

Innovations

THE NEWSLETTER OF THE FRANKLIN W. OLIN COLLEGE OF ENGINEERING

Olin Holds Second Commencement

Speakers Celebrate Class of "Makers" Who Built School, Created Inventions

ON MAY 20, 2007, Franklin W. Olin College of Engineering graduated its second class of risk taking pioneers. The College granted 71 Bachelor of Science degrees during the touching ceremony, which was viewed by an enthusiastic audience of around 900 faculty, staff, parents, guests and dignitaries in a large tent set up on the campus's Great Lawn.

In her Commencement address, Wellesley College President **Diana Chapman Walsh** called the members of the college's class of 2007 "makers" not only of devices and inventions, but also of the college—sounding a theme that echoed through many of the remarks at Olin's graduation ceremony.

"You have been makers too—makers not only of the objects through which you have learned and plied your craft—the intriguing, beautiful, inventive, and sometimes bizarre results of your engineering efforts, successful and abortive, but makers of this college—that will always bear your watermark," said Walsh.

Walsh noted the many accomplishments of a class which joined the college when the curriculum and many aspects of student life were still under development.

"You made a school, where there was only the promise of one when you enrolled,"

(continued on page 2)

"You made a school, where there was only the promise of one when you enrolled"

— Diana Chapman Walsh

The Olin Foundry Gives Students Opportunity for Hands-on Entrepreneurship



Members of the Bluestem Energy team discuss business ideas at the Foundry.

ANYONE who is familiar with the Olin triangle knows that entrepreneurship is a cornerstone of Olin's curriculum. In an effort to grant students the opportunity to explore entrepreneurship the "Olin way," the college offers and supports the existence of the Foundry where students are able to learn through hands-on experience.

Located at the edge of Olin's campus at 1795 Great Plain Avenue, the Foundry promotes the entrepreneurial spirit at Olin College by providing office space, and basic business services to student-run startups, as well as access to an experienced board of

advisors. It is important to note that while Olin College covers the cost of maintenance on the actual building (heat, electricity and general upkeep), Foundry participants are required to raise funds for any program-related expenses (network/server connections, supplies, student business "seed funds," etc.). Students are encouraged to collaborate with their counterparts at Olin's partner institutions, Babson College and Wellesley College, and in many cases Olin students have done so.

While Olin's Foundations of Business and Entrepreneurship (FBE) course sets the stage — the class is designed to provide students with experience in planning and operating a business venture — often times the Foundry is where the plot line develops.

No Business Plan Required

What sets the Olin Foundry apart from similar entrepreneurial resources at other colleges and universities is that undergraduate students at all levels are encouraged to bring their ideas to the table. A formal business plan is not required to utilize the Foundry and its resources. "Olin provides an entrepreneurial environment where students are encouraged

(continued on page 6)



Graduate David Wurtz gives the day a thumbs up.

Future looks Bright for Olin's Second Graduating Class

The students of Olin's Class of 2007 arrived on campus in September 2003 each with a long list of impressive accomplishments. Then they set out to help create and define an engineering school and now as they head out into the "real-world," their list of accomplishments just keeps growing. Whether it's attending graduate school at Cornell University, teaching in South Korea, starting a business or getting a job offer from Google, Olin's second graduating class has moved on to pursue impressive post-graduate opportunities.

Highlights include: a Fulbright scholarship for an English Teaching Assistantship in South Korea (see story on page six); three National Science Foundation (NSF) Integrative Graduate Education Research Traineeships (IGERT) awards; acceptance into graduate programs at Harvard, MIT, Babson, Carnegie Mellon, Columbia, Tufts University, University of California Santa Barbara and Vanderbilt, among others; job offers from leading companies such as Akamai Technologies, GE, Google, HP, Johnson+Johnson, Raytheon, and Texas Instruments; two startup ventures including Limeworks and Apprentice Gaming; and participation in AmeriCorps, Vista and Teach for America.

For more detailed information please visit the Post Graduate Planning website at <http://careers.olin.edu/>.

COMMENCEMENT 2007	2
PRESIDENT'S LETTER	2
STUDENT SPOTLIGHT	4
DEVELOPMENT UPDATE	4
GRADUATES SHINE	6
FACULTY FOCUS	7

COMMENCEMENT 2007

PRESIDENT'S MESSAGE



Olin held its second Commencement exercises on Sunday, May 20. I remember well when the Class of 2007 entered Olin as our second freshman class, wondering how they would make their mark on a still-developing institution. The

Commencement speakers provided answers to that question, painting a picture of the Class of 2007, whose members left an indelible mark on the college.

