UMassAmherst | College of Engineering

Peyton Lab

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Type of Research Position:

- Graduate RA at the PhD level
- Summer REU for undergraduates

Description of Research Project:

The Peyton lab is a diverse group of engineers and biologists, and our mission is to learn build new biomaterials and use



them to study how cells process information from their chemical and physical environment.

We design polymeric biomaterials to create models of human tissue, and use them to study how cells move, grow, and respond to drugs in different tissue environments. We use this approach to find new ways to stop cancer metastasis, discover more effective cancer drugs, prevent heart disease, and build scaffolds for regenerative medicine.

- **Interdisciplinary** Our lab is very interdisciplinary, working at the intersection of materials science, cancer biology, and regenerative medicine.
- **Entrepreneurial opportunities** We are potentially looking for new people to start companies based on our biomaterials technologies.
- Diversity welcoming/friendly research group The Peyton lab consists of students and professionals from all over the US and the world. We pride ourselves on being an open and welcoming environment. Our group has people of all religious, race/ethnicities, and socioeconomic backgrounds, and we are inclusive of all genders and LGBT identities.
- **International research opportunities** We have an active project on breast cancer in Ethiopia, and there are opportunities to work on this project. We also send students to international conferences to present their science.

Desired Qualifications and/or Background:

Students with a background in most any STEM field are welcome. No previous research experience required, but we want people who are passionate about science and are driven to make a difference in people's lives.