

ENGINEERS BECOMING ENTREPRENEURS

Teaching students how to turn great ideas into new ventures was the goal of the Invention to Venture (I2V) Workshop that was held on March 25, 2010. The event connected engineering and business students from Carnegie Mellon University and other Pittsburgh-based colleges with investors, industry figures and CIT faculty who have launched their own companies.

Sanna Gaspard, a Ph.D. student in biomedical engineering and an entrepreneur, orchestrated the student-run event, titled “Leading the World through Engineering and Entrepreneurship”. (Her biotech startups are TLneoCare and Rubitection Inc.) “I wanted to bring this national event to Carnegie Mellon because I feel that CIT students receive strong engineering fundamentals that would be enhanced with more opportunities to cultivate the skills needed to innovate novel ideas, sell those ideas to investors and translate innovations to society.”

Gaspard rallied CIT, the Tepper School of Business and the National Collegiate Inventors and Innovators Association (NCIIA) for financial support. Students from CMU’s Undergraduate Entrepreneurship Association and the Entrepreneur and Venture Capital Club volunteered at the daylong event. A total of 140 people registered for the day, marking an excellent turnout for a first-time event.

The day began with information sessions, including “Intro to Entrepreneurship” and “Assessing a Project, Product or Company,” which was led by Tepper’s Art Boni (B.S., M.S. MechE, ’61), Babs Carryer and Tara Branstad. At lunch, Jeff Mullen, the founder and CEO of Dynamics, Inc., delivered an inspiring keynote speech. Dynamics, a successful Pittsburgh startup, invented the world’s first fully

programmable magnetic stripe, i.e., the stripe found on the back of credit cards. Mullen earned his B.S. in electrical and computer engineering and MBA in entrepreneurship, both from CMU. Following lunch, CIT faculty led workshops that examined how to commercialize technology in different engineering fields. Many of the professors

Innovators in Engineering

CIT faculty speakers included:

Rick Carley, ECE

Robert F. Davis, MSE

Erica Fuchs, EPP

James Jordan, BME

Jeremy J. Michalek, MechE

Lawrence Pileggi, ECE

Ray Steeb, CEE

Erik Ydstie, ChemE



Sanna Gaspard

shared insightful accounts about the launch of their startups, covering everything from funding to intellectual property issues.

One of the day’s highlights proved to be the Elevator Pitch Workshop. Students presented their startup ideas to a panel of regional investors who provided valuable feedback on everything from the business ideas to how students can frame and polish their pitches. The prominent panel included: Carol McCague, BlueTree Angel Investors; Mel Pirchesky, Eagle Ventures; Ned Renzi, Birchmere Ventures; and Alan Veeck, Meakem Becker VC.

“A participant in the Elevator Pitch Workshop whose venture fell within the expertise of one of the investors received an invitation for further one-on-one assistance to promote the venture,” says Gaspard. “Another student said that the workshop opened her eyes to thinking beyond limiting her work to research.” The busy day concluded with a reception, a final opportunity for students to network with investors and their professors.



Alum Jeff Mullen, the founder and CEO of Dynamics, Inc., delivered a rousing keynote speech.

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Cultivating Leaders

“My favorite part of the trip was job shadowing. I got to sit in on meetings and talk to engineers at IBM. There was this one meeting about one of IBM’s new marketing strategies, and I got to input one of my ideas. I really got to see how team projects are run in the real world and how I need to use all my skills, not just the engineering ones, to help the group” – Eric Liu

“The experience of shadowing a mentor in the Department of Energy was amazing. The conversation I had with the people there has inspired me to pursue my interests in the field of energy.”

– Kory McDonald

Whether leaders are born or made, we won’t debate. However, when students demonstrate leadership potential, we’re compelled to help them develop their abilities. To provide a group of highly motivated undergraduates with additional opportunities, CIT named 11 juniors as Dean’s Leadership Fellows. Each of the fellows was invited to Washington, D.C. so they could job shadow alumni and others who work in the nation’s capital.

