Professor Rosalind W. Picard, right, and founder and director of the Affective Computing Research Group and co-director of the Things That Think Consortium, responds to a statement by Professor Susan Silbey (left), a Sociology and Anthropology at the Veritas forum this past Friday in Kresge. The forum was designed around the question “Will technology save the world?” and also featured Professor George Barbarastis and Professor José Gómez-Márquez.

By Joy Lee

Over 500 attendees congregated in Kresge Auditorium last Friday at 6 p.m. to ponder a single question: “Will Technology Save the World?”

The question was the feature of the fifth annual Veritas Forum, whose mission, according to its website, is to “engage students and faculty in discussions about life’s hardest questions and the relevance of Jesus Christ to all of life.” As Kierkegaard G said in his introduction, the basis for this year’s question was that, “Technology is shaping our world. But are we and technology leading where we want to go?”

As advertised, four faculty members participated in the forum, two authors—Professor of Sociology and Anthropology Susan Silbey and Professor of Mechanical Engineering George Barbarastis, and two Christians—Instructor for D-Lab (Health) José F. Gómez-Márquez and Professor of Media Arts and Sciences Rosalind W. Picard.

Ian H. Hutchinson, Professor of Nuclear Science and Engineering, moderated the discussion. The evening began with the four speakers each introducing their positions on the topic. Although the official question asked whether technology would save the world, the focus quickly shifted to whether it was possible for technology to do so.

Silbey started off by saying, “Technology cannot save the world because it is part of the problem.” Citing two types of change that technology affects in human society, Silbey questioned the ability of technology to effectively solve society’s problems. The first type of problem that technology poses to society is the immediate issues that arise with its necessary resources and waste, along with associated negative health effects. The other issue, Silbey said, deals with the ability of technology to change the way humans think and interact. She pointed out that technology affects the way we approach the world, including how we view the problems we face as a society, but itself lacks the proper methods to identify the problems that must be fixed. According to Silbey, the fundamental issue with technology is that “Technology cannot tell us what goals to pursue, what values we should promote through social action or technology.”

Gómez-Márquez took a different approach to the topic. Technology is a tool that people can use to better others’ lives, he believes, though he made it clear that technology can’t do the job by itself. Citing instances of where technology is used to help people in the developing world, Gómez-Márquez said, “I am actually a technology optimist. What I find when we go down to the developing world where there is poverty is that it’s often not about the gadget. It’s actually a lot of other things that matter.” One of those “other things” he said, is insight. He noted that people need insight ability, though the exact prize has yet to be determined. “Since it doesn’t involve that much extra work, there’s no reason not to earn extra money for your dorms,” noted fellow co-chair Anvisha Pai ’14.

Some students seemed ready for the competition. “Our president told us all to recycle, so we could win again,” said Miren Bambloth ’13, a Burton-Conner resident.

Other students, however, seemed more critical of the program. “Conceptually it’s good, but there’s no incentive if you’re just not attached to your dorm,” said Maseeh resident Thomas A. Vilton ’14.

Further, the question was the feature of the seventh annual Veritas Forum, whose mission, according to its website, is to “engage students and faculty in discussions about life’s hardest questions and the relevance of Jesus Christ to all of life.” As Kierkegaard said in his introduction, the basis for this year’s question was that, “Technology is shaping our world. But are we and technology leading where we want to go?”

As advertised, four faculty members participated in the forum, two authors—Professor of Sociology and Anthropology Susan Silbey and Professor of Mechanical Engineering George Barbarastis, and two Christians—Instructor for D-Lab (Health) José F. Gómez-Márquez and Professor of Media Arts and Sciences Rosalind W. Picard.

Ian H. Hutchinson, Professor of Nuclear Science and Engineering, moderated the discussion. The evening began with the four speakers each introducing their positions on the topic. Although the official question asked whether technology would save the world, the focus quickly shifted to whether it was possible for technology to do so.

Silbey started off by saying, “Technology cannot save the world because it is part of the problem.” Citing two types of change that technology affects in human society, Silbey questioned the ability of technology to effectively solve society’s problems. The first type of problem that technology poses to society is the immediate issues that arise with its necessary resources and waste, along with associated negative health effects. The other issue, Silbey said, deals with the ability of technology to change the way humans think and interact. She pointed out that technology affects the way we approach the world, including how we view the problems we face as a society, but itself lacks the proper methods to identify the problems that must be fixed. According to Silbey, the fundamental issue with technology is that “Technology cannot tell us what goals to pursue, what values we should promote through social action or technology.”

Gómez-Márquez took a different approach to the topic. Technology is a tool that people can use to better others’ lives, he believes, though he made it clear that technology can’t do the job by itself. Citing instances of where technology is used to help people in the developing world, Gómez-Márquez said, “I am actually a technology optimist. What I find when we go down to the developing world where there is poverty is that it’s often not about the gadget. It’s actually a lot of other things that matter.” One of those “other things” he said, is insight. He noted that people need insight.
The Tech Tuesday, March 13, 2012

**Britain to join Obama in discouraging a strike on Iran**

WASHINGTON — Britain will add its voice to President Barack Obama’s in discouraging an Israeli military strike on Iran when Prime Minister David Cameron begins a three-day visit here this week, a senior British diplomat said Monday.

“The prime minister is pretty clear that he does not think military action against Iran would be helpful,” the diplomat, Peter Westmacott, Britain’s recently appointed ambassador to the United States, told reporters. “We do not regard that as the right way forward in the months to come.”

Cameron, he said, supports Obama’s view that Iran will not be allowed to acquire nuclear weapons. And like the president, the prime minister believes military force must be preserved as an option.

