Nature’s machinery through the prism of physics, biology, chemistry and engineering

REU program at Clemson University
Summer 2018

Research Experience

Participants will work in pairs in a dynamic research team led by two principal investigators to:
• design and conduct experiments
• use modern research equipment
• learn applied and theoretical methods
• analyze data and draw conclusions
• present results in multiple formats
• enjoy an engaging, academically stimulating, and highly collaborative interdisciplinary research environment.

Exciting projects
Active materials driven by molecular motor proteins
Biomolecular interactions between collagen and cells
Missense mutations in DNA-binding proteins leading to the Rett syndrome
Amyloid aggregation in diabetes
Effects of low-level x-ray radiation doses on tissue
Three-photon absorption probes for deep tissue imaging

Participant majors
Physics, Biophysics, Bioengineering, Materials Science, Chemistry, Biology, Genetics, Biochemistry, or related majors

Important Dates
Application due date: March 9
Admission notification: Mid March
Program start date: May 28
Program end date: August 3

Application
www.clemson.edu/physics/biophysics-reu

The Research Experience for Undergraduates (REU) Program in biophysics is an intensive 10-week summer research program funded by the National Science Foundation that provides students with unique training and professional opportunities in student-driven, interdisciplinary, collaborative research projects at Clemson University. Participants receive stipends, housing, travel, and living allowances.

Program includes:
• collaborative projects with 2 faculty mentors
• cross-disciplinary research projects
• biophysics bootcamp
• research tool workshops
• professional development workshops
• paper writing
• collaborative projects with 2 faculty mentors

Student-driven discovery