

INSIGHTS

into Sustainable Engineering

WINTER 2015





Greetings from UF ESSIE! I am more than excited to share with you the news of the past six months or so from our college and school as it has been a time of great prosperity and growth.

First and foremost, you will read about a very generous donation of \$300 million that is already impacting the face of our college and school.

The benefactors, Dr. Herbert

Wertheim and his wife, Nicole have provided the largest cash gift in UF's history to enhance and propel forward engineering education and research within the College of Engineering. As you can imagine, everyone within the college is thrilled about the possibilities that this gift will allow for the future of our gator engineering program.

Next, you will read about some of the research efforts from our faculty including a National Science Foundation grant totaling nearly \$8 million. The grant was awarded to UF and Florida International University to complete further research on how to make homes and businesses safer in hurricanes and tornadoes. This collaboration will also include providing opportunities to top experts across the country to access facilities for furthering their own research and enhancing what is currently available based on their geographical needs. From an administrator's perspective I see many opportunities that this effort and others can lead to in the future.

Our faculty and students continue to amaze me with the number of top awards and recognitions that they receive at the national level. From being selected as a faculty participant

within the Fullbright program, to being acknowledged within professional organizations, to securing patents for their work, to rising above the teaching realm and moving into College-level administration, we have a great deal to be proud of within our School. Our ASCE student chapter won first place in all three areas within the national competition for concrete canoe, steel bridge design and sustainable development which made UF the first university to ever win the "triple crown" within the ASCE competition. The efforts of our students across our school continue to astound me every year and I cannot begin to tell you how much positive energy this brings to our classrooms, events and our campus.

And finally, with the continued support from our alumni and industry partners, our students are finding their place among the profession. Our ESSIE "Evening with Industry" event, now in its eleventh year, yielded over 300 student participants to meet with over 80 representatives from 26 companies and organizations. Many of these companies have participated since our first event even through the worst economic years and for that we continue to be grateful. There are many ESSIE alumni who return for this event to recruit for their employers and we always eagerly welcome them back to campus.

In summary, I would like to share the words of Thornton Wilder. He said "We can only be said to be alive in those moments when our hearts are conscious of our treasures." At UF ESSIE we are very conscious of our treasures of which there are many - our students, staff, faculty, alumni and industry partners and we are very much alive and thriving!

Dr. Kirk Hatfield
DIRECTOR ENGINEERING SCHOOL
OF SUSTAINABLE INFRASTRUCTURE
& ENVIRONMENT

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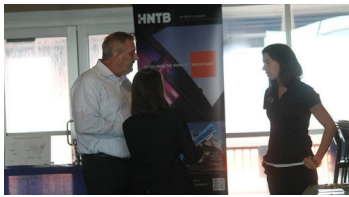
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ESSIE EVENING WITH INDUSTRY

FALL 2015

In acknowledgement of
the support and dedication shown to our students,
we thank all of the employer participants
who attended this event!



- HDR
- CHW
- AVCON
- Stantec
- ARCADIS
- Dewberry
- McKim & Creed
- EAC Consulting
- Wantman Group
- Brasfield & Gorrie
- Condotta America
- HNTB Corporation
- Hazen and Sawyer
- Atkins North America
- Protean Design Group
- Figg Bridge Engineers
- Ardaman & Associates
- Geosyntec Consultants
- Chen Moore & Associates
- WSP/Parsons Brinckerhoff
- Kimley-Horn and Associates
- Professional Service Industries
- Wiss, Janney, Elstner Associates
- Florida Department of Transportation
- Comprehensive Engineering Services

Do you know of internship or employment opportunities for our graduates? As an employer are you interested in presenting an information session to our students? If so, send an email with details to careers@essie.ufl.edu

**\$300 million University of Florida College of
Engineering transformation begins with \$50 million
naming gift**



UF IS PROUD TO ANNOUNCE

THE HERBERT WERTHEIM COLLEGE OF ENGINEERING

Dr. Herbert Wertheim and the Dr. Herbert and Nicole Wertheim Family Foundation have committed \$50 million to launch a \$300 million public and private investment in the University of Florida's College of Engineering.

The Wertheim gift, the largest cash gift in UF's history, is the cornerstone of a fund-raising initiative that will pool funds from the university, the state of Florida, and private donors to revolutionize engineering education and research at the UF College of Engineering.

The college will now become the Herbert Wertheim College of Engineering. The Wertheims' \$50 million gift is the catalyst for the largest expansion in the 105-year history of UF Engineering. The transformation will fund additional faculty, several state-of-the-art facilities and enhancements in engineering education delivery. The goal is inspiring engineers to seek humanitarian solutions in an effort to re-imagine the way we live today and into the future.

"It's befitting to name the college in honor of someone who exemplifies what we call 'the New Engineer,'" said Cammy Abernathy, dean of the Herbert Wertheim College of Engineering. "Herbie is the future of engineering. He's innovative, entrepreneurial and a service-oriented leader."

"The transformation made possible by the Wertheim investment signals UF engineering's remarkable determination to become one of the leading programs in the world," UF President Kent Fuchs said. "It raises the stature of both the engineering college and the university. This transformation will further accelerate social and economic development in the state of Florida and the nation."

Wertheim and his wife, Nicole, have a philanthropic reach that stretches across the globe. Together they strive to make a measured impact on people's daily lives. From their work with many nonprofits to the dedicated efforts and resources toward university advancement with Florida International University's Herbert Wertheim College of Medicine and Nicole Wertheim College of Nursing, the Dr. Herbert and Nicole Wertheim Family Foundation has made a significant impact since 1976. With this gift, the Wertheim Family, including daughters Erica Wertheim Zohar and Vanessa Von Wertheim, will have contributed more than \$100 million to Florida's public universities and colleges.

At least two high-tech facilities are planned for the college at UF, including the 80,000-square-foot Engineering Innovation building, which will also be named in Wertheim's honor. The innovation building is scheduled for groundbreaking in spring 2016. It will be located at the heart of the UF campus and designed to encourage interdisciplinary collaboration.

"UF is joining the ranks of the world's best universities, and having a world-class engineering college is one of the keys to that success. This strategic gift is one giant step in getting there and sustaining engineering leadership in the world," said Steve Scott, chair of the UF Board of Trustees. "The Wertheims' investment in the college and university continues their insight in the future of mankind. This gift dramatically increases UF's ability to impact the lives of people around the world through innovative teaching and research."

<http://news.ufl.edu/articles/2015/10/300-million-university-of-florida-college-of-engineering-transformation-begins-with-50-million-naming-gift.php>

UF study shows restored oyster reefs beneficial beyond the dinner plate

SHELLFISH HELP CREATE AND PROTECT HABITATS CRITICAL TO WILDLIFE AND HUMAN COMMUNITIES



Oysters thrive under brackish conditions, and now a University of Florida study reveals that the bivalves can actually help create the mix of fresh water and brine they crave.

While evaluating a new method of restoring degraded oyster reefs, researchers with UF's Institute of Food and Agricultural Sciences and UF's College of Engineering confirmed an observation that Cedar Key-area oystermen have made for years – some oyster reefs act as natural dams, impounding fresh water that flows seaward from nearby creeks and rivers.

