Fort Johnson REU Program | Grice Marine Lab, College of Charleston
Resilience and Response of Marine Organisms to Environmental Change
Summer 2018

About Our REU Program
The Fort Johnson Summer Undergraduate Research Program offers a 10-week experience of independent research, science communication and career-development activities focused on the multidisciplinary theme of Marine Organism Health: Resilience and Response to Environmental Change. Through mentored research projects, interns will investigate impacts of anthropogenic and natural environmental perturbations on marine organisms, from the molecular to ecosystem level, using a variety of lab and field techniques. Up to 10 interns are supported each year, with opportunities to work on research projects at the Fort Johnson campus.

Contributing Partners
Mentors and instructors are drawn from five partner institutions situated at Fort Johnson, a consortium devoted cooperatively to marine science:
- Grice Marine Laboratory, College of Charleston (CofC)
- Marine Biomedical and Environmental Sciences Program, Medical University of South Carolina (MUSC)
- National Institute of Standards and Technology (NIST)
- National Oceanic and Atmospheric Administration /National Ocean Service (NOAA/NOS)
- Marine Resources Research Institute, SC Department of Natural Resources (SCDNR)

Science Communication and Career Development
Our SCiCOM workshop series engages REU interns in learning new skills to better relate their research to societal issues and to publicize their findings, using both traditional media and the rapidly evolving tools of social media. Through structured exercises interns also develop professional skills in scientific writing, research proposal preparation, oral presentation, and scientific ethics. Field experiences and social events provide numerous opportunities for interns to network with other Ft. Johnson scientists, graduate and undergraduate students, and interns from other summer research programs.

2017 Research Projects
- Perfluoroalkyl Acids (PFAAs) in Plasma of the West Indian Manatee (Trichechus manatus) (Kady Palmer, Eckerd College)
- Dynamics of Benthic Diatom Communities: Patterns in Biomass and Composition (Christine Hart, Clemson U.)
- Investigating the Potential of Dicetyl Sodium Sulfosuccinate (DOS) to Promote Inflammatory Response in Macrophage (Brian Wuertz, Warren Wilson College)
- Comparison of Fish Populations in Dense and Sparse Assemblages of Gracilaria vermiculophylla (Melanie Herrera, University of Maryland, College Park)
- Getting in the Mood: the effect of environmental stress on the reproduction and productivity of a polar diatom (Emily Spiegel, Bryn Mawr College)
- Toxic effects of oil and UV light on the estuarine species Palaeomonetes pugio (Deanna Hausman, U. of Texas at Austin)
- Genetic variation in resistance to ocean acidification during larval development in a northern population of Arbacia punctulata (Hailey Conrad, Rutgers U.)
- A toxicological investigation of the effects of 4-nonylphenol on the coral Acropora cervicornis (Meagan Currie, Swarthmore College)
- The Effects of Salinity on Sperm Function and Fertilization in Squirrel Treefrog (Hyla squirella) (Cecilia Bueno, Lewis & Clark College)
- The Role of Heat Shock Proteins 70 and 90 in Tolerating Abiotic Stressors in Gracilaria vermiculoprylla and Ulva lactuca (Killian Campbell, Eastern Washington U.)

For information about eligibility, dates, and application materials:
http://reu.cofc.edu