Freshman orientation
Incoming frosh numero ‘uno’ on invention list

Canadian teenager Ben Gulak got a bit of a head start on his training in mechanical engineering. As an incoming freshman in the MIT Class of 2012, he’s already been featured on the cover of Popular Science magazine for having come up with one of the year’s top 10 inventions.

In fact, his was number one.

Gulak, who is just 18, will also be a guest on the Tonight Show with Jay Leno later this month, demonstrating his unique electric unicycle-like vehicle. He has been working on the project for two years, initially as a science fair project that made it all the way to second place in the Intel International Science and Engineering Fair (where he also won a special award for the project with the most marketability).

Gulak first applied to MIT last year, but was wait-listed and decided to take a year off rather than settle for the project with the most marketability.

The inspiration for the cycle came when Gulak visited China in 2006 and was amazed at the overwhelming pollution that completely blocked the view of the surrounding country as his airplane came in for landing. He realized that much of that smog was coming from the thousands of motor scooters whizzing through the streets and figured that there had to be a better way.

The design he came up with has two wheels mounted side by side, very close to engineering, especially the hands-on approach.”

The perspective that MIT brings to engineering is really unique,” he says. “I really like the experience that

Thought provoker: MIT’s Rebecca Saxe probes mechanics of judgment, beliefs

Assistant Professor of Cognitive Neuroscience
Rebecca Saxe

How do we know what other people are thinking? How do we judge them, and what happens in our brains when we do?

MIT neuroscientist Rebecca Saxe is tackling those tough questions and many others. Her goal is no less than understanding how the brain gives rise to the thing we do often as we try to figure out why others behave as they do.

That finding is “one of the most astonishing discoveries in the field of human cognitive neuroscience,” says Nancy Kanwisher, the Ellen Swallow Richards Professor of Brain and Cognitive Sciences at MIT and Saxe’s PhD thesis adviser.

“We already knew that some parts of the brain are involved in specific aspects

Ghoniem gets KAUST grant
Ahmed F. Ghoniem, the Ronald C. Crane (1972) Professor of Mechanical Engineering, has won a $10 million grant from the King Abdullah University of Science and Technology.
Robert Hulsizer, physics professor emeritus, 88

Professor of Physics Emeritus Robert I. Hulsizer Jr. PhD '48, a former chair of the faculty and expert on elementary particle physics whose zeal for teaching science made him a student favorite at MIT, died on April 30 of complications from Alzheimer's. He was 88.

Born in East Orange, N.J., in November 1919, Hulsizer received his BS in math from Bates College in 1940, an MA in physics from Wesleyan University in 1942 and his PhD in physics from MIT.

During World War II, Hulsizer helped develop radar at the Radiation Lab at MIT. Among the applications he worked on were radar-guided bomb sights that allowed bombers to find their targets through cloud cover, which was an important advance for wartime pilots who previously relied on visual sighting.

In 1969, after spending 15 years at the University of Illinois, he returned to take a professorship at MIT and to direct what became the Education Research Center, which was focused on new ways of teaching science and integrating the humanities and social sciences.

A tremendously popular and inspiring professor, Hulsizer saw teaching as an essential part of being a scientist. For many years, he taught the 8.01 and 8.02 elementary physics courses required of all MIT students, where he created a multitude of lively, vivid lectures and demonstrations that brought the subject to life.

Ray Magluzzo '72, better known as half of Chick and Chock from the National Public Radio series Car Talk, said Hulsizer was one of his favorite professors at MIT.

"I only took one class with him but he made a tremendous impression on me—he had a very gentle, non-judgmental way of conveying complex concepts," Magluzzo told the MIT News Office. "I would say he gave me the confidence to tackle a few courses that I probably should have flunked."

Hulsizer's talent as a teacher sprang from his insights, deep empathy and his conviction that complex ideas can be understood to anyone. One student evaluation from his class read, "We ... wanted to learn from him, and he was very enthusiastic for the subject. To learn from a man like him makes me feel real young like him is happy. He is considerate, kind, highly intelligent and can relate to students even though he is decades older."