—Mark Lande and John F. Burns, The New York Times

Google to collaborate with Belgian museum

PARIS — Google, which organizes the world’s information digitally, is linking up with a procurer that aims to do something similar, on paper. It plans to announce Tuesday that it is forming a partnership with the Mundaneum, a 19th-century Belgian library that hopes to index and make accessible all the printed books of the world.

“With the partnership with Google gives us a great opportunity to spread our message to the world,” said Jean-Paul Deplus, director of the museum, the Mundaneum, which was founded in 1897 by Francis de Viset, whom the prime minister believes military force must be preserved as an option.

—Mark Lande and John F. Burns, The New York Times

Yahoo sues Facebook over patents on web technologies

Yahoo stepped up its feud with Facebook on Monday, suing the social networking giant on accusations it infringed on 10 patents tied to an array of web technologies.

Yahoo said in a complaint filed in U.S. District Court in the Northern District of California that Facebook, with over 500 million users, is “incompatible with Nicklinson’s right to respect for private life.”

—By lan Johnson

**China hints at easing monetary policy, adjusting reserve ratio**

The reserve ratio was tightened throughout 2010 and 2011 after a huge government stimulus program of bank lending set off a bubble in real estate prices.

In the first two months of this year, these measures began to hit, and bank lending fell — possibly faster than officials had expected. Normally, as many as a quarter of all bank loans in a year are made in this period. But this year, however, only 18 percent of the expected bank loans for 2012 were made, implying either sharply slowing demand for loans or bank liquidity constraints.

Andrew Batson, head of research at Dragonomics, an economic analysis firm in Beijing, said the Chinese political leadership had decided to increase bank lending but sought to strike a balance.

Recent data showing that car sales have slowed and value-added industrial production has been slower than expected have created the expectation in some circles that the leadership will once again re-

—By lan Johnson

**Britain taking steps toward legalization of euthanasia**

LONDON — A British stroke victim paralyzed from the neck down and suffering from so-called locked-in syndrome won the right Monday to seek judicial reviews in a case that presents a difficult choice for Parliament, not the courts, to decide the issue.

While euthanasia and assisted suicide are illegal in Britain, campaigns have pursued long-run efforts to liberalize and clarify the ambiguous laws surrounding these issues. Some Britons suffer from incurable ailments that have traveled as far afield as Switzerland for access to assisted suicide.

The ruling Monday seemed a modest victory for advocates of euthanasia and assisted suicide, and by no means a decisive resolution of what Charles called “questions that are great social, legal, ethical and religious significance.”

Nicklinson, who is married and has two adult daughters, suffered a stroke in 2005. He is able to communicate only by blinking and nodding to choose letters from a special electronic screen.

“Nothing is going to get better,” his wife, Jane Nicklinson, told the BBC on Monday. “The only way to relieve Tony’s suffering will be to kill him. There is absolutely nothing else that can be done for him.”

Nicklinson’s lawyers had argued for permission to seek judicial review on three arguments — two

By lan Johnson

—By lan Johnson

China hints at easing monetary policy, adjusting reserve ratio

The release was timed throughout 2010 and 2011 after a huge government stimulus program of bank lending set off a bubble in real estate prices.

In the first two months of this year, these measures began to hit, and bank lending fell — possibly faster than officials had expected. Normally, as many as a quarter of all bank loans in a year are made in this period. But this year, however, only 18 percent of the expected bank loans for 2012 were made, implying either sharply slowing demand for loans or bank liquidity constraints.

Andrew Batson, head of research at Dragonomics, an economic analysis firm in Beijing, said the Chinese political leadership had decided to increase bank lending but sought to strike a balance.

Recent data showing that car sales have slowed and value-added industrial production has been slower than expected have created the expectation in some circles that the leadership will once again re-

—By lan Johnson

**Britain taking steps toward legalization of euthanasia**

LONDON — A British stroke victim paralyzed from the neck down and suffering from so-called locked-in syndrome won the right Monday to seek judicial reviews in a case that presents a difficult choice for Parliament, not the courts, to decide the issue.

While euthanasia and assisted suicide are illegal in Britain, campaigns have pursued long-run efforts to liberalize and clarify the ambiguous laws surrounding these issues. Some Britons suffer from incurable ailments that have traveled as far afield as Switzerland for access to assisted suicide.

The ruling Monday seemed a modest victory for advocates of euthanasia and assisted suicide, and by no means a decisive resolution of what Charles called “questions that are great social, legal, ethical and religious significance.”

Nicklinson, who is married and has two adult daughters, suffered a stroke in 2005. He is able to communicate only by blinking and nodding to choose letters from a special electronic screen.

“Nothing is going to get better,” his wife, Jane Nicklinson, told the BBC on Monday. “The only way to relieve Tony’s suffering will be to kill him. There is absolutely nothing else that can be done for him.”

Nicklinson’s lawyers had argued for permission to seek judicial review on three arguments — two
House Republicans split over a bid to revise the budget deal

By Jonathan Weisman
THE NEW YORK TIMES

WASHINGTON — The House is bracing for a raucous showdown over a 2013 budget plan that has already divided Republicans because of a push by conservatives to cut spending below the level both parties agreed to in last year’s deal to raise the federal deficit.

Trying to demonstrate anew their push to reduce the size of the government, conservative House Republicans want to cap spending on programs under Congress’s discretion well below the $1.047 trillion cap set by the budget deal last summer. But House Appropriations Committee leaders and Republican moderates, facing tough re-election prospects, are not going to nominate a candidate, more than twice the 217 that Romney has won more than 50 percent of the delegates in the contests he is on track to accumulate a majority of the 2,286 total delegates. They argue that Romney has won more than 50 percent of the delegates in the contests to date.

Santorum’s delegate math looks different from Romney’s

By Michael D. Shear
THE NEW YORK TIMES

WASHINGTON — Rick Santorum’s campaign has begun to argue forcefully that Mitt Romney will fail to win the 1,144 delegates needed to cinch the Republican nomination for president, leaving the decision to a wide-open national convention in Tampa, Fla., this summer.

