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Concrete Issues

Herff College of Engineering

Fall 2018

Inside:

| Chairman's Message |

| Department Welcomes Its New Faculty Member |

| Dr. Larry Moore Receives Lifetime Achievement Award |

| Faculty Updates |

| Student Highlight |

Department Activities |

Chairman's Message



Dear Alumni, Friends, and Colleagues,

As we begin a new year, I am pleased to share with you some of the many accomplishments and developments within our department since our last Concrete Issues.

We have focused on growing our undergraduate enrollment by recruiting top students who can have an impact on our region, state, and nation. As a result, our undergraduate enrollment has been increasing steadily. Furthermore, due to the outstanding research and scholarship productivity of our faculty, we have had the funding needed to recruit top international students to our PhD program. Our graduate enrollment for 2018-2019 will be our largest ever.

In June 2018, Dr. Larry Moore retired from the University of Memphis. Dr. Moore began teaching at the University of Memphis in 1983. Dr. Moore was very productive in all areas

of academia: teaching, research, and service. Dr. Moore's extensive professional background contributed significantly to making him a remarkable teacher and researcher. His applied research projects over the last 35 years have allowed him to use numerous real-world environmental engineering examples to illustrate important theoretical/empirical concepts in the classroom. We wish Dr. Moore a great and happy retirement.

Though we could never replace Dr. Moore, it is my great pleasure to announce that we have recruited Dr. Maryam Salehi as our new Environmental Engineering professor in Fall 2018. Dr. Salehi, who holds doctorates in both Textile Engineering and Environmental Engineering, was most recently a post-doc at Purdue University. You can read more about Dr. Salehi's expertise, research interests, and activities in this edition of Concrete Issues.

Please keep in touch; come visit us if you are in the area; e-mail us to keep us updated on your activities; and follow us on social media.

Chair and Professor, Civil Engineering

Shahwan Terrik

New Faculty, Dr. Maryem Salehi



Dr. Maryam Salehi is the newest faculty in our department. Prior to joining University of Memphis, she was a Post Doctoral Research Associate at Purdue University, and earned her Ph.D. in Civil Engineering (Environmental) from Purdue University in 2017. She obtained her MSc in Civil Engineering from the University of South Alabama, where she earlier conducted her Post Doctoral research. In addition to her studies in Civil Engineering, Dr. Salehi holds BSc, MSc and Ph.D. degrees in Textile Engineering. She has been conducting multidisciplinary research at the interface of material science and environmental engineering to protect the public health, for a decade. Also, she has been applying her expertise in nanotechnology, water chemistry, polymer and surface science to investigate the contaminant fate within drinking water infrastructure. Dr. Salehi has coauthored several peer review journal publications and has also presented in many national and international conferences. Currently she is working on a national priority research project to investigate the factors influencing water quality in residential and commercial buildings. In the future she plans to conduct both engineering and scientific research aimed to understand and predict the sustainability of drinking water infrastructure, and water treatment technologies.

Dr. Larry Moore receives 2018 Robert Sparks Lifetime Achievement Award



Tennessee Department of Environment and Conservation awarded Dr. Larry Moore with the 2018 Robert Sparks Lifetime Achievement Award. You can read the news here.

During the past 35 years, Dr. Moore has taught both undergraduate and graduate environmental engineering courses at the University of Memphis. In his teaching career, he has instructed over 1000 civil engineering students and helped prepare them to transition to the real world of civil engineering. To say that Dr. Moore has a passion for research on municipal and industrial wastewater treatment is an understatement. Throughout his career, through the UT Center for Industrial Services (UTCIS), he has helped to solve industrial wastewater problems for over 200 Tennessee industries. Dr. Moore has conducted site visits to each of these industries collecting as much data as possible to help define the scope of the industry's problems. He has also prepared a comprehensive report describing the problems in detail. Additionally, he has also developed alternative solutions for the industry. Each of these solutions typically incorporate pollution prevention measures coupled with end-of-pipe wastewater treatment systems or treatment process changes that would allow the industry to solve its problems. Dr. Moore has also carried out economic evaluation of the alternatives in many UTCIS projects to ensure the proposed solutions are cost-effective.