Hulsizer and his wife were housemasters of Ashdown House, a graduate dormitory, from 1974-85. The pair hosted a popular weekly evening of ice cream and socializing. When they stepped down as housemasters, the space where it was held was renamed the Hulsizer room.

Hulsizer retired in 1986 after 22 years as a professor at MIT, and continued teaching at the Institute for many years after. In Chilmark, Mass., where he had a second home, he served as chair of the Zoning Board of Appeals and of the Town Affairs Committee.

He was a fellow of the American Physics Society and a member of Sigma Xi, Phi Beta Kappa, the American Association of University Professors and the American Association of Physics Teachers. Hulsizer also served as the chair of the MIT faculty from 1977-79.

Hulsizer's memory began to fail him several years ago. He gave up teaching when he could no longer recall scientific formulas fast enough to stay ahead of his students. He was diagnosed with Lewy Body dementia, an Alzheimer's-like disease. He is survived by his wife of 41 years, Carol Ksen Hulsizer. His marriage to Bernice L. Hulsizer ended in divorce in 1965. He is survived by his children from his first marriage: Stephen Hulsizer and wife, Elise, of Seattle; Ann Wynmore of Jennie, N.M.; Morgan Jenkins, of Frederick, Va.; and Cynthia Hulsizer and husband, Bob Bernthal, of Phil, Ill. He is also survived by his stepchildren, Elizabeth Ascher and husband, Michael Yognam, of Cambridge, Mass.; Elise Ascher of San Diego, and even Aeber and wife, Jeanne Jordan, of Newtown, Mass.; and grandchildren Adam Wynmore, Sara and Robin Jenkins, Madeline and Alex- andrea Yognam, Michael Ascher and Ana Maria Ascher.

Memorial services will take place Saturday, July 19, in Chilmark and at MIT on Sunday, Oct. 19. In lieu of flowers, gifts may be made to the Robert I. Hulsizer Jr. (1948) Memorial Fund.

"We were so moved by his memorial and by the outpouring of support from students from different countries form engineering design teams and build robots.

Alexander Slocom, professor of mechanical engineering, enced the event, missing his signature auctioneer's patter with a message about why the context and MIT students' excitement about hands-on engineering is so important.

"MIT is the world university, and when kids work together this way I know there's hope. This is what the future of the planet is about—experimenting, testing, failing and playing with ideas. That's how learning takes place," he said. "That's how deep."

Slocom, who has run the 2.007 contest and taught the Introduction to Design course for more than a decade, added energy-awareness as an engineering principle this year, he said.

"Notably absent were the massive plywood and lumber content tables of previous years. The robots now run on the floor, saving wood and other materials.

"This is our first attempt to do a green contest. We've saved materials by using the floor, and other MIT programs like MITES and the Edgerton Center will use the scoring furniture. Everything is recycled," Slocom said.

Yet the spirit of invention prevails. As Slocom puts it in his wrap-up of 2.007 for 2008, "The machines, the students, it's all geek-alicious. It's geek-aliciously manufactured robotization."
David Chandler

The economic issues are often as important as the technical challenges when you're trying to improve the lives of people in impoverished communities. That's what environmental engineering student Kendra Johnson found when she tried to improve water quality in a rural Ecuadoran village and ended up devising an innovative way of using local arts and crafts to pay for the project.

When Johnson first arrived two years ago in the tiny village of Santa Ana, in the headwaters of the Amazon, she was expecting to help draw a water filtration system for the residents. It turned out that an existing water project already included plans for such a filtration system, so Johnson pitched in and helped the local people get the project completed. It turned out to be harder than she expected. By the end of that summer, the water system was in place and Johnson, along with fellow student Freyolani Sifuentes, now a senior in chemical engineering, had written an operating manual for the system and held training sessions in how to keep it running. The filtration system has thus far worked perfectly.