The argument suggests that Santorum’s strategists have all but given up on the idea that their own candidate can reach that magic number himself. A count by The Associated Press found that Romney has already collected 454 delegates, more than twice the 227 that have pledged to support Santorum. But Santorum and his advisers believe that he — along with Newt Gingrich and Rep. Ron Paul — can effectively block Romney’s march to the nomination over the next three months. If that happens, they argue, Republicans will gather for their convention with no certain winner — and with Romney at a disadvantage.

Aides to Santorum predicted that convention delegates — including a majority of the so-called “superdelegates” — would throw their weight behind Santorum once Romney failed to lock up the nomination.

“When we go to this convention, if that’s where we end up, it’s a conservative party,” Santorum said Monday on NBC’s “Today” show. “If an opportunity provides itself at an open convention, they are not going to nominate a moderate Massachusetts governor.”

Romney’s advisers dismiss the idea of a contested convention and say he is on track to accumulate a majority of the 2,286 total delegates. They argue that Romney has won more than 50 percent of the delegates in the contests to date.

Japanese companies continue to expand reach abroad

The Asahi Kasei Corp. of Japan agreed Monday to buy Zoll Medi- cal, a health care equipment maker in the United States, for $2.2 billion, becoming the latest Japanese company to expand abroad.

Under the terms of the deal, Asahi will pay $31 a share, a 24 percent premium to Zoll’s Friday closing price.

While merger activity overall has slowed down in the past year, dealmakers point to a few pockets of sustained interest. One of them is Japanese companies pursuing markets overseas even as their home markets stagnate.

About $82.8 billion worth of cross-border deals involving Japa- nese buyers have been announced in the past 12 months, nearly quadrupling the previous year’s volume, according to data from Capital IQ, a research firm.

—Mark Scott and Michael J. De La Merced, THE NEW YORK TIMES

Chancellor defends Germany’s nuclear power deadline

BERLIN — Chancellor Angela Merkel of Germany defended over the weekend her government’s decision to phase out nuclear power by 2022 and replace it with renewable energy sources, dismissing critics who said the government would never make the deadline.

Merkel made the decision nearly a year ago after a devastating earthquake and tsunami on March 11, 2011, caused a meltdown at a nuclear plant in Fukushima, Japan. The accident heightened anxieties about nuclear safety and set off new soul-searching about the wisdom of relying on nuclear power.

Merkel conceded in her weekly podcast that, “of course, we need a lot of new investment” for the plan to be carried out. But she in- sisted that her decision was the right choice.

—Michael Eddy, THE NEW YORK TIMES

Sarkozy, in rousing talk, takes conservative stand

PARIS — President Nicolas Sarkozy, trailing in opinion polls six weeks before the election, gave a rousing address to some 50,000 supporters on Sunday, striking strongly conservative notes on im- migration, Islam and protectionism.

Trying to recreate the excitement of his victorious 2007 camp- aign, Sarkozy gathered his Cabinet; his wife, Carla Bruni-Sarkozy; the former prime minister Edouard Balladur; Bernadette Chirac, a politician and the wife of former President Jacques Chirac, and even the actor Gerard Depardieu to hear him threaten to pull France out of the European Union’s visa-free Schengen agreement unless Eu- rope provides better protection from illegal immigration.

—Steven Erlanger, THE NEW YORK TIMES
Anti-abortion legislation continues to proliferate at the state level
Hypocrisy and paternalism surround the pro-life movement
By Michael Veldman

Last spring, I wrote about the worrisome nature of the state-level, Republican-led furor surrounding abortion rights. I am sad to report that the barrage has not relented. If you thought that last year’s legislation was shocking, then try the amount of salt in this new batch just knocked you out.

In Arizona, the Senate has passed a bill (20-9) that will protect doctors and other health care providers from “wrongful birth” lawsuits. This bill, if signed by Governor Jan Brewer, will allow them to withdraw information from essentially—terrible to their patients about prenatal problems such as a positive test for Tay-Sachs or Down Syndrome. Several other states have similar laws on the books. The intention, according to sponsor Senator Nancy Barto, is to prevent lawsuits from parents who, because of its unfortunate aesthetic value, closed its windows to protect the privacy of its patients from the protesters. When or not you agree with this sentiment, note that the bill could, depending on how the language is interpreted, have much more dire consequences for people experiencing complications like ectopic pregnancy, in which a condition occurs in the pregnancy which out- side the womb and is therefore, according to the NIH, “illegal.” Moreover, these developing cells must be removed to save the mother’s life, which occurs in 1-2.5 percent of pregnancies. These stark facts do not prevent many pro-lifers, including pro-life physicians and others, from supporting such a bill even in the case of ectopic pregnancy—hence the danger.

The University of Kansas is in danger of losing its obstetrics and gynecology accreditation due to their refusal to perform an abortion for them to communicate this desire. I was under the impression that women have all the facts and will no longer want children to be born. But in fact, a survey of 2,000 pregnant women found that 27 percent of them had decided not to have an abortion before an abortion. According to author Rebecca solomon, and opinion editor Andy Liang.

In Mississippi, among 20 bills and constitutional amendments are being debated about this topic. Mississippi, whose citizens rejected 58 percent to 42 percent an amendment to define anything as developed as a fetus, has found itself in the midst of the most abort states in the country and only two states that have not failed to regulate abortions. Currently, doctors must be flown out of state to the hospital in Jackson where they performed the procedure and undergo mandatory abortions, that parental consent is required for minors, and that doctors performing abortions in Mississippi be licensed in the state. According to a report by the Henry David T. Wang G; Henry Skupniewicz '13

CORRECTIONS
Letters to the editor, columns, and editorial cartoons are signed by their respective individuals and represent the views of the author, not necessarily that of the newspaper. Electronic submissions are encouraged and should be sent to letters@tech.mit.edu. Hard copy submissions should be addressed to The Tech, P.O. Box 397029, Cambridge, Mass. 02397-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the date of publication.