The result: large areas of reduced-salinity water that help maintain near-shore estuarine habitats supporting oysters, sea grasses, juvenile game fish and invertebrates important to the marine food chain as well as seafood production and recreational opportunities for people.

This finding, published in a report available at <http://www.projects.tnc.org/coastal>, could aid ecological and fishery restoration projects along Florida's Big Bend Coast, a largely undeveloped area bordering the Gulf of Mexico between Wakulla and Pasco counties, said project leader Peter Frederick, a professor with UF/IFAS' Department of Wildlife Ecology and Conservation.

The Big Bend Coast is one of the nation's few coastal areas featuring numerous oyster reefs that run parallel to shore and stand above the water's surface at low tide. The study site, off the Levy County coast, is a chain of oyster reefs punctuated by a few openings that allow seawater to mix with fresh water that the reef holds back as it empties into the Gulf of Mexico from the Suwannee River.

“We’ve known about other ecosystem services that oyster reefs provide, like acting as breakwaters that reduce the impact of wave action on the shore,” Frederick said. “But the role of oyster reefs in modulating the salinity of water near the shore had not been demonstrated before.”

The team investigated the area’s salinity levels after local oystermen told Frederick the reef held back fresh water. Frederick then made a simple test -- while visiting the study site, he dipped his finger in the water on either side of a reef and tasted each sample. Though the reef was only 80 feet wide, it seemed that water from the near-shore side wasn’t as salty as water from the side facing the open sea.

In response, Frederick recruited David Kaplan, an assistant professor with the UF College of Engineering’s Department of Environmental Engineering Sciences. The pair checked salinity in multiple locations for 18 months and their findings confirmed the oystermen’s observation – on average, the salt content of water on the near-shore side was nearly 20 percent lower than it was on the ocean side, and up to 90 percent lower on some days at some locations. Furthermore, computer modeling showed that if restoration increased the elevation of the degraded reef to expected levels, the reef would probably hold much more fresh water near the shore.

Kaplan said oyster reefs may provide further insights about creating or modifying structures to channel flowing water.

“As people become more focused on how to build and maintain resilient coastal communities, I think we’ll look more at natural systems, to see how they work and how we can replicate their effects,” Kaplan said.

Meanwhile, the team accomplished its primary mission – demonstrating that both lime rock boulders and polyester mesh bags filled with clam shells can be used to fortify degraded oyster reefs, said aquaculture expert Leslie Sturmer, a UF/IFAS Florida Sea Grant aquaculture Extension agent based in Levy County.

The bags, weighing up to 300 pounds, are expected to remain in place long enough to provide suitable habitat for tiny, free-floating oyster larvae to settle and grow, rebuilding the reef, she said.

Initial results showed that young oysters were colonizing the mesh bags at impressive rates, said Sturmer, who’s also a leader of the UF/IFAS Shellfish Aquaculture Research and Extension Program based at Cedar Key.

Within 18 months, oyster densities on the UF restoration sites were higher than the densities found at most other restored oyster reefs in the Gulf of Mexico. The UF control sites showed no improvement, indicating that the lime rock and bags of clam shells made the difference.

The reef’s long-term response is potentially more important, Frederick said, because scientists believe that successfully restored sites will be more resilient to environmental change and weather events. Monitoring efforts over the next 10 to 15 years will establish whether reefs at the study site will thrive and grow.

One piece of early evidence supporting the ecological value of restoration is that the restored reef sites attracted more birds than control sites – 62 percent more birds overall, and up to 500 percent more for some species, including the bald eagle.

Other members of the research team included Bill Pine, an associate professor with the UF Department of Wildlife Ecology and Conservation; Jennifer Seavey, a former UF post-doctoral associate now with the University of New Hampshire; Arnoldo Valle-Levinson, a professor with the College of Engineering’s Department of Civil and Coastal Engineering; Maitane Olabarrieta, an assistant professor with the department; and Cedar Key-area oystermen Jerry Beckham, Laura Adams and Garrett Sims.

Support for the project was provided by a four-year \$84,000 grant from The Nature Conservancy Florida and the National Oceanic and Atmospheric Administration as part of a program supporting shellfish restoration efforts nationwide, and separate grants from the Florida Sea Grant program and the National Fish and Wildlife Foundation. Government agencies and local business associations including the Cedar Key Aquaculture Association assisted as well.

The study was one of the first projects conducted under the auspices of the Nature Coast Biological Station, a new UF/IFAS facility for observation and research along the Gulf of Mexico.

Written by Tom Nordlie

NEW FEDERAL RESEARCH FUNDING MAKES FLORIDA UNIVERSITIES NATIONAL HUB FOR HURRICANE MITIGATION RESEARCH



MIAMI (Sept. 24, 2015) -- The National Science Foundation today announced grants to Florida International University and University of Florida totaling nearly \$8 million that will position the state to become a national hub for research into making homes and businesses safer in hurricanes and tornadoes.

FIU's Wall of Wind and UF's Powell Family Structures and Materials Laboratory are now among seven labs in the nation with the designation of "Experimental Facilities" under the Natural Hazards Engineering Research Infrastructure (NHERI) program, and the only two dedicated to studying extreme wind events. The facilities will attract NSF-funded researchers from throughout the nation who are working on wind engineering projects and are part of a network of scientists who study

different aspects of natural hazards.

"These awards highlight the groundbreaking work supported by Florida's public universities and underscore the value of multi-disciplinary collaboration and investment in research that leads to economic development in our state and across the nation," said Chancellor for the Florida State University System Marshall Criser III.

FIU's Wall of Wind is the nation's only full-scale simulator capable of producing Category 5 hurricane (157+ mph) winds. The 12-fan 8,400 horsepower system was inaugurated in 2012, on the 20th anniversary of Hurricane Andrew's devastating blow to South Florida. The Wall of Wind was developed with public and private

funding over nearly 10 years, and capped by a \$7.5 million State of Florida Center of Excellence award in 2008. Since then, the Center of Excellence has secured projects and awards totaling more than \$9 million.

A team from FIU's Extreme Events Institute (EEI) and International Hurricane Research Center (IHRC), led by principal investigator and associate professor of civil and environmental engineering Arindam Gan Chowdhury, was awarded a five-year NHERI grant for nearly \$4.1 million.

"At FIU we are committed to solving problems for our community, our state and the nation," said FIU President Mark B. Rosenberg. "This NSF designation tells us we are on the right track and inspires us to push ahead with research-driven innovation to foster economic development and job creation."

UF will receive \$3.6 million to give top experts across the country access to a one-of-a-kind wind tunnel that tunes its wind field to test bridge and building models in terrains ranging from marine to terrestrial conditions. Civil, mechanical and electrical engineering students designed and built its 'Terraformer' system, which changes terrains on the fly. Researchers will also use dynamic pressure loading actuators—machines that 'replay' realistic wind loads to test buildings. The largest can replicate extreme wind loads from an EF5 tornado, the strongest wind event on the planet. The \$4 million system was primarily funded by Henry Upjohn II through Michigan-based Special-Lite, Inc.

