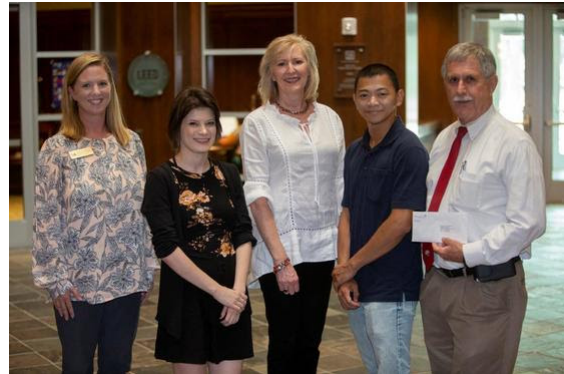


Exciting News Happening in Shelby Hall

Hargrove Engineers + Constructors Continued Support

Hargrove Engineers + Constructors recently delivered a check for \$25,000 for their endowed scholarship fund in the College of Engineering. With the



match from the Mitchell-Moulton Scholarship Initiative, this brings the Hargrove scholarship fund to \$270,000. Fernando Lorenzo (Electrical & Computer Engineering) and Austin Meredith (Civil Engineering) are this year's recipients for the Hargrove endowed scholarship.

Pictured left to right Caroline Smith (USA Development Office), Kayln Sutherland (Hargrove), Vicki Studstill (Hargrove), Fernando Lorenzo (Electrical & Computer Engineering), and Dr. John Steadman. Not pictured, Austin Meredith (Civil Engineering).

NASA X-Hab Competition

Out of only ten projects selected nationwide, two projects from the College of Engineering have been chosen for support by the NASA eXploration Systems and Habitation (X-Hab) 2019 Academic Innovation Challenge.

NASA and the National Space Grant Foundation asked university teams to design systems, concepts, and technologies intended to support the agency's deep space exploration capabilities. The USA projects chosen are "Automation Infrastructure for Gateway Biological Laboratory" led by Dr. Samuel Russ, Electrical & Computer Engineering and "Evaluating Ionic Liquids for Closed Air Revitalization" led by Dr. Grant Glover, Chemical & Biomolecular Engineering.

Dr. Russ's project focuses on automation and power management of an unmanned biological laboratory for the gateway, with a special interest on energy-efficient computing and software design.

Dr. Glover's project will support students who will evaluate two custom synthesized ionic liquid solutions for carbon dioxide capture in a closed air revitalization system. Most of the breathing air for astronauts is recycled within the spacecraft or habitat, and a key part of this process is the removal of exhaled carbon dioxide.

See the full article at [NASA Selects University Teams to Develop System Prototypes for Deep Space](#).

Dr. Eric Steward, Civil, Coastal, & Environmental Engineering faculty, was awarded the USA National Alumni Association's Excellence in Teaching Award. The award was announced at the Alumni Association's Annual Meeting.

Congratulations Dr. Steward!

Pictured from left to right: USA National Alumni Association President, Patrick Dungan, Dr. Eric Steward, and Alumni Relations Executive Director, Karen Edwards



Congratulations Civil, Coastal, & Environmental Engineering Faculty!

Congratulations to Drs. Islam and Smallegan on passing the Principles and Practice of Engineering Exam! All nine eligible faculty in CCEE now hold the P.E. license! Passing the P.E. examination is required to become a Professional Engineer (P.E.) and is taken after passing the Fundamentals of Engineering exam (FE) and working in the field for 4-5 years.

Congratulations Lauren (McNeill) Dunkin, BSCE Class 2007!

Lauren (McNeill) Dunkin has been named Chief of the Coastal Engineering Branch of the U.S. Army Corps of Engineers Research and Development Center in Vicksburg, MS.

Ms. Dunkin received her BSCE from USA in 2007, and worked at the Coastal Hydraulics Lab (CHL) since 2010. Prior to that, she was a Graduate Research Assistant at Texas A&M University and at the University of South Alabama. She also holds an MS degree (2010) in Civil Engineering from Texas A&M University.

Ms. Dunkin served as the project lead for the Corps Shoaling Analysis Tool (CSAT) and Principal Investigator for the Coastal Navigation Portfolio Management work unit, the U.S. Navy Shoaling Study, and post-storm volume change response utilizing LiDAR and other large spatial datasets. Her research focus has been on coastal environments related to navigation channel shoaling, estuarine and coastal erosion and sedimentation, and regional coastal management projects. Ms. Dunkin has authored a number of publications in national coastal journals.

As Chief of the Coastal Engineering Branch, Ms. Dunkin will lead a diverse team of engineers and scientist who execute coastal engineering studies including geomorphic analysis, sedimentation engineering and sediment management, dredging techniques and scheduling, coastal shoreline change, coastal inlets, and navigation impacts on coastal environments.

Congratulations to our Tau Beta Pi Student Chapter!

The Alabama Epsilon chapter at USA received an Honorable Mention from the awarding committee for the R.C. Matthews Outstanding Chapter Award at the recent Tau Beta Pi national convention. A total of 248 chapters competed for this award. The award is based on chapter projects and member participation. The Alabama Epsilon chapter conducted Tau Beta Pi week, assisted with K-12 events like BEST Robotics and the Mobile Regional Science & Engineering Fair and worked with area Boys & Girls Clubs. Members conducted a fundraiser for Hurricane Harvey and Irma relief and collected canned goods for Feeding the Gulf Coast. They also volunteered for Coastal Cleanup and at the Gulf Coast Exploreum. Alabama Epsilon received the R.C. Matthews award in 2015 and 2017 and has received an honorable mention in five of the last seven years.