Letters, columns, and cartoons must bear the authors’ signatures, addresses, and phone numbers. Unsigned letters will not be accepted. The Tech reserves the right to edit or condense letters; shorter letters will be given higher priority if space is limited. All submissions, including those submitted by email, will be posted on the Tech’s website and may be published in any other format or medium now known or later becomes known. The Tech makes no commitment to publish any letter.

Guest columns are opinion articles submitted by members of the 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@tech.mit.edu, and it will be directed to the appropriate person. You can reach the editor in chief by e-mailing editor@tech.mit.edu. Please send press releases, requests for coverage, and information about events for publication to the appropriate editor. Letters to the editor should be sent to letters@tech.mit.edu. The Tech can be found on the World Wide Web at tech.mit.edu.
Abortion legislation restricts personal freedoms

Abortion legislation, from Page 4

longer be kept in the dark about their pregnancies.” This statement epitomizes the blatant hypocrisy, paternalism, and stupidity of the pro-life movement. This is the movement whose members place the life of an unloving, unthinking, memory-less mass of human cells above the life of a person. This is the movement that consistently denigrates women by proclaiming that a cadre of men are in a better position to make decisions about women’s reproductive health than women themselves. This is the movement whose leaders and mouthpieces have demonstrated their utter ignorance of how even birth control medication works, much less pregnancy and abortion.

Reading the statements of anti-abortion activists, legislators, and commentators, one gets the idea that they think science is some nebulous, unknowable demigod that intermittently spits out nuggets of irrefutable knowledge — knowledge that conveniently always supports their pre-existing beliefs, I might add. “Science has demonstrated” this and “science has proved” that, but never “researchers at Johns Hopkins have produced evidence” of something. One of my favorites reads: “Science has shown that a baby in the mother’s womb is a human being, not a blob of tissue.” That’s right, you may now rest assured, my dear reader, for apparently scientists have conclusively demonstrated that a fetus is most definitely not a “blob.” Epitomizing the cluelessness of its members, the pro-life movement has pushed ultrasound requirements in eight states and less stringent forms in as many as 15 others; meanwhile, it has been demonstrated that viewing an ultrasound does not change the abortion decision of the pregnant person. In some cases, seeing that the fetus is indeed just a “blob” at the stage of development when most abortions take place reinforces the abortion-seekers resolve.

Luckily state-level abortion legislation is not uniformly awful. According to the Sacramento Bee, the California legislature will likely pass a law allowing non-physicians such as midwives, nurse practitioners, and physician assistants to perform a certain method of abortion dubbed “aspiration” abortion. This will make California the fifth state to make such allowances, which greatly improve access to safe abortions, especially to rural and low-income areas. But there is still little reason to celebrate. According to the Guttmacher Institute, a record 92 abortion restrictions were passed in 2011. Lacking a major revival of pro-choice activism — not just pro-choice ideals — and a recommitment of the Democratic Party to what was once, I have heard, a major plank of its platform, we could see an even more devastating 2012.

Abortion legislation restricts personal freedoms

Abortion legislation, from Page 4

longer be kept in the dark about their pregnancies.” This statement epitomizes the blatant hypocrisy, paternalism, and stupidity of the pro-life movement. This is the movement whose members place the life of an unloving, unthinking, memory-less mass of human cells above the life of a person. This is the movement that consistently denigrates women by proclaiming that a cadre of men are in a better position to make decisions about women’s reproductive health than women themselves. This is the movement whose leaders and mouthpieces have demonstrated their utter ignorance of how even birth control medication works, much less pregnancy and abortion.

Reading the statements of anti-abortion activists, legislators, and commentators, one gets the idea that they think science is some nebulous, unknowable demigod that intermittently spits out nuggets of irrefutable knowledge — knowledge that conveniently always supports their pre-existing beliefs, I might add. “Science has demonstrated” this and “science has proved” that, but never “researchers at Johns Hopkins have produced evidence” of something. One of my favorites reads: “Science has shown that a baby in the mother’s womb is a human being, not a blob of tissue.” That’s right, you may now rest assured, my dear reader, for apparently scientists have conclusively demonstrated that a fetus is most definitely not a “blob.” Epitomizing the cluelessness of its members, the pro-life movement has pushed ultrasound requirements in eight states and less stringent forms in as many as 15 others; meanwhile, it has been demonstrated that viewing an ultrasound does not change the abortion decision of the pregnant person. In some cases, seeing that the fetus is indeed just a “blob” at the stage of development when most abortions take place reinforces the abortion-seekers resolve.

Luckily state-level abortion legislation is not uniformly awful. According to the Sacramento Bee, the California legislature will likely pass a law allowing non-physicians such as midwives, nurse practitioners, and physician assistants to perform a certain method of abortion dubbed “aspiration” abortion. This will make California the fifth state to make such allowances, which greatly improve access to safe abortions, especially to rural and low-income areas. But there is still little reason to celebrate. According to the Guttmacher Institute, a record 92 abortion restrictions were passed in 2011. Lacking a major revival of pro-choice activism — not just pro-choice ideals — and a recommitment of the Democratic Party to what was once, I have heard, a major plank of its platform, we could see an even more devastating 2012.

Abortion legislation restricts personal freedoms

Abortion legislation, from Page 4

longer be kept in the dark about their pregnancies.” This statement epitomizes the blatant hypocrisy, paternalism, and stupidity of the pro-life movement. This is the movement whose members place the life of an unloving, unthinking, memory-less mass of human cells above the life of a person. This is the movement that consistently denigrates women by proclaiming that a cadre of men are in a better position to make decisions about women’s reproductive health than women themselves. This is the movement whose leaders and mouthpieces have demonstrated their utter ignorance of how even birth control medication works, much less pregnancy and abortion.