The featured speaker, Diana Chapman Walsh, captured the spirit of the class in her quoting from the poem "Advice to the Players" by Frank Bidart. The poem describes the act of making as one through which we define ourselves:

There is something missing in our definition, vision, of a human being: the need to make.

We are creatures who need to make.

Because existence is willy-nilly thrust into our hands, our fate is to make something – if nothing else, the shape cut by the arc of our lives.

Making is the mirror in which we see ourselves.

This passage strikes me as particularly fitting for engineers. We want to make things; indeed, through making things, we come to understand who we are and find our proper place in the world. What is more, we not only want to make things, but we want to make things better in the world.

We owe a tremendous debt of gratitude to the Class of 2007. Along with the Class of 2006, they played an enormous role in the creation of Olin College. As faculty/staff representative Allen Downey noted, the class's accomplishments include everything from the Ping Pong Club to the Vocal Ensemble, from the first intramural sports team to service organizations like SERV and Greening Olin; from creating professional society chapters to leading CORE, our student government. But the class's biggest project was the college itself: truly, you helped "make" Olin College, in the sense described by the poem, and in the act of making, you helped define yourselves.

Thanks, Class of 2007, and good luck as you enter the next phase of your lives and careers. We are eager to know the places you will go, and how you will fulfill the Olin mission of making the world a better place.

Richard K. Miller,
President



Graduates Lauren Hafford and Sarah Boman help one another robe (top); Graduate Keoni Mahelona celebrates the day with family members (above).



Dean of faculty Michael Moody leads the procession as Commencement chief marshal (above); Graduates Kat Kim and Robin Maslowski smile for the camera as they line-up (left); Graduate Dean Dieker listens intently to the commencement address (right).

OLIN HOLDS SECOND GRADUATION

(continued from page 1)

Walsh told the graduates. "You took a risk and cast your lot with this quirky and brave band of entrepreneurs. That spirit of adventure—your 'just-in-time' experience of an institution that took shape around you as you made your way through it—will never be quite the same for others as it was for you when you were here."

In his remarks, Olin President **Richard K. Miller** urged the students to value relationships, to persevere in the fulfillment of their goals and to consider helping others less fortunate.

"Those who become involved in providing opportunities for others derive a deep sense of joy and satisfaction from doing this," said Miller.

Student speaker **Sean McBride** noted the distance his classmates had come since their freshman year.

"We've all changed a lot since we arrived on move-in day back in 2003, bright-eyed, bushy-tailed, and scared out of our minds that our roommate would sacrifice small animals for fun or perpetually use all of our shampoo without asking," said McBride. "The only thing that I can say for certain about the future is that we will continue to change. That we will make new friends, find new joys, and discover at least one flavor of ice-cream that we didn't know existed."

Associate Professor **Allen Downey** noted the class's many contributions to the college, including student clubs and organizations, volunteer opportunities and academic activities.

"Many of these activities are going concerns now," said Downey. "They will continue after you leave. They are visible examples of the many contributions you have made to the project—the ongoing project—of building a new college."

2007 Hours 'Til Graduation

On the night of February 26, the Office of Parent and Alumni Relations held its second count-down event – 2007 Hours 'Til Graduation. The senior class took a break from studying and trekked through the snow to Roger's Pub at Babson to celebrate. "It was fun and a great way to get our whole class together to celebrate," emailed **Alison Lee '07**. The event was well attended. Entertainment included a raffle, karaoke performances, and fun trivia. Later that night, the soon-to-be alumni donned their commemorative T-shirts – designed by classmates **Cathy Murphie and Alison Lee** – which spoofed James Bond's 007 with the Olin Phoenix behind the numbers.

Erica Daborn Art Exhibit

Olin College held the opening reception of an art exhibition entitled "Interplay: A Painter's Dialogue with Photography," on February 22. The artist, Erica Daborn, displayed her work, which was a combination of photographic imagery and drawing, in the Olin Art Gallery located on the first floor of the Olin Center. The exhibition was on view from February 22 through March 31. Ms. Daborn lives in the Boston area and is a full-time member of the drawing faculty at the School of the Museum of Fine Arts in Boston. Her art has been exhibited extensively throughout the United States and in the UK and is held in many prominent public collections including the Boston Center for the Arts, the Santa Barbara Museum of Art, and the Contemporary Art Society for Wales.

