Letter from UPOP Director Susann Luperfoy

Dear Friends,

With the spring semester program of workshops and coaching halfway behind us, the UPOP team turns its attention to the intensive search for summer internships. Some 200 exceptional MIT sophomores are enrolled in the UPOP program, ready to contribute to their employers while gaining hands-on experience.

As I write this I’m on the road to visit prospective employers, volunteers, funders, and mentors. Reflecting on the past year of program achievements, I am both humbled and encouraged by the contribution of the engineering leaders who continue to make the UPOP program possible.

Since its inception in 2001, the UPOP program has depended on the generous “time and treasure” donated by successful MIT alums, entrepreneurs, and corporate donors. Mentor-instructors supply a continual source of student coaching, role models, and wisdom gained from real-world experience.

Our keynote speakers are also sources of great inspiration. This year, our distinguished guest speakers included Dana Mead PhD ’67, chairman of the MIT Corporation; Bruce Maggs ’85, VP of R&D of Akamai; Ken Ross, SVP and CTP of Thomson Reuters North American Legal; and Bob Langer CH ’74, director of the Langer Lab, Institute Professor, and National Medal of Science winner.

During this difficult economic period, we are especially grateful to those who have endorsed the UPOP mission. Among these are 3M, Thomson Reuters, GETCO, HP, and IBM. We continue to rely on their—and your—support.

The 2009 National Association of Colleges and Employers’ (NACE) Experiential Education Survey indicates that employers anticipate hiring almost 21 percent fewer interns this year, in comparison to 2008. This makes UPOP’s work of preparing students for the increasingly challenging job search more important than ever. In the face of scarcer opportunities, we are developing more cutting-edge educational programming, providing extra individualized coaching, and working harder to reach out to a wide range of prospective host companies.

There is no better way to maximize your impact on the world through engineering achievements than by your contribution to UPOP. My sincere appreciation goes out to all of you who continue to make this endeavor so successful.

With best wishes,

Susann

I have very rarely seen such a comprehensive leadership program offered to undergraduates. What a great opportunity it is for MIT students to get, through UPOP, a 10-year head start on the type of program they might take much later in their career. It most certainly will make a significant difference to their overall development as professionals, managers, and leaders.

GREGG BORMAN ’87
CO-FOUNDER, MANAGING DIRECTOR
[RISKMETRICS]

photos | sharona jacobs, jessica jones
UPOP’s week-long January workshops bring students together with industry leaders and faculty from MIT and Sloan.
Top row, L-R: Professor Lawrence Susskind, Dr. Bradley Kuszmaul, Professor Charles Leiserson, R: students concentrate during Professor Susskind’s “Oil-Pricing Game,” a two-hour exercise in negotiation skills.
Entrepreneurs’ roundtable

Zipcar and SynQor founders share their start-up experiences over dinner with UPOP students

Each spring, UPOP invites leading engineers for roundtable dinner conversations with small groups of UPOP students. The goal is to create a forum for discussion in an intimate, informal setting.

This year, the event featured Robin Chase GM ’86 and Marty Schlecht ’77.

Chase is the founder and former CEO of Zipcar, the world’s largest car-sharing and car club service, and the current CEO of GoLoco, a business that combines online carpooling and social networking. Schlecht is the founder and CEO of SynQor, a leading supplier of power conversion solutions to the communications, computing and industrial markets.

Sixteen students paid rapt attention as the guests of honor shared many stories about intellectual honesty, establishing a company culture, and overcoming self-doubt.

Kevin Rustagi ’11 will intern at a Chinese start-up this summer and has a long-standing interest in entrepreneurship:

“I especially enjoyed hearing the stories and advice that both CEOs had to give,” he said. “Having both CEOs there really helped in that they could spark ideas for each other and made it all that much more of an interactive experience.”

Chase quoted a fellow entrepreneur who suggested that the tough economy provides fertile soil for entrepreneurs:

“The big trees have fallen. There is now sunlight and space for saplings to grow.”

For more words of wisdom from the entrepreneurs, see Kevin Rustagi’s blog: kevinrustagi.posterous.com

Entrepreneurs Robin Chase (Zipcar) and Marty Schlecht (SynQor) respond to questions from students on the benefits and pitfalls of starting your own company.

Helping interns feel at home

The world’s largest IT company understands that interns might need help finding a familiar face while joining an organization that operates in more than 170 countries and is ranked 14 in the 2008 Fortune 500. So Hewlett-Packard (HP) strives to provide interns with meaningful work assignments, mentoring, and career support.

As one of UPOP’s most valued employers, HP has hired several students, contributed many kind gifts, and donated the time and talents of its recruiting staff.

