Identification of Transcriptional Networks for Vascular Disease

The overarching goal of the Romanoski Lab is to better understand the mechanisms by which DNA sequence instructs molecular programs that underlie human biology. We are particularly interested in complex diseases such as atherosclerosis and hypertension, which are caused by combinations of environmental and genetic risk factors. While these diseases involve many cell types, our research is focused on endothelial cells, which line blood vessels and form the barrier between blood and tissue.

Our laboratory is both experimental and computational. We use next-generation sequencing technologies to measure genome-wide molecular phenotypes. By leveraging the interconnected relationships between DNA sequence, transcription factor binding, chromatin modification, and gene expression, we study how cells achieve context-appropriate expression patterns and signal responsiveness.

Thursday March 29th, 2018
11:00 AM-12:00 PM
MR5 3005
Hosted By: Mete Civelek, PhD
Refreshments Served