# Biological Materials and Processes Research Experience for Undergraduates Summer Research Experience for Undergraduate Students

## IOWA STATE UNIVERSITY.

Department of Chemical and Biological Engineering



BioMaP creates novel research experiences for undergrad students from around the country in the areas of biological materials and processes. Students are active members of interdisciplinary groups and interact with faculty, post-doctoral researchers, graduate students and industry. Students may also participate in cohort experiences such as seminars, meetings, workshops and more.

#### Stipend of \$450 per week Travel expenses paid up to \$800

### Food & housing allowance up to \$2,500



BioMaP REU at lowa State University is funded by the Student accommodations

Ames, Iowa has been named one of the ten best places to live in the U.S.

National Science Foundation. All baccalaureate-track and community college students who are U.S. citizens or permanent residents are encouraged to apply. The application process includes submitting a resume and two letters of recommendation.

#### Apply online at: www.cbe.iastate.edu/research/undergraduate-research/ Please refer any questions to biomap@iastate.edu

### Application deadline: February 15, 2018

### May 29 - August 3, 2018

#### **Choose from these research projects:**

Immunomodulatory Nanovaccines Against Infectious Diseases

**Drug and Gene Delivery** 

Hyperspectral Imaging of DNA and Protein-Linked Metal Nanoparticles

Competition Between Soluble and Extracellular Matrix Signals during Cell Migration

Model Validation for Photosynthetically Active Radiation Transport in Algal Photobioreactors

Contribution of Membrane Proteins to Microbial Robustness

**Thermal Deconstruction of Biomass** 

**The Artificial Pancreas Project** 

Polymer Properties That Selectively Target Tumor-Associated Macrophages

Bacteriophages on Porous Surfaces Used for the Detection of Bacteria

Understanding the Relation Between Aptamer Structure and Function for Sensors and Synthetic Biology

ex vivo Mini-gut Mucosal System for the Investigation of New Oral Vaccine

The Social Network of Plants

**Probiotic Engineering** 

Resonant Biosensors for Enzyme Activity, Protein Binding, and Ion Detection

**Lignin-Based Engineering Thermoplastics** 



Comments from 2017 program participants:

"Loved the program. It was well organized and everyone was extremely helpful."

"I really appreciated the way the faculty and graduate students were so involved."

"I wasn't sure about graduate school but this program gave me the confidence to know I can do it."

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