Candidate's Weekends

It's hard to match the energy and excitement of Candidate's Weekends. This is when students, staff and faculty get the chance to show off what being a member of the Olin family is all about, as well as meet many future community members. This year's activities, which took place February 23-24 and March 2-3, were no exception. Having received a record number of applications for the Class of 2011, community members involved in Candidate's Weekend had a hard job to do – decide which students out of the 178 in attendance were the best match for Olin. Fortunately, once again the events were a huge success and in the fall Olin will welcome 79 new students as the Class of 2011.

February Job & Internship Fairs

On February 21, 22 and 27 the Office of Post Graduate Planning hosted three very successful Job and Internship Fairs. The three, half-day events, afforded more than 27 companies the opportunity to visit Olin, talk about their organizations and meet with students to discuss full-time job and summer internship opportunities.

Phoenix Fest 2007

On April 7, the Council of Olin Representatives (CORe) hosted the Second Annual Phoenix Fest. A distinctly Olin tradition, there was a mix of the tried and true events, such as the 30-second Student Video Competition and Bonfire, and a few new ones: an Eating Competition, Bouncy Stilts, and Senior Storytelling. As **Ben Hill '07** observed, "Given the average Oliner's busy schedule, it's rare that we all get a chance to just relax and hang out en masse. Whenever we do, it always reminds me just how thankful I am to be in such good company."

SAC Carnival

The Student Activities Committee (SAC) presented the annual Spring Carnival on May 4 immediately following the end of spring semester classes. At the end of class, students descended on the Campus Center Lawn to enjoy fabulous weather and giant inflatable play structures. Other activities included Airbrush Tattoos and Caricatures, a barbecue sponsored by Dining Services, and musical performances by Zero Four and The Brightwings.

"The Importance of Being Earnest" – Spring FWOP Performance

During Candidate's Weekends, the Franklin W. Olin Players (FWOP) performed "The Importance of Being Earnest" by Oscar Wilde, a tale about identity, society, and the dilemmas of Bunburying. FWOP successfully produced and performed this comedy in each and every one of its four shows. **Bennett Chabot '09**, who played Algernon Moncrieff (one of two main characters) noted in his student blog, "The closing night of "Earnest" blew me away. We played to our biggest crowd yet, which, along with Saturday being the closing night of our run, meant that our energy was through the roof. Something about knowing that it's my last show, my last moment, my last chance to become this other person... it always makes me really lay it on the line. That night, we all did - we were on fire. Nothing measures up to the thrill of the stage."



Seniors (left to right) Cathy Murphie, Simon Helmore, Eric VanWyk, Jeff Glickman, and Kristen Dorsey celebrate 2007 Hours 'Til Graduation.



Artist Erica Daborn (left) speaks with students Jon Provo '08 and Amy Gao '10.



Candidates for the Class of 2011 participate in a design exercise as part of Candidate's Weekend (left); Students sumo wrestle at the SAC Carnival (right).



The complete "Importance of Being Earnest" cast.

>>> AUGUST >>>
 >>> JULY >>>
 >>> JUNE >>>
 >>> MAY >>>

DEVELOPMENT UPDATE



Olin's Class of 2007

We would like to congratulate the Class of 2007 on their record setting performance in gaining 100% participation in the class gift! The class raised more than \$72,000 in five years worth of pledges for the creation of a fund to support student greening and sustainability projects.

The past months have been busy ones for the Development Office and I would like to thank everyone for their support. Following are highlights:

- The Class of 2006 continues to honor their pledges and a number of alumni have either exceeded their planned gift and/or are also contributing to the unrestricted funds.
- Thanks to the support of the Parent Advisory Board, the parent participation rate through June 1 is 72 percent.
- 40 percent of alumni parents have continued to participate in the annual fund and C.O.M.E.T.S. programs.
- The C.O.M.E.T.S. recognition program – which was successfully piloted last year – was rolled out to students, faculty, staff and alumni this year.
- Matching gifts have played a significant role in fundraising this year. These gifts have increased 50 percent over last year. You can check if your company has a matching program by visiting: http://www.olin.edu/about_olin/giving_to_olin.as
- To date, 45 parents have taken the Trustees up on their generous offer to match funds for all parents who contribute at least \$1000 more than they had in 2005.
- Faculty and staff participation in the annual fund has increased by 30 percent over last year.
- Two regional development events were hosted at the homes of Board Chairman William Norden and Trustee Scott Gibson in New York City and Portland, OR, respectively. Future events, hosted by Trustees, will be held in Armonk, NY (Carla Gude) and in Boston (Robert McBurney).
- Various corporate and foundation visits have taken place including: Baxter Medical, DiVitas Networks, Exelon, IBM, Illinois Tool Works, Intuitive Surgical, the Hearst Foundation, HP, Motorola and Symbol, Nokia, Pixar, Polycom, and the Spencer Foundation.
- The college is continuing to work to expand the President's Council and recruit new Board members.

