Key questions defining research program:

- How does the right ventricle (RV) adapt (or maladapt) to pressure overload?
- 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?
- What is the prevalence and outcomes of pulmonary hypertension associated with left heart disease?
- 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:

- Right ventricle function
- Pulmonary hypertension
- Heart failure with preserved ejection fraction
- Ventriculovascular coupling

Titles for shovel-ready research projects:

- Development of a system to harvest pulmonary artery endothelial cells from clinical right heart catheterization
- Acute right ventricular response to inhaled nitrite
- Effect of nitrite on pulmonary vascular impedance
- Subphenotyping of pulmonary hypertension associated with left heart disease
- Biaxial biomechanical response of bovine right ventricular myocardium

Data sources for shovel-ready research projects:

- Clinical biobanking of samples from pulmonary hypertension patients
- Echocardiography from ongoing phase II clinical trial of nitrite
- Hemodynamics from ongoing phase II clinical trial of nitrite
- Database of patients undergoing right heart catheterization
- Biaxial biomechanical data from murine right ventricular myocardium