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.

Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Office of Equal Opportunity, 3410 Beardshear Hall, 515 Morrill Road, 515 294-7612.

Stipend of $500 per week
Travel expenses paid up to $800
Food & housing allowance up to $2,500

BioMaP REU at Iowa State University is funded by the National Science Foundation. All baccalaureatetack 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.”