It took two years and two return visits, with funding from grants from MIT’s Public Service Center, to get everything working. Initially, the delivery system was full of leaks, but Johnson and Sifuentes (and eventually another student, Fernando Funakoshi) helped the villagers go through the system, pipe by pipe, and plug all the holes. They also helped to build a section of concrete dam to prevent the river from swamping the water system's inlet pipes, helped to get the system's slow sand filter working properly, and painted the inside of an elevated water tank that was to hold a day's water supply. Now the town has an effective delivery system with filtration and chlorination that provides water for sinks and toilets at most of the residents' wood-and-thatch homes.

With the leaks all fixed, Johnson says, "finally, a whole tank of water will last a whole day.

But that was not the end of the problems. Maintenance, supplies and operation costs for the system were more than the 250 villagers, who mostly subsist through a traditional form of sustainable-subistence agriculture, could afford.

On one of Johnson’s trips to Ecuador, her mother Tera Johnson came to visit her and bought one of the decorative ceramic bowls that the Rich family makes. When a visitor to her home in Wisconsin saw the bowl and suggested that people would pay a lot for such pieces, the Rich agreed. They decided that the local crafts could produce enough income for the families to keep up the water system—and turn a profit.

On their next visit to Santa Ana, Johnson and her mother bought a collection of the bowls, along with jewelry made from local seeds, and have been selling them through a gallery and a website (sachayaku.org) and occasionally, like last Friday, in MIT’s Lobby 10. "It’s an amazing culture, extremely collaborative," Johnson says. She will return to Santa Ana this summer with three other MIT students, to further improve the water system and do some health screening to measure the impact of the clean water on the people’s health. She hopes to see the project become an ongoing, sustainable solution to the town’s needs for safe water.

Johnson hopes to become a doctor, and says that maybe someday she would return to this region and perhaps set up a clinic. But she also hopes that the basic concept, of making use of local people’s artistic and crafts skills to support important local needs, can be expanded to small communities all over the developing world.

"The goal would be to figure out a model to export this to other communities, of linking the art to the water," she says. "I want to make sure this continues."
Can a prize designed for the high-tech challenge of helping to get people into space be applied to solving tech-related, down-to-Earth problems of life and death? Pose the question to a group of MIT students and you get three of five giving a resounding "yes." And the other third adds a strong "maybe."

That was the outcome of the first class held in the new collaboration between MIT and the California-based X-Prize Foundation, whose founder and chair is M. Peter Diamandis '83, SM '88, '89.H. '89. The class had the task of trying to design a new $10 million prize, or challenge, for the foundation. "Like everyone else, we don't have the ability to know what the difference they will make and when. "The impact of each scenario on fleet-wide emissions target, their methodology—but plausible—rates between 2035 and 2035 is almost 40 percent lower than it would be if no action were taken."

"Now you're talking really big reductions," Bandivadekar said. "Despite enormous growth in demand, fuel use in 2035 would be lower than it was in 2000."

The overall message? "If our goal is to achieve deep, long-term reductions and find ways to make the rate of growth in demand. With that combination we can get very deep cuts by 2035. Bandivadekar said these "will have a long-term effect on the carbon emissions we put into the atmosphere, and therefore make the world warmer."

"The magnitude of the changes required to achieve these reductions is daunting, especially as current trends run counter to those changes," said Anup Bandivadekar, a professor of mechanical engineering and director of MIT's Energy Initiative and is now an analyst at the International Energy Agency. "Among the biggest hurdles will be changing consumer behavior."

"The class was taught by Erika Wagner SM '97, PhD '07, an instructor in the School of Engineering and director of the new collaboration, X-Prize Lab @ MIT. The class formed three teams, each of which was to come up with a detailed proposal. Two of the teams did just that, proposing specific awards that the foundation may decide to adopt. But the third team, after studying several possibilities, found major problems with either identifying specific goals that weren't already the subject of intense research, or of being able to quantify the outcomes in a reliable way to award the prize. Instead, they offered advice to the foundation on how to address such problems in the future, such as by offering several smaller prizes instead of a single large one.