Reading the statements of anti-abortion activists, legislators, and commentators, one gets the idea that they think science is some nebulous, unknowable demigod that intermittently spits out nuggets of irrefutable knowledge — knowledge that conveniently always supports their pre-existing beliefs, I might add. “Science has demonstrated” this and “science has proved” that, but never “researchers at Johns Hopkins have produced evidence” of something. One of my favorites reads: “Science has shown that a baby in the mother’s womb is a human being, not a blob of tissue.” That’s right, you may now rest assured, my dear reader, for apparently scientists have conclusively demonstrated that a fetus is most definitely not a “blob.” Epitomizing the cluelessness of its members, the pro-life movement has pushed ultrasound requirements in eight states and less stringent forms in as many as 15 others; meanwhile, it has been demonstrated that viewing an ultrasound does not change the abortion decision of the pregnant person. In some cases, seeing that the fetus is indeed just a “blob” at the stage of development when most abortions take place reinforces the abortion-seekers resolve.

 Luckily state-level abortion legislation is not uniformly awful. According to the Sacramento Bee, the California legislature will likely pass a law allowing non-physicians such as midwives, nurse practitioners, and physician assistants to perform a certain method of abortion dubbed “aspiration” abortion. This will make California the fifth state to make such allowances, which greatly improve access to safe abortions, especially to rural and low-income areas. But there is still little reason to celebrate. According to the Guttmacher Institute, a record 92 abortion restrictions were passed in 2011. Lacking a major revival of pro-choice activism — not just pro-choice ideals — and a recommitment of the Democratic Party to what was once, I have heard, a major plank of its platform, we could see an even more devastating 2012.
Surviving, remembering, and fighting back

Members of the MIT community share stories of their participation in Relay For Life

By Cali Xu

What better reason is there to pull an all-nighter than to support the worldwide fight against cancer? This weekend, over 1,000 students and staff members participated in the Relay for Life event organized by the MIT chapter of Colleges Against Cancer (CAC).

From 6 p.m. Saturday to 6 a.m. Sunday, hundreds of students staged a circular around the Johnson track. In addition to the core of every Relay event — the collection of lighted glowsticks shining with hope in the darkness of the night, and the Fight Back Corner, which hosted dozens of lighted tent booths — was the Luminaria Ceremony. Participants listened to guest speakers, watched performances by student a cappella and dance groups, and listened to inspiring stories. The event also included a variety of fundraising booths around the track, such as a photo booth, massage booth, and just-friend booths.

At the start of Relay, students and staff members gathered to remember the families and friends who had been impacted by cancer. Iris E. Shue '14, a member of the CAC, shared her story:

“Last year was my first Relay, and besides being a lot of fun, the event was really meaningful because I had someone on my team who was directly affected by cancer. My uncle had leukemia, but he was really lucky in that he survived because my dad is a bone marrow donor. That was so lucky, that was a really difficult time for my family. I’ve heard countless stories and know of people who have lost part of their family members. I think that growing up, you lucky; that was a really difficult time for my family. I’ve heard countless stories and know of people who have lost part of their family. I think that growing up, you

In his late 20s, his friend hunter Hawkins was diagnosed with leukemia, and I Relay for Such a community was really meaningful to me. He was the happiest I'd seen in years. Little did I know, but he was really lucky in that he survived because my dad is a bone marrow donor. That was so lucky, that was a really difficult time for my family. I’ve heard countless stories and know of people who have lost part of their family members. I think that growing up, you lucky; that was a really difficult time for my family. I’ve heard countless stories and know of people who have lost part of their family members. I think that growing up, you

Students from Wellesley College play a game during the Relay for Life on Saturday night. The relay was held from 6 p.m. on Saturday to 6 a.m. on Sunday in Johnson Athletic Center, and raised over $76,000 for the American Cancer Society.

Interview with Iris E. Shue '14

‘My grandmother got cancer when I was very young. I didn’t really understand what was happening at that time. You can’t really grasp the magnitude of a disease that affects a lot of people, and it had a huge effect on my family. When I first told him I got into MIT, on the airport, even under the best of circumstances, there would be little chance that I would go to MIT for the first time last year and had about 600 participants, raising over $40,000. This year, Life Campus raised over $720,000, and donations are still being accepted online.

Out of all the charitable events held around the world, why do millions of people choose to participate in Relay For Life? According to the American Cancer Society, in Massachusetts alone there were over 300 Relay For Life cancer cases in 2012. In the MIT community, there are countless students who have participated in Relay For Life, either personally or as a member of a family or friend who had been touched by cancer in some way. Some of their stories are below.
Start recycling!
Dorms participate in recycling competition, prize to be awarded

Romi S. Kadri ’14, also a Masехh resident, didn’t foresee students going out of their way to recycle. “With MIT students leading such busy lifestyles, recycling is inevitably a lower priority,” said Kadri, suggesting that “individual rewards or a credit for recycling” would give more incentive. Though the current Greenbean machine in the Student Center pays money for certain recyclables, its data is currently not used for the competition. Pai attributes this to the difficulty of dealing with students’ personal Greenbean accounts and the fact that the machine is mostly used by fraternities and sororities while the competition is between dorms.

Villalon also said that most students’ recycling habits are probably related to whether they recycled before coming to MIT. “If you give it a personal connection, then that’s another incentive — peer pressure.”

