Dear IMSE alumni and supporters,

Much has changed in the department since this newsletter was sent out last year, most notably being our move from Durland Hall to Rathbone Hall. In case you missed it in our electronic newsletters, the department relocated to Rathbone Hall after the previous tenants from the electrical and computer engineering department moved to the new Engineering Hall.

While remodeling and moving was no small task, we are all settled in now and enjoying the upgrades with bigger faculty and staff offices, as well as more office, lab and study space to better serve our students.

We look forward to more changes ahead as well. We are currently in the midst of searching for two new faculty members to serve our growing student body and increase our research capabilities.

Through all of these changes, we remain dedicated to the same student-first values. In this newsletter, you will read about the efforts of our faculty and alumni groups to build upon the strengths of our program by focusing on students’ identity development and placing them in the role of shareholders — rather than consumers — of their educational experience.

But our efforts don’t end when students graduate. Our excellent alumni community continues to prove that our K-State IE family is yours for life. We invite all of you to take advantage of opportunities to engage with our students, faculty, and fellow friends and alumni of the department. Through the IMSE Professional Academy, our mentor program, events like Open House, or even an email or phone call, we welcome your voice, your engagement and your generosity.

And as always — Go Wildcats!

Bradley A. Kramer
Professor and Department Head
THE IDENTITY INITIATIVE

IMSE department and alumni groups continue mission to refocus education on identity development

IMSE ADVISORY COUNCIL MEMBERS, FROM LEFT, LORI JESTER, KERRY KAISER, MICHELLE SCHLIE AND KRISTINE SHEEDY JOIN DAVID BEN-ARIEH, IMSE PROFESSOR, IN A FACULTY ROUNDTABLE DISCUSSION AT THE FALL ADVISORY COUNCIL MEETING OCT. 21.

IMSE PROFESSIONAL ACADEMY MEMBER AND 1994 GRADUATE ANITA RANHOTRA, RIGHT, WORKS WITH EUNICE VARONA, IMSE SENIOR, AT A RESUME CRITIQUE AND INTERVIEW ‘SPEED DATING’ EVENT SEPT. 15.

“The K-State name often serves as a competitive advantage in industry today. Every student and graduate therefore has a stake in the quality of IMSE’s programs.”

— Bryce Huschka

If you were to fit higher education into a typical business model, most people would label faculty and staff as employees and students as consumers, with the end product for sale being knowledge and, ultimately, a diploma. IMSE faculty and alumni groups are on a mission to change this mindset within the department. By focusing on development of students’ identities, the department envisions a program that places students in the role of shareholders, rather than consumers.

“We want students to embrace the full range of experiences, technical skills and soft skills they can gain from our programs,” said Bradley Kramer, department head. “The more invested they are in their education, the more successful they will be as lifelong learners and leaders in industry.”

Through the identity initiative, IMSE aims to help students better understand their interests and goals within the broad field of industrial engineering. With a better sense of their IE identity, students are more likely to persist in the field and will be better able to market their adaptable skill sets as they embark on their careers.

One major change the department is working toward involves expanding the senior manufacturing systems design and analysis course into a more continuous production system, in which students will be able to participate as early as their sophomore year.

Many smaller changes will also be needed to truly change the way people perceive the education system. At the IMSE Advisory Council meeting last fall, alumni and faculty came together to begin formulating ways to turn the identity initiative into an actionable reality.

“K-State and IMSE already have a lot of strengths we can build from,” Bryce Huschka, advisory council chair, said. “At the top of that list are K-State’s family atmosphere and IMSE’s tradition of hands-on and group learning.”

Huschka proposed implementing a skills literacy framework to define the core technical and soft skills necessary to succeed as an industrial engineer. With a core framework defined, individuals will have further opportunity to discover their career aspirations and define their own terms of success.

And it’s not just about students. IMSE sees faculty and alumni as shareholders in the department’s success as well.

Eventually, they hope to expand their mentorship abilities to alumni as well as students.

“Developing your IE identity is a continuous process,” Academy President, Chris Althoff, said. “Graduating, getting your first job—that’s just the beginning. We want to create a network of IMSE alumni who can support each other far beyond graduation.”

FOR MORE INFORMATION

Learn more about the department’s IE identity initiative online at http://www.imse.k-state.edu/news/archive/featured/2016_feature_revolutionize-education/.
BECOME A SHAREHOLDER IN IMSE’S MISSION

Alumni support is critical to the success of IMSE’s mission to refocus education on students’ identity development. We welcome your voice, your time and your generosity, and invite you to take part in the department’s numerous opportunities for engagement.

