

## 2025-2026 Undergraduate Research Mentoring Program

### What is involved? (12 month commitment)

- 8 weeks summer research (June – July 2025)
- Research project poster to present at ERN conference (Spring 2026)
- Regular meetings with project mentors (Aug '25-May '26)
- Mentoring sessions with education coordinators

### What you will receive:

- \$6,500 stipend for summer REU
- Summer travel and lodging fully covered
- \$1,000 stipend in Fall 2025
- \$1,000 stipend in Spring 2026
- All expenses paid trip to ERN conference (Spring 2026)
- STEM mentors
- Graduate school/internship prep sessions

### Who is eligible?

Students from the University of Arizona, Wayne State, and Spelman College who have also completed their sophomore year by beginning of program.

## PROJECTS

For more information on projects visit [newfos.arizona.edu](http://newfos.arizona.edu)

### ***Building Emerging Technologies with Surface Acoustic Waves***

*Eligible Students: Wayne State, Spelman College - Location: University of Arizona*

Design, build, and optimize cutting-edge Surface Acoustic Wave (SAW) devices, gain hands-on experience in a state-of-the-art cleanroom, and develop skills for exciting careers in semiconductors, RF technologies, and beyond.

### ***Fabrication of reconfigurable acoustic devices***

*Eligible Students: Wayne State, Spelman College - Location: University of Arizona*

Synthesize phase-change materials from scratch, fabricate acoustic circuits using laser writing, and create waveguides that guide sound waves by switching between crystal and glass phases.

### ***Miniaturized Acoustic Waveguides for Quantum-Inspired Computing: A Finite Element Analysis Approach***

*Eligible Students: University of Arizona - Location: Wayne State University*

Learn finite element analysis (FEA) to model miniaturized acoustic waveguides for quantum-inspired computing and design and simulate waveguides in COMSOL.

### ***Experimental Demonstration of Topological Modes in a Su-Schrieffer-Heeger (SSH) System***

*Eligible Students: University of Arizona - Location: Spelman College; Georgia Tech*

Modifying an air track to conduct experiments on protected edge modes AND gain skills in mechanical design, CAD, and 3D printing.

**Applications due: March 17, 2025**



**Questions? Contact Sara Chavarria**  
[spchavar@arizona.edu](mailto:spchavar@arizona.edu)