

# Drexel Univeristy Society of Women Engineers Winter Issue 2013

### President's Message

Claudia Gutierrez

This past term was unforgettable as I witnessed an incredible growth in Drexel SWE's membership and influence both on and off campus. We kicked off the term with over fifty new faces at our first general body meeting. These new members then participated in everything from discussions panels about work life balance, volunteered at an outreach event to introduce young girls to engineering during Engineer's Week, and ten of them even traveled to Wilmington, DE to participate in the SWE Regional Conference. Our growth and involvement did not go unnoticed as I am proud to announce that Drexel SWE received 1st place Outstanding Collegiate Section of the Mid-Atlantic Region. This accomplishment would not have been possible without our dedicated officers who I have the pleasure to call my closest friends, all the enthusiastic members who attended and volunteered at our events, and the support of College of Engineering and School of Biomedical Engineering.

This spring term I will be moving to Switzerland to complete my second co-op. In my place the vice president, Meaghan Paulosky, will be acting as president-interim for the spring and summer term of 2013. She is extremely passionate about SWE and a very dedicated individual. I know she will do a great job. Best of luck to you and the SWE chapter!

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Nominate Society of Women Engineers for Student Organization of the Year at www.drexel.edu/studenta ffairs/programs\_events/p rograms/slawards/



#### **Doreen Nixon from Lockheed Martin**

Doreen Nixon is the current director of Lockheed Martin and manages thousands of employees. On January 23rd, she spoke to Drexel organizations including SWE, ASME, AMP, and IEEE about her experiences, her pathway, and challenges she has overcome as a female engineer. Ms. Nixon thrived in her field during a generation when women were not viewed as employees equal to the value of their male counterparts. Her ability to express her concerns to superiors and dedicate time to her children is inspiring and is what led her to her position today. She is currently the Director of Mission Systems and Sensors (MS2).

Lockheed Martin is a global security and aerospace company that employs about 120,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration, and sustainment of advanced technology systems, products, and services.

### **Knovel Trivia Night**

Drexel sections of Society of Women Engineers and American Institute of Chemical Engineers held a joint engineering jeopardy competition adapting a search engine called Knovel specifically designed for engineers. Knovel pulls information from published textbooks and references using a keyword search and percent match to find exactly what is being searched. The Knovel site also hosts a practical unit converter that has a vast selection of units to choose from.

Knovel Trivia Night allowed SWE members to explore a new way of researching in an engineering design projects.

### SWE Wellness Yoga



Meridith Bienvenue, our newest Wellness Director, oversees the mental and physical wellness of SWE members. Yoga supports the SWE mission by providing members a positive experience to feel at peace before the onset of midterms.

### Why Women Still Can't Have it All

A discussion over dinner of the article "Why Women Still Can't Have it All" was lead by a panel of three women. This event supported the SWE mission because we spoke about the difficulties of being a woman in engineering - the difficulties for a woman who wants to take time off to have children and take care of them. The three women who spoke are all very successful and have families; The professor is a stepmom whose husband's children live with them every summer, and because of her career choice she is able to spent a lot of time with them. One woman works for Lockheed Martin and has a child and expecting a second. She is in a management position, which usually requires about 50 to 60 hours a week. However, she made the decision to produce very high quality work so that she can work only 40 hours a week, giving her more time to spend with the family. Another woman was much later in her career and mentioned how when she first had a child. part-time didn't exist. Fortunately her quality of work impressed her employer so much that he created a parttime position for her. All these women demonstrated that having a career can be balanced with your personal life when you set your priorities and know what will make you happy.

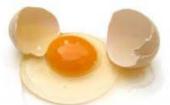
The event was held in Raisler Lounge (Towne 225) in Penn's Engineering Quad from 6:30-8:30 PM on January 23. Nine Drexel SWE members attended.