MIT’s version of RecycleMania is part of a larger, 10-week intercollegiate competition sponsored by the nonprofit RecycleMania Inc. “MIT has always participated in RecycleMania, but has never placed highly,” said Pai. Pai added that the UA is focusing on the intradorm competition as opposed to the intercollegiate competition — in which MIT placed 68th last year out of 288 schools — though campuswide recycling rates will still count toward the competition. Pai also said that one of the goals of the competition is to maintain high recycling rates during and after RecycleMania.

Participation in the recycling competition involves simply placing recyclable materials in the recycling containers provided at each dorm. The UA will be posting updates on dorm rankings and recycling rates on the MIT RecycleMania website (http://web.mit.edu/recyclemania/) so participants can track their dorm’s progress.

Joan M. Blake
will conduct a book reading on
Standing on His Promises:
Finding Comfort, Hope, and Purpose in the Midst of Your Storm
Price Church Cambridge
Zero Garden St.
Cambridge, MA 02138
Tuesday, March 27, 6:30 p.m.

Recycle, from Page 1

The UA Committee on Sustainability publicized RecycleMania at Tuesday’s UA midnight study break. They handed out cardboard recycling bins for students to use in their rooms.
**Least Action Principle** by Amanda Aparicio

---

**WHY I IMMERSE MYSELF IN MATH & PHYSICS**

_Equations of Description_

Math & Physics

\[ E=mc^2 \]

\[ \sum_{i=1}^{n} x_i y_i = \sum_{i=1}^{n} x_i + \sum_{i=1}^{n} y_i \]

\[ \frac{d}{dx} \int f(x) \, dx = f(x) \]

\[ a^m + 1 = 0 \]

\[ \sum_{i=1}^{n} a_i = \frac{n}{2} \]

If this doesn’t make sense, Google it. If you don’t agree, go disprove it.

---

**ISN - Army Labs**

2012 Student Summer Internship Program

**Earn up to $2864/month this summer!**

*With the ISN/ARMY Labs Summer Intern Research Program*

This program provides opportunities for MIT undergraduate students to conduct research at state-of-the-art Army laboratories working under the direction of Army scientists. Most areas of science and engineering are of interest. Internships typically run from June to August.

As a summer intern, students:

• Gain valuable research experience
• Build new professional relationships
• Access world-class facilities
• Become part of a team that provides new, life-saving technologies.

If you are interested in learning more about this program the first step is to register at the website:


If you have questions about this program, or experience difficulty using any features on website, please contact Marlisha McDaniels - mmcd@mit.edu or the ISN Headquarters, NE47-4thFl. 617.324.4700.

*The Army Lab provides the intern's salary, which typically ranges from $2280/month to $2864/month depending on class year. Under certain circumstances the ISN can provide the intern with a supplement of up to $1500 to defray costs of local accommodations and travel.*

---

**Techdoku**

Solution, page 11

**Sudoku**

Solution, page 11
Saturday Stumper by Brad Wilber

Solution, page 10

ACROSS
1 Label on many Miami Vice fashions
9 Destined to comment?
14 Mideast digestive aid
15 Grenada neighbor
16 Players will walk on it
17 Place with no self-service gas stations
18 Wine-rack selection
19 Big Ten team
21 Luna de miel participants
23 Barely beat, with “by”
24 Minor eruption
25 Factions
26 Beset by butterflies
28 Players will walk on it
29 Interpol agent of filmdom
30 Dancer’s prompter
31 Bjorn Borg trademark
32 Comradely
33 Major Chicago tourist attraction
34 Stuttgart-to-Munich direction
36 History test answer, maybe
39 “A lousy teacher,” per Bill Gates
41 Channel name shortened in 2006
43 Assurance
45 Blu-ray with the featurette “The Plane Behind the Legend”
46 They’re thrown from horses
47 Contractor’s projections
50 The Sun, for one
51 “Made in Chocolatina Town” sloganer
53 Royal Jordanian Airlines destination
54 DoD branch
58 “Maid of Athens, __ we part.” Byron

DOWN
1 Diary features
2 Frees
3 Russian: Vanya :: Italian:
4 CBS’ “Poet in Residence”
5 Visibly discomfited
6 Some March Madness finishes
7 Escapes gradually
8 Surflet
9 Nibbles
10 “Hah!”
11 Round holder
12 Sources of annoying wind
13 Suggestion dismissal
15 Hasbro subsidiary
20 Signal-carrying, in a way
22 Making a crossing
26 Dietary guideline source
27 Plan, with “but”
29 Interpol agent of filmdom
31 Dove-releasing event
32 Comradely
33 Major Chicago tourist attraction
34 Stuttgart-to-Munich direction
36 History test answer, maybe
39 “A lousy teacher,” per Bill Gates
41 Channel name shortened in 2006
43 Assurance
45 Blu-ray with the featurette “The Plane Behind the Legend”
46 They’re thrown from horses
47 Contractor’s projections
50 The Sun, for one
51 “Made in Chocolatina Town” sloganer
53 Royal Jordanian Airlines destination
54 DoD branch
58 “Maid of Athens, __ we part.” Byron

The MIT community celebrating the best of the MIT community

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

AWARDS CONVOCATION

awards.mit.edu

Nominations are now open!

Deadline is March 19

The MIT community celebrating the best of the MIT community

MacVicar Day 2012

Innovations in Undergraduate Education at MIT: Past, Present, and Future
In the Tradition of Margaret MacVicar and Robert Silbey

Friday, March 16, 2012, Bartos Theater, E15-070

Refreshments: 2:30 PM
Symposium: 3:00 – 5:00 PM

Sponsored by The MacVicar Faculty Fellows Program and the Office of Faculty Support
By Helene Cooper and Eric Schmitt
THE NEW YORK TIMES

WASHINGTON — The Obama administration is discussing whether to reduce U.S. forces in Afghanistan by at least an additional 20,000 troops, possibly more, by 2013, reflecting a growing belief within the White House that the mission there has reached the point of diminishing returns.

