Civil Engineering Echoes
Department Newsletter

Spring 2015

Student News

Congratulations to all our students who were recipients of department scholarships this past fall!

**Structurepoint Scholarship**
Kristen K. Belyea
Jordan A. Bosse
Natalie M. Buckley
Elizabeth R. Eckert
Taylor Knoblock
Nicole M. Mora
David C. Reamer

**Cecil T. Lobo Civil Engineering Scholarship**
Morgan R. Anderer

**Fred O. Clayton Scholarship**
Brian J. Soller
Louis O. Vaught

**Jim Diehl Memorial Scholarship**
Taran Bohnhoff
George E. Green
Anne E. Pierce
Ryan Tanaka
Michael J. Timko

**Mark Shelton Hannig Scholarship**
Morgan R. Anderer
Todd A. Clapp
Kevin Dorn
Jacob H. Gould
Sijun He
John E. Horvet
Mengzhen Lei
Kendal J. Rosenbaum
Jia Shen
Ashley R. Schumacher
Brian J. Soller
Michael J. Timko
Louis O. Vaught

**Moffatt & Nichol Scholarship**
Emily Johnson
Dieter Schultz

A special thank you to all of our alumni and friends of the department who support and keep these scholarships going!

**Emeriti Updates**

**Kathy Nicolson** reported that while she misses the students and alumni, she is enjoying her retirement. She is working part-time, traveling with her semi-retired husband, bowling in a league and enjoying quality time with her grandkids.

**Robert** and Judy **Houghtalen** stopped by the department for a visit recently. He and Judy are now teaching at a university in Africa. Robert is teaching in a Master of Engineering Management program and Judy is teaching English. They both enjoy their students, but shared that they are at a distinct disadvantage (educational background, finances, personal computers, and laboratory exposure) when compared to his former students at Rose.
AREMA

The Rose-Hulman AREMA Student Chapter, under the guidance of President Zach Ehlers, Vice President Lauren Plouff and Secretary/Treasurer Allison Phillips, has been very active conducting monthly meetings and site visits to railroad operations.

Monthly meetings included:
- Sam Beck, ME 2014, BNSF Mechanical Engineering Car Shop Trainee Program
- GATX Terre Rail Car Rehabilitation and Leasing Operations
- Railroad Internship Overview
- Greg Frech, CE 2014, BNSF CE Management Trainee Program.

Site visits included:
- Canadian National expansion and construction activities at the Kirk Yard in Gary, Indiana
- GATX Terre Haute rail car rehabilitation facility
- Indiana Rail Road Van Yard, Terre Haute, yard operations and dispatching
- CSX Avon Yard, Indiana, hump operation for car classification

AREMA Chapter members learn about the operations at the CSX Avon Yard

AREMA Chapter members pose at the Indiana Rail Road Van Yard in Terre Haute.

Congratulations to Allison Phillips, Sophomore Civil Engineering student, she was awarded the 2015 AREMA Presidential Scholarship.
Board of Advisors Meeting

Our winter Board of Advisors meeting convened on Wednesday, January 7 here on campus. As usual, the morning session was focused on senior projects, with members of the Board of Advisors and Board of Associates meeting with the project teams and giving advice on the student work. At lunch, we recognized Board members who were stepping down following the guidance developed some years ago for Board membership. The afternoon session included planning activities related to the freshman engineering experience, ethics in the curriculum, and opportunities for an extracurricular department project shared by students, faculty and industry. The meeting concluded with plans for our summer Board meeting to be held in Indianapolis sometime during the week of June 1-5.

We deeply appreciate the service provided to the department by those Board members who stepped down this year. Bruce Carter (CE, 1990), Mark Federle (CE, 1985) and David Maxwell (CE, 1991) all joined the Board of Advisors in 2000. We will greatly miss the benefits of their wisdom and experience over the years. All will continue to be informed about Board activities as Emeritus members. We look forward to their continued assistance in that role.

New members joining the Board of Advisors are Cash Canfield (CE, 1994), Gene LeBoeuf (CE, 1985), and Jake Wagle (CE, 2007). Cash is Vice President with Structurepoint in Indianapolis, Gene is Professor and Associate Chair of Civil and Environmental Engineering at Vanderbilt University in Nashville, and Jake is Project Manager with Garmong Construction Services in Terre Haute. The other nine Board of Advisors members are Anthony Broadnax, Charity Dudley, Walter Flood IV, Pat Goodwin, Greg Henneke, Mickey Hines, Glen Morrow, Jon Stolz and Martin Wessler.

Our Board of Associates is annually appointed to help us with senior project mentoring during our winter meeting and to join in the strategic planning at that meeting. Members of the Board of Associates this year were Jakob Bruhl, Chuck Ennis, Jason Lange, Pat Martin, Marcus Maurer, David Myers, Troy Swan, and Andy Theisz.