As the strategic plan continues to evolve, new ideas being considered include a center for innovation in engineering education, a bio-engineering degree program, and new ways to enhance and sustain the pace of innovation at Olin. In order to recruit additional external support for our objectives, it becomes even more critical for the outside world to understand the core support of the College from within. A critical metric is the participation rate, and our goal is 100% participation.

If you have not yet participated in achieving the 100% goal please consider making a gift to the College. Gifts can be made by cash or check to the Development Office. Credit card payments can be made on line at https://www.olin.edu/about_olin/online_donation.asp. If you wish to make another type of donation please contact me.

Thank you so much for all of your support and further consideration. Enjoy the sunshine!

Joanne Kossuth
Associate Vice President, Development,
Chief Information Officer
phone: 781-292-2431 email: joanne.kossuth@olin.edu

Human Powered Vehicle Team Named Rookie of the Year in National HPV Competition

Team also Ranked Fourth Overall in the East Coast Challenge

Olin's Human Powered Vehicle (HPV) team (**Carl Herrmann '09, Gavin Boggs '09, Jonathan Raphael '09, Allison Weis '09, David Stamp '10, Giulia Fanti '10, Becky Belisle '10, and Casey Canfield '10**) participated in this year's Human Powered Vehicle East Coast Challenge hosted by the American Society of Mechanical Engineers (ASME), May 11-13. The team achieved many impressive results in the single rider category—vehicles operated and



powered by a single individual—including Rookie of the Year; 5th out of 23 in design; 2nd out of 23 in the sprint; 6th out of 23 for endurance; and 4th overall.

The single rider category is based on good design and a fast race time. There are two races: the straight line sprint and a very curvy 65 km grand prix-style endurance race. In the sprint, Giulia

Fanti took second place for females at 27.1 mph; her male teammates, Carl Herrmann and Gavin Boggs, both placed third in the men's race at 34.4 mph. While this was the team's first official competition, they worked on the single rider HPV for two years, and everything with the exception of the standard bike parts was manufactured at Olin's Machine Shop. Support from Olin College in terms of space, resources and funding was an integral component of the team's success.

With its inaugural competition behind them, next year's HPV team will aim for improved performance in all categories. For more information regarding this story, please visit Olin's website at http://www.olin.edu/about_olin/news/pr_single.asp?id=195

Student Surfboard Business, Sonicfoam, LLC, Named Finalist in Rhode Island Business Plan Competition

Who says engineering and surfing are mutually exclusive interests? Certainly not the team of Olin students and alumni who founded Sonicfoam, LLC. These environmentally conscious surfers and adventurers – **Amy Lee '08, James Krejcarek '06, and Lindsay Redmond '08** (pictured below) – have possibly discovered a new way of processing polyurethane (PU) foam for surfboards. The patent-pending Sonicfoam Process elimi-



nates the need for toxic chemicals and reduces the total amount of energy used in processing foam. The successful commercialization of this process would lower costs and increase sustainable manufacturing capabilities in the \$7.7 billion American PU industry.

On May 6th, the Sonicfoam team took its business plan to the Rhode Island Business Plan Competition, and placed in the top six of forty competing finalists. The Rhode Island Business Plan Competition, a nonprofit organization that seeks to promote entrepreneurship and the development of start-up and early stage companies in Rhode Island, is supported by 24 local organiza-

tions, including public and private companies, universities and colleges, and public agencies. Sonicfoam, LLC's business plan centered around the key goals of developing partnerships to commercialize and implement the Sonicfoam Process into the manufacturing of surfboards and other foam products.

"One of the really great things about Olin is that students are encouraged to find ways to foster our passions by using our engineering talents. The founding of Sonicfoam, LLC has been the ideal blend of activities for me— it's allowed me to become an entrepreneur, stay true to my passion of surfing, and focus on bettering the environment through innovative engineering. It's been a great experience and I look forward to continued success," said Lindsay Redmond '08, co-founder and owner of Sonicfoam, LLC.

