

# Frontiers in Science

## Summer Research Experience for Undergraduate Students Program, May - August 2021

### Univ. of Houston – Rice Univ. – Northeastern Univ.

#### Frontiers in Science (FIS) Program

The Frontiers In Science Program is intended to introduce students from all STEM disciplines and academic levels to the beauty and fun of scholarly pursuits in natural and physical science research, and to engage faculty in interdisciplinary and multi-institutional research activities. To maintain the excellence of our student cohorts, the Frontiers in Science Program seeks to recruit and select a diverse student group to illustrate our commitment to equity, inclusion, and social justice. In so doing, we offer our students not only the opportunity to learn about varied disciplines but to engage with diverse perspectives and ways of knowing and learning. Students selected for the program will participate in cutting-edge scientific research in the field of theoretical biological physics during a 10-week program with the Center for Theoretical Biological Physics (<http://ctbp.rice.edu>), housed at either Rice University in Houston TX or at Northeastern University in Boston MA.

#### Prospective Research Faculty Mentors (representative faculty):

Dr. José Onuchic, PhD, Department of Physics, Rice University

Dr. Peter Wolynes, PhD, Department of Chemistry, Rice University

Dr. Margaret Cheung, PhD, Department of Physics, University of Houston

Dr. Greg Morrison, PhD, Department of Physics, University of Houston

Dr. Herbie Levine, PhD, Department of Physics, Northeastern University

Dr. Paul Whitford, PhD, Department of Physics, Northeastern University

#### A Physical Sciences Research Experience for Undergraduates (REU) program

The 2021 Frontiers in Science REU program provides students with extensive hands-on training in a multitude of physical and biological research methods within a research group at the University of Houston, Rice University (in Houston TX), or Northeastern University (in Boston MA). This research experience is intended to be an in-person collaboration with regular interaction between students and mentors. In the event that the pandemic continues to necessitate social distancing, the 10-week program will be held virtually.

#### Internship Stipends

Interns will receive a \$5000 stipend for the summer program, and are expected to perform at least 300 hours of research. *Please be aware the \$5000 is taxable as regular income.* In the event that in-

person meetings are possible, students traveling to work at Northeastern University will be provided transportation costs to Boston and on-campus housing for the full 10-week period (in addition to the stipend provided to all participants). Each intern's particular working schedule will be determined by their faculty mentor.

### **Eligibility**

Applicants must be currently enrolled as a student at one of the following institutions:

- Houston Community College
- Prairie View A&M
- Texas Southern University
- Sam Houston State University
- University of Houston (UH)
- UH Clear Lake
- UH Downtown

Students from Physics, Mathematics, Computer Science, Chemistry, Biology, or other related departments are welcome to apply. No prior experience with Biological Physics is required. The Frontiers in Science Program does not permit discrimination based on pregnancy, childbirth or related medical conditions, race, religious creed, color, national origin or ancestry, physical or mental disability, medical condition, veteran status, marital status, age, sex, sexual orientation, or gender identity. Persons of all backgrounds are encouraged to apply.

### **To Apply**

Email a *single PDF file* containing the following items:

- Current Resume
- Course list of all Science (biology, chemistry, physics, etc.), Computer Science, Technology, and Mathematics courses completed with a passing grade to-date. Please do *not* include the letter grades received, just list the courses you have passed.
- Statement of Research Interest (minimum of one-page), that describes and explains your current academic and professional aspirations.

Email your application to [fisctbp@central.uh.edu](mailto:fisctbp@central.uh.edu) and include "2021 REU Application" in the email subject line.

An initial review of applications will begin in March, so we highly recommend that you apply by **Friday March 19, 2021**. Initial invitations for interviews will be sent by **March 26, 2021**. After interviews, students will be notified of their status within a week.

For additional program information, please contact Dr. Greg Morrison [gcmorrison@uh.edu](mailto:gcmorrison@uh.edu), 713-743-9344.