Accelerating the withdrawal of United States forces has been under consideration for weeks by senior White House officials but those discussions are now taking place in the context of two significant setbacks to U.S. efforts in Afghanistan — the killings on Sunday of Afghan civilians by a U.S. Army staff sergeant and the burning of Qurans by U.S. troops. Administration officials cautioned on Monday that no decisions on additional troop cuts have been made, and in an interview President Barack Obama reaffirmed his commitment to the Afghan mission, warning against “a rush for the exits” amid questions about the U.S. war strategy. “It’s important for us to make sure that we get out in a responsible way, so that we don’t end up having to go back in,” Obama said in an interview with KZKA in Pittsburgh.

The United States now has just under 90,000 troops in Afghanistan, with 22,000 of them due home by September. There has been no schedule set for the withdrawal of the remaining 68,000 U.S. troops, although Obama said last year that the drawdown would continue “at a steady pace” until the United States handed over security to the Afghan forces in 2014.

At least three options are under consideration, according to officials at the White House, the Pentagon and the State Department. One plan, backed by Thomas E. Donilon, the national security adviser, would be to announce that at least 10,000 more troops would come home by the end of December, and then 10,000 to 20,000 more by June 2013. Vice President Joe Biden has been pushing for a bigger withdrawal that would reduce the bulk of the troops around the same time the mission shifts to a support role, leaving behind Special Operations teams to conduct targeted raids.

Any accelerated withdrawal would face stiff opposition from military commanders, who want to keep the bulk of the remaining U.S. troops in Afghanistan until the end of 2014, when the NATO mission in Afghanistan is supposed to end.

Their resistance puts Obama in a quandary, as he balances how to hasten what is increasingly becoming a messy withdrawal while still painting a portrait of success for NATO allies and the American people.
Tech and religion at Veritas Forum

Veritas Forum, from Page 1

to develop new technologies, and said, “It’s less about the hardware and more about the intangible.” The intangible includes hope, which Gómez-Márquez said is especially important in poorer countries with fewer resources.

“It’s about the confidence of knowing that at a certain point, you don’t have all the answers,” he said, “and you have to rely upon something bigger yourself!” For Gómez-Márquez, that something is found in his Christian faith. He admits, “It’s really not about what I can do. It’s about what the God that I believe in can do through me.”

Barbastathis agreed that technology could help people, but that its benefits to society were decided by the choices that members of society made. He observed that many technologies could be used for both good and evil, and posed the question, “How do you judge how you use technology?”

Barbastathis believes that the answer lies in the “decency of [human] society” to decide what is good for each other provided we have some sort of basic covenant. He explored the implications of sharing technology and scientific knowledge in light of this potential for either good or evil, and noted that hopefully through the sharing of information, those who are in it for good will always stay a step ahead of those who are in it for harm. He concluded by stating, “I don’t know to what degree the world needs saving, but I think that technology can make it a better place.”

Picard opened her talk by asking, “What are the world’s hardest problems and what is the promise of technology to solve them?” Describing the benefits of autism research and the technology that has been developed to help autistic individuals, Picard noted that while the technology is good, it cannot cure people of autism. Picard then posed the question of whether curing people of autism was the best thing for them, noting that many patients that she speaks with ask not for a cure that will change who they are, but for a way to cope with their autism. “We have to be very careful and humble when we think we know what is best,” Picard said, “especially when it involves other people.” Like the other speakers, Picard also discussed the potential benefits and harms that are possible through the use of technology. Even everyday technology such as cell phones can be used for both good and for great harm depending on who is using it.

So how do we look to in life? “I want to build great technology to help our world,” Picard said, “and I want to go of whatever I have to help people in need. I deligit in this work.” But, she said, the meaning of life is in knowing a God whom she believes does have the answers and can save the world.

During the question and answer session that followed the talks, the panelists were asked, “We’ve all admitted to the limits of technology, and in that sense, perhaps technology will not save the world, where does our hope lie?” Barbastathis answered, “In ourselves,” while Gómez-Márquez said, “Beyond ourselves — in the Christian God.” Silber commented, “In our youth,” and Picard concluded, “In our youth, in ourselves, but all of us informed by a God who knows more than we do and loves all the people in the world.”

MIT Fighting World Hunger invites you to the first annual MIT HUNGER BANQUET

A Hunger Banquet is an experience in which you and the other attendees are divided into three groups that represent different socioeconomic statuses. The size of your meal reflects the typical meal a person of that economic status would eat, and the number of people in each group reflects the proportion of people in the world with each status.

Proceeds benefit the MIT Soup Kitchen and famine alleviation in the Horn of Africa through the World Food Programme.
ATHLETE OF THE WEEK: CURTIS WU ’14

Tennis, teammates, and thermodynamics

An interview with the NEWMAC Men’s Tennis Rookie of the Year on life at MIT

By Nidharshan Anandasivam

Curtis Wu ’14 is a Course 10 (Chemical) major at MIT and a member of the MIT Men’s Tennis Team. He has won numerous awards for his tennis prowess over the years, excelling as one of the top players on both his high school and college varsity teams. During high school, Curtis won the Empire League individual championship all four years and led his team to the Empire League championship in 2011. The California Intercollegiate Federation Individual Champion for the 2011-12 tennis season, Curtis became NEWMAC Rookie of the Year and first team All-NEWMAC. His win total is the second highest on the MIT squad.

