

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

REU program at Clemson University
Summer 2021



Student-driven *discovery*

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

CLEMSON
UNIVERSITY



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 and highly collaborative interdisciplinary research environment

Exciting projects

Active materials driven by molecular motor proteins
Dielectrophoretic forces in the diagnosis of parasitic disease
Intrinsically disordered proteins in membraneless organelles
Role of defects in nanomaterial-biomolecular interactions
Effects of low-level x-ray radiation doses on tissue and cells
Small GTPases that organize septins essential for crypto pathogenesis
Redox chemistry models for alcohol induced cardiac dysfunction

Participant majors

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

Important Dates

Application due date: February 11
Admission notification: Early March
Program start date: May 24
Program end date: July 30

Information and Application

www.clemson.edu/physics/biophysics-reu

