously have a significant contribution, but they're not doing work that's directly associated with the Nobel Prize. So again, not to say that my work was the work that went into the Nobel Prize, but it was part of the program.

TT: I think it's fair to give yourself credit. What do you do in your spare time?

GCF: That's a good question. Not a whole lot right now. I'll occasionally go see a Red Sox game. I probably have a 36-year streak of seeing at least one Red Sox game — I think since my freshman year here. When I was a postdoc at Caltech, I used to go to see the Angels play the Red Sox. In terms of sports, they're probably my favorite team.

TT: Can I ask you how many hours a week you spend in the office? Or checking in on the lab?

GCF: Not that much time around the lab anymore. I put the truly, a fair amount of latitude to do what they want. But in terms of how many hours I spend in the office, I don't want to say. Security's my biggest concern.

TT: That's dedication. That's serious dedication.

GCF: Well, it's one of those things. Many people aren't so fortunate. If you like what you do, it's not work. So, coming in on weekends isn't a chore if you really, really love what you do. I don't know a lot of people who work just to pay the bills and to me that would be a frustrating life. I think I'm extraordinarily lucky in that work is fun for me. So, it's not a chore. So working more than eight hours a day or working on weekends isn't a bad thing. It's not something I dread.

TT: That's an incredible luxury, to love what you do.

GCF: And last, what's your favorite molecule?

TT: That's an interesting question. I don't know, maybe water. It's an interesting molecule because it has hydrogen bonding. Properties and it's such a simple molecule, too.

GCF: That's a far simpler answer than I had to expect.

TT: There are some very interesting large biomolecules, but water is a basic molecule and it's so important in terms of our everyday existence.

TT: Mine is isononyl acetate.

GCF: Oh.
I've Got Brouhaha Rhythm

By Michael T. Lin

I like going to plays and theatre shows. It makes me feel cultured, the same way that I've got music. It's a part of it.

Act, Next House's annual musical theater show, is just a show, a musical. (Dun dun dunnn.) Next Act's the one that I'm going to be in this week. And not just a show, but a part of it. For me, it's a part of my quasi-adult life. Yet, as the powers that be would have it, be they luck, fate, or several qualifications to being a part of it, I'm clearly not the only person who thinks so. I'm going to be in a show this week. And not just a show, but a part of it.

Let's be perfectly clear: I have no pretensions to being what one might consider a theatre person (that's more within my girlfriend's purview). I consider myself an above-average dancer in that I've never hospitalized a dance partner with a foot injury, but I wouldn't peg my acting abilities anywhere above high-school-era Leonardo DiCaprio unless told so by someone with a proper frame of reference. I also lack Leo's teen girl heartthrob factor that doubles ticket sales on sight (also known as the "Orlando Bloom Effect"). And on top of all that, I'm not indicative of a responsible sexual partner.

Some numbers are important at MIT — particularly on certain tests — but then there are numbers that are just that — numbers. It seems to me that most people believe that men "over-count" and women "under-count." If you're going based off just a number, you should assume some manipulation. The story behind the count — especially what people learned from it — is much more important to who we are sexually.

Think Smart—Live Smart!
at Watermark Cambridge

Watermark Cambridge is under new management by Boston Residential Group!

Inquire today about an exclusive 15% MIT affiliate discount!*"
Steal My Comic

by Michael Ciuffo

The Daily Blunderbuss

by Ben Peters

Help Desk

by Michael Benitez

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of the digits 1 through 9. Solution on page 10.

Join The Tech and see your comic here!

join@tech.mit.edu
Beavernappers Seek Reprieve for Varsity Sports That Will Be Cut

The kidnappers also said that the ransom wasn't serious — he viewed the kidnapping as a fun joke, the ransom demands probably won't be met, Yamada said. “It's a message of ‘unless you comply with our demands, we're gonna take away an important part of marketing to freshmen,’ he said.

“Don't want to be quick to do some irrational thing whenever something we don’t like comes up,” he said.

But a few other students said that the “beavernapping” was just a funny stunt that sent MIT a serious message.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.

Hiroyuki G. Yamada ’11 heard the ransom demands probably won’t be met, Yamada said. “It’s a message of ‘unless you comply with our demands, we’re gonna take away an important part of marketing to freshmen,’” he said.

“But a few other students said that the ‘beavernapping’ was just a funny stunt that sent MIT a serious message,” he said.
MIT Astronaut Has Maintained Hubble Telescope for 18 Years

Hubble, from Page 1

said in a recent interview. But, he added: “I don’t think anybody could ever prepare themselves for, you know, trying to burrow your way through what they have said. ‘Hey, this is worth rigging my life for.’”