Forrest Masters and his colleagues in the Engineering School of Sustainable Infrastructure & Environment will use the grant



to tackle an ambitious science plan that spans from promoting the use of robotics in construction to advancing computational methods to reduce the reliance on physical testing to understand how building products and systems respond to high wind loads.

With the grant, UF also will support military veterans returning to school, with emphasis on hiring those with service-connected disabilities.

Masters and Chowdhury will serve on the leadership team for the entire network, which includes the supercomputing center at UT Austin.

"The University of Florida is honored to be selected by the NSF to provide a national resource that will be used by researchers throughout the US," said David Norton, UF's Vice President for Research. "This speaks volumes to our prowess as a research university."

Source: <http://us1.campaign-archive2.com/?u=d13d9ca5483e1889af5c1cd91&id=5c7f6d8c20&e=8f62f4a88e>



UFTI AFFILIATE WORKS WITH SENSORS TO ENSURE THE SAFETY OF INFRASTRUCTURE, ESPECIALLY BRIDGES



Dr. Jennifer Rice, is an assistant professor who specializes in infrastructure monitoring and works on bridge research. Rice is part of the Structural Engineering group in the UF Department of Civil & Coastal Engineering. She is also a member of the University of Florida Transportation Institute's (UFTI) Internal Steering Committee. Specifically, her research focuses on the development and application of innovative sensors and networks that collect data to improve the management and maintenance of bridges and other infrastructure.

"Although my focus is on bridges, which are critical components of transportation systems, the sensors and tools I develop can be used in other areas of transportation research and applications for enhanced decision support," Rice said.

One of Rice's major accomplishments involved developing and installing smart sensor hardware, including the software framework, on the Jindo Bridge in South Korea in 2009. This was the largest wireless smart sensor network deployment on a bridge, which eventually resulted in a structural monitoring applications patent for this device (high sensitivity environmental sensor board and methods

for structural health monitoring", US Serial No. 13/696,747). And, early this year, Rice was awarded a National Science Foundation (NSF) CAREER award titled "Loading on Coastal Bridges in Windstorms using Rapidly Deployable Sensor Network". This project involves the use of wireless, smart sensor networks to find out how bridges behave during extreme weather events such as severe storm surges or a hurricanes. It is expected that this research will improve decisions related to the assessment and management of bridge health and also develop reliability models from the analysis of data related to hurricane load and response.

For Rice, her affiliation with the UFTI enables collaboration with other researchers and transportation stakeholders, and without cross-disciplinary collaboration, she says that her research would not be possible.

"I am a structural engineer by training, but I draw upon electrical engineering, computer science, and coastal engineering to design sensors and systems for infrastructure monitoring," she said. "The most interesting research and greatest technological advances happen at the intersections of various disciplines."

Article provided by University of Florida Transportation Institute

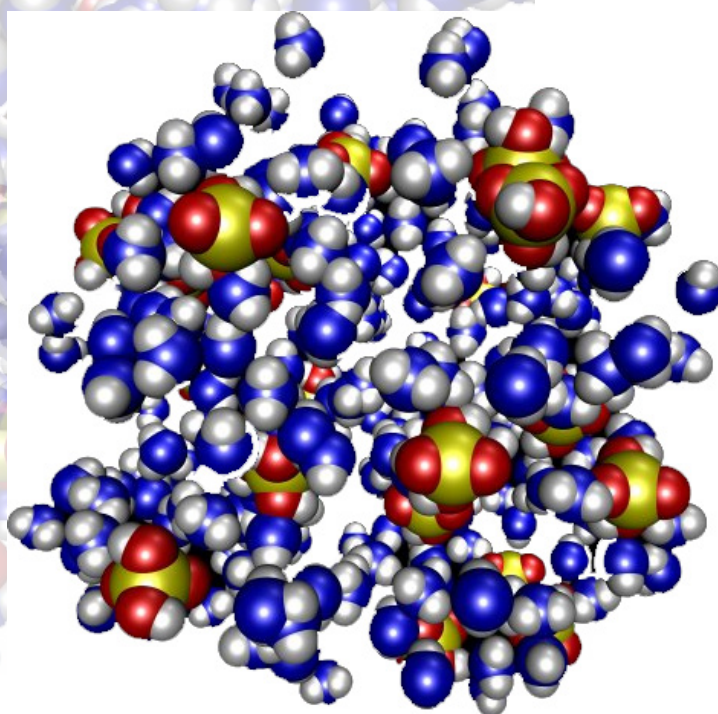
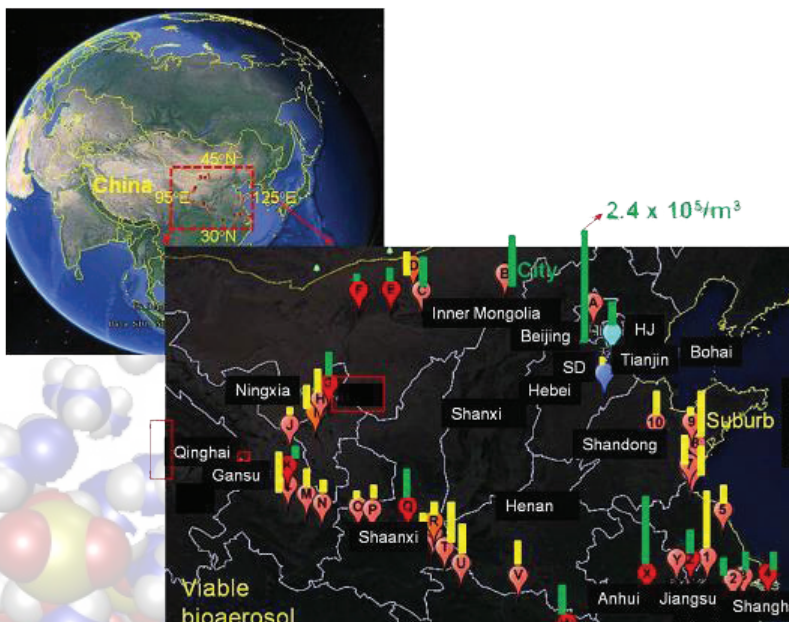
Chinese team now develops a better understanding of microbes in the air

When people think about air pollution, haze and ozone come into mind. Although microbes are known to be present in the air, the public rarely relates it to air quality or climate due to lack of knowledge about their distribution in the atmosphere. In recent years, UF professor Dr. C Y Wu has participated in an international team to develop a better understanding of microbes in the air. The team deployed a fluorescence-based microbial aerosol monitor installed on a car to many parts of China, including urban and suburban regions from 13 provinces (40 locations in 7 climate zones) to characterize the microbial aerosol concentration levels and their size distribution.

In addition, they studied the microbial aerosol structures using a gene sequence technique. Strikingly different size distribution patterns depending on the geographical locations and climate conditions were observed. These unique patterns of microbial aerosol distribution may serve as a fingerprint for a particular region. Such info, which is essential in constructing the next-generation comprehensive atmospheric model involving airborne microbes, is critically important in understanding the impact of microbial aerosols on air quality, climate and ecology. The team's findings have recently been published in *Science Bulletin* (Wei et al., *Sci. Bull.* (2015), 60(16), 1439-1447) and disseminated as a news article by the American Association for the Advancement of Science

Citation from source:

(http://www.eurekalert.org/pub_releases/2015-09/scp-ctn093015.php).



