

Call for Applications: 2012 National Science Foundation Research Experiences for Undergraduates Program in Cellular Engineering at Rice University

Grantor: Rice University

Closes: 2/10/2012

Maximum: \$4,800.00

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May 30 - August 3, 2012

This Institute hosts the NSF REU-funded summer undergraduate internship in Cellular Engineering. This program is open to undergraduates from all disciplines of science and engineering who are interested in cellular engineering. This goal of this program is to expose students to cutting-edge technologies and approaches in metabolic and tissue engineering. The program dates for 2012 are 5/30/12-8/3/12. The deadline for all application materials to be received is February 10th, 2012.

Cellular engineering is a field with enormous potential to make truly significant contributions to mankind in both medical and non-medical fields over the next decades. We believe the next generation of therapeutics (following recombinant proteins and peptides) will utilize cells and tissues. Many new technologies in fields such as environmental engineering and chemical production will also be based on advances in cellular engineering. Interdisciplinary scientists and engineers with skills in molecular and cell biology, biochemistry, and engineering will be necessary for U.S. industrial competitiveness and will be crucial for translating our world leadership in the scientific aspects of biotechnology into cost-effective, environmentally benign, industrial and product applications.

Some examples of ongoing metabolic and tissue engineering research that will be included in the summer program are:

- •engineering of hard and soft tissue formation
- •cardiovascular tissue engineering
- •engineering cell surface interactions
- •metabolic engineering
- •development and motility.

Symposium & Tissue Engineering

The capstone of the program will be a symposium where students will present posters on their work, and students are eligible to attend a short course in tissue engineering.

Housing, Stipends, & Travel Assistance

Students will receive on-campus housing at Rice. In addition, students will receive a \$4,300 stipend and up to \$500 in

travel support.

Mentoring, Field Trips and More

Each REU student will mentor a high school student and then participate in a round table discussion on their undergraduate experiences.

Contact Us

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