Department: Biomedical Engineering

Supervising Faculty Member: Shayn Peirce-Cottler

Specialization: Vascular tissue engineering

Research Focus: Professor Peirce-Cottler's team studies the smallest blood vessels in the body and strives to understand how they grow and remodel in healthy and diseased tissues.

Job Description: 1) assist with laboratory experiments involving cells and tissues; 2) analyze microscopy images; 3) research databases for published literature pertaining to the major research questions.

Required Skills/Knowledge: basic laboratory skills; Microsoft Excel

Required Courses: BME Physiology (BME 2101 & 2102) and Cell and Molecular Biology (BME 2104)

Training: The student selected for this position will need to complete the biosafety training module offered through Environmental Health and Safety before beginning work.

What You Will Learn: Through this research work opportunity, you will: 1) be able to analyze microscopy images using quantitative approaches; 2) know, broadly speaking, the structure and function of the microcirculation; and 3) know how diseases like diabetes and peripheral vascular disease affect tissues adversely and how the microcirculation is implicated in this process.

Suggested Reading:

Select publications that can be found on the Peirce-Cottler lab website:

www.bme.virginia.edu/peirce