### Member Spotlight: Emily Buck



Congratulations to our Outreach Director Emily Buck (Materials Science Engineering '14) for earning the prestigious Goldwater Scholarship this past March! The Barry M. Goldwater Scholarship is a national premier award that recognizes highly ambitious and talented undergraduates committed to research careers in Science, Technology, Engineering, and Math (STEM) fields identifying them as future scientists of the highest potential. Emily Buck is working on using electrospun polymer nanofibers for water filtration, with a specific interest in making such devices able to accommodate the wide variety of contaminants found in water globally.

### Engineers Week Egg Drop Competition



The annual competition hosted by Drexel's College of Engineering challenges students to design a container that is capable of protecting an egg from drops of various heights. This year, SWE took part in publicizing, planning, and cracking a few laughs and eggs at the competition. SWE was even present on the awards podium – congratulations to our Social Media Chair, Emily Krantz, and her team on winning First Prize!

### February 18 - 22 Introduce a Girl to Engineering



As part of Engineer's Week, Drexel SWE introduced high school and middle school girls to the engineering design process by discussing appropriate technology solutions to various global problems.

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### Advancing Women in Science: Dr. Ada Yonath

On January 15th, the Society of Women Engineers was invited to a conversation hosted by Dr. Donna Murasko, the Dean of the College of Arts and Sciences, and Dr. Banu Onaral, the Director of the School of Biomedical Engineering, Science and Health Systems. The event entitled "Advancing Women in Science" centered on the experiences of Nobel Laureate Dr. Ada Yonath, a woman of incredible strength and noted for her groundbreaking research. The discussion focused on her personal life and the motivations behind a female presence in the scientific community.

At a young age Dr. Yonath fell in love with science while reading a book about Marie Curie. Dr. Yonath was captivated by the passion for science and discovery apparent in Curie's work, but did not regard it as unusual for a woman. Even while pursuing her doctoral studies Dr. Yonath never noticed that she was the only woman in the lab until her male colleagues acknowledged it mockingly. Instead of being discouraged, it only motivated her to work harder. She went on to purse postdoctoral work at MIT and managed to balance her success with her growing family. She never feared the family-work life balance. Instead, she just made it work because it was what she had always wanted. Dr. Yonath acknowledged the sacrifices that had to be made and shared that there is no secret recipe for triumph - recognize family time as quality time that made everything possible.

"I am very grateful for the opportunity to meet Dr. Yonath. As a female taking the very first steps on a long career path in the sciences, meeting with important figures such as Dr. Yonath is extremely inspirational. As a woman in a field of many men- with a young baby no less - Dr. Yonath recounted how she began what was to become a widely successful career, which was a wonderful example of how a woman can both raise a family and contribute to the field of study she loves. I especially appreciated the casual setting in which Dr. Yonath addressed us, as it felt more like an after-dinner conversation than a lecture."

- Jackie Gerhart, SWE member, Pre-Junior, Biomedical Engineering



"I spoke with her personally after the discussion and she asked me to pass on a message to the members of SWE: First, do not find a role model; instead find a mentor. A role model will limit you, while a mentor will encourage you to create your own life centered on your own ambitions. Second, if you have a passion for science, follow it. You will never grow tired of your career if you do."

- Claudia Gutierrez, SWE President

In 2009, Dr. Yonath received the Nobel Prize in Chemistry for her studies on the structure and function of the ribosome, becoming the first Israeli woman to win the Nobel Prize out of ten Israeli Nobel laureates, the first woman from the Middle East to win a Nobel prize in the sciences, and the first woman in 45 years to win the Nobel Prize for Chemistry. However, she said herself that there was nothing special about a woman winning the Prize.

### Engineering Leader of the Year 2013 - Dr. Linda M. Abriola

Each year, at the close of Engineers Week activities, Drexel University's College of Engineering honors one engineer for their work and contribution to the engineering community. This year was the first in which this honor was bestowed upon a female engineer, making the event especially appropriate for our four officers in attendance. Dr. Linda M. Abriola is a Drexel Cvil Engineering alum and is currently with Tufts University where she is the Dean of the School of Engineering. Dr. Abriola has been respected within the field for many years: she holds twenty different awards for her lectures, work, and publications and was an elected member of the National Academy of Engineering, a member of the National Research Council, and remains member of the National Science Foundation.