Of the specific proposals, one team suggested a new "prize" to "recruit a new generation of medical professionals from underrepresented minority groups in medicine and science education," with a $10 million prize for a new curriculum that could train doctors who have already graduated. "This prize would be intended to fund research that can develop new therapies and treatments for chronic diseases," said team member Devon Roshan, a senior in chemical engineering.

The whole concept of the X-Prizes, which started with the Ansari X-Prize for the first privately funded craft to reach space (won in 2004 by SpaceShipOne), is "changing the way we think about problems," according to the X-Prize Foundation. "We want to encourage unrestrained, open-platform thinking. And that's why the foundation has formed this new partnership with MIT, he says. "We're looking for MIT students to help improve the design of the new prize."

The final presentations by the class last Friday were remarkable, according to the Bugnack, who also teaches in MIT's Society for Learning and Designing. Winning the prize would require not just laboratory demonstrations but field tests on 1,000 patients to show that it really works under difficult conditions.

"We have chosen to focus on a number of problems," said team member Jody Maro, a graduate student in the Technology and Policy Program. "We chose TB on the basis of impact—where could we make the greatest difference. With AIDS, for example, effective and affordable treatments are not yet available and efforts to combat the disease are already receiving considerable attention and funding."

The second proposal was for a simple, portable system that could be used by community health workers to carry out initial diagnostic evaluations for the most widespread fatal, transmissible diseases. Such screening could lead to the follow-up of patients with tuberculosis or other killers, which are not yet available but affordable treatments are not yet available and efforts to combat the disease are already receiving considerable attention and funding. "We're looking for MIT students to shake things up for us. We're looking for unconventional ideas."

"Drawing on more than 16 years of experience in medical research, The Picower Foundation recognizes that private funding can and should support the most imaginative and successful collaboration among scientists. Unfortunately, public funding remains inadequate," said Mark F. Bear, director of the Picower Institute and Picower Professor of Neuroscience. The history of science teaches us that the key ingredients for major scientific breakthroughs are a creative and collegial faculty, excellent infrastructure and flexible funding for blue-sky projects. Thanks to the wonderful environment at MIT and the continuing support of The Picower Foundation, all these pieces are in place for cutting-edge research.

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Neuroscience.

of such compounds in children,” wrote researchers said. “I thought, maybe I could build a game that could be played by both, equally well.”

Working as the first student in Gambit, the Singapore-MIT game lab, with a team of seven other students he developed the prototype for AudiOdyssey in the summer of 2007, and has since been testing it with various groups of players. Since not every-one has access to the Wii controller, the game is also designed to be playable using a regular keyboard.

The game “is an early prototype, it’s limited in the things people can do,” Glin- ert says. “But people seem to really enjoy it.”

Count Alicia Verlager among them. A recent graduate of MIT’s Comparative Media Studies program, Verlager, who is blind, helped with the development of the game.

“As a media studies scholar and a blind consumer, I am very excited to see that Eitan and other game developers are working to make games more available to gamers with disabilities, especially when those games can be shared between players with and without disabilities,” Verlager says.

“Element the I probably most envy about gamers is just the way they hang out together and share doing something fun,” she says. “It’s the social aspects of Guitar Heros and World of Warcraft that I really want to try myself and so hanging out with other gamers playing AudiOdyssey was really fun.”

Meanwhile, Glinert has been working on a more advanced version of the audio game that will allow for playing against others online, and will be released late this summer. AudiOdyssey is available for free download (Windows only) at http://gambit.mit.edu/loadgame/audiodyssey.php. The new game will also be available on the Gambit site as soon as it becomes available.