Faculty Updates

Dr. David Arellano



Dr. Arellano's key highlights during 2017 included organizing, moderating, and also providing a presentation for the three hour workshop titled Applications of Expanded Polystyrene (EPS) Geofoam for Transportation Infrastructure held at the Transportation Research Board's 2017 annual meeting on January 8, 2017 in Washington, D.C.. The workshop was sponsored by the Transportation Research Board's Standing Committees on

Geosynthetics (AFS70) and Transportation Earthworks (AFS10). He also organized and presented the 'Guidelines for Geofoam Applications in Slope Stability Projects' a Transportation Research Board webinar on July 27, 2017. On October 27, 2017, Dr. Arellano provided a presentation on Overview of Expanded Polystyrene (EPS)-Block Geofoam for Use as Lightweight Fill to representatives of the geotechnical and structural sections of the Tennessee Department of Transportation in Nashville. Dr. Arellano is on the research team that was awarded a \$3.2 million grant from the 2015 Housing and Urban Development (HUD) National Disaster Resilience Competition to map and assess damage from future floods and earthquakes in Lake, Dyer, Lauderdale, Madison and Tipton counties in West Tennessee. You can click here to get a general overview of the project. The focus of his research in 2017 was on developing seismic hazard maps for Lake County.

Mr. Hamed Tohidi joined Dr. Arellano's research group in January 2018. He recently completed his Master of Science in Civil Engineering from Idaho State University and is now pursuing his Doctor of Philosophy in Engineering at University of Memphis and is a graduate research assistant on the HUD project. Mr. Juan Jimenez, a senior in civil engineering, is also assisting with the HUD project. Among Dr Arellano's students, Mr. Sudip B Khadka is doing his M.S. thesis on the influence of degree of saturation and dry

unit weight on the shear strength of local Memphis loess. He is currently working as an intern geotechnical staff engineer at Dulles Geotechnical and Materials Testing Services in Virginia. Another student Mr. Efrem W. Emhatsion is doing his M.S. thesis on dynamic properties of local Memphis area loess.



Mr. Sudip B Khadka supervising a geotechnical drill crew on one of his internship projects.

Dr. Charles Camp



Dr. Camp has been working with several graduate students this past year on a variety of earthquake engineering and optimization research projects. His graduate students include:

• Mohammad Farshchin who finished his Ph.D. in 2017 has worked with Dr. Camp on structural health monitoring of bridges. As part of this research, Mohammad developed an algorithm for multi-setup identification of structures under ambient vibration conditions. Working with local TDOT officials, Dr. Camp and Mohammad tested a bridge on I-385 near Arlington, TN to identify its modal properties and compare the results to finite element simulations of the bridge. Ultimately, the objective of this research was to develop non-destructive methods to evaluate the structural health of bridges. In addition, Dr. Camp and Mohammad also developed a parallel optimization framework they called school based optimization (SBO) and applied the method to the design of steel frames. Results indicated that SBO could develop high-quality steel frame designs and be used to solve a variety of discrete variable structural optimization problems. Findings of this research is yet

to be published in Engineering Structures Journal.

- Mohsen Maniat who is a Ph.D. candidate is working on applying machine learning using deep convolutional neural networks for detecting cracks in pavements from video images. With exceptional advances in computational power, Artificial intelligence systems can be developed to partially replace human-conducted visual inspection. High accuracy of different architectures of convolutional neural networks in image classification problems, makes them an effective method in the visual crack detection process. Mohsen presented his work at the ASCE Engineering Mechanics Institute Conference at MIT this June. Mohsen has also worked with Dr. Camp and Mohammad in the development of SBO and its application to structural engineering design problems.
- Jalal Kiani who is also a Ph. D. candidate is working on innovative approaches for ground motion selection as a tool for developing the seismic input for performing nonlinear dynamic structural analysis. Jalal's research seeks to identify which ground motion parameters are important in predicting the response of structural systems. He has presented his work at E.E.R.I., A.S.C.E., and S.S.A. conferences and written three journal papers; two have been submitted and are under review with another paper already been published: "Role of conditioning intensity measure in the influence of ground motion duration on the structural response" Soil Dynamics and Earthquake Engineering, 104, 408–417.

