



A Research Experience for Undergraduates in Multi-Scale Biomolecular Networks

May 30 - Aug 3, 2018



Welcome to the Institute of Biosciences and Bioengineering at Rice University!

This institute hosts the nationwide National Science Foundation Research Experience for Undergraduates (NSF REU) in BioNetworks.

The goal of this program is to provide students first-hand experience with cutting-edge interdisciplinary research that is needed to predict biological functions sufficiently to reprogram cells to avoid diseases or to perform new tasks. Program dates are 5/30/18 -8/3/18.

Students will work on research projects under faculty mentors that draw from a

range of approaches (classical biochemical and genetic to non-trivial theoretical models that require computation) to study naturally-occurring genetic networks, artificial genetic and metabolic networks, and biomolecular structure, function and evolution.

This program provides: a creative opportunity for students to develop innovative biotechnological ideas; leadership, mentorship and social retreats; special seminars and career development workshops; a \$5,250 stipend and up to \$500 in travel support; on-campus housing; a capstone research poster symposium; and an ethics and responsible conduct of research discussion seminar.

The program is open to undergraduates from all disciplines of science and

engineering. Applicants may be students at any institution, but must be U.S. citizens or permanent residents.



The focus of this NSF REU program is biological networks, complex interactions among biomolecules that give rise to the diverse biological phenotypes observed in nature. We are not students of some subject matter, but students of problems. And the problems may cut across the borders of any subject matter or discipline. - Karl Popper

This summer undergraduate program includes:

Seminars & Lunch Meetings We will have several seminars on research topics related to multi-scale biomolecular networks. Within the seminar series, sessions on graduate school and career options, how to prepare an effective poster, and an academic leadership workshop will be held, as well as an in-depth ethics and responsible conduct of research discussion seminar.

Symposium

The capstone of the program will be a symposium where students will present posters on their work.

Housing, Stipends, & Travel Assistance Students will receive oncampus housing at Rice. Students will also receive a \$5,250 stipend and up to \$500 in travel support.

How Do I Apply?

To apply for this REU online, visit our web site at ibb.rice.edu. Deadline for online application is 2/16/18 Women and minorities are especially encouraged to apply.



What is the IBB?

The Institute of Biosciences and Bioengineering (IBB) at Rice University is an interdisciplinary endeavor, supported by 115 faculty from all departments in science and engineering. The IBB:

- supports interdisciplinary research and education
- fosters ties with the Texas Medical Center
- creates partnerships with industry
- promotes the translation of research, and
- facilitates strong research and training programs.

Important Dates

Deadline for online application (and all requested materials): February 16, 2018 Actual program dates: May 30, 2018 - August 3, 2018



Joff Silberg, Ph.D. Program Director Associate Professor of Biochemistry & Cell Biology and Bioengineering ph 713-348-3849 joff@rice.edu

Lisa S. Blinn, Associate Director of IBB ph 713-348-4671 / lisblinn@rice.edu

Kimberly M'Carver, REU Program Coordinator ph 713-348-6034 / kms@rice.edu

Rice University Institute of BioSciences & Bioengineering MS 144, PO Box 1892 Houston, TX 77251-1892



George Bennett, Ph.D. Program Director Professor of Biochemistry & Cell Biology ph 713-348-4920 gbennett@rice.edu