Picture below from left to right: Charles Unkrich (Mechanical Engineering), Evan Mazur (Civil Engineering), Phiwat Klomkaew (Chemical Engineering), Tanner Hickman (Chemical Engineering), and Dr. Sally Steadman.



Tau Beta Pi Professor of the Year

Dr. Joseph Richardson, assistant professor in the Mechanical Engineering Department, has been honored with the annual Tau Beta Pi Professor of the Year Award.

Tanner Hickman, a Senior in the Chemical & Biomolecular Engineering Department and President of Tau Beta Pi, is pictured giving the award to Dr. Richardson.

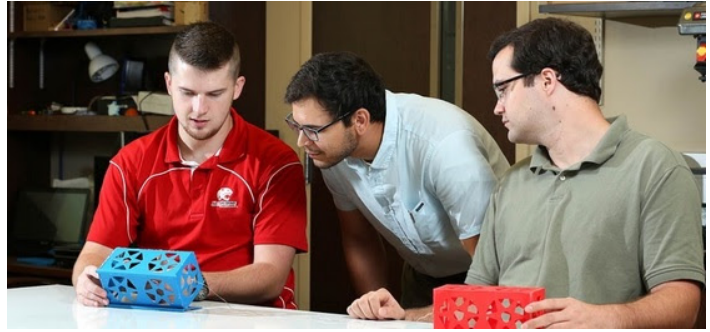
Congratulations Dr. Richardson!

New this Fall:

Concentrations in Aerospace and Biomedical Engineering now offered by the Mechanical Engineering Department.

E-Sailing to the Edge of Space

Graduate students Harrison White and Matthew Simmons flank Dr. Carlos Montalvo, assistant professor of Mechanical Engineering, as they discuss the tradeoff



from having two or more miniature satellites, called CubeSats, connected via a tether from an E-Sail. More CubeSats means more tethers and more thrust, but also more chances of tangling. See the full article at [E-Sailing to the Edge of Space](#).



Innovation that Leads to Surgical Solutions

Dr. Saami Yazdani, associate professor of Mechanical Engineering, feeds a balloon catheter through a pig artery with, from left, Claire Cawthon and Kathryn Cooper,

research assistants, and Mechanical Engineering major Clifton Huett at Yazdani's lab in the College of Engineering. See the full article at [Innovation that Leads to Surgical Solutions](#).

Students in the News

National Science Foundation Awards:

Congratulations to Benjamin Siu (Chemical Engineering) who was awarded a Graduate Research Fellowship by the National Science Foundation, and to Phiwat Klomkaew (Chemical Engineering) and Brittany McMillian (Civil Engineering) who received Honorable Mentions from the awarding panel. The NSF GRF program makes highly prestigious awards to promising young researchers, many of whom have gone on to become world-class experts in their fields.

Phiwat was also awarded Tau Beta Pi, Phi Kappa Phi, and Mortar Board Fellowships.

Alabama's Civil Engineering Student of the Year:

Peyton Posey, a Senior in the Civil, Coastal, & Environmental Engineering Department, was named Alabama's Civil Engineering Student of the Year. Over the summer, she conducted research on hurricanes and coastal engineering. See the full article at [Student of the Year](#).

Earnest F. Hollings Undergraduate Scholarship:

Evan Mazur, (Civil, Coastal, & Environmental Engineering) received the Hollings Scholarship and participated in research at the University of California, Berkeley over the summer. Evan said: "This summer, I was named a Natural Hazards and Engineering Research Infrastructure (NHERI) REU Student funded by the National Science Foundation. I was a research intern at the Computational Modeling and Simulation Center (SimCenter) located at the University of California, Berkeley. The main initiative of the SimCenter is development of research tools to aid in the mitigation of damage to the built environment by natural hazards. My project, a regional hazard simulation and workflow adaptation, was largely modeled after the SimCenter's own Regional Earthquake Workflow and is intended for use in assessing the damage and loss evaluations for an entire region from hurricane wind and coastal surge. The economical and physical damage in Charleston County, SC, caused by three different storm paths was modeled and studied as a preliminary stage in the development of the NHERI SimCenter's newest research tool. The culmination of my summer experience was presenting my findings to professionals in academia and industry and other REU students at Oregon State University in early August. I am so thankful to the National Science Foundation, NHERI-REU staff, my mentors Dr. Matthew Schoettler and Wael Elhaddad, and REU peers for an unforgettable summer!"

2018 Summer Undergraduate Research Program

Peyton Posey, a Senior in the Civil, Coastal, & Environmental Engineering Department, was awarded "Best Oral Presentation" in this year's undergraduate research symposium for her work with Dr. Stephanie Smallegan, assistant professor in the Department. Peyton's project was on the effect of beach access points on the morphological damage to coastal environments during hurricanes, specifically the 2017 hurricane season.

Spring 2019 Events

2019 Giving Day: USA's second Giving Day is scheduled for February 14, 2019, for 24 hours. Jags everywhere will unite to show their support for the University and give back to an area that is important to them. Gifts of all sizes add up quickly and have an immediate impact.

April 12, 2019: The 13th Annual Engineering Alumni Society Golf Tournament—Robert Trent Jones Golf Trail at Magnolia Groves. More information can be found at [Engineering Alumni Golf Tournament 2019](#)

April 13, 2019: The 50th Anniversary of the College of Engineering celebration! More details to come.

May 18, 2019: The College of Engineering Alumni Society will be holding a social Saturday, May 18th. They have reserved one of the decks behind the baseball field at Stanky Stadium and will be supporting the Jaguars as they play Troy. More details to come.

University of South Alabama
College of Engineering

