

## Distinguished Lecture Series in Physiology

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## “Optical dissection of brain capillary function”

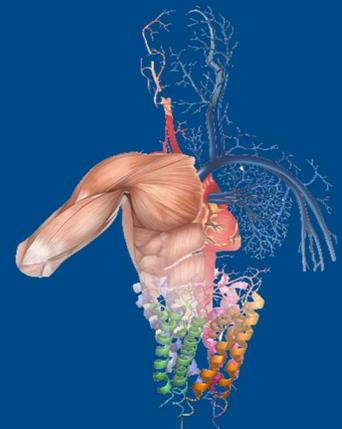
Most of the brain's vascular length lies beyond the artery in the form of dense capillary networks. Blood cells move single file through capillaries and the diameter of individual capillaries exert a strong influence on blood flow. However, there remains a limited understanding of how flow is regulated in capillary networks and the consequence of its dysregulation during disease. In this talk, I will discuss new findings using multi-photon imaging to visualize and modulate flow in brain capillaries of anesthetized and awake mice. Specifically, we have focused on pericytes and their role in control of capillary tone. I will describe our use of in vivo single cell optical and chemogenetic approaches to understand the consequences of perturbing pericytes in the healthy adult and aged brain.

Thursday, March 21, 2024  
GBSF and Zoom  
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March  
21



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