Study suggests caution on new anti-obesity drug in children

Anti-obesity drugs that work by block- ing brain molecules similar to those in marijuana could also interfere with neural development in young children, according to a new study from MIT’s Picower Insti- tute for Learning and Memory.

Marijuana is known to be an appetite stimulant, and a new class of anti-obesity drugs—such as rimonabant (trade name Acomplia) developed by Sanofi-Aventis and awaiting approval for use in the United States—work by blocking brain receptors that respond to a chemical in marijuana, and other cannabinoids.

Marijuana, derived from the plant Cannabis sativa, contains special active compounds that are referred to collectively as cannabinoids. But other cannabinoids (endocannabinoids) are generated naturally inside the body.

The MIT study, which was done in mice, found that blocking cannabinoid receptors could also suppress the adaptive rewiring of the brain necessary for neural development in children. The work was reported in the May 8 issue of Neuron. “Our finding is a profound disrupt- tion of cortical plasticity in juvenile mice suggests caution is advised in the use of such compounds in children,” wrote lead author Mark F. Bear, director of the Picower Institute and Picower Professor of Neuroscience.

The researchers investigated plasticity—the brain’s ability to change in response to experience—by temporarily depriving newborn mice of vision in one eye soon after birth. This well-known experiment induces a long-lasting loss of synapses that causes blindness in the covered eye, while synapses shift to the uncovered eye. How and where this synaptic shift occurs in the visual cortex has remained controversial.

Understanding the mechanism behind this phenomenon is key because the same brain mechanisms are used for normal development and may go awry in condi- tions that cause developmental delays in humans, and may reappear in old age and contribute to synaptic loss during Alzheim- er’s disease, Bear said.

In mice, the MIT researchers found, even one day of deprivation from one eye starts the shift to dominance of the uncovered eye. But injecting the mice with a cannabinoid receptor blocker halted the shift in certain brain regions, indicating that cannabinoids play a key role in early synaptic development.

Blocking cannabinoids receptors could thwart this developmental process, the researchers said.

This work is supported by the National Eye Institute and the National Institute of Mental Health.

Four undergraduates win $25,000 prize in Google mobile software competition

Four MIT undergraduates shared a $25,000 prize as round-one winners in Google’s Android Developer Challenge, a worldwide open competition for software developers based off Google’s Android software stack for mobile applications.

The students—sophomore Clare Bayley and seniors Carter Jernigan, Jasper Lin and Christina Wright—were awarded the prize for their term project in 6.087/6.081: “Building Mobile Applications with Android.”

The winning project, “Locate,” lets cell-phone users manage settings on their mobile devices. Unlike normal settings managers, Locate can automatically change settings based on your current location, for example turning the ringer to vibrate when you enter work or class, or automatically forwarding calls to a landline when you are at home.

6.087/6.081 is an experimental course offered this semester by the EECS depart- ment in cooperation with MIT’s Informa- tion Services and Technology (IS&T). The course was taught by EECS Professor Hal Abelson with the assistance of Andrew Yu, manager of IS&T’s mobile-devices plat- form project. The course taught how to pick a project idea and rapidly bring it to fruition through the prototype phase.

One noteworthy feature of the course was its use of mentors—professional appli- cation developers from the Boston-area software developer community who volun- teered to work with the teams. The mentor for the Locate team was Eric Carlson of ConnectsBis.

Locate was one of 50 winning projects selected from a field of 1,800 entries. As round-one winners, the MIT students are eligible to compete for higher levels in the challenge, leading to prizes of up to $275,000.

New game lets visually impaired share the fun

LEVELING the playing field

David Chandler

A new computer game developed by MIT and Singaporean students makes it possible for visually impaired people to play the game on a level field with their sighted friends.

The game, called AudiOdyssey, simu- lates a deejay trying to build up a catchy tune and get people dancing. By swing- ing the remote-control device used by the Nintendo Wii, which senses motion, the player can set the rhythm and lay down one musical track after another, gradually build- ing up a richer musical track.

