



Andrew Putnam, Ph.D.

Department of Biomedical Engineering, University of Michigan

E-mail: putnam@umich.edu

Lab homepage: <https://www.theputnamlab.com/>

Position Summary

The Putnam Laboratory in the [Department of Biomedical Engineering](#) (BME) at the [University of Michigan](#) is seeking a highly motivated individual for a post-doctoral research position. The selected candidate will work closely with Dr. Putnam and other members of his group on an NIH-funded project focused on the roles of the extracellular matrix and supportive stromal cells on the formation of functional vasculature. The primary initial responsibility of this individual will be to lead a series of small animal studies to evaluate the functional perfusion of engineered microvasculature.

Responsibilities

- Lead a series of small animal studies (SCID mice) involving the implantation of cell-laden hydrogel constructs to evaluate their ability to direct the formation of functional microvasculature in vivo
- Facilitate animal research within the group by assisting with animal surgeries and post-surgical care
- Provide technical support to a range of tissue engineering research projects
- Develop new directions in tissue engineering that leverage the group's expertise and track record
- Present work at conferences and publish findings in peer-reviewed articles
- Mentor undergraduate and graduate research assistants

Required Qualifications

- PhD in biomedical engineering, physiology, molecular/cellular biology, or other related discipline
- Evidence of prior research productivity in the form of one or more first authored peer-reviewed papers
- Prior experience with rodent surgeries
- Exceptional work ethic and research integrity
- Excellent communication skills and fluency in English
- Ability to work both independently and collaboratively as part of a diverse team
- Optimistic "can-do" attitude and desire to tackle challenging research questions

Desired Qualifications

Prior experience with one or more of the following:

- Rodent models of ischemia (femoral artery ligation)
- 3D cell culture
- histology/immunohistochemistry
- biomaterials and tissue engineering

About the Putnam Lab and the University of Michigan

Founded in 2003, our lab has been operating within the highly-regarded Department of Biomedical Engineering at the University of Michigan for the past 14 years. We are a small but mighty team conducting both fundamental and applied research in regenerative medicine, with an emphasis on vascularization. We use a multidisciplinary combination of approaches from biomaterials, mechanobiology, stem cell biology, cell/molecular biology, and engineering. The Putnam Lab strives to create a positive and welcoming environment for scientists and engineers from all backgrounds. **ALL individuals with a passion for our science, regardless of race, ethnicity, country of origin, physical ability, gender identity, sexual orientation, political leanings, religious preferences, and age are welcome here!**

Widely-considered to be one the very best public universities in the world, the University of Michigan provides a world-class training environment for post-doctoral fellows, with access to a number of T32 training programs, fellow-to-faculty transition opportunities, and strategic programs focused on the clinical translation of medical products. Our lab is part of the [Frankel Cardiovascular Center](#), the [Center for Cell Plasticity and Organ Design](#), and [Regenerative Medicine](#), all of which enhance the training environment for fellows and students.

How to Apply

Candidates interested in a position as a Postdoctoral Research Fellow should submit a single PDF file including their C.V., the names and contact information for three references, and a cover letter describing their research interests and qualifications to Andy Putnam (putnam@umich.edu).