



Research Experience for Undergraduates at the University of Georgia Summer 2018

Fungal Genomics, Computational Biology & Systems Biology

This is a ten-week NSF REU program with a \$5,000 summer stipend. Our students go on to distinguished graduate programs including Harvard, University of Pennsylvania, Johns Hopkins, Albert Einstein, Boston University, Washington University, Morehouse School of Medicine, Emory University, and St. Jude's Children's Hospital. Our students successfully chart both academic and nonacademic paths at institutions and companies including Johns Hopkins, Goddard Space Center, Pfizer, Emory, Meril, NASA Langley, NIH, CDC, and Complete Genomics (Inc.). Begin building your personal network of future colleagues in the life sciences.

Contact: Jonathan Arnold (arnold@uga.edu)

Apply: <http://www.genetics.uga.edu/FGCB>

Immersive Research in the Bioarchaeology of Greek Colonization

This international REU site brings eight undergraduate students from diverse backgrounds to Sicily, Italy for four weeks to collect data from ancient human skeletons, and back to the United States for four weeks to work in the research laboratories at UGA. Students complete independent research projects relating to the health, activity patterns, diet, and genetic relatedness of people at the Greek colony and battlefield of Himera to better understand the biocultural consequences of culture contact in the past. Participants receive specialized field and lab training in archaeological chemistry, anatomy, research design, and data analysis. Students will leave the REU with greater technical and analytical skills, better preparedness for graduate study and professional careers, and heightened awareness of global issues relating to population contact, inequality, human conflict, and health transitions.

Contact: Laurie Reitsema (reitsema@uga.edu) or Britney Kyle (britney.kyle@unco.edu)

Apply: <http://research.franklin.uga.edu/reu/>

Nanotechnology & Biomedicine

The Nanotechnology and Biomedicine REU program will provide an interdisciplinary research experience at the interface of micro-/nano-technology and biomedicine to undergraduate students from other institutions, leveraging the diverse interdisciplinary expertise, resources, and training opportunities in this area at UGA. Students will participate in interdisciplinary research projects that apply micro-/nano-technology to specific biomedical questions. Each REU student will be co-mentored by paired faculty from the nanotechnology and biomedical disciplines on a collaborative research project. In addition to a total-immersion, hands-on research experience, students will participate in enriching activities that will include ethics-in-science workshop; weekly career development seminars; research seminars; educational field trips; participation in conferences in nanotechnology and biomedicine.

Contact: Leidong Mao (mao@uga.edu)

Apply: <http://reu.engr.uga.edu/>



UNIVERSITY OF
GEORGIA

Undergraduate Biology Education Research

The Undergraduate Biology Education Research (UBER) REU Site is a nine-week, NSF-funded program to involve undergraduates in designing and conducting research on undergraduate biology teaching and learning with mentorship from faculty from the UGA life science departments and College of Education. The goals of the program are to develop undergraduates' knowledge and skills in biology education research, encourage undergraduates to pursue doctoral study of biology teaching and learning, expand the diversity of the talent pool in biology education research, and contribute to the development of theory and knowledge about biology education in ways that can inform biology instruction.

Contact: Dr. Julie Stanton, stantonj@uga.edu

Apply: uber.coe.uga.edu

Georgia Coastal Ecosystems Marine Sciences

The Georgia Coastal Ecosystems (GCE) LTER is an NSF-supported research project focused on the central Georgia coast. The marshes and estuaries in this area are affected by changes in both fresh water (from land and precipitation) and salt water (from the ocean.) Over the coming decades we anticipate that changes in climate and human activities will affect these ecosystems through changes in river inflow, sea level rise, and changes in land use. Field work for the GCE project is based at the University of Georgia Marine Institute on Sapelo Island, which has housing and laboratory space. Opportunities are available for students to work with researchers either in their laboratories at UGA, or over the summer at Sapelo Island.

Contact: Adam Sapp (asapp@uga.edu)

Apply: http://gce-lter.marsci.uga.edu/public/employment/summer_internships.asp

Microbiology: Research in Prokaryotic Biology

REU participants will conduct independent projects with supervision. A wide variety of research topics will address the diverse functions of bacteria and archaea. State-of-the-art techniques will be used in interdisciplinary approaches that combine knowledge from the fields of Genetics, Biochemistry, Physiology, Molecular Biology, Cellular Biology, and Ecology. Participants will each receive a \$4,725 stipend in addition to a \$500 food allowance for the summer. Housing and most travel costs will also be covered. Students will stay in air-conditioned dorms on the UGA campus. Funded by the National Science Foundation and UGA, the program will run from late May – late July 2018 (please check Nov 2017 for the 2018 dates).

Contact: Kimberly Brown (reumibo@uga.edu)

Apply: www.uga.edu/mib/programs

Population Biology of Infectious Disease

The goal of this nine-week program is to provide students with experiences and opportunities at the intersections of the quantitative sciences and empirical disciplines of infectious disease biology. We achieve this goal by creating an integrative program aimed at exposing students with a biological background to quantitative methods, and by promoting an understanding of experimental biology among students with a background in mathematics and computer science. We encourage applications from students majoring in ecology and biological science fields, in addition to those majoring in mathematics, computer science and statistics. Special attention is given to recruitment of students from a network of partner Historically Black Colleges and Universities, students from groups underrepresented in STEM disciplines and students from primarily undergraduate institutions.

Contact: Dr. John Drake (jdrake@uga.edu)

Apply: <https://daphnia.ecology.uga.edu/reu/>