Three students in the CEHS Summer Undergraduate Research Program (SURP) funded by NIEHS have received special distinction receiving partial funding from the Society of Toxicology (SOT)’s program to support undergraduate summer research. This is a separate and special award from the SOT that highlights the overall success of the summer program, and is the second year in a row that the SOT has been a partner in the summer program.

The three students receiving the awards are Maggie Boyd from the University of Montana, Nichol Smith from the University of Massachusetts Lowell, and Katie Pershinske from Northern Michigan University.

During the summer program, Maggie studied the cytotoxicity of engineered nanoparticles, Nichol investigated a mitochondrial DNA/RNA hybrid that is the key to DNA replication, and Katie researched Rotenone and MPTP, neurotoxins that generate models of Parkinson’s disease.
CEHS Areas of Research Emphasis

- Central Nervous System Diseases
- Immunology
- Gene Environment Interactions
- Epigenetics
- Respiratory Toxicology
- Nanotoxicology

Core Facilities

The state-of-the-art core facilities and rich research workflows to accomplish complicated research.

The centers are highly integrated providing collaborative workflows to accomplish complicated research.

The state-of-the-art core facilities and rich research environment make CEHS a unique center in Montana with the closest related centers located in Seattle, Portland and Denver.

Core Resources

- Surgeon’s Biological, Histology and Immunofluorescence Core provides access to confocal and transmitted light microscopes with analysis software.
- Functional and Optical Imaging Core provides access to imaging facilities and services, including tissue processing and staining, as well as access to confocal and classical light microscopes.
- The Molecular Histology and Fluorescence Imaging Core provides access to flow cytometers and flow sorting equipment, as well as access to confocal and classical light microscopes with analysis software.

Surf Advisor

Dr. Andrij Holian, CEHS Director
SURF Advisor
PhD from Montana State University
Respiratory Toxicology
Nanotoxicology
Macrophage Biology

This program is funded through a grant obtained from the National Institute of Environmental Health Sciences (NIEHS, 2R05ES028988) and the Society of Toxicology.

About SURP

Program Overview

The Center for Environmental Health Sciences (CEHS) sponsors a summer educational research experience for outstanding college undergraduates that are interested in attending graduate school and pursuing a career in environmental health science. The Summer Undergraduate Research Program (SURP), is part of a national program to attract and train undergraduates to research careers in the environmental health sciences.

The Center’s SURP ten-week summer program presents extraordinary opportunities to learn from expert mentors about the philosophy and practice of conducting research in laboratories. Guest seminar lectures and presentations by graduate students, postdoctoral fellows and staff provide SURP students with personal experiences in biomedical research. In addition, students gain key skills to help them successfully apply to graduate programs in environmental health science, the biomedical sciences, and other related fields.

Currently in its ninth year, undergraduate students in the SURP program have come from universities around the country; examples include Gonzaga, Washington State University, Stanford University, Purdue University, University of Massachusetts - Lowell, Notre Dame University and University of Texas at Dallas.

Current undergraduate students with a strong interest in science and excellent grades are encouraged to apply by January 15, annually.

January 15, 2017. Applications received after January 15 will not be considered only if slots are still available.

Please e-mail CEHS at cehs@mso.umt.edu.

About CEHS

CEHS was formed in 2000, and is a leading edge biomedical research center focused on diseases associated with exposures to harmful environmental and occupational agents.

Center investigators interact with a network of researchers worldwide to enhance basic and translational research.

Research Focus

- To determine the mechanisms by which environmental and occupational exposures contribute to the development of human diseases
- To translate that knowledge into development of biomarkers, therapeutic interventions and improved public health information

CEHS supports three Research Cores:
- The Fluorescence Cytometry Core
- Molecular Histology and Fluorescence Imaging Core
- Inhalation and Pulmonary Physiology Core

Each of the cores are led by experienced faculty and full time staff scientists helping investigators plan, execute and interpret experimental studies.

The cores are highly integrated providing collaborative workflows to accomplish complicated research.

The state-of-the-art core facilities and rich research environment make CEHS a unique center in Montana with the closest related centers located in Seattle, Portland and Denver.

About UM

The University of Montana is located in beautiful Missoula, Montana and integrates an enriching educational experience with easy access to outstanding recreational activities including hiking, fly fishing, and camping and is located near Glacier National Park.

For more information about Missoula and the surrounding region, please visit www.destinationmissoula.org.

The friendly, collaborative nature of the faculty emphasizes one-on-one faculty-student interactions.

In addition, SURP students have won top awards at end of summer conferences representing students from various summer programs campus-wide and have been recipients of Society of Toxicology scholarships. We encourage you to view past project descriptions and posters on our website.