He went home that January night and wondered whether he should resign.

Five years later, Grunsfeld reported for work at an 11 million-gallon indoor pool near the Johnson Space Center in his long underwear and a red baseball cap bearing an image of Curious George in a spacesuit. The pool’s blue depths contained sunk replicas of the Hubble and the International Space Station. Surrounded by divers and helpers, Grunsfeld squirmed into a 400-pound set of known as a spacewalk. He was preparing to practice for his next flight.

On May 12, he and six other astronauts commanded by Scott Altman are scheduled to ride to the telescope’s rescue one last time aboard the shuttle Atlantis. This will be the 15th time astronaut visits Hubble. When the telescope’s batteries and gyroes finally run out, it will become side to side in the middle of the next decade, NASA plans to send a rocket and drop it into the ocean. It all goes well then what Grunsfeld described as “brain surgery” in space. Hubble will be left at the apex of its scientific capability.

As chief Hubble repairman for the past 18 years, he has been inter-twined with the Hubble telescope physically, as well as intellectually and emotionally. “He might be the only person on Earth who has observed with Hubble and touched Hubble,” said Bruce Margen, an astronomer at the University of California, Santa Cruz, and former deputy director of the Space Telescope Science Institute.

Last September, Grunsfeld and his crewmates were two weeks from blasting off for Hubble when a data router failed, shutting down the telescope until a backup could be booted up. The servicing mission was postponed so that NASA could prepare for a new router, adding another degree of difficulty to an already crowded and high-stakes agenda.

To accommodate installing the new router, mission planners had to cut into the time allotted for the repair and resurrection of Hubble’s main camera, the Advanced Camera for Surveys. That repair was originally scheduled over two spacewalks, and now planners are hoping to be able to do it a few hours on one spacewalk.

If it cannot be done, Grunsfeld said grimly, the pictures that have inspired people around the world, pinpointed planets around other stars, and investigated the fate of a cosmos dominated by dark energy will be lost.

“If anybody up to the challenge, it seems to be Grunsfeld, who will be able to get the trip to space.”

Michael Turner, a cosmologist and former colleague at the University of Chicago, described Grunsfeld’s career as “Mr. Smith goes to space.” Everything turns to magic even when things go bad. In the end he’s righted, and he gets to lead the team.”

Grunsfeld’s whole life has led to Hubble. Born in Chicago in 1958 into a family of architects — his grandfather designed the Adler Planetarium — Grunsfeld said he yearned from age 6 to be an astronaut. Science soon beckoned as an alternative. By the time he reached college at the Massachusetts Institute of Technology, his interests were centered on physics and cosmology. To make some money as an undergraduate, he took a job for $4 an hour on the grayed-out shift in the control room for a small satellite, known as S3-3 which was observing X-rays. Sometimes he took his dates there.

The job led to a year in Tokyo, where Grunsfeld lived in a Zen monastery, meditating in the morning and teaching, and working with an X-ray astronomer, Minorsa Oda, at the University of Tokyo in the afternoon. When he came home early one day and found the monks playing baseball, a spell was broken.

Grunsfeld returned to Chicago to earn a doctorate conducting cosmic ray research at the University of Chicago. Along the way he married a woman he had known in high school, Carol Schiff. They now have two children, and she is an accountant at the Johnson Space Center.

Grunsfeld then took a job at the California Institute of Technology, and he and his wife both learned to fly.

When NASA invited Grunsfeld to an interview in 1995, Grunsfeld flew his own plane to Houston. On his first flight, a 16-day mission in 1995 tending a suite of small telescopes, Grunsfeld did not want to come down. “I had this real feeling of peace, you know, that I never had here on planet Earth.”

Grunsfeld went up again on a 10-day mission to the Mir space station, in 1997. “Then, he said, “I got lucky and got assigned to Hubble.”

