

GRADUATE NEWS

MAY 2017

ODU American Society of Civil Engineers Places Second in Concrette Canoe Contrest



The ODU
Chapter
of the
American
Society
of Civil
Engineers
(ASCE)

hosted a regional conference March 30th through April 1st. The conference was attended by over 400 students, faculty, and staff representing 14 universities. There were a number of competitions that took place over these three days including the concrete canoe competition. A team led by CEE student Aaron Ladue began designing the

feet backwards style canoe in the fall semester. The mold was made mostly from recycled foam and plywood formers. Steel cables were included for carbon fiber mesh reinforcement. The concrete was also poured in the fall semester and curing began the week of December 9th.

The competition itself began with the "swamp test." This test was to intentionally sink the canoe and wait for it to float by itself. The team's Monarch Speed passed with flying colors and then it was off to the races. It took to the sea for a total of five races. After the races, there was a final evaluation to see how the canoe held up. We are proud to say the ODU Concrete Canoe Team placed second at the ASCE VA Conference!

THE OLD DOMINION UNIVERSITY SEAL



The original seal represents history of which very monarchs few are aware. Virginia was the first permanent English settlement in America. The name Dominion Old was

the nickname given to Virginia by King Charles II of House Stuart. The shield is a version of the royal arms of the Stuarts to commemorate this origin. The center of the seal is a shield split into four parts by St. George's cross which is also on England's flag. The middle of the cross features the coat of arms of The College of William and Mary, America's second oldest university and the parent of ODU. The coat of arms was granted

by the College of Heralds in England in 1694. It is there as a reminder of our origin and connection to William and Mary. ODU was initially the Norfolk division of William and Mary established in 1930. It later became its own entity as Old Dominion College under President Lewis W. Webb, Jr. in 1962. Today, the seal sits in the center of Kaufman Mall. It is said that if one steps on the

seal before graduating, they must ride the lion or they will be cursed and will never graduate from ODU.

DATES AND DEADLINES

May 9, 2017 Maymester Courses Begin

May 15, 2017 First Summer Session Begins

June 26, 2017 Second Summer Session Begins

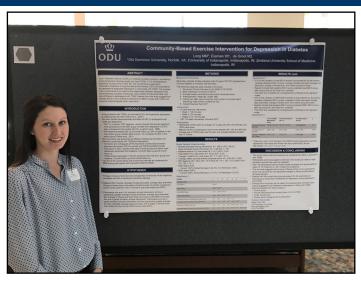
August 25, 2017 Summer Degree Conferral Date

GRADUATE RESEARCH ACHIEVEMENT DAY RECAP!

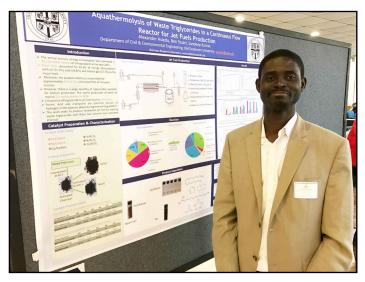
The 2017 Annual Graduate Research Achievement Day (G.R.A.D.) was held on March 23, 2017 in the Webb University Center. It was co-sponsored by the Graduate School and the Graduate Student Organization. This year's event featured the research of more than 80 students representing over 30 different graduate programs. If you would like to learn more about research presented at this event, feel free to e-mail the Graduate School at graduateschool@odu.edu. Special thanks to everyone who attended the event and an extra special thanks to all of the participants! Next year's G.R.A.D. will be held in the spring semester as well so if you would like to participate, please look for emails from your program faculty and continue to read the graduate newsletter. We look forward to learning about your research!



Srdjan Lesaja, BME PhD Student in Dr. Krusienski's ASPEN Lab and ODU-BMESA Vice-President, exhibits a Brain-Computer Interface (BCI) for controlling a Pac-Man-like game with brain activity. This research aims to better understand the brain's electrical activity for developing new ways to interface with technology in medical, commercial, and entertainment applications.

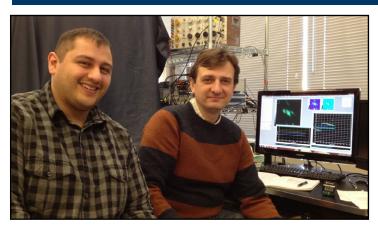


A representative of the College of Health Sciences, **Molly Long**, is in the Ph.D. Health Services Research program. Her research studies a combination treatment of cognitive behavioral therapy and exercise for the treatment of diagnosed depression in individuals with type 2 diabetes. She found there is a negative correlation and that exercise can drastically improve conditions when working with other treatments.



Among the 27 students that represented the Frank Batten College of Engineering was civil engineering student **Anthony Aseidu**. Anthony's research aims to tackle programs concerning our dwindling fossil fuel reserves and the climate change issues associated with their use. The focus was on converting these sources to be used as jet-diesel fuel.

ANTHONY ASMAR AND THE FRANK RIEDY RESEARCH CENTER



Anthony Ansar and Dr. Iurii Semenov

Anthony Asmar was born and raised in Newport News and attended Peninsula Catholic High School before pursuing his bachelor's in biology at Virginia Tech. There he met a molecular biology professor whose passion for research inspired him to extend his academic goals. He became an undergraduate research assistant in the Department of Biological Sciences where he used microscopy to study cell division and defects that occur during tumor formation as well as aging. As a senior, he was already working on his first publication.



Dr. Zemlin giving a demonstration during a high school tour

When considering places to go for graduate school, one of the most important criteria was access to interdisciplinary research labs. During that search was when he first heard about the Frank Reidy Research Center for Bioelectrics (FRRCBE). The center's mission is to increase scientific knowledge and understanding of the interaction of electromagnetic fields and ionized gases with biological systems and to apply this

knowledge to the development of medical diagnostics, therapeutics, and environmental decontamination. The center is home to approximately 70 researchers from all over the world. Within ODU, the center pulls talent from several different colleges and the research covers many fields from engineering to physical and biomedical sciences. To learn more about the history, research, and members of the FRRCBE, visit odu.edu/bioelectrics.

Anthony ultimately chose ODU for his master's in biology. He began working in the center and his research focused on the structural proteins of the chest and chest wall deformities. Chest wall deformities are inheritable conditions of the cartilage of the chest causing displacement of the sternum. A popular treatment for this condition is the Nuss procedure, a technique developed at CHKD in Norfolk. Though the treatment is effective, it is invasive and often costly as insurance companies normally consider it a cosmetic surgery and may not cover it. Now for his Ph.D., his research has extended to how the electrical properties and signaling pathways of the cartilage in the chest can contribute to the development of these conditions. The hope is to better understand why the abnormal growth occurs in order to develop a method in the form of gene therapy or an ion channel target to mitigate the need for surgery. Outside of this research, Anthony works with several students on various research projects. He has also collaborated and published papers with other members of the center related to biomedical science and mechanical engineering.

To other graduate students, he recommends trying to learn or experience different things outside of your field. It is easy to become too focused in both your studies and your career, but your varied experiences can provide fresh perspectives important for solving difficult problems. This is the underlying principle of interdisciplinary research. It is also important to keep a positive attitude and ignore the naysayers. Anthony plans to graduate in August and start a post-doctoral fellowship soon after.



OLD DOMINION UNIVERSITY

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Find GRADUATE NEWS online at: www.odu.edu/graduateschool.

ODU graduate student Eric White compiled and edited this newsletter with help from Dr. Robert Wojtowicz, Dr. Bryan Porter, and Ms. Missy Barber in the Graduate School. You can contact Eric at: emwhite@odu.edu.