Dr. Adel Abdelnaby



Dr. Adel Abdelnaby in collaboration with the History Department at the University of Memphis has examined the structural safety and stability conditions of an ancient temple in Egypt built in around 1300 BC. This assessment is part of a study to suggest structural repair and retrofit schemes to The Karnak Hypostyle Hall with the objective of increasing its safety and preventing the collapse of any structural or nonstructural masonry units as a result of expected hazards.



Dr. Abdelnaby with the central east west aisle of Temple of Amon-Re, Karnak, Egypt in the background.

Dr. Claudio Meier



Since starting at the CE Department in August 2015, Dr. Meier has been involved in a wide range of academic activities: obtaining research grants and contracts, developing and offering new graduate classes in his fields of expertise, consolidating international collaborations, advising graduate and undergraduate students, presenting his research at different local, national, and international venues, conducting outreach activities, and providing service to the university, the profession and the community.

He is the PI in a \$164k grant from TDEC-West TN River Basin Authority to study the ability of restored urban creeks to retain sediments (2017-2021), He is also the PI in a \$375k HUD-National Disaster Resilience Competition sub-award (2017-2019) to develop better flood modelling tools for rivers in West TN, and in a \$30k equipment grant from the TN State Board of Architectural and Engineering Examiners, to improve the teaching of hydraulics and hydrology at UofM. Dr. Meier has also obtained internal UofM funding: a \$6000 Faculty Research Grant (2016-17) in order to study the spatial variability within river bars, and a \$30k Team Initiation Grant for an interdisciplinary investigation of flash flooding risks and community resilience in low-income Memphis neighborhoods. With his graduate student Aashis Sapkota, he is involved in a project to model a range of solutions with the hydraulic model for Shelby County, as an investigator (PI: Dr. Brian Waldron).

On top of teaching required and elective undergraduate courses in Hydraulics and Hydrology, Dr. Meier has developed and taught new graduate classes in Physical Hydrology, Urban Resilience to Flooding I, Ecohydraulics and Ecohydrology, and Urban Resilience to Flooding II, all based on his research topics.

Dr. Meier is also involved in numerous international collaborations. Dr. Meier is a member of the International Steering Committee for the Andong River Experiment Forum, in Andong, Korea, a large-scale facility operated by the Korea Institute of Civil Engineering and Building Technology, KICT. Dr. Meier visited KICT for the 3rd time in October 2017, presenting a seminar on "Quasi-prototype scale experiments for medial bar formation and hyporheic exchange flow description in gravel-beds." He continues collaborating with colleagues and institutions in his home country of Chile, where he was invited in October 2017, to present a seminar on "Managing Patagonian fluvial systems under anthropogenic change" (at CIEP, Coyhaigue, Chilean Patagonia) and teach a course on Integrated Water Resources Management and Climate Change to personnel at the local water agency. He is building links with the recently created "Universidad de Aysén", in Coyhaigue, and with the Dept. of Civil Engineering at "Universidad de la Frontera" (Temuco), where many of his past students are now faculty members. Dr. Meier also has ongoing collaborations with ETH-Zürich, Switzerland, The University of Catania, Sicily, Italy, and with ITESO-Guadalajara, México, where he taught a one-week Hydrology course in the June 2018, and was then invited as a keynote speaker to a workshop on Urban Water Resilience.

Dr. Meier's first full-time graduate student at UofM, Patricio Muñoz-Proboste (M.S.), came to Memphis in January 2017, from Chile. Then, three more students came in the Fall of

2017: Koorosh Azizi from Iran (PhD), recipient of a Herff Scholarship, as well as Aashis Sapkota (Ph.D.) and Kushal Regmi (M.S.), from Nepal. Dr. Meier also advises a part-time PhD student, Mrs. Eatedal Alqusaireen, from Martin, TN. He tries to give as many opportunities as possible to his graduate students, so they can attend courses and conferences, and conduct collaborative research. Patricio Muñoz-Proboste attended with him the May 2017 American Society of Civil Engineers' Environmental and Water Resources Institute (ASCE-EWRI) Congress, in Sacramento, as well as the July 2017 Symposium for European Freshwater Sciences, in Olomouc, Czech Republic. In June 2017, Patricio also did a two-week long research stay at the Institute of Environmental Engineering, ETH-Zürich, working with the group of Prof. Peter Molnár, and then in August attended a CUAHSI course at U. Michigan – Ann Arbor, on installing sensors for water resources research. All of Dr. Meier's full-time graduate students attended the West TN Water Resources Symposium at Pickwick Lake, in February 2018, and also travelled with him to the 2018 A.S.C.E.-E.W.R.I. meeting in Minneapolis, in June 2018.