Free tickets for MIT students! Made possible by the Council for the Arts at MIT

Emmanuel Music: J.S. Bach Motets
Saturday, April 25 at 8pm at Emmanuel Church, 156 Newbury Street, Boston 7pm: Pre-concert talk by Acting Artistic Director, John Harbison
The Chorus of Emmanuel Music, Michael Beattie, conductor

Radial Ensemble
Run, May 2 at 8pm in Killian Hall, 414-111 Willis
Moosacaglia for winds
Ran, Mirage for amplified flutes, clarinet, strings, and piano
Debussy, Sonata for flute, viola, and harp
Shostakovich Piano Trio No. 2 in E minor, Op. 67
The Boston Modern Orchestra Project: Premiers
Friday, May 22 at 8pm at Jordan Hall at New England Conservatory
Lena Levin, violin
Marcus Thompson, viola

Tickets available at the MIT Office of the Arts (E15-205)
Monday - Friday, 2:30 - 5:30 pm
**SPORTS**

**Taekwondo Wins Tournament At Penn, Maintains ECTC Lead**

By Tara Sarathi

On Saturday, April 4, the MIT Sport Taekwondo team travelled to the University of Pennsylvania to compete in the fourth Eastern Collegiate Taekwondo Conference (ECTC) tournament of the year. This tournament was a crucial for the team, since a loss could mean the loss of the long-aspirated ECTC cup to the rival team from Cornell University. Despite being outnumbered by the team from Cornell, MIT's team — coached by head instructor Dan Chuang and led by captains Christopher J. Han '09 and Corinna Hui '09 — finished first.

The team's passion was displayed from the beginning as the day opened with the forms competition. In the black belt division, Daniel J. Sauza '11 claimed the silver while Erika Lee '12 captured the bronze. In the green belt division, Daniel J. Sauza '11 claimed the silver and bronze respectively.

For the intermediate belts, Rafael A. "Maverick" Raya '11 claimed the silver in blue belt forms, while Teresa T. "Ty" Lin '12 and Lyla J. Fischer '11 demonstrated their prowess by taking the silver and bronze, respectively, in the green belt division.

After a promising morning, the team refused to ease up on the competition, especially against Cornell. The afternoon opened with sparring in the A team division, the men's A1 (Wu, Han, Forrest W. Liu G) muscled their way to the medal with an outstanding performance by MIT. With Christine M. Lee '09, Shammi S. Quddas '10, and Ramesh P. Sun '10 capturing the gold, silver, and bronze respectively.

For the intermediate belts, Rafael A. "Maverick" Raya '11 claimed the silver in blue belt forms, while Teresa T. "Ty" Lin '12 and Lyla J. Fischer '11 demonstrated their prowess by taking the silver and bronze, respectively, in the green belt division.

After a promising morning, the team refused to ease up on the competition, especially against Cornell. The afternoon opened with sparring in the A team division, the men's A1 (Wu, Han, Forrest W. Liu G) muscled their way to the medal with an outstanding performance by MIT. With Christine M. Lee '09, Shammi S. Quddas '10, and Ramesh P. Sun '10 capturing the gold, silver, and bronze respectively.

In Division B sparring, the women's team made history and dominated their division. The B1 team (Quddas, Zhu, Chin) snatched the gold, B2 (Sun, Nix, Fischer) captured the silver, and B3 (Jung "Jenny" Cheng '11, Lee, Hsin-Jung "Sophia" Li '11) and B4 (Tara P. Sarathi '12, Zhu Chen "Mary" Hong '10, Lin) seized the bronze.

Even in the C team division, the desire to win was never diminished. The men's C1 team (Ryan A. Rosario '12, David Y. Wen '10, Ijeoma "J" Emeagwali '12) sparred fiercely and left the ring with the gold. As the tournament came to an end, the team walked away knowing that the goal of the day was accomplished: beating Cornell and retaining the hard-earned lead in the league.

Only one tournament stands in the way of winning the ECTC cup: with only two weeks left before the Columbia University tournament, MIT outscored their opponents for the bronze.

In Division B sparring, the women's team made history and dominated their division. The B1 team (Quddas, Zhu, Chin) snatched the gold, B2 (Sun, Nix, Fischer) captured the silver, and B3 (Jung "Jenny" Cheng '11, Lee, Hsin-Jung "Sophia" Li '11) and B4 (Tara P. Sarathi '12, Zhu Chen "Mary" Hong '10, Lin) seized the bronze.

Even in the C team division, the desire to win was never diminished. The men's C1 team (Ryan A. Rosario '12, David Y. Wen '10, Ijeoma "J" Emeagwali '12) sparred fiercely and left the ring with the gold. As the tournament came to an end, the team walked away knowing that the goal of the day was accomplished: beating Cornell and retaining the hard-earned lead in the league.

Only one tournament stands in the way of winning the ECTC cup: with only two weeks left before the Columbia University tournament, MIT outscored their opponents for the bronze.