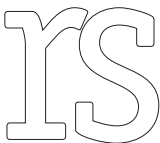
The selection process began last fall with a call for student applications, reference letters and resumes. Dean Pradeep K. Khosla, faculty and senior staff reviewed the applications and chose the fellows, each of whom received a \$500 stipend and a two-night trip to D.C. during Spring Break. The fellows were interviewed and then paired with mentors whose expertise aligned with the students’ professional interests.

During the trip, the students attended a reception to network with alumni and other D.C.-based professionals, they visited the Capitol, and spent a day shadowing their mentors. As part of their fellowship commitment, the students worked on a community service project that they devised. The students created a website that connects Pittsburgh-area food banks and soup kitchens with local vendors and farmers who have surplus goods.

As anticipated, the trip to Washington and interacting with government and industry leaders excited the students and provided a platform for career exploration. “The shadowing experience gave the students a great opportunity to meet incredible leaders and see leadership skills in action,” says Kurt Larsen, the assistant dean for Undergraduate Studies. “This effort was yet another vehicle for CIT students to gain the experience and skills needed to become tomorrow’s leaders in industry, education and government.”

DEAN'S LEADERSHIP FELLOWS

"My experience with a senior scientist at the National Institutes of Health (NIH) provided great advice for my potential career in the health sciences. It was a great networking opportunity and I was able to see multiple facets of the NIH campus and the wide range of active research disciplines. Receiving a mentor who was a Carnegie Mellon Chemical Engineering alum made the experience extra fulfilling. He told me he met his wife in the Chemical Engineering student lounge in Doherty Hall." – Pallavi Nair


"The most fulfilling experience apart from having a leadership role in the Pittsburgh community was seeing the collaboration between the government and field research. D.C. is the best place to see how technology, public and private sectors all come together."
– Sruthi Reddi Chintakunta

"I am simply elated that I can do something I am passionate about — helping individuals in a sustainable way. Our community service project created an avenue through which local farmers can connect with local soup kitchens, facilitating the process of using the earth the way it was meant to be used and increasing the quality of life of those in need." – Kwadwo Som-Pimpong

"Dean's Leadership Fellows gave me a real-life experience doing a useful project. I learned a lot about my community here in Pittsburgh. I got to use my leadership skills to bring food to the hungry, with the backing of Carnegie Mellon University."
– Kelly Frank

SRUTHI REDDY CHINTAKUNTA, ECE
CHRISTOPHER DEFRANCESCO, MECHE AND BME
KELLY FRANK, ECE
LAURA GURWITZ, MECHE
ERIC LIU, MECHE
KORY MCDONALD, MECHE
LAURA MCKEE, CHEME AND BME
PALLAVI NAIR, CHEME AND BME
CHIRAAJU SETHI, CIVIL
KWADWO SOM-PIMPONG, MECHE
DANIEL WETZEL, CHEME

The College of Engineering wishes to thank the following alumni and friends for taking part in the Dean's Leadership Fellows program and making it a success:

Dr. Michael Azarian (MS, Ph.D. MSE, '88, '94)
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University of Maryland

Dr. Marilyn Bracken (BS MM, '57)
Institute for Defense Analyses

Jerome Bracken (BS CivE, '56)

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Drug Delivery & Kinetics Laboratory of Bioengineering and Physical Science

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Tylesha Drayton (BS, MS CivE, '03, '04)
Concurrent Technologies Corporation and Office of the Assistant Secretary of the Army (Energy & Partnerships)

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Senate Commerce Committee

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CEO, Greater Pittsburgh Community Food Bank

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Office of Research and Development and Office of Science Policy

Dr. Robert Wright (BS MechE, '63)
Senior Advisor for Planning and Environmental Analysis at the Office of Fossil Energy,
U.S. Department of Energy (DOE)

"The dedication our alumni and staff have to the students at this institution is astounding. From my perspective, this program seemed to encourage more engineers to think about going into policy. If that was the intent, it could not have been more effective. These experiences changed our perspective on scientific policy and how it can be used to better the current state of our world." – Daniel Wetzel