

SPECIAL RESEARCH SEMINAR

Presented by the Center for Vascular and Heart Research at the Fralin Biomedical Research Institute at VTC



FRALIN BIOMEDICAL RESEARCH INSTITUTE AT VTC
CENTER FOR VASCULAR
AND HEART RESEARCH
VIRGINIA TECH.



THOMAS A. JEPPI, Ph.D., FBPHS

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Kidney, and Lung

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Roads, Motors and Cargo: Journey to a New Therapy for Hypertension

Dr. Jepps will focus on the microtubule network in vascular smooth muscle cells, which acts like a road network to traffic proteins to and from the cell membrane. He will show how the microtubule network regulates the expression of key ion channels and receptors in vascular smooth muscle cells using the motor protein dynein. Furthermore, he will show how, by disrupting the microtubule network, vasodilations that were attenuated in arteries from hypertensive rodents can be restored. Dr. Jepps will then show how, in vivo, administration of colchicine – a clinically approved drug known to disrupt the microtubule network and have cardiovascular protective effects – to hypertensive rats reduced blood pressure, improved vasodilations, attenuated vascular remodeling and inflammation, and suppressed left ventricular fibrosis. Finally, this work has been translated to humans, where improvements in vascular conductance are observed after oral colchicine administration. Thus, this talk will aim to convince you that colchicine may be a promising therapeutic for the treatment hypertension.

TUESDAY, MARCH 11, at 2 p.m.

Room R3012, 2 Riverside Circle

Or watch via Zoom:

<https://virginiatech.zoom.us/j/87860538038?pwd=3EfG4i77stWvG6CTbAQvIA2EnmVghO.1>



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