In the future, the team hopes to be riding on surfboards created with Sonicfoam technology. But at this point, they're happy knowing that they have found ways to help the surfboard making process become more environmentally sustainable.

For more information regarding this story, please visit Olin's website at http://www.olin.edu/about_olin/news/pr_single.asp?id=194

GRADUATING CLASS SHINES

Alison Lee '07 Receives Fulbright for Study in Korea

Alison Lee '07 has been chosen by the Fulbright Program for a scholarship-funded year of study in South Korea. "I wanted to challenge myself to experience something totally different," says Lee.



"I'm excited to have an adventure and see what opportunities arise."

The Fulbright Program is designed for recent college graduates who would like to spend a year overseas pursuing some sort of project of their own design. It provides scholarships to a limited number of students each year to cover their expenses for the year in countries all over the world. These students become cultural ambassadors for the United States, and

are expected not only to take something of their home country with them, but also to bring home what they learn while away. Lee plans to do just that.

Lee's trip officially begins over the summer, when she will be one of 70 Fulbright recipients headed for Korea. While there, she will be a part of an English Teaching Assistantship, which is slightly different from the more open-ended Fulbright programs in that she will teach English to 200-800 schoolchildren for twenty hours each week.

Olin SCOPE Team Wins Second Place in IEEE Student Design Competition

'MindScout' Offers Improved Quality of Life for Alzheimer's Patients

On May 5th, three members of an Olin SCOPE team (**Cathy Murphie '07, Kristen Dorsey '07, and Daniel Gallagher '07**) traveled to Rochester, N.Y., to present their Alzheimer's device, MindScout, at the Seventh Annual IEEE Student Design Contest. The team won second place for its solution, which was designed to allow a person with Alzheimer's disease to live independently for a longer period of time without the need for institutionalized care.



The "MindScout" SCOPE team

mindscout.com

ments through creative final projects. Each project is judged on the merits of presentation, teamwork and innovation in its particular field.

MindScout is a handheld device that automates reminders about daily activities and hears and answers a patient's most frequent questions. The device is worn around the house throughout the day and is always on. A customizable interface with appropriate audiovisual cues ensures that both the Alzheimer's patient and his or her care giver can easily use the device. MindScout can be programmed by the care giver to answer specific spoken questions and to store schedule and reminder information.

This project was taken on by five Olin seniors—**Kristen Dorsey, Daniel Gallagher, Alison Lee, Catherine Murphie and Laura Stupin**, as well as Wellesley senior **Susan Tse**—as their engineering capstone project and the Olin sponsored SCOPE project. Over the course of eight months (one academic year) the team successfully developed a proof of concept for the device.

The 2007 Student Design Contest provides an opportunity for engineering students of various disciplines to showcase their developing talents through creative final projects. Each project is judged on the merits of presentation, teamwork and innovation in its particular field.

The Olin Foundry Gives Students Opportunity for Hands-on Entrepreneurship

(continued from page 1)

to experiment and even fail, if that's what it takes to help them learn. Hands-on learning is not limited to engineering course work and learning. Olin believes the best way for students to learn how to navigate the business landscape – what works and what doesn't – is by doing," said **Steve Schiffman**, associate professor of Entrepreneurship at Olin and Babson Colleges. Professor Schiffman and his colleague, **John Bourne**, professor of Technology Entrepreneurship, serve as the faculty co-directors of the Foundry.

Additionally, the Foundry is entirely student run. The Foundry's manager, **Andrew Coats '08**, attributes the evolution and increasing interest in the Foundry to several factors. "Now that there is less emphasis on 'building' the College, we're able to focus on improving its programs and other offerings, and Olin's emphasis on educating well-rounded engineers recognizes that basic business practices are essential components of our education. Entrepreneurship is an area of interest for many Olin students and the Foundry is a great way for them to pursue that interest."

Activities at the Foundry are

nice complemented by the Olin Entrepreneurial Group (OEG). The group's mission is to promote the spirit of entrepreneurship, facilitate entrepreneurial education, provide a network of entrepreneurially minded individuals, and encourage entrepreneurship as a viable career option for all. While students are often members of OEG prior to actively engaging in start-up businesses, the group meets regularly at the Foundry to share ideas and insights.