Eitan Glinert, a graduate student in computer science at the Singapore-MIT Game Lab, says the introduction of the Wii controller attracted many women and older players for the first time to the world of video games. “Lots of people who had never played video games were now playing them all the time,” he says. “I started to think, who’s been left out? What groups are left behind even with all the new technology, these new systems?”

Then it hit him. “People with disabilities had been left behind. I began to speculate, how could you bring these people into the world and have them be able to play these games?” He started by looking up everything that was available in terms of computer games for the visually impaired, and found there were already about 200 games.

“I thought, ‘Oh well, it was a good idea.’ But then I noticed something: As a sighted player, I was unable to play any of these.”

The games had been so specifically adapted for sound and tactile play that they gave the visually impaired too much of an advan- tage, making it impractical for them to play with sighted friends. “There were games for sighted people, games for blind people, and never the twain shall meet,” he says. “I thought, maybe I could build a game that could be played by both, equally well.”

Working as the first student in Gambit, the Singapore-MIT game lab, with a team of seven other students he developed the prototype for AudiOdyssey in the summer of 2007, and has since been testing it with various groups of players. Since not every-one has access to the Wii controller, the game is also designed to be playable using a regular keyboard.

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“As a media studies scholar and a blind consumer, I am very excited to see that
The MIT chapter of Chi Epialon welcomed seven new members into its fold April 29 with a dinner at the Faculty Club and a talk by Professor Dee Ann Sanders, the first woman to hold the honor of the elected position of national council vice president. Sanders spoke of changes in the engineering field since she was an undergraduate student. She recalled often being the only woman student in her classes and said that engineering courses were taught in a building with no women's restrooms. All the new MIT members for women are. They are seniors Katherine Jarrell, Tamara Sheldon and Alia Whiting Johnson and juniors Ariana Biscoime, Alexandra Konings, Allison St. Vincent and Patricia Teixeira.

A team comprised of juniors Aliya Popartia, Dawood Rouhbeh, Suhni Chen, Shan Ito and Esther Chung won first place in the first annual Undergraduate Design and Build Competition. According to Professor Jan Wampler of the Department of Architecture, Contestants were given the theme of “Sky and Land as a Measure of Space between,” focusing on the ways architecture mediates the transition between the ground and the air. Each design had to address the practical elements of actually being built incorporating MIT’s philosophy of using mind and hand. The winning team’s design of a building front of Building 9 between the ends of the experiments cycle?

There is a student who, after helping his grandmother in her tomato garden, completed a two-year study of the long-term effects of exposure to pyrethroids, commonly found in household and agricultural pesticides. He won second place in the Intel Science Talent Search (STS) for his project. The third-place Intel STS winner, whose project involved developing new types of solar cells, is also engineering.

There is a student who owns a company that has built 380 houses for low-income families in Guatemala using “green” cement and recycled steel. She has built in China have reached 1.5 million students. Another student created a community-based microfinance program for transgendered individuals and intravenous-drug users in Delhi.

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SAXE: MIT neuroscientist probing mechanisms of thought

Continued from Page 1

of perception and motor control, but many doubted that an abstract high-
level cognitive process like understanding another person’s thoughts would be conducted in its own private patch of cortex,” Kanwisher says.

Breaking down the brain

Because fMRI reveals brain activity indirectly, by monitoring blood flow
rather than the firing of neurons, it is considered a fairly rough tool for study-
ing cognition. However, it still offers an invaluable approach for neuroscientists, Saxe says.

More precise techniques, such as recording activity from single neurons, can’t be used in humans because they are too invasive. fMRI gives a general snapshot of brain activity, offering insight into what parts of the brain are involved in complex cognitive processes. Saxe’s recent studies use fMRI to delve into moral judgment—specifically, what happens in the brain when people judge whether others are behaving morally. Subjects in her studies make decisions regarding classic morality scenarios such as whether it’s OK to flip a switch that would divert a runaway train onto a track where it would kill one person instead of five.

