

FYRE First Year Research Experience

Dr. Paul Urayama in Physics is seeking First Year students to become part of his research projects through the new FYRE program.

Get FYRE application form on the web @ www.muohio.edu/undergradresearch

PAUL URAYAMA urayampk@muohio.edu

ASSOCIATE PROFESSOR, PHYSICS



513-529-9274 Culler Hall Room 39

Research Field - Biophysics at High Pressure

Laboratory Activities

Use pressures that would crush a submarine to explore pressure effects on microorganisms and biomolecules, simulating deep sea or even extraterrestrial conditions. Our work focuses on developing and applying metabolic sensing and advanced microscopy imaging technologies to high-pressure physiology.

You might be involved in all stages of the research process - from envisioning and designing experiments, to building equipment and taking data, to analyzing and presenting results at talks and in papers. My goal is to open opportunities.

Visit the lab's website <http://www.users.muohio.edu/urayampk> to see current and past members, what they're doing, and where they are now.

Recent Student Research Projects

- Calibrating dyes for high-pressure calcium-ion sensing
- Designing graphical user interfaces for our measurement devices and high-pressure perfusion system
- Exploring the thermodynamics of biomolecular folding under pressure
- Using endogenous NADH fluorescence to monitor cellular metabolic activity

How do students get Involved? Get information about faculty research projects in the FYRE Program at: www.muohio.edu/undergradresearch

What is the FYRE Program Student Application Process?

To apply, simply e-mail Martha Weber Undergraduate Research Coordinator in the Office for the Advancement of Research and Scholarship, 102 Roudebush at Weberme@muohio.edu