

# FYRE First Year Research Experience

Burcin Bayram in Physics is looking for First Year students to become part her research projects through the new FYRE program. Get FYRE application form on the web ([www.muohio.edu/undergradresearch](http://www.muohio.edu/undergradresearch))

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ASSOCIATE PROFESSOR

Area of Expertise:  
Experimental Atomic,  
Molecular and  
Optical Physics  
(AMO)

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Culler Hall Room 133



Here's your chance to find out how we use Lasers & Spectroscopic techniques to understand photon-matter interaction. Come and Experience Exciting Research at Bayram's Lab.

## Examples of Possible Project Involvement

- Build a wavelength tunable dye lasers
- Use lasers in atomic/molecular chamber to excite the electrons into higher energy levels
- Observe interference effect of light called "quantum beats".
- Be a part of the 'atomic beam' we are building

## Possible Outcomes

- Get a course credit
- Present your work at national & regional conferences.
- Get salary for summer research if available.
- Be a co-author in a high impact refereed journal publications.



To Learn about our Projects on Electron imaging & Polarization spectroscopy, Visit our Research Group at 4 Culler Hall.

Students receive training in lasers, optics, electronics, optical fibers, data acquisition, high vacuum systems, frequency control of the lasers, etalons, cameras, and spectroscopic techniques such as spectrometer, fabry-perot interferometer, optical fibers, liquid crystal retarders, polarizers, and absorption and emission spectra of various atoms.

Bayram Research Group <http://www.users.muohio.edu/bayramsb/>