New Initiatives

This summer marks the initiation of the Foundry Summer Program which allows 15 Olin students to work 40 hours per week on their businesses. The students, who represent a total of five startups (BlueStem Energy, IdeaTree, Recipe Tango, TB Tester and Xobl), are provided free housing and all the resources the Foundry has to offer. They meet once a week to exchange ideas, talk about obstacles they've faced and how they've overcome them, as well as successes they've experienced.

They also brainstorm ideas about what can make the Foundry run more effectively, for example, its

new ideation room – imagine whiteboard walls. With a grant from the Conscious Lifestyle Youth Venture organization, the students have turned a room into a public area where teams can design and prototype products.

Additionally, the Foundry has recently approved a charter that allows Olin alumni to continue their entrepreneurial work from the Foundry for two years post-graduation.

Early Successes

The Foundry environment provides a unique link between engineering education and entrepreneurial interest, and it's a proven success. During their tenure, Olin alums **Jeff Satwicz '06** and **Bret Richmond '06** created the concepts and first prototype for the Big Belly Cordless Compaction System™ while two Babson MBA students (**Jim Poss and Alex Perera '04**) focused on the business side. Last year Seahorse Power Company (www.seahorsepower.com) was named to Inc. Magazine's list of Green 50 Companies and has sold



Jeff Satwicz '06 constructed prototypes for his "Big Belly" trash compactor at the Foundry.

hundreds of Big Bellies to cities all around the country, including Baltimore, Boston, Chicago, Queens and Brooklyn, N.Y., and Palm Springs and San Diego, Calif., among others.

Meanwhile, **Leighton Makoto Ige '06**, the engineer behind the Salubrion Seat™, did much of his initial prototyping and business research at the Foundry while studying at Olin. Today Ige's company, Salubrion (www.salubrion.com), has sold its "meditation chair" and related products in Japan, Britain, Germany, Canada, Australia and France, as well as in smaller markets in Ireland and Costa Rica.

Faculty Development Workshop Series



A Metal Casting co-curricular participant

Popular Co-Curriculars Let Students Explore Intellectual Interests

One of the many things that sets Olin apart from other engineering schools around the world is its focus on providing students with alternate ways to pursue their non-engineering oriented intellectual interests. Be it an Arts, Humanities, Social Sciences Capstone project or participation in co-curricular offerings, Olin students are strongly encouraged to feed their passions. Co-curricular offerings are non-credit activities combining fun and intellectual awareness. They are scheduled for a limited time, are led by a staff or faculty member and are funded by the Office of Student Life. In this edition of Innovations we're highlighting two popular faculty sponsored co-curriculars.

For the past two fall semesters, professors **Caitrin Lynch**, **Oscar Mur-Miranda**, **Alisha Sieminski** and **Zhenya Zastavker** have offered Gender and Engineering. The co-curricular asks a number of questions. What does gender have to do with engineering and science? Is there a connection? Should there be? What might such a connection mean? Throughout the 11-week duration of the co-curricular offering students will read industry, popular, and academic studies that examine a variety of issues related to gender and engineering, including issues related to femininity and masculinity in engineering. Students are expected to read a brief article for each meeting and take turns leading a discussion. The semester's readings are determined as the co-curricular progresses. Reading materials are based on faculty, staff, and student suggestions and participants are encouraged to relate issues raised in arti-

cles to their own experiences.

Meanwhile, Professors **Jon Stolk** and **Ben Linder** appeal to students interested in creating something more tangible like jewelry or sculptures via their Metal Casting co-curricular. The co-curricular offers a combination of demonstrations and project work aimed to teach participants the lost-wax, investment casting process, which can be used to create small, detailed metal items such as jewelry, fashion accessories, architectural accents, sculptures, engineered components and simple consumer products. Students use investment casting techniques to produce original designs or found objects from a variety of metals, including bronze, sterling silver, aluminum alloys, and pewter.

Olin Professor Helps Needham High Prepare for AP

Professor **Allen Downey** came to the rescue for four Needham High School (NHS) students. Due to low enrollment numbers it wasn't looking good for a few highly motivated NHS students who were interested in taking an advanced placement Computer Science course last year. But thanks to the creative thinking of NHS Mathematics Department Chairperson, Marie Baroni Allen, these four students not only completed the AP Computer Science course and exam at the end of the year, they were also afforded the opportunity to attend classes at Olin College in preparation.

