



RESEARCH IN MATERIALS ENGINEERING, BIOMATERIALS, AND MATERIALS PHYSICS
GSSM/SUBR Summer Program for Research Interns (SPRI) 2018

Press Release

During the summer of 2018, six (6) rising high school seniors from the South Carolina Governor's School for Science and Mathematics (SCGSSM) Residential and Accelerate Engineering Programs conducted research for four (4) weeks under the supervision of Dr. Ershela Sims, Senior Vice President for Virtual & Outreach Programs at SCGSSM, and Dr. Anthony D. Stewart, Director of the Electrochemistry and Energy Research Laboratory (EERL) and Assistant Professor of Physics at Southern University – Baton Rouge (SUBR). The high school students were teamed with four (4) undergraduate students. EERL was established at SUBR by a project directed by Dr. Diola Bagayoko and that was a part of the Consortium for Materials and Energy Studies (CMAES). This consortium was funded by the US Department of Energy (DOE), National Nuclear Security Administration (NNSA). The research projects covered a range of topics from the growth and optimization of titanium dioxide (TiO₂) nanostructures, using electrodeposition techniques, to investigating the mechanical properties and failure characteristics of alternative dental archwire materials. The research projects were designed to demonstrate the interplay between science and engineering disciplines through hands-on research projects related to physics, chemistry, materials science and biomedical engineering. According to Malik Hubbard, a senior in the Accelerate Program from Palmetto Scholars Academy in Charleston, SC:

“I learned multiple vital laboratory and research skills during this trip, from formulating scientifically strong experiments to safely handling hazardous materials. I definitely have interest in doing research as an undergrad. I'm also very excited to conduct research as a graduate student as well. I learned a lot on this trip.”



2018 EERL Summer Research Group Photo (from left to right): Courtney Bell, Dr. Ershela Sims, Ashley Alfred, Jonalyn Fair, Karriem Upshaw, Malik Hubbard, Jo'Vante Hills, Doyle Hayden, Lamar Richards, Collen Mims, Austin Geer, Dr. Anthony Stewart, and Leighton O'Dell

More details regarding this research collaboration can be accessed at
<https://www.scgssm.org/news-article/gssm-southern-university-baton-rouge-partner-research>.