“The internship program brings in new talent and new ideas,” says Migdalia Carrero, manager of HP’s Americas Intern Program. “The intent is to bring in top students, to develop and mentor them, and eventually to convert them into full-time HP employees as business conditions allow.”

Carrero adds that during the hiring process, managers and recruiters work together to ensure that students’ skills and attributes fit with the needs of each team. This ensures that the projects are meaningful and match the students’ skill sets. Managers also “provide the guidance and mentoring that the student needs to develop professionally and personally.”

Michelle Burroughs ’10 worked at HP’s Houston location last summer, evaluating and debugging computer servers’ cooling mechanisms.

“In my projects, I was able to be hands-on and see close-up the process of a product used worldwide. I was also given the freedom to create new solutions using my engineering knowledge from MIT. It was really neat to see the same equations in my mechanical engineering classes be applied and altered to the computer industry.”

Carol Dunn, manager for HP’s University Recruiting Program, concurs: “We do a good job in that the projects match the students’ education.” Dunn also highlights HP’s collaborative work environment, and its focus on interns’ engagement in team projects and activities.

HP’s intern program also includes social events, sports, networking, lunches, and other activities. “It’s not just about work,” says Paul Hausmann GM ’75, manager of HP’s Business Critical Systems Supply Chain Program Management. He also serves as HP’s MIT Campus Recruiting manager and is a UPOP volunteer and mentor-instructor.

“At each site, a group of newly hired employees organizes social events and activities so that they have a supporting social structure and don’t feel alone.”

Burroughs took full advantage of these initiatives, and the corresponding learning: “When I wasn’t working, I was participating in the many intern activities ... HP is a very friendly community that made me feel welcomed and appreciated. After interning, I felt I had a closer idea of what I wanted in a future full-time job ... My experience with HP was the first time I felt I learned about human work interactions and experienced a taste of what the workforce will be realistically.”

Mastering these interactions is an area that Hausmann believes interns need the most help with—and where UPOP makes the greatest contribution.

“All the training students get through UPOP prepares them for situations where social interaction is big. A successful intern is one who is proactive and speaks up, talks to other people, and is able to discuss things with others. You can tell
which ones have had that training: UPOP students as opposed to other interns.”

While Hausmann enjoys imparting his perspectives and advice to new employees of all ages, he gets the most satisfaction from mentoring sophomores.

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— Paul Hausmann GM ’75
Manager
BCS Supply Chain Program
[Hewlett-Packard]

“I get a lot of joy out of it, helping the students. I also see it as part of our corporate citizenship responsibility,” says Hausmann.

“We are committed to a long-term relationship with MIT. It makes sense that the world’s largest technology company would partner with one of the best engineering schools in the world.”

UPOP AWARDS

Steve Webster honored with Deshpande award

Steven C. Webster ’78 was presented with UPOP’s Desh Deshpande Award for Outstanding Volunteers during one of the January professional development workshops.

Webster, vice president of Research and Technology Commercialization for 3M’s Display and Graphics Business, has played a significant role in expanding UPOP’s direction, in addition to being a mentor-instructor for two January workshops.

“We have benefited from his wise counsel, from curriculum development to financial management, as well as his generous contribution of time and energy,” said Susann Luperfoy, UPOP’s executive director.

UPOP created the award in tribute to Desh Deshpande, the co-founder and chairman of Sycamore Networks Inc. Deshpande, together with his wife Jaishree, established the Deshpande Center for Technological Innovation, part of MIT’s School of Engineering, and the center made the significant contribution that launched UPOP.

“Steve is extremely well regarded by the students,” said Luperfoy. “He honestly will say if something is going wrong, but will focus on new ideas and solutions, and he does this in an unassuming manner. This is the bearing we want our MIT students to have when they have succeeded the way Steve has succeeded.”

Webster says that growing up during the heyday of the space race inspired him to reach for the stars of engineering leadership. He counts the Gemini and Apollo missions among the most exciting events of his youth, and remembers waking up early to watch the launches.

“I built and flew model rockets,” he recalls: “Sometimes successfully, sometimes not. It was those experiences that got me into the engineering field.

“I grew up in an era during which everybody recognized the importance of engineering to the future of our country,” Webster says. “Engineering was on the front lines of the cold war with the Russians, so there was a real appreciation for science and technology.”

Webster is an ardent supporter of UPOP. He has used vacation time to serve as a mentor-instructor in the intensive January workshops, and was also instrumental in launching the Gordon Engineering Leadership Program. He found the experience both rewarding and challenging. “Since so much of my success and opportunities have been because of MIT, it seemed like a great way to give back. I didn’t anticipate how much work it would be, though. It takes complete focus.”

Webster mentored students he described as “diverse in style and approach, which was fun because people with different personalities can all be great engineers.”