Join the IMSE Professional Academy. Connect with your fellow alumni and discover fun ways to participate in department programs and alumni events. The academy holds biannual meetings in the fall and spring, sponsors student-alumni events and supports scholarships for IMSE students. As the group continues to grow, they plan to hold more events beyond Manhattan and create a lasting network of K-State IEs across the country. To learn more about joining the academy, contact the IMSE department at imse@k-state.edu or 785-532-3720.

Become a mentor. The Academy Mentoring Program allows students to develop relationships with IMSE alumni and learn vital professional skills. And the benefits go both ways — mentoring can provide new perspectives on the industry from up-and-coming professionals. Plus, research shows that mentoring others helps professionals grow in technical expertise, managerial skills and leadership capacity.

Donate. Your financial support will help provide crucial updates to IMSE lab spaces and equipment, as well as continued development of our educational programs. Various funds have been established by the department and alumni, so you can determine how you want your contribution to benefit the department.

Industrial Engineering Education Venture Fund — Fund No. I27788

Started by 2007 graduate Bryce Huschka, the purpose of this fund is to directly support ideas that rethink how our educational enterprise prepares students for the future. It is especially intended for developments that transform the student experience, create faculty enthusiasm on incentives, attract additional or future funding, or have an impact beyond the department.

Industrial Engineering Excellence Fund — Fund No. I27800

This fund supports the department’s professional activities and development, such as: student organizations and activities such as Open House, IIE and Alpha Pi Mu; facilities and equipment improvement; and student, faculty and staff recruitment, and development.

Scholarship funds — Numerous alumni and other department supporters have established scholarship funds that have a direct impact on the lives of IMSE students. Whether a scholarship is awarded to recruit students to the discipline, recognize extraordinary achievement, provide resources for a study-abroad experience or support professional development, each one makes a difference.

We invite you to contact a member of our development staff to begin discussing how you can make a difference.

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TWO IE GRADUATES SPEAK AT FALL ENGINEERING COMMENCEMENT

Industrial engineering voices were prominent at the fall engineering commencement, as graduating senior Drew Ewing and 1990 graduate Ray Dempsey were selected as featured speakers for the December ceremony. Dempsey currently serves as vice president for BP Foundation Inc., and was recently appointed chief diversity officer for the company. He serves on the College of Engineering advisory council and continues his involvement with the department as an alumni mentor.

Ewing was selected to give the student address based upon his extracurricular involvement and academic achievements, according to Andy Fund, assistant dean for student services for the College of Engineering. “They both gave outstanding talks,” said Brad Kramer, department head. “I was proud of how they represented the department.”

Ewing said preparing for the speech made him think about how much has happened at the university at the macro level, as well as in his own experiences as a student. “The most important part of the speech for me was the charge,” Ewing said. Using a lesson he learned from an older couple who worked for last summer, he implored the graduating seniors to think beyond financial success.

“Be wealthy in many ways,” Ewing said in his address. “Be wealthy in your kindness to others. Be wealthy in both the purpose and productivity of your work. Be wealthy in your love.”

“Drew delivered great remarks, many of which were reflective of his time here and the exciting changes we have all experienced in the college, but also as a whole within the university,” Fund said. “But he also challenged us to not only be great engineers and stewards, but also to become the best versions of ourselves, which is really the ultimate goal in the end.”
After studying humanitarian and public health supply chain systems for much of her career, assistant professor Jessica Heier Stamm has come to an important realization: it’s going to take multidisciplinary research to solve multistakeholder problems.

In a public health emergency, such as the influenza pandemic that hit the U.S. in 2009 and 2010, stakeholders and decision makers from numerous organizations must coordinate their response efforts—a complicated task, even under non-urgent circumstances.

In Kansas, for example, the Kansas Department of Health and Environment, local public health departments, the Kansas Hospital Association and its members, critical access hospitals and all major hospital systems, as well as private medical supply companies must all work together to deliver urgent, equitable care across the state.

Using cooperative game theory, Heier Stamm hopes to develop optimization models that accurately and realistically address the needs of public health disaster response systems. The state of Kansas will serve as her initial case study as she analyzes the response strategies for emergencies such as serious infectious disease outbreaks, natural disasters and bioterror attacks.