UFTI DIRECTOR JOINS PANEL OF INDUSTRY EXPERTS AT HNTB FORUM



UFTI Director Dr. Lily Elefteriadou participated in a panel of industry experts at an HNTB “Think: Infrastructure Forum” on August 18, 2015, in Orlando, Fla. The group of more than 40 leaders, experts and thinkers met for 2-hours to engage in discussions on key topics important to the transportation industry. The main topic of the discussion was on “Automated and Connected Vehicles.” This new transportation technology will affect drivers and pedestrians, including car manufacturers, state DOTs, commercial trucking and logistics, companies, transportation engineers, consultants, the insurance industry and legislation.

Dr. Elefteriadou is conducting extensive research in this area and has received funding from the Florida Department of Transportation (FDOT) and the National Science Foundation (NSF). She said forums such as the one hosted by HNTB are vital to the future of automated and connected vehicles.

“Having those types of discussions is essential in exploring the potential impact of these new technologies, anticipating problems, and taking full advantage of their potential to improve safety and increase mobility,” Elefteriadou said.

Also in attendance was Dr. Siva Srinivasan, an associate professor in civil engineering at the UFTI. Dr. Srinivasan is exploring the policy side of automated and connected vehicles.

“Policy makers have a challenging task of fostering an environment of innovation while ensuring public safety,” he said. “FDOT’s approach of pilot testing of alternate ideas coupled with an active program of education via

the annual symposium is critical for developing good policies.”

Experts in attendance agreed on the following points related to the topic of automated and connected vehicles: 1) managing and collecting data from automated vehicles is a top priority, 2) traffic fatalities and injuries will be decreased because autonomous vehicles are safer, 3) traffic congestion will be reduced as these type of vehicles minimize roadway usage decreasing the need to build or expand roads, and 4) because more and more autonomous commercial vehicles will be on roadways, transportation professionals will need to be trained in this area. The group also agreed that liability issues related to autonomous and connected vehicles must be explored further to assess risk, responsibility, ownership, and legislation.

In addition to Dr. Elefteriadou, panelists included Senator Jeff Brandes; Chair of Florida’s Senate Transportation Committee; Brian Blanchard, Assistant Secretary for Engineering and Operations at Florida DOT; Javier Rodriguez, Executive Director of the Miami-Dade Expressway Authority; and Jim Barbaresso, National Practice Leader, Intelligent Transportation Systems, HNTB. The event was moderated by Dr. David Metcalf who is the director of the Mixed Emerging Technology Integration Laboratory at the University of Central Florida in Orlando.



Article provided by University of Florida Transportation Institute

DR. LOUIS H MOTZ RECIEVES FULBRIGHT SPECIALISTS AWARD



Dr. Louis H. Motz, Associate Professor in the Department of Civil and Coastal Engineering at the University of Florida, was selected for a Fulbright Specialists project at Burapha University

in Thailand for six weeks during the Fall Semester by the United States Department of State and the J. William Fulbright Foreign Scholarship Board.

Dr. Motz presented lectures and conducted seminars on seawater intrusion in coastal aquifers and numerical simulation of groundwater flow and solute transport. He worked with Dr. Chanyut Kalakan of Burapha University to establish a water-resources curriculum and initiate a cooperative agreement and exchange program between Burapha University and the University of Florida.

Dr. Motz is one of over 400 U.S. faculty and professionals who traveled abroad

this year through the Fulbright Specialists Program. The Fulbright Specialists Program, created in 2000 to complement the traditional Fulbright Scholar Program, provides short-term academic opportunities (two to six weeks) to prominent U.S. faculty and professionals to support curricular and faculty development and institutional planning at post secondary, academic institutions around the world.

The Fulbright Program, America's flagship international educational exchange activity, is sponsored by the U.S. Department of State, Bureau of Educational and Cultural Affairs. Over its 60 years of existence, thousands of U.S. faculty and professionals have taught, studied or conducted research abroad, and thousands of their counterparts from other countries have engaged in similar activities in the United States. Over 285,000 emerging leaders in their professional fields have received Fulbright awards, including individuals who later became

heads of government, Nobel Prize winners, and leaders in education, business, journalism, the arts and other fields. Recipients of Fulbright Scholar awards are selected on the basis of academic or professional achievement. Among thousands of prominent Fulbright Scholar alumni are Milton Friedman, Nobel Prize-winning economist; Alan Leshner, CEO of the American Association for the Advancement of Science (AAAS); Rita Dove, Pulitzer Prize-winning poet; and Craig Barrett, Chairman of the Board of Intel Corporation. Distinguished Fulbright Specialist participants include Mahmoud Ayoub, Professor of Religion at Temple University, Heidi Hartmann, President and CEO, Institute for Women's Policy Research, Percy R. Luney, Jr. Dean and Professor, College of Law, Florida A&M University and Emily Vargas-Barone, Founder and Executive Director of the RISE Institute.



ELLIS / WASHBURN RECIEVE FHA AWARD FOR SEA TURTLE RESEARCH

The Florida Department of Transportation (FDOT) initiated a demonstration project that used low-level roadside lighting fixtures and embedded pavement lights instead of overhead luminaires along a stretch of coastal roadway (SR-A1A) in Boca Raton, Florida. This lighting change was made in an



effort to improve the survival rate of sea turtle hatchlings. Sea turtle hatchlings use natural light to guide their journey into the ocean;

however, adjacent roadway lighting can mis/disorient the hatchlings and "guide" them on an ill-fated journey away from the ocean. Drs. Ralph Ellis (Construction, pictured on right) and Scott Washburn (Transportation, on left) worked with the FDOT to evaluate the lighting and transportation impacts for this project. The FDOT/UF project team received the Exemplary Ecosystem Initiative Award from the Federal Highway Administration.



DR. FORREST MASTERS NAMED ASSOCIATE DEAN FOR RESEARCH AND FACILITIES



Dr. Forrest Masters has been named the Associate Dean for Research and Facilities with the University of Florida College of Engineering. He is an associate professor in the Engineering School of Sustainable Infrastructure & Environment. He earned his Ph.D. in Civil Engineering (Structural) from the University of Florida in 2004. Dr. Masters has received support from more than 40 grants from state, federal and private sources, including the NSF CAREER and MRI Programs. Recently, he secured a \$3.6M cooperative agreement with NSF to create one of six national experimental facilities to study infrastructure performance in natural hazards. Dr. Masters has published more than 100 papers in peer-reviewed journals and conference proceedings and given more than 90 invited presentations. He holds a University Research Foundation Professorship and is an Entrepreneurship Faculty Fellow.

Dr. Masters' research focuses on the impact of hurricanes on the built environment, with emphasis on advancing damage mitigation strategies and building product innovation. Masters conducts experiments in (1) extreme wind events to investigate wind, wind-driven rain and structural loading and (2) the lab, where building systems are subjected subjected

to realistic simulations of wind load and rain conditions to study their performance. Masters' findings appear in engineering, building science, meteorological, arboricultural and psychosocial literature, which reflects the interdisciplinary nature of his research. This work is necessary to reduce the loss of property and life during extreme wind events, which have caused more than \$100 billion in insured losses in the last two decades.

