Record enrollment for the Class of 2012

IAP workshops: bigger than ever

Enrollment from the Class of 2012 hit an all-time high.

With more than 300 students registering and 30 mentor instructors, UPOP’s two week-long IAP professional development workshops outgrew their TEAL-room venue for the first time, and relocated to Walker Memorial.

Keynote speakers were Marina Hatsopoulos ’92, founding CEO of Z Corporation, who spoke on “Starting & Building a Technology Business,” and Robert M. Metcalfe ’68, founder of 3Com, who entertained the students with “The Zen of Selling.”

A highlight of the first session was MIT’s president, Susan Hockfield, who welcomed UPOP students and acknowledged the contributions of the visiting MIT alums who serve as Mentor-Instructors each IAP.

VIP “dine and learn” series

UPOP’s spring colloquium series brought 15 industry leaders to MIT to present topical expertise and allow students to practice professional etiquette skills in context.

Among the topics were Product Design, Negotiation in the Life of an Engineer, Entrepreneurship, Chemical and Bioengineering Design, Marketing New Products and Ideas to Nontechnical Funders/Customers, Product Production Relationships, Protecting Intellectual Property, and Intrapreneurship: how to launch a new enterprise inside a large organization.

Dinner presentations were followed with lively small group discussions and the opportunity to talk with speakers individually.

FEL for GELs: a crash course in leadership

In May, UPOP delivered a three-day workshop, “Foundations of Engineering Leadership” (FEL).

FEL was designed for students in unique circumstances who had been unable to complete UPOP requirements in their sophomore year of the Gordon-MIT Engineering Leadership Program, but who were otherwise qualified for admission to the junior year continuation as GEL students.

FEL covered selected “firm skills” from UPOP’s engineering effectiveness curriculum, including project engineering, negotiation, specification, and ethics, and students were given practice with coaching on elevator talks and networking skills. UPOP veteran mentor-instructors Barry Bronfin, Deborah Burke, Kristin Hort and Ralph Inglese helped design and deliver this special version of the IAP workshop tailored to GEL students. Key modules were taught by MIT faculty Lawrence Susskind, Charles Leiserson and Rob Miller.

“UPOP augments the traditional MIT education with the skills and experiences that students need in order to thrive in the industrial world.”

Marty Schlecht, Chairman, President & CEO SynQor, Inc.

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Marina Hatsopoulos ’92, founding CEO of Z Corporation, was a keynote speaker at one of UPOP’s professional development workshops; Jen Nicholson ’60, a founder of Mitek Surgical Products and Innovative Devices, and now founder and managing partner of OrthoPlex, LLC, spoke at one of UPOP’s VIP dinner series on taking technologies from concept to market leader.

photos | sharona jacobs
Dear Friends of UPOP,

This fifth issue of POPTalk marks several key milestones in the growing Undergraduate Practice Opportunities Program and there is much to report to you.

Applications for the 2009-2010 academic year topped 350 students. Of those, nearly 290 students were accepted and have successfully completed fall, IAP and spring program requirements, followed by the practicum component in the form of hands-on internships over the summer of 2010.

In the face of expanding enrollment numbers from students throughout the Institute, UPOP remains committed to the highest standards of service to students including small-group instruction by engineering experts, on-the-job mentoring by industry partners, and walk-in access to individual coaching by UPOP staff.

We have increased capacity and diversity in all areas of program delivery. We have added or modified modules to address broader career interests in science and business while maintaining our focus on effective engineering practice and career ownership. The modules included negotiation, specification, project engineering, estimation, and societal impact of engineering decisions.

To cover the increased student numbers, our IAP venue has moved from the TEAL room (26-152) to Morss Hall in Walker Memorial, where, in addition, more than a hundred employers attended our IAP networking events.

Our expanded offerings continued over the spring semester with 15 VIP speakers for our dinner colloquia series. Our students interned at 135 companies during summer 2010.

UPOP constitutes the sophomore component of the Bernard M. Gordon-MIT Engineering Leadership Program, and we have added program offerings to better lay the foundations of engineering leadership for the many UPOP students who qualify to continue in the junior-senior years of the Gordon program as Gordon Engineering Leaders, called GELs.

As we prepare to celebrate UPOP’s 10th year and set a course for the next decade, we pause to acknowledge the extraordinary contributions made by those who have brought us this far. Essential to all that has been accomplished since 2001 are the generous financial contributions of the many donors, the largest of whom are Desh Deshpande, Armen Avanessians, Gerry Applestein, Bruce Boehm, Jay Dweck, Bernie Gordon, Russ Apfel, and one anonymous donor. We are especially grateful for corporate sponsorship from Thomson Reuters, GETCO, 3M, and Shell who have set a model for employer partnership with UPOP students and graduates.