Words cannot express our gratitude for the guidance provided to the department and to our students by the Board of Advisors and Board of Associates. Thanks to all of you for your help!
Engineers Without Borders (EWB)

Dr. Aidoo and six students from Rose-Hulman EWB Student Chapter attended the EWB-USA Great Lakes Regional Workshop held at Ohio State University in Columbus (pictured on the right). Two main themes discussed at the conference were: alleviating poverty through entrepreneurship (APTE) and how your organization can apply the acquired APTE skills.

Additionally, EWB members attended a short course that discussed the theory and practical methods of sustainable community-based development, particularly, strategies for improving the relationship between EWB chapters and their partner communities.

Farewell Dinner for Wil Painter

Drs. John Gardener and John Aidoo and some Rose Hulman-EWB members met with our outgoing technical mentor, Wil Painter, for dinner in Indianapolis as a final thank you for services rendered to our Chapter.

Mr. Painter has had a diverse Civil Engineering career and has led major structural projects across the continental United States and Alaska. Additionally, his years in the military took him overseas. Over the past five years, he has traveled with and reviewed designs for EWB-RHIT as well as shared unique and fascinating stories. Wil was awarded a plaque commemorating his involvement with the club.
ASCE

The year has started off strong for the Cecil T. Lobo ASCE Student Chapter. We are happy to announce our new student leadership: Chapter President Anne Pierce, Vice President Ben Klick, Secretary Dieter Schultz, and Treasurer Alex Pohl. The new leadership quickly got to work and participated in a retreat in Indianapolis, geared toward training the new leaders and setting up plans for a successful year. We were very fortunate and thankful to have past student chapter leaders present to facilitate the event: Mike Reeves (CE, 2006), Molly Rice (CE, 2012) and Morgan Anderer (CE, 2015). The team developed a great plan for an exciting year.

In addition to new student leadership, we also are happy to welcome a new faculty advisor, Dr. Matthew Lovell (CE, 2006). Matt is taking the place of Dr. Michael Robinson who has served as the faculty advisor for the past four years. We would like to express our gratitude to Dr. Robinson for his service and dedication to the success of the chapter. Also, we wish Dr. Lovell all the best in the future.

Among the many exciting events coming up for the chapter this year, there are a couple that we would like to make you aware of:

The 2015 ASCE Great Lakes Conference will take place at Notre Dame University during April 17th through April 19th. We are excited to bring a strong contingent to the conference. If you find yourself around South Bend, please come out and cheer on our Steel Bridge, Concrete Canoe, and other competition teams.

The Annual Golf Tournament for Habitat for Humanity has been scheduled. It will take place on May 2nd at Hulman Links in Terre Haute, IN. We are very excited about this year’s golf outing as we feel we have made many significant improvements to the event. There will be a strong push to have many more participants and sponsors, so we encourage you to sign up for a great time and a great cause. Look forward to a great meal, prizes, and raffles… and a little bit of golf. Contact Alex Pohl at pohlag@rose-hulman.edu to sign up for the event or to inquire about sponsorship information.

Once again, the Cecil T. Lobo ASCE student chapter is so thankful for all of the continued support from our Rose-Hulman Alumni. Please feel free to contact our faculty advisor, Dr. Matt Lovell, at lovellmd@rose-hulman.edu if you are interested in hosting a site visit or serving as a speaker at a monthly meeting.

As always… CIVIL PRIDE!
Alumni Highlights

Patrick H. Cahill (1967) was honored at this year’s APAI Winter Conference for his many years of service. During his career Pat was on a multitude of committees for Asphalt Pavement Association of Indiana and Indiana Constructors Inc. (now ICA) He served on the board of APAI for twenty years, twice serving as President. He also served on the board of ICA for two terms and served as its President for one year. Congratulations to Pat on this wonderful achievement.

Brian Desharnais (1995) was promoted to Vice-President and Board of Directors of Commonwealth Engineers just over a year ago. We would like to wish him a belated congratulations and our apologies on the delay in sharing this news.

Mark Federle (1985) will be heading back to Guatemala this June as Faculty Advisor to the Marquette University chapter of EWB. This trip they will be working on a pedestrian bridge. Mark shared photos from their last trip, which resulted in a vehicle bridge that connected a rural community with a major highway. This community will no longer be shut off from jobs, education, and health care during the rainy season thanks to this chapter’s work.

Jason Lange (2005) and his wife Stephanie welcomed their third child, Ainsley Rose, on November 10, 2014. Jason is a Senior Project Engineer with TLF Engineers.

Jake Wagle (2007) and his wife Chelsea welcomed their second daughter, Greta Belle, on February 4, 2015. Jake also recently took a position with Garmong Construction Services as a Project Manager.