Dr. Meier also incorporates undergraduate students in his research projects, either through honors contracts, independent projects, or as hourly-paid students. civil engineering students Spencer Drum, Justin Lawrence, Carla Meier, and Timothy Belles have collaborated with his project on hyporheic flow under river bars, with three of them visiting the research site at Bull Creek, near Ozark, Missouri.



UofM Civil Engineering undergraduate students Spencer Drum, Justin Lawrence, and Carla Meier (left to right), measuring hydraulic conductivity within a river gravel bar on a research site at Bull Creek, Missouri Ozarks.

In the last two years, Dr. Meier has been actively presenting his research at different local, national, and international events. In 2016, he presented at the Earth Sciences Colloquium, on campus. In 2017, he attended the West TN Water Resources Symposium (Jackson, TN; 2 presentations), the ASCE-EWRI meeting (Sacramento, CA; 1

presentation and 1 poster), the annual meeting of the Society for Freshwater Sciences (Raleigh, NC; 1 presentation), the Symposium for European Freshwater Research (Olomouc, Czech Republic; 1 presentation), and the American Geophysical Union Fall meeting (New Orleans, LA; 1 presentation). He also gave 1 hr seminars about his research in Korea, Chile, and at his alma mater, the Flathead Lake Biological Station of the University of Montana. Finally, in 2018, he gave three presentations at the West TN Water Resources

Symposium,

at Pickwick Lake.

Dr. Meier has an ongoing outreach collaboration project with both St. Georges Independent School in Collierville and St. Mary's Episcopal School in Memphis. Students in the environmental science class, and senior students doing projects, are monitoring wells that were installed on the floodplain of the Wolf River, and a stream gaging station will be installed this summer. He also gave 4 seminars on hydrology to 7th grade STEM students at Riverdale School (Germantown), as well as a lecture on watershed delineation to high-school science teachers, at the Lausanne Learning Institute. Finally, he gave guidance to a team of grade and middle school students that were taking part in the FIRST LEGO

League

Championship.

Lately, Dr. Meier has performed editorial peer-review service to various journals in his field, obtaining the 2017 Outstanding Reviewer Award for the American Society of Civil Engineer's *Journal of Hydrologic Engineering*. He was an abstract reviewer for different conferences in his discipline, as well as for the 2017 National Conference on Undergraduate Research.

Dr. Sabyasachee Mishra



Dr. Sabya Mishra along with Dr. Mihalis Golias recently received a grant from the Memphis Area Transit Authority (MATA) to conduct an asset management plan which will serve as a guiding document for future management of assets (buses, trolleys, vans, etc.). In another grant from city of Memphis Dr. Mishra studied potential adoption likelihoods of autonomous vehicles by the Memphis residents. In another project sponsored by the University of Memphis research funds, he is the co-PI of a project that spans across six disciplines (civil engineering, electrical engineering, urban

planning, computer science, business administration, and economics) to analyze connected and autonomous vehicle readiness index of various cities across US. He codirects the Smart-city research cluster at FedEx Institute of Technology. In December 2017, he was invited by Federal Highway Administration to present on the use of Freight Analysis Framework data in research and practice. In TRB 2018, he co-authored 10 papers, which were presented at various poster and podium sessions. At TRB, he also chaired two sessions, as well as a sub-committee meeting. Dr. Mishra serves as the paper review coordinator of the Transport Economics Committee of TRB. He also serves on the editorial board of Transport Policy, and has edited a book volume that was selected as a part of the World Conference on Transport Research. His student accomplishments include:

Santosh Bhattarai completed his M.S. degree in transportation engineering, has
joined the Fresno Council of Governments(Fresno, CA) with a full-time position.