Susann Luperfoy

MIT President Susan Hockfield addressed students and mentor-instructors during one of UPOP’s IAP professional development workshops.

† 2010 MIT Engineering Senior Survey (N=581) and response of 87 UPOP-alum seniors and 165 non-UPOP-alum seniors

In education literature, the measure of an individual’s “self-efficacy” to complete a task is a strong measure of both confidence and readiness.

Did you know?

In a 2009 survey of employers, UPOP summer interns were rated significantly higher in performance when compared to other interns.

MIT seniors who had completed the UPOP program reported significantly higher levels of self-efficacy in applying business concepts, teamwork, and communication, compared to seniors who had not completed that program.†
Thank you!
It takes a community

UPOP would not be able to provide its enriched year-long curriculum without a tremendous amount of help from the community of UPOP friends—mentors, faculty, employers, donors—who generously give time, expertise and funding, and sometimes all three.

IN-KIND DONORS: Apple, Electronic Arts, GETCO, Hewlett Packard Company

MONETARY DONORS: Getco LLC; Hewlett Packard; IBM; Shell Oil Company; Thomson Reuters; Gerald Applestein; Armen Avanesians; Bruce Boehm; Barry R. Bronfin; Jay Dweck; Chris Resto; Daniel J. Rothman; Andrew Silver; and a generous anonymous donor from the ranks of our mentor-instructors.


SPEAKERS: We would like to extend our special thanks to our keynote speakers during IAP, Marina Hatsopoulos, and Bob Metcalfe, and to President Susan Hockfield, who most generously gave of her time to address the UPOP students and engage in an extended Q&A session during IAP 2010.

VIP Series
Speakers: 5/ David Weissburg, CEO of IDEO 6/ UPOP alum, Howard Kellogg, now with Thermo Fisher Scientific 7/ Mark Russell, VP Engineering at Raytheon

FEL Crash Course
9/ Students Emily Obert, Maggie Lloyd and Erich Brandeau work on a module 10/ Ralph Ingelse, managing director, NATIXIS Capital Markets Inc., debriefs students on the “Whole Brain/HBDI” instrument

THANK YOU!
UPOP MENTOR

Jen Pinson wins Deshpande Award


Pinson, a mentor-instructor since 2003, was honored with the award for her extensive and lively work with UPOP students. “UPOP students are more grounded, more realistic” says Pinson. “The students have that passion, but through UPOP, they realize that they will be working for the next 40 years. UPOP teaches students to self-evaluate, to understand what’s important to them in a career.”

Pinson is a Lean Six Sigma Black Belt at GE, driving cost reduction and material affordability across military engine product lines. She’s worked there since 2001, and has never felt the need to leave GE: “When I felt restless, I made a change in my career path without leaving the company.” She cautions students not to work somewhere that’s just “ok”: “Passion matters—people will follow a leader with drive and dedication.”

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

UPOP EMPLOYER

SynQor: Reinforcing UPOP’s “firm skills”

When former MIT professor Marty Schlecht ’77 left 11 years ago to start the power-converter company SynQor Inc., he wanted to bring his entrepreneurial experiences back to MIT in any way possible. He began as a mentor-instructor with UPOP, and has hired several interns.

“UPOP augments the traditional MIT education with the skills and experiences that students need in order to thrive in the industrial world,” he said. “SynQor’s intern projects are designed to expose students to real-world engineering and manufacturing. We do not create ‘research work’ for students to do.”

SynQor manufactures all its products in Boxborough, Mass., resulting in a responsive, flexible, and high-quality operation that its outsourced competitors do not have. Its team-based process-centered enterprise reinforces the “firm skills” that students learn during their UPOP year, such as project management and establishing team cohesion on engineering projects.

“I have been very pleased with our UPOP interns,” he says. “We are looking forward to having more every year.”

UPOP@WORK

The New Faces of UPOP

Over the past several months, UPOP has welcomed new staffers to help with the UPOP tenth anniversary year and with the expanded employer relations program.

Lai Wa Wu, a recent graduate of Smith, is filling the role of Dori Peleg as UPOP’s primary point of contact for Gordon Engineering Leadership (GEL) juniors and seniors.

Kate Moynihan, formerly of Radcliffe’s Alum Office, is working on faculty and mentor relations, and Rachel Sharples will be the special projects coordinator for UPOP’s tenth anniversary event in January 2011.

Amy Bass became a full-time UPOP program coordinator working on the intersection between students and employers. She will lead the résumé development component of our program.