Eric Wojak (2006) and his wife Rebekah (Forsyth) Wojak (ME, 2008) welcomed a daughter, Lily Grace, on January 20, 2015 at 6:43 pm. She weighed in at 7lbs 2oz and was 19.5 inches long.
Matt Trowbridge (2008) earned his PE in Canada in June of 2014, as well as his structural engineering license in California in December. He is about to go on assignment for Moffatt & Nichol to Canada to work on a new marine terminal for the TransCanada Energy East Pipeline project. He also shared in his down time, he is playing on a nationally ranked adult traveling kickball team.

Marcus Maurer (2006) and his wife, welcomed a son, Samuel Warren, on August 17, 2014. Marcus is a Staff Engineer for the City of Terre Haute.

Jessica (Muhlenkamp) Maslan (2011) was married to Lt. Jason Maslan, on April 26, 2014. They are expecting their first child this summer. Jessica and her husband live in Norfolk, VA where she has joined the Moffatt & Nichol team.

Eric Wathen (1997) was sworn into the office of Hendricks County Council, on December 27, 2014. It was his third time taking the oath, as he has served two previous times as Commissioner. Eric is a Project Engineer for Banning Engineering.

Christopher Bauer (2001) is currently assigned to the Program Management team that on November 22, 2014 at the Orlando Citrus Bowl, reached its first game day deadline just in time (Temp. Cert. of Occupancy/same day of the event) as thousands of fans enjoyed the Florida Classic football game. Work continued at the facility (during a successful football Bowl season) leading up to a record setting (62,000 people/sold out) inaugural game of the newest MLS expansion team Orlando City Soccer on March 8, 2015. Chris and Christa Bauer still reside in Tampa, FL and continue to be heavily involved in the Humane Society of Tampa Bay. (Chris serving on the Board of Directors)

Pictured above is the Chief Building Inspector, the Turner (GC/CM) Project Executive and Chris on the morning of the Citrus Bowl.

KEEP IN TOUCH

We are always interested in how our alumni are doing. Keep in touch by e-mailing us at tanner2@rose-hulman.edu.

Mark Your Calendar

April 22 - Spring Career Fair
May 2 - ASCE Golf Tournament, Hulman Links
May 20 - Order of the Engineer Ceremony
May 30 - Class of 2015 Commencement
From the Staging Area

We’ve had a busy and productive winter quarter in the department this year. This is the third year of our revised senior design. Winter quarter was changed the most in that revision, as we now have sub-discipline course assignments that provide stronger and timely mentoring of students’ technical designs. We think the success of this revision is most evident in the students’ design work. We are observing both greater depth of design and stronger connections between different parts of the design as a result of the change. We are confident the results are due to higher accountability and faster access to design mentoring. Now, as we roll into spring quarter, it is truly up to the teams to blend their work into a single final project report, and we are looking forward to the final products.

In other areas, the faculty and staff have been putting the finishing touches on some projects around the department that have gone well. Those projects include remodeling the fluids lab to better accommodate both classes and labs, upgrading our senior projects lab with flat screen monitors and teamwork-focused scheduling, and remodeling of our copy room. We continue to tweak some aspects of our classroom spaces as changes in learning technology push our connectivity and software uses. That will be an annual activity, but we can assure all of you that those chalkboards are still getting lots of use.

The faculty are busy on some “across-the-curriculum” learning initiatives. We are coordinating even more carefully student learning about ethics, business acumen, sustainability, and computer applications from freshman through senior year. We are also not neglecting essential technology skills, as we have rearranged the freshman year so that surveying is now in the fall, GIS and AutoCAD in the winter, and freshman design in the spring quarter. This reorganization permits us to experiment with development of a year-long freshman experience that begins with field work, continues to creation of drawings and figures, and concludes with a client-based design experience.

We are so thankful for all of the support provided by our alumni and friends of the department. Our students’ experiences are so enriched by all of you through your assistance as guest speakers, field trip coordinators, and providers of projects. The guidance of our Board of Advisors and Board of Associates given to our seniors at the winter Board meeting is crucial to their success, and the support and insights provided by our Board through our summer Board meeting have done so much to help us follow the best path in strategic planning. Finally, the financial support many of you provide by designating your gifts to the Civil Engineering Department go far in assuring the success of student activities and trips, equipment purchases, and other learning enhancements in the department. Thanks to all of you. We hope you have a successful and productive 2015.

-Kevin Sutterer

Volunteers Needed

The department is in need of raters for our ABET accreditation submissions. Please contact Kevin at sutterer@rose-hulman, if you would be interested in helping out.

Senior Design Projects Needed

The department is currently seeking senior design projects for next year. If you think you have a project to offer, please contact Kevin at sutterer@rose-hulman.edu.