From left to right: Meaghan Paulosky, Neha Thomas, Dr. Linda M. Aribola, Claudia Gutierrez, Emily Buck

During her speech, Dr. Abriola focused on the importance of engineering education. Unfortunately, many students are adverse to studying engineering before they even know what it encompasses. By the time they reach high school, most students feel intimidated by math and science and therefore vilify any notions about engineering. Dr. Abriola stressed the need for a shift in perception. Young students need to see the design element and the power behind an engineering education, not the struggle and difficulty.

"As mentors of young girls and high school students, this directly relates to our mission and purpose in SWE. By introducing the creativity and potential in studying engineering, we have the ability to effect change. Taking Dr. Abriola's charge to share our positive experiences, future events will be more thoroughly centered around this philosophy.

I am so fortunate and extremely grateful to be able to attend these types of events through my affiliation with SWE. Being able to meet so many incredible figures within Drexel and the engineering community makes it possible for me to visualize myself in their positions. Midterms, homework assignments, and lab reports make it easy to get tunnel vision. At times I find myself only thinking up to graduation, forgetting that it is only the beginning of my engineering career. Hearing the testimony of Dr. Abriola, someone who was in my exact shoes at Drexel only a short time ago, allows me to set bigger goals and make more ambitious plans.

Attending the celebration also allowed me to make connections that I would otherwise not have the opportunity of making. Just while eating dinner I was able to get advice about my plans for a graduate degree, learn about research relevant to my studies, and establish a mentoring contact. I can't say that other Friday nights are quite as productive.

### Region E Conference

Region E Conference took place March 8 - 10, 2013 at the DoubleTree Hotel in Wilmington, Delaware. The conference presented a weekend of networking, career fairs, educational workshops, and inspirational speeches for women in engineering. The networking event hosted by Boeing at World Cafe Live on Friday night opened a sociable environment for student engineers and professionals. Saturday included a variety of workshops targeting four pathways: Collegiate, Professional, SWE, and Technology. A sample of workshops topics covered emotional intelligence, effective personal communication, renewable energy, and strategies for entering the



From left to right: Joy Jiang, Samantha Schneider, Gabby Schmanek, Anna Lu, Claudia Gutierrez, Meridith Benvienue, Janette Danella, Jenna Bechard, Paulina Gawor, Bhavika Gali, Shravani Birewar

job market. The career fair was lively with recruiters from The Boeing Company, DuPont, Pepco Holdings, PSEG, W.L. Gore & Associates, Merck and Co., Johnson & Johnson, etc. During the conference, Drexel University won Outstanding Collegiate Section for the Mid-Atlantic Region. Congratulations to everyone in our chapter for making this possible! The eleven Drexel SWE attendees all stood with pride during the award presentation and were able to go home just a little more inspired.

"Attending the SWE Region E conference was one of the best experiences I have had in my collegiate life. I had the opportunity to meet and talk with elite professionals from reputed engineering corporations nationwide. It was an absolute privilege to have so many doors of opportunities open up for me after attending the conference. There I met my future mentor and many professionals from the industry whom I am still in contact with today. I encourage everyone to attend these conferences, and I am very much looking forward to attending the next one!"

- Bhavika Gali

### Vice President's Message

Meaghan Paulosky

It never ceases to amaze me just how motivated and successful our Drexel SWE girls can be. This term was one of particular productivity as our new leadership infrastructure was implemented. Many of the current officers are holding leadership positions for the first time within SWE, although you'd never be able to tell! In those few short weeks, our numbers have jumped in both membership and participation! I could not be more proud of all of the work accomplished this term and look forward to all that will be done in spring and summer.

### Thank you!



Drexel University Society of Women Engineers would like to thank Drexel College of Engineering and School of Biomedical Engineering, The Boeing Company, Air Products and Chemicals Inc., and the Student Activity Fee Allocation Committee for their support

over the last academic term!











### **Contact Drexel University Society of Women Engineers!**

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Janette Danella Membership Director

Janette Danella Membership Director

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