With the help of Olin Dean of Faculty **Michael Moody**, Allen arranged for the high school students to take Software Design at Olin in the fall. Not only did Olin give these students free tuition and use of the computer lab, they also rescheduled the class so that the students could attend after their regularly scheduled school day. Because the Software Design course, taught by Professor Downey, didn't follow the AP curriculum for Computer Science the students required some additional coaching in preparation for the exam. That's when Professor Downey volunteered to go to NHS to meet with the students once a week and help prepare them for their upcoming Computer Science AP exam.

"Without the support of Olin and Professor Downey in particular, these students would not have had an AP Computer Science course last year," said Marie Baroni Allen. "For these particular students, this course was essential to their preparation for their college major. We are very grateful!"



Olin Professor's New Book Looks at Women Garment Workers in Sri Lanka

Caitrin Lynch, assistant professor of Humanities and Social Sciences at Olin, has a deeply rooted interest in Sri Lanka and the status of women working in its burgeoning garment industry. After more than 18 months observing workers and conducting interviews, she has written a book, "Juki Girls, Good Girls," that tells the stories of women caught between their traditional roles as women and their new roles as workers. She focused on two garment factories in a small village in central Sri Lanka. The two factories under Lynch's lens were built as a result of rural industrialization policies the Sri Lankan government promoted in the early 1990s.

"There has been huge social and economic change in Sri Lanka since economic liberalization," notes Lynch. "This has created a lot of concern about the damage to perceived traditional values."

The "Juki girls" of the book's title is a derogatory term used to describe urban garment workers who, rightly or wrongly, garnered a reputation for loose morals. The phrase "Juki girls, Good girls" reflects the attempts of rural female garment workers to distance themselves from the negative connotations of their jobs. They consider themselves both good workers and good representatives of the highest ideals of Sri Lankan society, says Lynch.

Recent Accolades

Dr. Yevgeniya V. Zastavker, Associate Professor of Physics, recently received notification that her paper titled "Women in Engineering: Exploring the Effects of Project-Based Learning in First-Year Undergraduate Engineering Program," was selected as a top five finalist competing for the FIE 2006 Benjamin J. Dasher Best Paper Award. The paper was acknowledged as an outstanding contribution to the FIE 2006 Annual Conference.

Dr. Sarah Spence Adams was awarded a \$20,000 grant titled "Complex and Quaternion Orthogonal Designs for Wireless Communications" from the National Security Agency (NSA) for a research program that revolves around the marriage of classical mathematics and modern wireless communication systems.

Dr. Ozgur Eris was awarded a \$60,000 grant from Stanford University/NSF as a continuation of the previous grant titled "Accelerating Globally Distributed Team Innovation: Building an Experimental Testbed to Leverage Digital Libraries in the Transformation of Design Engineering Education." The purpose of the grant is to continue to apply, evaluate, and augment the digital libraries framework that has been developed in the first two and a half years of the NSF-DIDET project. Olin will continue the ongoing Stanford-Strathclyde collaboration as the third partner.



While some professors put their feet up the week after graduation, Olin College professors do anything but. During the week of May 21, fifteen members of the faculty participated in the second Faculty Development Workshop. The week-

long course on "Computational Modeling" was taught by Professor **Allen Downey** and had participants reading scholarly articles and books, engaging in lively discussions, and writing and running simulations in the computer lab. The workshop covered topics including small world graphs, cellular automata, and agent-based simulation. "I like to use these topics to get at some ideas from the philosophy of science," Downey explained, "including different claims about the nature of scientific laws."

One of the articles the group read was Thomas Kuhn's "Objectivity, Value Judgment, and Theory Choice," which discusses the criteria scientists use in choosing one model, or theory, over another. The professors did some programming, too. "I was impressed," Downey said. "We had people from anthropology to zoology, but they were willing to get into the lab and write some programs." In one of the labs, the "students" implemented Schelling's segregation model, which shows that individuals who are only mildly xenophobic can yield aggregate behavior that is strictly segregated. Professor **Caitrin Lynch**, a cultural anthropologist, said "It was interesting to see how computer simulation could be used to approach questions that social scientists have been researching for many years. When my lab partner (Chemistry Professor **Chris Morse**) and I created a highly segregated simulated world, we began to think in new ways about the world we live in."

Computational Modeling will be offered to students as a semester-long course in the fall of 2008. "All I have to do between now and then is write the text book," Downey said.

Professor **Joanne Pratt** and I conceived the faculty development series. Our motivation was simple -- we were jealous of the students because they got to take great courses with great professors. Since we generally don't have time during the semester, we decided to try it during winter and summer breaks.

