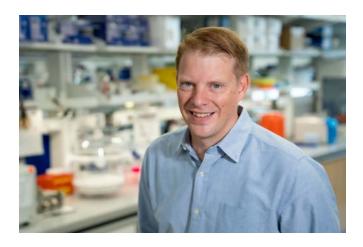


RMB CVRC Seminar

The Robert M. Berne Cardiovascular Research Center Presents

Scott Johnstone, PhD

Affiliation: Assistant Professor, Fralin Biomedical Research Institute at Virginia Tech Carilion



Cell Signaling And Immune Cell Involvement In Neointima Formation

Connexin (Cx) proteins form gap junctions, allowing for communication between cells. Alterations in gap junctions have been associated with pathological proliferation in disease since their discovery in the 1950s. Our studies describe how both connexin proteins and gap junctions work in concert during disease initiation and progression. We focus on how smooth muscle cells (SMC) proliferate and how interactions with macrophages lead to the thickening of the blood vessel walls. By modeling molecular interactions between Cx43 and cell cycle proteins, we can generate novel molecules, including peptides, that can limit SMC proliferation in mouse and human models of disease. Taken together, our data suggest a complex interplay between gap junction signaling following vascular injury, involving multiple cell types that regulate disease progression.

Thursday May 2nd, 2024 10:00 AM-11:00 AM MR5 Room 3005

Refreshments served Hosted by: Brant Isakson

Contact:

Mary Sheffer Program Administrator

CVRC, UVA MR5 1010 PO Box 801394 Charlottesville, VA 22908 434-243-9943

Mt3kx@virginia.edu