

BioMaP REU 2021

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 \$500 per week

Travel expenses paid up to \$800

Food & housing allowance up to \$2,500



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



BioMaP REU at Iowa State University is funded by the 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, 2021

June 1 - August 6, 2021

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

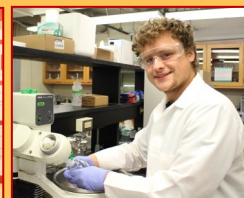
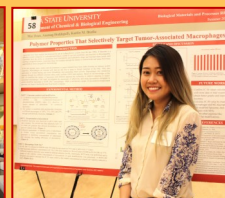
ex vivo Mini-gut Mucosal System for the Investigation of New Oral Vaccine

The Social Network of Plants

Probiotic Engineering

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

Lignin-Based Engineering Thermoplastics



Comments from past 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."