Judging others’ behavior in such situations turns out to be a complex process that depends on more than just the outcome of an event, says Saxe. “Two events with the exact same outcome get extremely different reactions based on our inferences of some- one’s mental state and what they were thinking,” she says.

For example, judgments often depend on whether the judging person is in conflict with the person perform-
ing the action. When a soldier sets off a bomb, an observer’s perception of whether the soldier intended to kill civilians depends on whether the soldier and observer are on the same side of the conflict. In a future study, Saxe and one of her postdoctoral associates plan to study how children develop beliefs regarding groups in long-standing conflict with their own group (for example, Muslims and Serbs in the former Yugoslavia, or Sunnis and Shiites in parts of the Middle East).

They hope to first identify brain regions that are active while people think about members of a conflict group, then observe changes in brain activity following mediation efforts such as “peace camps” that bring together children from two conflict groups.

Big questions

Saxe earned her PhD from MIT in 2003, and recently her first gradu-
ate student, Liane Young, successfully defended her PhD thesis. That extends a direct line of female brain and cogni-
tive scientists at MIT that started with Molly Potter, professor of psychology, who advised Kanwisher.

“At first, I wanted to be a geneticist because I thought it was so cool that you could make life out of chemicals. You start with molecules and you make a person. I thought that was mind-blowing,” she says.

She was eventually drawn to neuro-
sience because she wanted to explore big questions, such as how the brain gives rise to the mind.

She says that approaches place her right where she wants to be in the continuum of scientific study, which ranges from tiny systems such as a cell-signaling pathway, to entire human societies, to a tradeoff between the size of the ques-
tion asked and the concreteness of answers you can get, Saxe says.

“I’m doing this because I want to pursue really hard questions, maybe at the cost of never finding out the answers,” she says.
David Schmittlein
deans of MIT Sloan School of Management

Over the course of the spring semester, TechTalk has brought readers a series of interviews with each of MIT’s five school deans. The fourth in this series features Dean David Schmittlein of the MIT Sloan School of Management. In the following interview with Greg Frost of the MIT News Office, Schmittlein discusses Sloan’s engagement with the global community and his hopes for the school’s future.

Q: Describe your biggest challenge in coming from the University of Pennsylvania in MIT.
A: My biggest challenge on behalf of this school is to prove to you, our students, and to the world that we’re more than just a leader, but to be the leader, globally, in management education. Further, it can, and must be, the global leader in doing that, something that is valuable now and will stand the test of time. One of the keys to accomplishing that future is deeper and broader and more meaningful engagement with the alumni community, global business community and community at large. We should be doing some things that are relevant to what they need from a great school of management now and in years to come. It is really fun to be here and I’m coming on board a moving train. This school has not been static. It has been willing to innovate in creating the portfolio of different educational programs it offers and has also innovated well “inside” each of its programs. It has simply been more responsive than other schools of management to the world’s need for different kinds of programs, for different kinds of learners. Undergraduate education in management, management practice regionally. This deep engagement develops their faculty and organizational leaders through regional leading educational institutions. We help them simply set up a “lemonade stand” in Beijing or Mumbai very hard now about the kind of relevance we will have to just expertise in supply-chain management, marketing, branding, the people that have been around the organization for 10 or 15 years don’t out the key issues of the day, because the people who’ve graduates who have just gone through a thoughtful education, then (and has now) more to offer those companies in the main conduit for how people understand us. There are short-term steps to do that—the dean being on the road and also experimenting with new kinds of events where MIT Sloan is a forum so people can gather and so on. We’ve done a lot of these things in the past but there is an opportunity to do more, and to experiment with different kinds of activities.