While optimization models are used frequently in commercial supply chains, no existing models directly apply to the coordination challenges currently faced by the public health and humanitarian sectors.

“We can’t build useful optimization and game theory models for humanitarian and public health supply chains by ourselves,” Heier Stamm said. “We need to actually engage with the stakeholders to understand the current system and what future systems might look like.”

That’s where her interdisciplinary research approach comes in. Heier Stamm plans to gather information directly from the stakeholders through interviews, surveys and focus groups, which will require training and collaboration from experts in other fields.

Once they understand the stakeholders’ perspectives, Heier Stamm’s research team will focus its efforts on developing mathematical models to describe public health supply chain structures.

“I think the features of the system are going to require us to develop new kinds of models that people haven’t built or solved before,” Heier Stamm said.

Multi-stakeholder collaborations are often complicated by concerns over who will benefit most and who will bear the costs. Heier Stamm hopes her research process will help initiate conversations between organizations, while new optimization models will incorporate factors such as cost allocation and supply distribution according to the stakeholders’ needs.

Her ultimate goal is to bridge the gap between theory and practice through an iterative process of development, testing and revision. While her research can provide theoretical solutions to optimize response to public health emergencies, stakeholder engagement will be crucial in developing realistic solutions that satisfy the needs of all affected parties.

Eventually, Heier Stamm hopes the mathematical models and research methods used in her case study will be applied in other public health and humanitarian supply chain systems.
Heather Moe was aboard a National Oceanic and Atmospheric Administration (NOAA) ship somewhere off the West Coast when she discovered the field of operations research. At the time, Moe was serving in the NOAA Corps, a uniformed service branch that provides operational support for NOAA. They had just left port on a research cruise. Sometime between midnight and four o’clock in the morning when she was trying to stay awake between bridge watch shifts, Moe began researching options for her next assignment.

She stumbled upon operations research, and over the next several weeks, learned more about the field and started thinking about it as she went about her duties. “It wasn’t long before I started to see how it could be applied to everything from ship scheduling to officer assignments, ship supply restocking, and even how the research we were conducting could be done more efficiently to get more data from dwindling budgets,” Moe said.

In order to complete a master’s degree while still in the NOAA Corps, Moe knew she would need to find an online program — and that’s what led her to Kansas State University. “K-State offered the best set of classes for my interests and was willing to work with my very non-traditional background for an OR master’s program,” Moe said. Moe came from a military family, and enlisted soon after earning an undergraduate degree in biology from Rochester Institute of Technology. Her assignment with NOAA continued through all but her last semester of master’s classes at K-State, when she began working as an intern at ESRI, a geographic information systems software company.

Although the online format presented some challenges, especially when coordinating group projects, Moe said the classes fit her independent learning style well. Her assignments in the NOAA Corps sometimes required her to go to sea for weeks at a time, and the online classes allowed her the flexibility to work around her schedule. “A huge advantage I saw to the online program was that I knew everyone in the class really wanted to be there and would work hard to do their part,” Moe said. The lack of inherent networking opportunities was a disadvantage for Moe, especially as she was navigating a career change from biology and environmental science to engineering, but she took the initiative by reaching out to the IMSE faculty and joining the Institute for Operations Research and the Management Sciences (INFORMS).

During her last semester, she was nominated by the IMSE department head to attend a professional colloquium for graduate students at the INFORMS Analytics Conference. Today, Moe puts her operations research degree to use at ESRI, where she takes part in developing software to help optimize geographic business decisions such as location allocation and multiple vehicle routing. Someday she hopes to merge her interests in the natural sciences and operations research.
Innovation Collaboration Leadership Education Entrepreneurship Research Scholarly Economic Global Excellence Technology Discovery

DISCOVERY was to share this with participants so applications,” Cassone said. “Our goal work best in industry and military based on years of consulting experience building. Criteria and group decision making, science techniques in areas of multiple objectives of an organization. And funded best support the goals and products and projects being launched on real-world examples, participants methods and tools Cassone and Tillman technical and management experience. Of combined experience in consulting, course, leveraging more than 50 years IMSE department head, instructed the University Olathe in October. "The approach we have used is through lectures and by working real-world examples, participants learned a process to ensure that products and projects being launched and funded best support the goals and objectives of an organization. The process was built upon decision science techniques in areas of multiple criteria and group decision making, along with data analysis and consensus building. “The approach we have used is based on years of consulting experience and identifying which methods work best in industry and military applications,” Cassone said. “Our goal was to share this with participants so they could develop the framework for use in their own companies.”

