I’m happy to announce that BMES is strongly continuing its missions of professional development and outreach this semester. The annual Cornell sponsored Into the Streets event was held October 20th. The BMES volunteers were assigned to Ellis Hollow Community Center where they worked on improving the landscaping through some gardening and mulching. They definitely did a GREAT job! Furthermore, many of our students presented their research at the annual Biomedical Engineering Society conference held in Atlanta, GA. In addition to the fantastic representation at the BMES conference from our Cornell students, we were able to recruit 200 new people to apply to the PhD program for Fall 2013! The social committee sponsored a BMES Wine Tour on November 3rd where four wineries were toured. I can personally tell you it was a lot of fun! Lastly, I would like to congratulate Aparna Ashok as the new Masters of Engineering BMES Vice President. Congratulations! Looking into the next month, BMES will be having a lot of outreach activities for the upcoming holiday season, so watch for further emails if you would like to get involved.

-Chelsea Gregg

Social Committee

We had a great turn out for our BMES Wine Tour on November 3rd. A big thanks goes to Ashley and Turi for organizing and taking care of everything to make the tour possible. Our next big event is our holiday party on Dec. 7th in the evening. More details will be released as they become available. We will have good food, drinks, and a musical group. To become more involved with the social committee, please email Katie Hudson at kdh58@cornell.edu.
COMMITTEE UPDATES

Outreach Committee

The outreach committee is hard at work planning some great activities for the coming months. First off, we had a great showing at our first event “Into the Streets.” A group of BMES members helped do yard work for local organizations. Our next event will be assisting local Girl Scout troops in earning a Society of Women Engineers badge. We will be hosting up to 30 girl scouts here at Weill Hall this January and leading and assisting them in several activities to teach them about science and engineering. There will be an informational meeting on this event Thursday, November 15 at 3 PM. If you are interested in volunteering please attend the meeting or contact Julie Kohn (jck256). We are also planning some local outreach that will take place over the holiday season, more details to follow. Lastly, we are gearing up for our annual Red Cross Drive. The drive will take place from Monday, November 26 through Friday, December 14. As always teams of labs will be facing off to see who can raise more points. Rumor has it there may even be a trophy for the winning team. If you have any questions or suggestions regarding any of our outreach events, please contact Jocelyn Marshall (jrm524).

Professional Development Committee

With the ultimate goal of organizing skills workshops and increasing interaction with industry alumni and partners, The Professional Development Committee has been hard at work networking with potential contacts from reputable firms to pay a visit to Cornell BME. We have a number of interested parties and we will be interfacing with them to potentially help us put on events in the Spring. The LinkedIn group has been established and we’ve been starting to post content that should be interesting for people in the department. It is our hope that we can continue to increase membership and facilitate professional interaction and assist with the job search process.

BMES CONFERENCE: INSIDER’S PERSPECTIVE

Picture this: 80-degrees and sunny, open fields in Olympic park, Coke World, one amazing aquarium, and the headquarters of many Fortune 500 Companies. This was the site of the 2012 BMES National Conference: Atlanta, GA. Cornell was well represented with both platform sessions and posters presented by current and alumni BME students. Our red booth attracted the attention of numerous prospective graduate students, and the 500 chocolate bars were almost gone after the first day! Cornell also had the biggest and longest reception on Thursday night, not to mention the best booze and food (thanks Belinda). Friday night we all got to explore the famous Georgia Aquarium, within walking distance of our hotel. This night was packed with lots of fish, whales, dolphins, otters, a southern buffet, sweet desserts, and of course drinks. After the conference it was time to head back to our beloved Ithaca- weather permitting.

Picture and article by Julie Kohn

SEMINAR SURVEY

Despite the first flakes of snow falling over the weekend, the most popular methods for getting to Cornell remain depressingly mundane. Most people transport themselves by foot or by bike, though cruising in by car is also a popular choice. Perhaps the advent of winter will bring with it an increase in the number of students utilizing skis, dogsleds, and hovercrafts to get to work. Stay tuned for further updates from this exciting field of Cornell transportation.
BMES would like to congratulate Dr. Jonathan Butcher and Dr. Chris Hernandez for being promoted to Associate Professors with tenure and Dr. Michael King for being promoted to Full Professor. Rock on, guys!

Jonathan Butcher
- Associate professor

Professor Butcher’s research seeks to identify principals regulating embryonic heart development and uses these naturally inspired engineering paradigms to motivate regenerative strategies for heart and valve disease. Butcher has been recognized many times for his contributions to engineering research and education.

Butcher did not grow up wanting to be a professor. He describes having a what-am-I-doing-with-my-life crisis during college when he found none of the traditional engineering industry jobs appealing. A somewhat convoluted path involving a wheelchair design contest led to his first research position and Butcher became hooked on the idea of a job where the purpose was to generate knowledge. These days, Butcher enjoys the additional mentoring aspect of being a professor and describes himself to be “less of a knowledge generator and more of a knowledge generator generator.” When snow comes to Ithaca, Butcher does not gripe, but enjoys making snowmen out of it with his kids.

Michael King
- Professor

Professor King’s research expertise is in the adhesive dynamics of flowing cells and reactive surfaces. The King lab aims to elucidate dynamics of multicellular adhesion and the isolation of rare cell populations. King heads one of three Cancer Center project teams and has published a successful textbook.

King grew interested in professorship during graduate school because of the research freedom and bow-tie wearing opportunities the career offered. King reached back into his not-so-long-ago graduate years to offer current grads some advice. “Take ownership of your project and try your best to stay on top of the literature in your field,” recommends King, “for instance, you can sign up to receive emailed Table of Contents from the important journals in your area and you should also get in the habit of doing a PubMed search on your favorite keywords once a week.” On a lighter note, King also provided some Ithacan winter advice and cited a hill near Taughannock Falls as a great place for sledding.

Christopher Hernandez
- Associate professor

Professor Hernandez is a field faculty member with appointments in mechanical engineering and BME. His specialty is in biomechanics and orthopedics, especially bone mechanics. Multiple BME students conduct research in the Hernandez lab and he has established himself as an important part of the BME department.

An undergraduate course in biomedical engineering first hooked Hernandez on the field and enticed him to pursue an academic route. “The course included a short lab where we dissected muscles and measured forces they generate in vitro— it was too cool,” reminisced Hernandez. Hernandez iterates the importance of becoming familiar with research outside of one’s lab and in never stopping trying to learn new things, “the most important thing for my career so far has been willingness to study outside of my immediate comfort zone.” Staying true to his mantra, this California native describes living with snow as a “charmingly new experience.”

Into the Streets is an annual program at Cornell that sends student groups into the Ithaca community to perform volunteer work. Second year BME student Anne Rocheleau organized the Cornell BMES team, and on October 20th an intrepid gaggle of grads headed to the Ellis Hollow Community Center for some good old-fashioned community service. We were greeted there by our enthusiastic host who armed us with gloves and yard tools. We quickly went to work yanking out brush, clearing leaves, and discovering branches that resembled hypertrophic hearts. Several hours later, the community center’s surroundings were much improved, and the combination of Ithacan sunshine, nice people, and measurable progress had made it a great way to spend an afternoon.

Alex, Anne, and Mary-Clare relocate leaves from the children’s play area to the woods.

Kevin, Greg, Harvey, and Chelsea brandish a saw and a wooden heart.