

**“Vascular Microenvironments and
Women's Health: Advancing Diagnostic
Approaches and Computational Tools”**

Friday, June 2nd, 2023
12:00 – 1:00 p.m.

Zoom: <https://uci.zoom.us/j/92399806593>
Meeting ID: 923 9980 6593
Passcode: 750744



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Abstract: Dysregulated vascularization has been linked to various disorders, including obesity, atherosclerosis, and cancers. Despite considerable efforts, controlling vascularization to improve human health remains a major challenge. Our research group focuses on two approaches to address this challenge: (1) developing sensitive tools and methods to quantitatively analyze tissue and vascular microenvironments, and (2) applying systems approaches that integrate experimental measurements and offer predictive insights. In this presentation, we will discuss our progress in measuring and controlling vascular signals, and how our research is contributing to the development of novel diagnostic approaches for disease. Additionally, we will highlight our efforts in applying these approaches to women's health, with the potential to improve outcomes in labor and delivery.

Biography: After earning her undergraduate degree, Professor Imoukhuede pursued graduate study in Bioengineering at the California Institute of Technology (Caltech) in Pasadena, CA. Here, she combined sensitive techniques in biomedical optics with nanoparticle imaging towards understanding the structure, function, and trafficking of a key protein in epilepsy, the GABA transporter, GAT1. She also performed research in nicotine addiction through molecular imaging of nicotinic acetylcholine receptors. Professor Imoukhuede's research in nanotechnology earned her the Kavli Nanoscience Institute Award and her graduate research was supported by the National Institutes of Health (NIDA). Professor Imoukhuede was the first African-American woman to be awarded a Bioengineering PhD by Caltech and was only the second African-American woman to earn a PhD from Caltech's Division of Engineering and Applied Science.

Professor Imoukhuede completed a Postdoctoral Fellowship in the Biomedical Engineering Department at the Johns Hopkins University School of Medicine. During her fellowship at Johns Hopkins, she was 1 of 10 postdoctoral fellows nationwide to earn the prestigious United Negro College Fund/Merck Postdoctoral Research Fellowship, 1 of 6 young investigators to earn the FASEB Postdoctoral Professional Development Award, and her work was awarded a Poster Award at the biennial Gordon Conference in Angiogenesis. Her postdoctoral work was also supported by the National Institutes of Health (NHLBI).