Even with such dedication to the sport, Curtis has many loves besides tennis. He loves snowboarding, bowl, cook, draw, finds new restaurants in Boston to satisfy his perpetual hunger, and do random and spontaneous things with his friends. He even mentions his love for rain. Curtis said that he hoped to move to Seattle or Sweden later on in life. “As the rain set down, Curtis continued to dote on a rainy life as a student-athlete on the MIT Men’s Tennis Team. The only thing he couldn’t initially get you into tennis? Did you go to this competitively at an early age? Curtis Wu. My dad was the one who got me into tennis. He wanted me to play at a competitive level and I started training at the age of 10 (which is actually pretty late). By the time I was 14, I was playing in national tournaments and was highly ranked in the Southern California region and the nation. When I turned 14, I started traveling across the country playing high-level national tournaments. I played in Haverford, Michigan, Florida, Texas, New York, and many other states.

What do you like about the MIT Tennis team?

CW: I love being able to travel to other universities to play matches and get to know my teammates better. But I think the best part of traveling is all the cool places we get to stop to eat at. It’s always interesting finding newhole-in-the-wall restaurants in some obscure town.

CW: Describe some of the interesting aspects of life as a member of the tennis team.

CW: The team is composed of 18 dedicated players. It’s awesome getting to know each and every one of them, whether it be at practice or a match. But the best part is actually getting to fly somewhere and even sometimes work on p-buts, such as being in the middle of a tennis court during our destination because we know exactly where we’ll be staying for the weekend. We always arrive to this tiny house behind a motel. It’s owned and rented out by the same family. It’s a normally a house that has a smaller proportions than a normal house. There’s a pool out back (god forbid anyone goes in) that’s about the size of a hot tub. We always joke about this house because it’s so strange but it’s become a tradition for us when we travel to Williams and it provides us with a sense of comfort for our upcoming matches.

CW: What’s your favorite tennis shot?

CW: ‘If I would have to say one, it would be the lob. It’s like a second-hand Forehand. I can really use a one-handed forehand (most players use this) but I started working on hitting a two-handed forehand when I saw someone use it two years ago. It’s a lot of fun to use because it is really effective and usually catches my opponent off guard.

CW: How do you find a balance between classes and sports at MIT?

CW: Admittedly, it’s difficult. My time management skills could probably use a bit of work but the tennis coach is always flexible and the great thing about tennis is that it doesn’t occupy a whole lot of time to go out and practice. I can always schedule a practice session on the weekend or I’m free during the week.

What is the most enjoyable or most intense class that you’re taking right now?

CW: 10.033 — Chemical and Biological Engineering Thermodynamics. It is my favorite class because in the people in that class are awesome. It is intense because we just had a drastically hard midterm.

Basketball earns first-ever trip to national semifinals

By Shri Ganeshram

After two wins last weekend, MIT’s Men’s Basketball team earned itself a trip to the Final Four round of the NCAA Divi- sion III Tournament for the first time in program history. MIT beat St. Joseph’s 83-67 and then defeated Johns Hopkins to secure its spot in the Final Four.

MIT dominated the first half in its Sweet Sixteen game against St. John’s Island. The game started close, with neither team able to gain an advantage. St. John’s Island led 10-9 with 10:40 left. MIT turned its lead to 27 points, scoring a 10-run in less than four minutes. Mitchell H. Kates ’13 and James D. Karraker ’12 exchanged threes to help MIT maintain its lead, The Engineers ended the first half, 44-30.

MIT coasted through the second half of the game, scoring 49 points in the second half. Senior Nathan E. Peterson had the top individual showing of the day, placing fifth on the day with 16. Karraker led the 3-point contest; MIT starting with 16.14 left in the second half. The last minute was a free-throw contest; MIT ending with an eight-point advantage no trouble holding on to the lead, winning 69-54.

The Engineers once again had a strong performance in the final eight. Twelve games, in Franklin and Mc- shall (F&M), who defeated No. 2 ranked Engineers in the Sweet Sixteen. The Engineers started slowly, down 5-9 at 14:11. After three consecutive 3-pointers, MIT turned the game around, taking a 14-9 lead against F&M. The Engineers ended the half with a strong 20-32 lead. F&M was able to reduce MIT’s lead to eight with 1:14 left in the second half. The last minute was a free-throw contest; MIT ending with an eight-point advantage no trouble holding on to the lead, winning 69-54.

The Engineers will next be playing Friday, March 16 against Wisconsin-Whitewater in Salem, Va. in the NCAA Division III Final Four. Both teams met in Salem last year that game will then play the winner of the Cabrini-Illinois Wes- leyan game in the finals.

Baseball shuts out Gordon College, 10-0, for first victory of 2012 season

By Phil Hess

MIT used a 16-hit, 10-run offensive attack this afternoon that lifted the Engi- neers to a 10-0 win over Gordon College. The Engineers picked up home runs from Bryan A. Macomber ’12 and Parker A. Tew ’15 and six strong in- innings from Kyle J. Perez ’15 as the Engineers claimed their first win of the season.

Tew, who had three hits on the day, drove in the first run of the game for MIT (1-2) with a second-inning single that brought home Mangrum, who had singled and stole second. Tew then made it 2-0 with a solo shot in the fourth, first of the season.

That was all the offense that Parent would need as he scattered a pair of hits and a walk over his six innings, striking out six. After he departed the game, MIT broke the contest open with seven runs in the seventh. Four singles and a hit and a bit put a pair of runners on one down. Macomber then followed with a three-run home run to make it 6-0. The Engineers added an unearned run on a Gordon er- ror before Junior Riccardo J. Perez singled home to move it to 9-0. MIT finished the scoring in the frame when Swanson hit into a fielder’s choice with the bases loaded.

Parent drove in his third run of the day with a sac fly in the eighth to close out the scoring. MIT got a seamless inning such from Brandon Lowe ’14, Timothy M. Wil- son ’14, and Philip M. Reier ’15 out of the bullpen to preserve the shutout.

MIT will be back in action on Saturday when the Engineers will play a double- header against Trinity College in a pair of games that will be played at Central Con- necticut State University starting at 1 p.m.