The first workshop, taught by Professor Pratt on the "Biology of Disease and Health," took place in January and was attended by fourteen faculty members. "It was a great experience to teach my colleagues," said Professor Pratt. "These students really challenged me to explain biology concepts and techniques to an audience that looks at everything from a completely different perspective. They also really challenged my patience."

— **John Geddes**, Associate Professor of Mathematics



BEHIND THE SCENES AT EXPO

First-Time Participants Share their Inspirations

An ice skating fall put **Morgan Boes '10** into a cast with a broken tibia last winter. Despite the pain and inconvenience of her injury, she turned her five week ordeal into a learning experience. As one of the student presenters at Olin EXPO, an exposition of students' new ideas and recent achievements, Boes used her new-found understanding and personal experience with physical therapy to give an overview of the profession and the process of rehabilitating injured limbs. In her presentation she discussed in detail the regimen implemented by her therapist and how the process returned strength and flexibility to her joint. She aspires to become a medical professional, and her injury served to introduce her to the field of physical therapy, one she is now considering for a profession. The exercises and the medical motivations for each therapy exercise offered insight into the complexity and resilience of the human body and her experience, aside from being painful, was insightful and enlightening.

Meanwhile, fellow student **Emanuel Towns '10** presented on a completely different topic – the business concept behind SerasFlight Designs. Towns initially developed the concept for his Foundations of Business and Entrepreneurship course. The class, taught by Professors Steve Schiffman and John Bourne, is designed to provide students with experience in planning and operating a business venture. The goal of SerasFlight Designs is to bring model rocketry into elementary and high school classrooms as a teaching tool. Towns plans to challenge the major model rocketry manufacturers, such as Quest Aerospace, and in doing so, revolutionize and revitalize the model rocketry business. He is looking into the possibility of applying to the Olin Foundry for financial support and space where he can develop and grow SerasFlight into a viable business. Towns' concept furthers a lifelong passion for rocketry. Most recently he was active in his high school's rocketry club and participated in the Team America Rocketry Challenge, a nationwide model rocketry competition for high school students.



Angela Sharer '09 presents her Expo poster.

Inventor Amy Smith's Speech Sparks Appropriate Technology Discussions and Initiatives Across Campus



Professor Amy Smith addresses the Olin community.

On April 4th, Olin College welcomed MIT professor and inventor Amy Smith on campus to speak about her life's work. The visit was part of the Big Conversations speakers' series addressing the theme of "What's Important." Smith is widely recognized for her work in developing countries such as Brazil, Honduras, and Zambia. Her inventions, which are inexpensive, environmentally sustainable, and compatible with local materials, have changed the way people live in developing parts of the world.

Smith graduated from MIT in 1984. She then joined the US Peace Corps and spent four years in Botswana. Afterwards, Smith returned to MIT to pursue a degree in Mechanical Engineering specializing in engineering design for developing countries. For her work, she was awarded a MacArthur Foundation "Genius Grant" in 2004.

Currently, Smith leads a series of courses at MIT called D-Lab. She teaches students about efforts in development, sustainability, and creating "appropriate technology" to aid and enhance the quality of life in these underdeveloped areas.

Among her achievements, Smith has engineered a screenless hammermill that eliminates the need for replaceable screens low-income households cannot afford, and a phase-change incubator that can culture microbes for 24 hours without using electricity or gas as a power source.

Following Smith's discussion, the Olin community involved itself in a host of activities inspired by the theme of Smith's talk.

UPCOMING ACTIVITIES AND EVENTS

August 5, 2007
Women's Open House

August 25, 2007
Arrival Day for Class of 2011

August 30, 2007
First day of Instruction

October 11, 2007
Career Initiatives Day

October 12-14, 2007
Family Weekend

October 28, 2007
Admission Open House

November 14, 2007
Presidential Lecture Series

November 19-23, 2007
Thanksgiving Recess

December 19-20, 2007
Olin Exposition

**December 21, 2007-
January 21, 2008**
Intersession

Innovations

©2007 Franklin W. Olin College of Engineering

Office of Communication:
Joseph Hunter
781-292-2261

Alyson Goodrow
781-292-2257

e-mail: communication@olin.edu

Photography:
Michael Maloney, Andrew Tsang '09

Design:
Vergara Design

VISIT US ONLINE @ WWW.OLIN.EDU