Since 1999, he has conducted field experiments in more than 25 named Atlantic hurricanes. In 2004, Masters began developing technologies to simulate dynamic wind and wind-driven effects, at sufficient scale and realism to test full-size structures in a controlled laboratory environment.

Masters' contributions to full-scale research have included: initiating the first and second phases of the Florida International University Wall of Wind, development of the UF portable Hurricane Simulator, assisting the Insurance Institute for Business and Home Safety in developing turbulence and rain simulation protocols for its \$40 million windstorm facility, and developing the Multi-Axis Wind Load Simulator, which is a \$4 million machine that can replicate SaffirSimpson Category 5 and EF5 tornadic wind loads on building systems. Currently, Masters is building the second largest boundary layer wind tunnel (BLWT) in the U.S. Congratulations Dr. Masters!

DR. CHANG-YU WU RECEIVES THE 2015 LYMAN A. RIPPERTON AWARD

Dr. Chang-Yu Wu, Professor of Environmental Engineering Sciences in the Engineering School of Sustainable Infrastructure and Environment, received this year's Lyman A. Ripperton Award from the Air & Waste Management Association in Raleigh, NC, on June 24. Established in 1980 to recognize distinguished achievements in the field of air pollution control, the Ripperton Award is given to an educator who by precept and example, has inspired students to achieve excellence in all their professional and social endeavors. It recognizes the abilities that only a few in the education profession possess: to be able to teach with rigor, humor, humility, and pride. The recipients of this award, known by the accomplishments of their students, are representative of the educators we would have chosen if we had a choice.



Are you a Civil Engineering graduate?

You can join the Civil Gators!

**To find out more visit:
www.civilgators.com**

DR. LILY ELEFTERIADOU WINS TWO PRESTIGIOUS AWARDS



Dr. Lily Elefteriadou had an outstanding 2015. First, in February she was recognized by the Transportation and Development Institute and received the 2015 James Laurie Prize for her contributions in advancing the field of transportation engineering and “For outstanding leadership as one of the world’s foremost experts in the field of traffic operations, traffic flow theory and

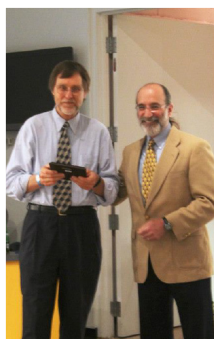
simulation and her research which has been incorporated into the Highway Capacity Manual.”

In October, “Dr. Lily” received the American Road and Transportation Builders Association’s (ARTBA) Ethel S. Birchland Lifetime Achievement Award. The Ethel S. Birchland Lifetime Achievement Award, named after ARTBA’s executive director from the 1920’s, is given to at least one woman who has demonstrated outstanding leadership and long-term service in the industry’s public or private sectors.

Dr. Elefteriadou is the Director of the UF Transportation Institute (UFTI) and the Kisinger Campo Professor of Civil Engineering at the University of Florida. Her research focus is traffic operations, traffic flow theory and simulation. She is the principal investigator of the US DOT-funded Regional University Transportation Center for Region 4 (Southeast Transportation Research Innovation Development and Education, or STRIDE). STRIDE involves seven other universities in the southeast and is funded with \$6.8 Million from the US DOT plus an equal amount of cost sharing from non-federal sources (period of performance is January 2012 to January 2016). STRIDE focuses on issues of livability, safety and economic competitiveness.

Way to go Dr. Lily!

US PATENT BY DR. BEN KOOPMAN



Congratulations to Dr. Ben Koopman for his new invention issued by US Patent and Trademark Office on 03/24/15, titled “Optical Release of Hydrogen from Functionalized Fullerenes”, US Patent No. 8,986,516.

An efficient way to produce hydrogen from sunlight irradiation, this technology may be a sustainable energy source and reduce our reliance on fossil fuels.

Dr. Ben Koopman
(L) pictured with
Dr. Paul Chadik

DR. JOHN SANSALONE NAMED DONALD ECKLER PROFESSOR OF EXCELLENCE



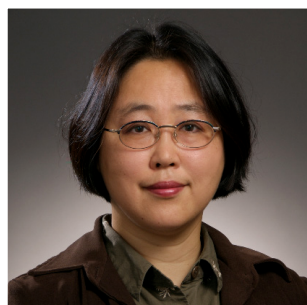
A committee of full professors from the Department of Environmental Engineering Sciences have unanimously recommended Professor John Sansalone for the distinction of being the first Donald Eckler Professor of Excellence. This is a partially endowed five year term professorship which provides Professor Sansalone \$5,000 each year to support research and a student scholar.

DR. TIM TOWNSEND INDUCTED INTO THE CONSTRUCTION AND DEMOLITION RECYCLING HALL OF FAME



Dr. Tim Townsend has been inducted to the C&D Recycling Hall of Fame! This is a relatively new award by the Construction and Demolition Recycling Association. Dr. Townsend is the only academic in the group and received letters of congratulations from both Governor Rick Scott and Senator Bill Nelson.

US PATENT BY DR. MYOSEON JANG



Congratulations to Dr. Myoseon Jang for a new patent issued by the US Patent and Trademark Office on 08/18/15, titled “New Techniques to Measure Acidity of Airborne Matter using Reflectance UV-Spectrometry”, US Patent No. 9,110,048. Fine aerosol has great implications on human health and its acidity is a key factor though difficult to measure. Now Dr. Jang has come up with a powerful tool to overcome the challenge.

CLAY MONTAGUE TO HEAD ENVIRONMENTAL SUBCOMMITTEE AT SPACEPORT CAMDEN



At the October 6, 2015 regularly scheduled Board of County Commissioners meeting, Dr. Clay Montague, a Camden County resident and Georgia native, was appointed by Commissioners to Chair the Environmental Sub Committee of the Spaceport Camden Steering Committee. County Administrator Steve Howard recommended Dr. Montague for this role, which begins immediately. Dr. Montague has over 30 years' experience as a university professor and coastal systems ecologist in the Department of Environmental Engineering Sciences, College of Engineering, University of Florida. He also brings with him a wide array of coastal area experience as an environmental scientist, researcher, author of scientific papers, and consultant.

Originally from Atlanta, Montague received a B.S. in Biology in

1973 from the University of North Carolina, Chapel Hill, a M.S. in 1977 from the School of Industrial and Systems Engineering at Georgia Tech, and a Ph.D. in Zoology from the University of Georgia in 1980. While at Georgia Tech, he spent a summer studying estuarine ecology at Skidaway Island State Park and he would later live on Sapelo Island for two years doing field work in salt marshes for his doctoral research. From 1980 to 2010, Dr. Montague was a professor of systems ecology, coastal ecology, and general environmental science in the Department of Environmental Engineering Sciences at the University of Florida.

