

Research Summary

My research interests are to investigate the inflammatory and fibrotic responses as major mediators of cardiac remodeling after myocardial infarction (MI). The ultimate goal is to find novel intervention targets to improve MI patient outcomes. Primarily, Our lab uses the murine model of MI and investigate changes of inflammatory reaction and extracellular matrix during cardiac wound healing process at molecular, cellular, tissue, and organ levels. Specifically, we focus on elucidating polarization mechanisms of neutrophils and macrophages post-MI and identifying potential targets to modulate distinct phenotypes (pro-inflammatory vs. anti-inflammatory) of neutrophils and macrophages, ultimately to improve cardiac repair.