Key questions defining research program:

1) How do alterations in redox signaling influence cardiovascular function?
2) What genetic modifiers effect redox signaling and confer risk for cardiovascular disease?
3) How do genetics influence cardiovascular therapeutic responsiveness?
4) Can we identify new targets and pathways that regulate endothelial cell and smooth muscle cell function in the microcirculation?
5) What are the mechanisms that cause dysfunctional nitric oxide signaling in cardiovascular disease?

Key words describing research program:

1) Hypertension
2) Microcirculation
3) Endothelial and smooth muscle cell dysfunction
4) Heart Failure
5) Nitric oxide

Titles for shovel-ready research projects:

1) Role of cytochrome b5 reductase in smooth muscle function
2) Mechanisms regulating of nitric oxide diffusion in the microcirculation
3) Identifying genetic variants that modify clinical responsiveness to soluble guanylate cyclase stimulator
4) cGMP signaling and heart failure
5) Determinants of cGMP signaling in platelets

Data sources for shovel-ready research projects:

1) RNA Seq data
2) SNP analysis
3) Exome sequencing analysis