- Khademul Haque, who completed his Ph.D. has joined a full time job at RSG.
- Zohora Sultana who completed her M.S. has joined Tennessee Department of Transportation (TDOT).

Dr. Stephanie Ivey

Dr. Stephanie Ivey is the mentor of the ITE chapter. The U of M ITE student chapter competed in the annual Tennessee Section ITE Traffic Bowl competition on February 27, 2018 in Knoxville, TN. The event is a Jeopardy-style competition focused on a variety of traffic engineering, planning, safety, and ITE-specific knowledge. This year's team consisted of undergraduates María Muñoz, Dominic Stewart, and Wilson Mabry (alternate), and graduate student Holland Aguayo. The U of M team won this year's Traffic Bowland and advanced to



the Southern District competition held in Mobile, Alabama on April 9 during the annual Southern District meeting. Special thanks to this year's traffic bowl coach for the U of M team, Sam Jordan (doctoral candidate)!

The 4th annual Choosing Transportation Summit was hosted on March 22-23 at the U of M FedEx Institute of Technology and the Hilton Memphis. The Summit began in 2015 as

an outgrowth of the Department of Civil Engineering's Southeast Transportation Workforce Center's efforts to bring industry stakeholders together to discuss workforce issues and share best practices, particularly for increasing diversity. The Summit consisted of the following:

- Two-day professional conference focused on challenges and opportunities related to attracting, retaining, and developing a skilled transportation workforce.
- Blue Pump Gala, celebrating women in the transportation industry, and supporting scholarships for students pursuing transportation-related majors at the University of Memphis.
- Concurrent Summit track for high school students, conducted on the first day of the conference and engaging students in a variety of sessions to increase their awareness of (and hopefully interest in) transportation careers.
- Transportation Expo in addition to providing a traditional vendor outlet during the
 professional conference, the Expo provided an opportunity for participants to
 reach mid-south area college students and high school students.

The theme of the 2018 Summit was *Transportation Workforce 2.0: Envisioning the Future.* Many industry experts participated in the Summit as keynote speakers and panelists from CN, DBi, Dunavant Logistics, FedEx Express, FedEx Freight, Gannet Fleming, HDR, IMC, TDOT, TRC, the Port of New Orleans, Vaco, and VDOT, just to name a few.

Dr. Stephanie Ivey, Meredith Powers, and Dr. Marty Lipinski would like to thank the more than 30 speakers, 80 volunteers, and our sponsors who made this event a success!

Dr. Larry Moore

Dr. Larry Moore retired from The University of Memphis on June 30, 2018. During the last 35 years, Dr. Moore has taught undergraduate and graduate environmental engineering courses in our department. Dr. Moore's research has focused on municipal and industrial wastewater treatment. He has helped to solve wastewater problems for more than 200 Tennessee industries and municipalities through his applied research activities.



Dr. Moore has planned and conducted numerous applied

research projects for the Tennessee Department of Environment and Conservation (TDEC), USEPA, the U.S. Department of Energy, the University of Tennessee Center for Industrial Services, the City of Memphis, and local industries. In 2004, he and his research team conducted an evaluation of water quality in the Loosahatchie River via an extensive field data collection effort. Dr. Moore used the field data to perform water quality modeling of the river to determine discharge standards for eight rapidly growing municipalities northeast of Memphis. Dr. Moore has received about \$2,000,000 in funding from local, state, and federal sources for applied research and public service projects while at the University of Memphis.

With his specialty in biological wastewater treatment he has most recently developed the Bio-Tiger Model that simulates activated sludge processes. The model is currently being used as a design tool by environmental engineers and as an operating tool by wastewater treatment plant (WWTP) operators across the U.S.

During the last six years, Dr. Moore has primarily focused onBio-Tiger to achieve energy conservation and to improve process performance at over 60 municipal WWTPs in the southeastern U.S. based on data prepared by USEPA Region 4, Dr. Moore has helped these communities achieve verified energy savings totaling more than 8,000,000 kWh/year. The verified equivalent carbon dioxide reduction of the energy savings was 6,400 tons/year because of reduced need for electric power generation. The verified reduction of nitrogen discharged to U.S. streams in the southeast was 400,000 pounds/year. The verified, combined operational savings for the wastewater treatment plants that have implemented Dr. Moore's recommendations is \$1.6 million per year.