Much of Montague's coastal area experience comes from his time spent on the management of navigation inlets; beach nourishment; oil spill damage assessment; animal damage control under pesticide use; large modifications to river drainage and canals; other dredge and fill operations; coastal wetland impoundments for mosquito control and waterfowl management; winter freezes in mangroves; sea level rise; ecotoxicology; and the fate of beloved exotic animals on public lands.

In addition, Dr. Montague has completed field work in estuarine bays, tidal marshes, seagrass, coral reefs, and mangroves. He has consulted on other Environmental Impact Statements produced for the US Army Corps of Engineers

and the Florida Office of Beaches and Coastal Systems. Dr. Montague has worked with environmental scientists; project managers; administrators at NASA's Kennedy Space Center; U.S. Fish and Wildlife Service; the National Park Service; the U.S. Army Corps of Engineers; Florida's Water Management Districts; Florida's Inlet Management Districts; Florida's Office of Beaches and Coastal Systems; the U.S. Environmental Protection Agency; National Science Foundation; several large consulting firms; and a law firm.

In 2010, Montague was named an Associate Professor Emeritus at the University of Florida and moved to Camden County. He has significant involvement with non-profit environmental organizations in Georgia and Camden County and is currently a member of the Board of Directors of the Satilla RiverWatch Alliance, Inc. Mr. Montague was Interim Executive Director for the Satilla Riverkeeper during 2012 and early 2013. County Administrator Howard said, "I am confident Dr. Montague brings a wealth of knowledge and experience to the Spaceport Camden Project. He will certainly be a tremendous asset to the newly formed Steering Committee and we look forward to this new working relationship."



OUR CHANGING CLIMATE: SEA LEVEL RISE



AN EXHIBIT BY AMY LANGSTON

Now on display at the Florida Museum of Natural history is the new “Our Changing Climate: Sea Level Rise” exhibit. The exhibit highlights the work of PH.D Student Amy Langston on the effects of sea-level rise on coastal ecosystems.

This exhibition continues the Museum series exploring science and world issues, and highlights research on Earth’s increasing sea level rise – largely in response to climate change. Learn about the science behind sea level rise and the special challenges Florida faces.

Discover current UF research, and explore evidence found by local residents and scientists as well as steps being taken to help communities adapt for the future.

Records from tidal gauges show sea level increased about 8 inches from 1880 to 2009.

Global sea level rise is the current increase in average height of all the Earth’s oceans relative to land. Records from tidal gauges show sea level increased about 8 inches from 1880 to 2009.

Geologists have found that sea levels change throughout Earth’s history when temperatures and carbon dioxide levels rise and fall.

The primary factors for current sea level rise related to global warming are an increase of water from melting land ice and the expansion of sea water as it warms.

Florida is particularly vulnerable to sea level rise. Much of the state is at or near sea level and most of Florida’s nearly 20 million residents live less than 60 miles from the ocean.

Exhibit highlights include: learning about the causes of Earth’s rising seas. Museum goers can examine evidence found by state residents including pictures that illustrate the effects of sea level rise on Florida’s coastal communities. Information is provided to Identify the areas of Florida most affected by sea level rise. Discover current UF research and strategies to help communities understand and adapt to rising seas. Visitors may also project future sea levels and create their very own sea level poem with two interactive displays.



UF celebrates Triple Crown of ASCE titles

Teams won national titles in both concrete canoe and steel bridge in 2015.

Concrete canoes are heavy.

Nothing, though, compared to the weight of expectations. Consider the situation – equal parts golden opportunity and pressure-packed problem – facing the University of Florida team as the ASCE National Concrete Canoe Competition launched in June.

With Gator Engineering teams already having won two ASCE national competitions earlier in the spring – the ASCE Sustainable Development Award at the EPA P3 competition in April and first place in the National Student Steel Bridge Competition in May – an unprecedented “triple crown” lay just within reach. Concrete Canoe was the third and final challenge.

“It was pretty funny, after Bridge won, to walk into the lab the next week,” said Chris Ferraro, Ph.D., P.E., research assistant professor at UF as well as steel bridge advisor and concrete canoe technical advisor. “‘No pressure,’ was the first thing we said to them – ‘No pressure.’”

“They work in the same lab, right next to us,” said

Danielle Kennedy, A.M.ASCE, captain of the Concrete Canoe team. “All of the students, all of our advisors, everyone was saying, ‘Steel Bridge won first. Are you going to win first too?’ So we were definitely feeling the pressure.” As it turned out, the pressure proved no problem. The Forever Glades canoe took first place, making the University of Florida the first school to ever win national titles in Concrete Canoe and Steel Bridge in the same year. “We’ve been close in Canoe, and we’ve won Steel Bridge once before. To have it happen in the same year was pretty amazing,” said Robert Thieke, Ph.D., A.M.ASCE, civil and coastal engineering department head and faculty advisor for the Concrete Canoe team. “It’s really nice for the students. They put in a huge amount of work for this.”

Leaders from the Environmental Protection Agency and ASCE present the University of Florida’s student team with ASCE’s Sustainable Development Award at the EPA P3 competition in April. For Cammy Abernathy, Ph.D., dean of the university’s College of Engineering, the triple



crown of success is evidence of the school's emphasis on what she calls "educating the new engineer." "We place a lot of emphasis on outside-the-classroom activities," Abernathy said. "We feel they prepare our students for the world of 21st century engineering." Abernathy said the school aims to teach technical excellence in the classroom while also encouraging students to innovate, work as a team, and learn leadership fundamentals through projects like the ASCE competitions.

Ferraro, who runs the on-campus lab shared by both the UF bridge and canoe teams, sees his students developing a variety of skills throughout the competition process. "Critical, it's absolutely critical," Ferraro said. "And it's using tools and machining materials and stuff like that, working on things, obviously. That's one aspect of it. The other aspect of it is scheduling, planning, the design and engineering process." Kennedy said that the Concrete Canoe club was among the most educational experiences of her UF career. "It teaches you to be more well-rounded," she said. "Being a leader, being part of a team, the competition, time constraints, budget constraints." Abernathy graduated from the Massachusetts Institute of Technology in 1980. Hands-on projects, she said, were not as prevalent then. "I would've loved to have [participated]; it just wasn't as emphasized at the time. This generation of students demands it. It really is obvious to me that they want to begin to apply what they've learned in the classroom immediately."

That certainly was the agenda for Justin Rayl three years ago when he, having recently switched his major to civil engineering, attended his first ASCE meeting. "All the guys seemed really cool," Rayl said. "The main aspect that really appealed to me was the opportunity to put something on



my resume that was really special." Two years later, Rayl got his wish as the UF Steel Bridge team for which he served as a co-captain was announced as the national champion at the competition's awards banquet in May. "It was pure shock," Rayl said. "I didn't know what to do at that moment. It was a truly awesome feeling." Rayl will be a senior in the fall. He may or may not resume his captain's duties for the Steel Bridge team. Either way, he'll remain heavily involved and his resume, as he had hoped at that first meeting, boasts a few special accomplishments. "I think we have an excellent academic program here. Employers love our students," Thieke said. "But this kind of thing, it gives them skills they just don't get in a classroom."



