Key questions defining research program:
1) How does the right ventricle (RV) adapt (or maladapt) to pressure overload?
2) How do hemodynamic markers of RV function and coupling to the pulmonary vasculature translate into clinical outcomes and how can we translate such analysis to the clinic?
3) What is the prevalence and outcomes of pulmonary hypertension associated with left heart disease?
4) How does nitrite affect the pulmonary circulation, right ventricular function, and response to exercise in pulmonary hypertension associated with left heart disease?

Key words describing research program:
1) right ventricle function
2) pulmonary hypertension
3) Heart failure with preserved ejection fraction
4) Ventriculovascular coupling

Titles for shovel-ready research projects:
1) Development of a system to harvest pulmonary artery endothelial cells from clinical right heart catheterization.
2) Acute right ventricular response to inhaled nitrite.
3) Effect of nitrite on pulmonary vascular impedance.
4) Subphenotyping of pulmonary hypertension associated with left heart disease
5) Biaxial biomechanical response of bovine right ventricular myocardium

Data sources for shovel-ready research projects:
1) Clinical biobanking of samples from pulmonary hypertension patients.
2) Echocardiography from ongoing phase II clinical trial of nitrite
3) Hemodynamics from ongoing phase II clinical trial of nitrite
4) Database of patients undergoing right heart catheterization
5) Biaxial biomechanical data from bovine right ventricular myocardium