Dr. Ricardo Taborda

Civil Engineering Assistant Professor Ricardo Taborda previously served as a faculty in the Center for Earthquake Research and Information (CERI) at the University of Memphis He worked on problems related to the simulation of earthquake and their effects, including problems of three-dimensional seismic waves propagation in models that incorporate the effects of the surface topography and the interaction of cities with the ground motion. The images above/below show results from simulations done by Taborda and PhD students working with him at CERI for the response of

the Canterbury Planes in New Zealand during an aftershock of the 2010-2011 earthquake sequence (Figure 1), and results from simulations of the interaction of regular and irregular clusters of buildings with the ground response (Figure 2). This past year, Dr. Taborda hasactively collaborated with research groups in California and New Zealand. Late in 2016 he joined the Planning Committee (PC) of the Southern California Earthquake Center (SCEC) as co-leader of the Computational Science disciplinary group of SCEC, and in 2017 he was invited to the SCEC-PC representative in SCEC's Communication, Education and Outreach Committee. He also serves as an International Collaborator for the New Zealand Center of Research Excellence in Earthquake Engineering (QuakeCoRE). Dr. Taborda is also a senior researcher for the SimCenter, one of the centers that are part of the Natural Hazards Engineering Research Infrastructure program established in 2016 by the National Science Foundation. The SimCenter is headquartered at the University of California, Berkeley. More recently, Dr. Taborda has taken the lead in

organizing our Civil Engineering Research Seminar Series, featuring local and national speakers in areas of transportation, structures, and water resources.

Dr. Taborda presently serves as the Dean of School of Engineering at Universidad EAFIT, Colombia.

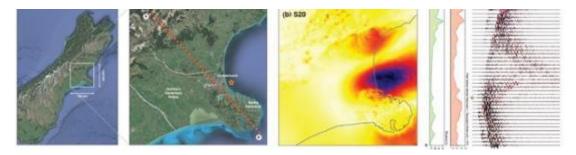
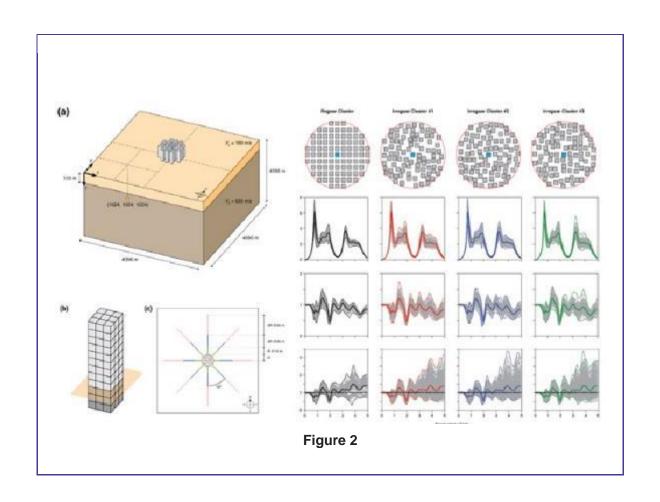


Figure 1



Dr. Martin Lipinski

Dr. Martin Lipinski, professor Emeritus and former director of Intermodal Freight Transportation Institute served on the Memphis Area Transit Authority Board of Commissioners and was involved in number of activities.

Dr. Lipinski has:

- Served on the Memphis Chamber of Commerce, Major Roads Committee
- Served as a member of West Tennessee Freight Advisory
 Committee
- Served as a member of Memphis MPO Freight Advisory Committee
- Hosted visiting delegation from India, Bangladesh, and Nepal in June, 2017.
 Toured the Memphis Freight related industries.
- Delivered lectures on transportation engineering classes on safety and railroads.
- Hosted transportation class field trip to Wepfer Marine
- Served on the Planning Committee for annual State of Freight Conference in October, 2017
- Served on the Planning Committee for 2018 Choosing Transportation Summit and directed one session.
- Served as the Associate Director of IFTI and Associate Director of the SETWC –
 Southeast Transportation Workforce Center

- Attended the annual TRB meeting and participated in multiple sessions focusing on workforce development.
- Participated as a member of the research team on three major projects National Transportation Career Pathways Initiative, Operations focus; Transportation systems Management and Operations Workforce (NCHRP Project), and the Transportation Apprenticeship Accelerator
- Served as an advisor to the Transportation STEM Academy at East High School.
- Served as a member of the TEC Committee developing the Diesel Mechanic Program at East High school.