Among the longer-term goals, we need to start building the platforms to tell our own story to the world. We cannot, as a leading school of management, simply rely on the goodwill of editors, or the editorial decisions of the moment for particular magazines and newspapers, to the main conduit for how people understand us. With respect to innovation in our educational programs, there are discussions and plans internally to reconsider the particular portfolio of customized offerings from the MIT Sloan school for the world.

Q: It’s still early in your tenure, but can you give the MIT community a sense of your top short-, medium- and long-term goals?
A: We need to demonstrate greater engagement with alumni and the broader business community. There are short-term steps to do that—the dean being on the road and also experimenting with new kinds of events where MIT Sloan is a forum so people can gather and so on. We’ve done a lot of these things in the past but there is an opportunity to do more, and to experiment with different kinds of activities.

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Q: You’re running the MIT Sloan School of Management, but you’re a world-renowned marketing expert. How much of that marketing background do you expect to rely on as you lead this school?
A: Well, I know a lot about specific marketing concepts and methods, about doing surveys and constructing computational models and so on. But that’s not the kind of background that’s most important, I think, in this leadership setting. There is, however, a marketing perspective that starts the whole enterprise’s activity with a commitment to understanding the needs of our commitments and for a business school it’s not just students, and it’s not just faculty, and it’s not just alumni, and it’s not just business leaders, but it’s all those groups. And that commitment goes along with a certain humility, a recognition that we don’t necessarily know the answers to what those needs are and that we’re willing to listen and we’re willing to come to understand our own capabilities, and through the right frameworks to build and change those capabilities, to be relevant to the legitimate needs, the legitimate aspirations of those constituencies—those disparate communities. That, fundamentally, is marketing, and is the aspect of my marketing background that I draw on: but it’s the "product design" side of marketing, not the "selling the sizzle rather than the steak" side of marketing. Also, I said earlier that we need to be able to communicate well and we can do more in those areas if we use a bit of a marketing perspective. Take for example G-Lab, which is a global internship experience for our MBA students. This is a great experience for students: Helping some company in another country and learning about global markets by doing. But frankly even our other school has some kind of internship for some kind of student going to some kind of place to do some kind of something. But here’s a fact that too many potential MBA students don’t know: at this school last year, about half of our students did that, actually did it. And collectively they did it in 17 different countries. Typically at leading schools only a small fraction of students would have such an opportunity and with only a very small number of countries. Frankly, what we’re doing here is killing ourselves administratively, managing a program at a large scale, with a great value to our students, that no other school is doing to the best of my knowledge. Yet people don’t know about it. MIT Sloan is doing things that we can own in the eyes of the world, that are demonstrable, credible, linked to a real benefit, that no other school either could or would match. I’d rather build a strategy around what we are great at, and can be great at, and that people value, and tell the world about it, than build a strategy around a kind of omnibus survey regarding what people in general say they would like business schools to do, and then somehow claim that we’re doing all that stuff.

Q: What is the most surprising thing you’ve run into so far in your role?
A: The positive engagement of the alumni community, staff, faculty and students, but among those four especially the students. By that I mean the inclination to want to take ownership of the solution of a problem, not just to be the articulator of a problem. At some other leading schools many of the MBA students fundamentally chose the school for its "brand." Most of our students do not choose us for some fuzzy omnibus B-school band. They choose us out of a detailed knowledge of who we are and what we offer. And when you have students who have been more thoughtful about why they want to be at a particular place, they are much more likely to be happy and to be engaged in that place. Our students are distinctly engaged—and I celebrate that.

Q: What do you do for fun in your spare time?
A: I love travel, including being exposed to the cultures and peoples of the world. I’ve just liked that for a very long time. A lot of the remaining leisure time that I have is taken up with my two kids—they’re twins, and they’re 10 years old. And there’s a lot of fun around the usual stuff that interests 10-year-olds, including sports and music. The children are not a “hobby” of course, but when you put together the desire to be a thoughtful leader of a large organization, and hopefully a thoughtful and engaged parent of a couple kids, those goals soak up the time pretty well.