I was impressed with the amount of material fit into two days,” one participant noted. “It was great that we had the chance to work through an example in groups.” Cassone said they are looking to launch another short course in late summer or early fall on the topic of technology and project risk management. IMSE wants to hear from you —- if you or your business has interest in a professional development topic, please contact department head, Brad Kramer, at bradleyk@k-state.edu.

SUMMER INTERNSHIP LEADS TO SCHOLARSHIP FOR K-STATE’S BELL

A Kansas State University senior in industrial engineering is receiving an internship scholarship from Ash Grove Cement Co. Brandon Bell, Channahon, Ill., is one of two recipients of the annual scholarship. Bell interned for Ash Grove at its Chanute cement plant this past summer. He is the son of Rick and Beth Bell. In addition to his internship at Ash Grove Cement, Bell served as president of the Alpha Tau Omega fraternity, where he has been recognized with the Alpha Tau Omega Scholastic Excellence Award, the Presidential Scholaristic Achievement Award and the Alpha Tau Omega Memorial Outstanding Senior Award. Bell is co-chair of K-State’s Society of Manufacturing Engineers, a member of K-State Student Finance Association and a 2014 LeaderShape Institute graduate. The annual $1,500 scholarship was established in 2007 to recognize students who successfully completed a summer internship with Ash Grove or one of its subsidiaries and who have a strong interest in pursuing a career in the cement industry. “I am grateful for the opportunity to be considered and honored to receive this scholarship,” Bell said. “After a summer of experience with Ash Grove, I’ve grown to understand the cement industry and what it has to offer. Cement is the backbone of infrastructure and is one of the basic elements for setting up economic development within all communities.”

ANJARD ONE OF THREE K-STATE STUDENTS TO RECEIVE PRESTIGIOUS GILMAN SCHOLARSHIP TO STUDY ABROAD

By Tiffany Roney

Three Kansas State University students have received the Benjamin A. Gilman International Scholarship to study abroad in Ghana, Japan and the Czech Republic. The Gilman Scholarship Program is an undergraduate grant program for U.S. citizens of limited financial means to enable them to study abroad. The program awards scholarships up to $5,000 to help students internationalize their outlook and better prepare them to thrive in the global economy. This year, more than 3,100 students applied and only 27 percent received the award. Thomas Anjard, junior in industrial and manufacturing systems engineering, Overland Park, will study in the engineering program at Czech Technical University in Prague. Anjard is the founder and president of the Food Recovery Network, a student-led organization focused on minimizing food waste and providing for the less fortunate. He is also an office assistant in the College of Engineering’s Office of Recruitment. He is a member of Delta Sigma fraternity, Johnson County Ambassadors and the Venture Accelerator Program. He has earned the Celebrating Service and Leadership Award, the Neal Atkinson Junior Leadership Award, the Delta Sigma Phi Fraternity McKee Scholarship and the Gois Discovery Scholarship from the Office of International Programs. The son of Ron Anjard and Tonya Hillard, Overland Park, he is a 2014 graduate of Bishop Miege High School. The Gilman Scholarship Program is sponsored by the Bureau of Educational and Cultural Affairs of the U.S. Department of State. The bureau fosters mutual understanding between the people of the U.S. and the people of other countries to promote friendly, sympathetic and peaceful relations.

Learn more about the Gilman Scholarship Program at K-State by visiting http://www.k-state.edu/media/newsreleases/2017-01/gilman1317.html
CONGRATULATIONS 2016 GRADUATES!

B.S. Industrial Engineering
Spring
Saad Allaker
Yousfi Ashkelab
Gabriela Armendariz
Ashley Clark
Pablo Dominguez
Kade Emley
Leves Flores
Kathleen Ford
Aaron Frith
Paulo Gomes Salinas
Colton Gillott
Andrea Hopkins
Emmett Hull
Sarah Hutchinson
Audrey Johnson
Summer
Saad Allaker
Yousfi Ashkelab
Gabriela Armendariz
Ashley Clark
Pablo Dominguez
Kade Emley
Leves Flores
Kathleen Ford
Aaron Frith
Paulo Gomes Salinas
Colton Gillott
Andrea Hopkins
Emmett Hull
Sarah Hutchinson
Audrey Johnson
Fall
Abdullah Alshehab
Gabriela Armendariz
Ava Clark
Pablo Dominguez
Kade Emley
Leves Flores
Kathleen Ford
Aaron Frith
Paulo Gomes Salinas
Colton Gillott
Andrea Hopkins
Emmett Hull
Sarah Hutchinson
Audrey Johnson