This is fortunate, because, he says, “The world in which engineers create things is more complex than it was 30 years ago, and the complexity of the engineer’s role continues to increase.

“There is so much to learn in class or by experience. But the good news is that the students are smarter than we were 30 years ago. They have the capacity to deal with complexity.”

After graduating from MIT with an electrical engineering degree, Webster worked at Bell Laboratories, doing “conventional EE work in a spectacular building with 4,000 engineers.” Still, he felt like “a cog in a machine.”

He then discovered the perfect fit, at Minneapolis-based 3M with its diversity of technologies. Webster enjoyed the high-caliber people, its engineer-driven management, and the way the company makes technical people feel at home. He found that his MIT training and communication skills equipped him for success from the very beginning. “My training from MIT allowed me to talk to a chemical engineer, mechanical engineer, or material scientist and understand them. I could help one engineer make sense to the other, serving as
a value-added interpreter. That skill formed the basis of all kinds of opportunities.”

Before taking on his current role, he led the deployment of Six Sigma for 3M, and held R&D leadership roles in optical films, telecommunications, data storage, and optical recording.

Webster maintained contact with his UPOP students over the summer of 2008, inviting those interning in his hometown of Minneapolis to performances at the Guthrie Theatre (where he serves on the board of directors) and other cultural events.

Webster’s advice for aspiring engineers?

“Stick with it. Getting through MIT is the hard part. In the real world it gets easier. The background will serve you well for a full career. MIT teaches a technical way of thinking, and UPOP helps you understand the nontechnical aspects of problem solving.”

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UPOP MENTORS
Jon Ivester
Rick Stadterman
Ann Barrett
Gregg Berman

New mentors offer internships

This year, UPOP was delighted that four first-time mentor-instructors are offering internships at their companies:

Jon Ivester ’78 is the senior vice president of worldwide operations for Silicon Laboratories, a producer of high-performance, mixed-signal integrated circuits, headquartered in Austin, Texas.

Ivester found that “the talents and accomplishments of the students were truly amazing, but their commitment and eagerness to get the most of the experience was even more impressive. It was great to be able to reconnect with MIT, and I really enjoyed getting to know the other mentors. My week working with the UPOP program was a reminder of what a special place MIT is, and it gave me confidence in the future of the Institute and in the future of undergraduate science and engineering education in the US.”

Richard (Rick) Stadterman ’75 is the head of global R&D for Bayer HealthCare Diabetes Care. He has also held leadership positions at Callaway Golf Company, Inc., and Pfizer Company’s Schick (shaving) division. Of the UPOP workshop, he notes: “It was invigorating to mentor and learn from the UPOP students. I have kept in contact with several students, and they have told me that our conversations have exposed them to different opportunities for their summer work.”

Ann Barrett is a senior engineer with the Department of Defense Combat Feeding Program at the US Army Natick Soldier Center in Natick, Mass. At the Soldier Center, she develops rations that remain safe—and even tasty—after up to three years in a warehouse. Ann found the students “a lot of fun,” and added, “UPOP’s program was absolutely phenomenal for the students; they were exposed in only one week to skills many people require an entire career to master.”

Gregg Berman ’87 currently leads RiskMetrics’ Risk Business, covering institutional and wealth-management offerings that serve a variety of finance-related clients. He has offered several internship slots and maintained contact with the students he mentored in January.

“I have very rarely seen such a comprehensive leadership program offered to undergraduates. Similar programs are offered to professionals after a number of years in the field, and this is usually done to help facilitate career growth. What a great opportunity it is for MIT students to get a 10-year head start on the type of program they might take much later in their career. It most certainly will make a significant difference to their overall development as professionals, managers, and leaders, regardless of their field.”

UPOP at Work

Handling stress in uncertain times

Given the current economy, Sharona Jacobs’ recent article in the prestigious Career Development Quarterly couldn’t have a more timely title: “Mindfulness as a coping mechanism for employment uncertainty.”

Jacobs, UPOP’s program manager for student and alumni relations, has a master’s degree in counseling psychology and worked as a psychotherapist in the Boston Public School system and at Tufts University before joining UPOP.

“Mindfulness-based stress interventions are effective in creating an internal sense of control and balance, which can be a huge asset in coping with the job stress and uncertainty of the outside world,” says Jacobs. “This applies to students seeking internships as much as it does to those established in the workforce.”

Her article, published December 1, 2008, and co-authored with David L. Blustein, PhD, of Boston College, reviews the research showing that mindfulness practices are highly effective in helping workers deal with uncertain employment conditions.

“People are able to make calmer and more informed decisions for themselves,” says Jacobs, “and they are more relaxed in job interviews.”

The article is online: www.entrepreneur.com/tradejournals/article/191181769.html