And all that pressure on the Concrete Canoe team? It's really only a friendly rivalry between Gator Engineers – all who call Weil Hall home on the University of Florida campus. The teams even celebrated with a captains' dinner. "Everybody gets along. We're all friends," Rayl said. "Everybody's part of ASCE."

Ben Walpole is associate editor for ASCE News, celebrating member achievements, updating members on Society news, and promoting civil engineering as a whole
<http://www.transportation.institute.ufl.edu/?p=3550>

RODRIGUEZ AWARDED LEADERSHIP SCHOLARSHIP



Congratulations to Regina Rodriguez for receiving the Thomas Hunter Leadership Scholarship. This scholarship recognizes outstanding leadership and only 5 in the College of Engineering receiving this award every year. Regina has excelled in many fronts, including student organizations, teaching assistant, start-up companies, etc. Her advisor, Dr. D. Mazyck, who is behind the scene in mentoring Regina, should

also be recognized and congratulated. A student's success is a professor's success.

UF VICTORIOUS AT THE FLORIDA AIR & WASTE MANAGEMENT MEETING

Congratulations to our UF teams in their great performance in the Environmental Challenges competition at the Florida Air & Waste Management Association meeting held in Tallahassee.



This year's topic was strategy for implementing the Clean Power Plan (CPP). The CPP is EPA's new rule for reducing CO₂ emissions from existing power plants by 2030. Under the CPP, the EPA has set goals for each state by setting interim and final reduction levels of CO₂ until 2030. The competing teams presented strategies to enable the State of Florida to achieve the needed CO₂ reductions.

1st Place Winner: Team Carbon InvestiGators Consulting (UF)
Tahmid Ibnat, Melissa Nabors, Sarah Toth, Andrew Taggart and Thomas Moody

2nd Place Winner: Team Breeze Consulting (UF)
Naim C. Vilabrera, Kevin Winslow, Mayuko Mizutani and Melissa Burdier

AFSHAR-MOHAJER RECIEVES DISSERTATATION PAPER AWARD



Nima Afshar-Mohajer placed second for the Air & Waste Management Association Doctoral Dissertation Paper Award! He was recognized at the 108th Annual Conference & Exhibition, held in Raleigh, North Carolina. Nima graduated in May 2014 with his Ph.D. from the

Department of Environmental Engineering Sciences with a specialization in air resources. Nima was supervised by Dr. Chang-Yu Wu for his doctoral program.

WHITE NOMINATED TO ATTEND SEEDS LEADERSHIP WORKSHOP



Elliott White nominated by the Society of Wetland Scientists (SWS) Human Diversity Committee to attend ESA's "Strategies for Ecology Education, Diversity and Sustainability (SEEDS)" leadership workshop. This is a highly competitive opportunity extended

to just two of their program's participants.

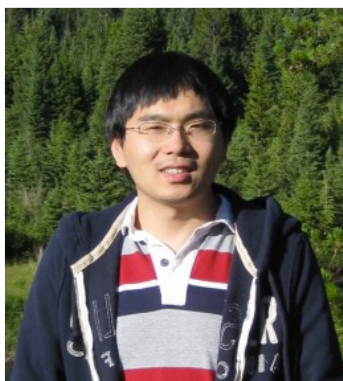
Held annually, the Leadership Meeting is an opportunity for SEEDS student leaders to engage in a dialogue about the connections between science and society. The meeting provides a venue for SEEDS participants to develop 21st century skills and understanding in communications, policy, community outreach and education, rounding out their experience as young scientists.

TSAI WINS BEST PAPER AWARD

Ying-Kuan (Jeremy) Tsai received the Best Paper Award at the 5th International Symposium on Design and Analysis of Protective Structures (DAPS) that was held in Singapore on 19-21 May 2015. His paper "Energy Based Load-Impulse Diagrams," was based on his Doctoral thesis that he recently defended successfully at UF. His travel to the conference was supported by both the Office of Research and the Theodore R. Crom Chair.

TRANSPORTATION ALUMNUS REFLECTS ON CAREER PATH TO AMAZON.COM

Di Wu, also known as “Woody,” was a quiet and hardworking doctoral student in the transportation program. He attended UF from fall 2007 to fall 2011, working under the direction of Professor Yafeng Yin, his doctoral program adviser at the UFTI. While in graduate school, he followed the rigorous path of working on transportation-related research, attending conferences, participating in events, publishing papers and defending his doctoral dissertation. It was during this time that Wu was figuring out in which direction his doctoral degree would take him. He was uncertain of whether he should become a college research professor or work for a company.



**“NEVER STOP
LEARNING AND
ENJOY YOUR LIFE”**

“I think the most critical decision to make after graduation, especially after spending quite some time in the Ph.D. program, is whether to pursue a career in academia or industry,” Wu said. “I spent a lot of time struggling through the decision. I think what makes your life better is to be able to find a career that overlaps with your personal interests.”

As a graduate student working with his doctoral dissertation adviser and observing the other transportation faculty members, Wu was able to experience first-hand what the demands are on a university professor. While he was not intimidated by a career in academia, the idea of pursuing a job in industry was intriguing to him, and after much thought, that was the direction he eventually decided on.

Wu was hired by Amazon.com upon completing his Ph.D. in 2011. In spite of all the negative publicity that the company has received in the past couple of weeks, he is completely satisfied working there because his research results are implemented right away, making an impact in a short period of time. Currently, Wu is a senior research scientist working with the vendor profitability management group in Seattle, Wash.

“What is particularly interesting, and of course also

challenging in Amazon, is that the problems we solve are extremely large scale and this is hard to come across in most other companies,” Wu said. “This gives more opportunities for me as a researcher to make a contribution. Despite some recent negative comments on Amazon, I have been able to enjoy my time here and see my work being appreciated.”

However, Wu says there are some adjustments that have to be made when working for private industry. Experience has shown him that in working with many personalities, a person must learn to communicate their ideas succinctly and fast in the corporate sector.

“I think one challenge to come to a company after graduation is the transition period,” Wu said. “You need to start working with people with many different kind of backgrounds. You need to be able to communicate your ideas in a way that can make everybody understand in a short time. At the same time, you should always be prepared to get challenged, sometime much more direct than what you would expect from school.”

Wu says that at Amazon.com, a degree really doesn't mean much in the office, and that he has learned a lot from working with people at the company rather in school, in a certain way. However, he has noticed that there is no room for patience in industry such as exists with the relationship between professor and student during a graduate degree program. Wu says one must often invest a lot of extra effort just to be able to learn from others and remain competitive.

After working four years for Amazon.com, Wu has some advice for students aspiring to the same career after graduation.

“Never stop learning and enjoy your life,” Wu said. “I think those are the two most important components, and they apply to almost every job you eventually take. Learning will ensure you are able to handle any challenges thrown your way, and you should always keep in mind that all career paths are just pathways for a better life so you should never sacrifice your life for them.”

Mrs. Loreen Bobo (maiden name, Choate), superhighway-supermom, graduated from the University of Florida with her Bachelor of Science in Civil Engineering in 1999. While enrolled she specialized in the areas of transportation and construction.

