

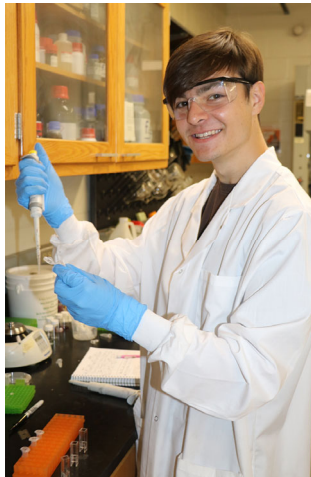
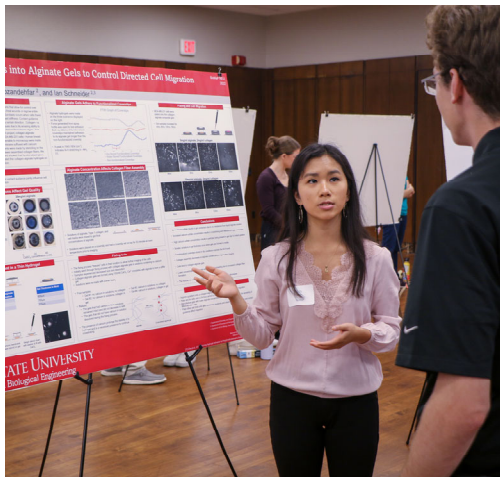
BioMaP REU 2023

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

May 30 - August 4, 2023

IOWA STATE UNIVERSITY™

Department of Chemical and Biological Engineering



Choose from these research projects

Immunomodulatory Nanovaccines Against Infectious Diseases

Drug and Gene Delivery

Fabrication and Characterization of Optical Metamaterials Using DNA Origami Templates

Controlling Structure and Mechanical Properties to Understand and Guide Cell Migration

Model Validation for Photosynthetically Active Radiation Transport in Algal Photobioreactors

Microbial Cell Factories for Lipid Conversion

Thermal Deconstruction of Biomass

The Artificial Pancreas Project

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

Developing New Oral Vaccines through the Minigut Mucosal System

Probiotic Engineering

Toward Real-Time Control of Cell Differentiation Using Reinforcement Learning

Lignin-Based Engineering Thermoplastics

BioMaP creates novel research experiences for undergraduate students from around the nation 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



Student accommodations

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

More information:

www.cbe.iastate.edu/research/undergraduate-research/

Please refer any questions to biomap@iastate.edu

Application window open thru Feb. 15, 2023



Comments from past program participants:

"I gained a lot of skills not only in lab procedures, but in experimental design."

"The faculty and grad students are great. The campus is very beautiful and excellent for walking and biking."

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

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.