B.S./M.S. Industrial Engineering
Spring
Saad Allaker
Yousfi Ashkelab
Gabriela Armendariz
Ashley Clark
Pablo Dominguez
Kade Emley
Leves Flores
Kathleen Ford
Aaron Frith
Paulo Gomes Salinas
Colton Gillott
Andrea Hopkins
Emmett Hull
Sarah Hutchinson
Audrey Johnson
Summer
Saad Allaker
Yousfi Ashkelab
Gabriela Armendariz
Ashley Clark
Pablo Dominguez
Kade Emley
Leves Flores
Kathleen Ford
Aaron Frith
Paulo Gomes Salinas
Colton Gillott
Andrea Hopkins
Emmett Hull
Sarah Hutchinson
Audrey Johnson
Fall
Abdullah Alshehab
Gabriela Armendariz
Ava Clark
Pablo Dominguez
Kade Emley
Leves Flores
Kathleen Ford
Aaron Frith
Paulo Gomes Salinas
Colton Gillott
Andrea Hopkins
Emmett Hull
Sarah Hutchinson
Audrey Johnson

B.S. in Engineering Management
Spring
Saad Allaker
Yousfi Ashkelab
Gabriela Armendariz
Ashley Clark
Pablo Dominguez
Kade Emley
Leves Flores
Kathleen Ford
Aaron Frith
Paulo Gomes Salinas
Colton Gillott
Andrea Hopkins
Emmett Hull
Sarah Hutchinson
Audrey Johnson
Summer
Saad Allaker
Yousfi Ashkelab
Gabriela Armendariz
Ashley Clark
Pablo Dominguez
Kade Emley
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Kathleen Ford
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Andrea Hopkins
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Fall
Abdullah Alshehab
Gabriela Armendariz
Ava Clark
Pablo Dominguez
Kade Emley
Leves Flores
Kathleen Ford
Aaron Frith
Paulo Gomes Salinas
Colton Gillott
Andrea Hopkins
Emmett Hull
Sarah Hutchinson
Audrey Johnson

M.S. Operations Research
Spring
Heather Moe
Stacy Newman
James Pennis
Daniel Young
Summer
Jeffrey Nold
David Ryan
Fall
Rehanun Balser
All Dickenson
Jenni Stott

Ph.D. Industrial Engineering
Spring
Anne Grego-Nagel
Xiaoming Yu
Summer
Abdullah Alshehab
Gabriela Armendariz
Ava Clark
Pablo Dominguez
Kade Emley
Leves Flores
Kathleen Ford
Aaron Frith
Paulo Gomes Salinas
Colton Gillott
Andrea Hopkins
Emmett Hull
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Aaron Frith
Paulo Gomes Salinas
Colton Gillott
Andrea Hopkins
Emmett Hull
Sarah Hutchinson
Audrey Johnson

The IMSE department is excited to welcome alumni back to campus for Open House and other activities.

Friday, March 31
IMSE Professional Academy and Advisory Council Meeting
8:30 a.m. – 2:30 p.m., Alumni Center
Guests are welcome — if interested in attending, contact Lacey Brummer at imse@k-state.edu

IMSE ribbon cutting
3 p.m., Rathbone Hall, second floor
College of Engineering Open House
Engineering Hall
Saturday, April 1
IMSE Open House luncheon
11:30 a.m. – 1 p.m., 2064 Rathbone Hall
All alumni, family and friends are welcome.

Join us for a celebration of excellence, innovation, and collaboration. We look forward to seeing you back on campus!

KANSAS STATE UNIVERSITY
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Please contact us at 785-532-1935 or visit www.imse.ksu.edu/graduate

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Kansas State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, ancestry, disability, genetic information, military status, or veteran status, in the University's programs and activities as required by applicable laws and regulations. The person designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: the Director of the Office of Institutional Equity, equity@k-state.edu, 103 Edwards Hall, Kansas State University, Manhattan, Kansas 66506, (785) 532-6277. The campus ADA Coordinator is the Director of Employee Relations, charlott@k-state.edu, who may be reached at 103 Edwards Hall, Kansas State University, Manhattan, Kansas 66506, (785) 532-6277.

IMSE ADVISORY COUNCIL 2016-17

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