After graduation, she was gainfully employed as a Professional Engineer Trainee with the Florida Department of Transportation (FDOT). A few years of learning about the different aspects of FDOT, she then specialized in construction. She worked on several projects over the years, most notably the I-4/408 Interim project (\$120 M) which was the pre-Ultimate project. She then spent a few years in one of FDOT's local maintenance yards as an Assistant Maintenance Engineer. In 2011, she became the program manager for I-4 Ultimate and worked on the procurement of the 40 year contract. She is now overseeing the project during the design and construction which entails a 2.323 billion dollar complete reconstruction of twenty-one miles of Interstate 4 in Central Florida, which will take 6.5 years to complete. The project is also adding Express Lanes to the center of the interstate. FDOT has procured the project as a Public Private Partnership (P3) and is the largest P3 to date in Florida.



Loreen chose to attend the University of Florida because of the reputation of the Engineering program within the state. She states, "if I was going to stay in-state for college and I wanted to pursue Engineering, then UF was the way to go. Now that I've been out in the 'real world' for sixteen years, it has been evident that UF Civil Engineering is really a well-respected program." While attending UF, she participated on the UF chapter of the American Society of Engineers concrete canoe teams. She states that, "I was able to get involve with ASCE and had the opportunity to meet many friends and colleagues with whom I am still in contact, including my husband. The leadership skills I learned through ASCE have definitely helped shape me into the engineer that I am today."

Loreen now serves on the ESSIE Advisory Board which provides her with the opportunity to get back to campus and interact with the students and faculty. She is the mother of two beautiful boys and is married to Brandon Bobo who also graduated from the UF Civil & Coastal Engineering program. To our program, Loreen emulates strength and leadership, characteristics that our female students can certainly view through her efforts and incorporate into their own career paths - but more importantly, she is the epitome of a true Gator Engineer and is respected in her field for her insight and professionalism.



To **Mr. Charlie Geer** (BSCE '76), attending UF was where he thought "everyone went after high school" because his dad was a Gator, his friends were Gators and his neighbors were Gators. So, Charlie enrolled in UF to specialize in Structural Engineering. While at UF, Charlie fondly recalls one semester in which several young professors (all of whom are now retired) joined a group of students every Tuesday and Thursday in an Advanced Golf class at the UF Golf Course to play 9 holes. These faculty established a personal relationship with the group of students, Charlie among them. Charlie feels that this experience made his, and the others, educational experience very meaningful and fun.

After graduating, Charlie went on to experience a variety of opportunities in his professional career.

Throughout his career he designed bridges with a top Florida firm, he provided International engineering, procurement and construction services for petrochemical plants, he worked on small commercial-industrial-environmental design/build projects, he found and built his own small firm which eventually merged with a larger firm that he helped build and then he retired before reaching the age of 60. After retirement Charlie realized that he wasn't content with the life of leisure so he is now an Account Executive/Senior Vice President of EPIC- Greyling Insurance Division.

Charlie is still an active Gator. He serves on the Dean's Advisory Board, the ESSIE Advisory Board, he is a Foundation Donor and a Gator Booster. He feels that his "UF Engineering education prepared me well to practice anywhere. In 40 years of working world-wide with engineers from every country, I have never been in a situation where I was not able to participate in (and often lead) a team working on any subject. Gator Engineers are as good as any in the world." Charlie clearly exemplifies the attributes of a Gator Engineer and in the simple words of Mahatma Ghandi he can unequivocally say, "My life is my message."



Franklin D. Roosevelt once said, "Happiness lies not in the mere possession of money. It lies in the joy of achievement, in the thrill of creative effort." **Mr. George Knecht** (BSCE- '65, MBA- '80) has led a fulfilling career in the field of Civil Engineering and this is evidenced by his receipt of over 34 awards and recognitions ranging from being a three-time award winner for

"Engineer of the Year" for Jacksonville, FL, the state of Florida and a National award, President of the Florida Engineering Society 1987 - 1988, President of the Florida American Public Works Association (APWA) 1991 - 1992, Outstanding Service Award - National Society of Professional Engineers, Leader of the Year APWA-Florida 1989, and many others. He spent 3 years in the U.S. NAVY Sea Bees, 5 years in the U.S. Coast & Geodetic Survey, and 32 years with the City of Jacksonville where he served as the Chief of Solid Waste Disposal.

When asked how he feels UF helped shape his career he will tell you that his education simply gave him "ALL the building blocks to be a LEADER, and a DAMN GOOD CIVIL ENGINEER." His grandfather was a Civil Engineer (Princeton 1900), and he would spend hours telling George about what he did. So with his grandfather's encouragement and insights when George was ready to attend college, he visited both Auburn & Georgia Institute of Technology but he was not impressed with either campus or their facilities. He then looked toward the University of Florida and was admitted to the Civil Engineering program. This was also to his benefit since Gainesville was only a 2 hour drive from home.

George has been an integral leader within the Department of Civil & Coastal Engineering as he has served on the Visiting Committee and Advisory Board for over 33 years and as he puts it "the only one left from the original "clan". Throughout his tenure on the committee, all who have had the distinct pleasure of crossing paths with this gentleman, know of his enthusiasm for the field and his generosity of both his time and his resources. When asked about his success he responds by saying, "My WIFE and U of F made me EVERYTHING I AM!!!!!!" To George we graciously say, "thank you for your commitment and dedication to ESSIE Gator Engineering, YOU exemplify the joy of achievement and the thrill of creative effort!"



Somewhere in his youth, **Mr. Ernie Cox** (BSCE '70, ME '71) must have heard the statement "the only job you start at the top is digging a hole." Ernie grew up a Gators fan and chose to specialize in geotechnical

engineering while attending "the best engineering school in the state, if not the world." He was influenced by his father who was a Professional Engineer and the District Materials Engineer for the Florida Department of Transportation's Chipley Office. After he graduated he worked in Georgia and Alabama for ten years and says he came to his senses and returned to Florida in 1981. He has remained in Florida and he is currently the Senior Vice President of Ardaman & Associates, Incorporated where he is responsible for 13 offices in Florida and Louisiana.

Ernie's time at UF was a very exciting time for him. Steve Spurrier won the Heisman trophy, the engineering intramural football team went undefeated for three consecutive years and he even had a blind date with Miss Florida, but to his chagrin she didn't show. Although his date with Miss Florida didn't work out, the skills that he obtained under the supervision of Drs. Spangler and Schaub helped Ernie accomplish such notable achievements as being the President of the Florida Institute of Consulting Engineers (FICE) from 2005-2006, receiving the FICE Governor A.W. Gilchrist Award in 2012 and being a board member of the Florida Engineers Management Corporation (FEMC) 2007-2015. Ernie also keeps connected to UF by serving on the UF Civil Engineering Industry Advisory Committee and collaborating with a number of UF Civil Engineering graduates on projects throughout the state. He also served as the Inaugural President of the Civil Gators, a UF Civil Engineering alumni group.

On any given day, in any conversation with Ernie if you ask him about the years that he spent at UF he will tell you, "I received a great education, and made wonderful, lifelong friends. Knowing graduates of many other universities, being a Gator graduate is truly special." Ernie, yes, we agree you are truly special and, no doubt, started at the top and remained there when digging those holes!



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