Student Highlight

Sam Jordan, a student in the Civil Engineering Ph.D. program, has been awarded the prestigious Dwight D. Eisenhower Transportation Fellowship. The award recognizes the potential of Jordan's ongoing research in performance metrics for intermodal transportation systems. Samuel Jordan received Eno Foundation fellowship. Each year, the Eno Future Leaders Development Conference (LDC) gives 20 of the nation's top graduate students in transportation a first-hand look at how national transportation policies are developed.

Department Activities

Girls Experience Engineering



The Girls Experience Engineering or the GEE program at the University of Memphis was successful in receiving funding for its 15th year. The <u>Women's Foundation for a Greater</u>

<u>Memphis</u>, <u>CN</u>, <u>Carrier Corporation</u>, <u>SSR</u>, PepsiCo, and the <u>U of M's Intermodal Freight</u>

<u>Transportation Institute</u>, and <u>Southeast Transportation Workforce Center</u> have been the key sponsors for this program.

It is a fast-paced, interactive summer program that seeks to instill young women with confidence, interest, and awareness of the wide array of career opportunities within science, technology, and engineering fields

The GEE has New focus on providing STEM academic support year-round to students in 38126 (highest poverty zip code in the country. The program has been able to track majors for 268 young women, of which 35% are in STEM majors and 25% in Engineering!

GEE has been recognized as one of 2018's top Inspiring Programs in STEM by *INSIGHT Into Diversity* magazine. For more information on the Program click here.

West Tennessee STEM hub



Every year 35 STEM Ambassadors are appointed by the West Tennessee STEM hub project to work with K-12 students in the region supporting STEM teaching and learning. The Project aims to serve as a resource for West Tennessee to increase students' interest in and preparedness for the STEM workforce through a variety of activities

For more information on the project click <u>here</u> or <u>here</u>.

Tennessee Engineers Conference





ASCE student chapter members and students of the department attended the Tennessee Engineers Conference at the Music City Center in Nashville, TN.

Career Fair



The department hosted career fairs for the engineering students in the fall and spring semester. Over 20 companies participate in the career fair. The career fair serves as a mutually beneficial event for the companies and graduating students. The department's career fair has expanded and

has become the Herff College of Engineering Career Fair in recent years.

E-Day

The annual E-Day was hosted by the Herff College of Engineering on October 19 this year. The day composed of activities including competitions, engineering lab tours, and multiple walk-up activities throughout the Herff College of Engineering complex.



Click on the logo above to know more.



Chapter members participated in Engineering Day hosting a duct tape wall and KNEX bridge compettitions.



Deep South Conference 2018

The students from the Department participated in the 2018 ASCE Deep South Conference hosted at University of Louisiana from March 23-24.



The students competed Surveying competition, Mystery Event competition, and the Environmental Quiz Bowl competition.

For more information visit the UofM ASCE website.

Department Potluck



A.S.C.E. student chapter President Marissa Higgins organized this year's holiday potluck for the Civil Engineering Department.

ITE Traffic Bowl



Students from the Department participated in the annual Tennessee Section ITE Traffic Bowl organized on February 27, 2018 in Knoxville, TN. The Department fielded a team of four members along with our coach Dr. Stephanie Ivey. The team consisted of undergraduates María Muñoz, Dominic Stewart, Wilson Mabry and graduate student Holland Aguayo.

UoM WON the competition and advanced to the regionals held as part of the Southern District Annual Meeting in Mobile, AL!!!

There was a tough battle in the preliminaries and while UoM didn't win that one, the participants still had a blast there.

The competition inspired our UoM teammates to do more and now they are eager to go back for next year's competition!

CE Cookout





The American Society of Civil Engineers and <u>The Department of Civil Engineering</u> at <u>UoM</u>

Co-sponsored a spring cookout for the Engineering department as a fun event before finals