In Division B sparring, the women's team made history and dominated their division. The B1 team (Quddas, Zhu, Chin) snatched the gold, B2 (Sun, Nix, Fischer) captured the silver, and B3 (Jung "Jenny" Cheng '11, Lee, Hsin-Jung "Sophia" Li '11) and B4 (Tara P. Sarathi '12, Zhu Chen "Mary" Hong '10, Lin) seized the bronze.

Even in the C team division, the desire to win was never diminished. The men's C1 team (Ryan A. Rosario '12, David Y. Wen '10, Ijeoma "J" Emeagwali '12) sparred fiercely and left the ring with the gold. As the tournament came to an end, the team walked away knowing that the goal of the day was accomplished: beating Cornell and retaining the hard-earned lead in the league.

Only one tournament stands in the way of winning the ECTC cup: with only two weeks left before the Columbia University tournament, MIT outscored their opponents for the bronze.

In Division B sparring, the women's team made history and dominated their division. The B1 team (Quddas, Zhu, Chin) snatched the gold, B2 (Sun, Nix, Fischer) captured the silver, and B3 (Jung "Jenny" Cheng '11, Lee, Hsin-Jung "Sophia" Li '11) and B4 (Tara P. Sarathi '12, Zhu Chen "Mary" Hong '10, Lin) seized the bronze.

Even in the C team division, the desire to win was never diminished. The men's C1 team (Ryan A. Rosario '12, David Y. Wen '10, Ijeoma "J" Emeagwali '12) sparred fiercely and left the ring with the gold. As the tournament came to an end, the team walked away knowing that the goal of the day was accomplished: beating Cornell and retaining the hard-earned lead in the league.

Only one tournament stands in the way of winning the ECTC cup: with only two weeks left before the Columbia University tournament, MIT outscored their opponents for the bronze.

In Division B sparring, the women's team made history and dominated their division. The B1 team (Quddas, Zhu, Chin) snatched the gold, B2 (Sun, Nix, Fischer) captured the silver, and B3 (Jung "Jenny" Cheng '11, Lee, Hsin-Jung "Sophia" Li '11) and B4 (Tara P. Sarathi '12, Zhu Chen "Mary" Hong '10, Lin) seized the bronze.

Even in the C team division, the desire to win was never diminished. The men's C1 team (Ryan A. Rosario '12, David Y. Wen '10, Ijeoma "J" Emeagwali '12) sparred fiercely and left the ring with the gold. As the tournament came to an end, the team walked away knowing that the goal of the day was accomplished: beating Cornell and retaining the hard-earned lead in the league.

Only one tournament stands in the way of winning the ECTC cup: with only two weeks left before the Columbia University tournament, MIT outscored their opponents for the bronze.

In Division B sparring, the women's team made history and dominated their division. The B1 team (Quddas, Zhu, Chin) snatched the gold, B2 (Sun, Nix, Fischer) captured the silver, and B3 (Jung "Jenny" Cheng '11, Lee, Hsin-Jung "Sophia" Li '11) and B4 (Tara P. Sarathi '12, Zhu Chen "Mary" Hong '10, Lin) seized the bronze.

Even in the C team division, the desire to win was never diminished. The men's C1 team (Ryan A. Rosario '12, David Y. Wen '10, Ijeoma "J" Emeagwali '12) sparred fiercely and left the ring with the gold. As the tournament came to an end, the team walked away knowing that the goal of the day was accomplished: beating Cornell and retaining the hard-earned lead in the league.

Only one tournament stands in the way of winning the ECTC cup: with only two weeks left before the Columbia University tournament, MIT outscored their opponents for the bronze.

In Division B sparring, the women's team made history and dominated their division. The B1 team (Quddas, Zhu, Chin) snatched the gold, B2 (Sun, Nix, Fischer) captured the silver, and B3 (Jung "Jenny" Cheng '11, Lee, Hsin-Jung "Sophia" Li '11) and B4 (Tara P. Sarathi '12, Zhu Chen "Mary" Hong '10, Lin) seized the bronze.

Even in the C team division, the desire to win was never diminished. The men's C1 team (Ryan A. Rosario '12, David Y. Wen '10, Ijeoma "J" Emeagwali '12) sparred fiercely and left the ring with the gold. As the tournament came to an end, the team walked away knowing that the goal of the day was accomplished: beating Cornell and retaining the hard-earned lead in the league.

Only one tournament stands in the way of winning the ECTC cup: with only two weeks left before the Columbia University tournament, MIT outscored their opponents for the bronze.