Key questions defining research program:

- Cardiac Magnetic Resonance (CMR) dichotomizes the myocardium into the interstitium (regulated mostly by neurohormonal factors and fibroblasts) and the cardiomyocytes parenchyma (regulated mostly by hemodynamics). We study how these fundamentally different compartments relate to remodeling, outcomes, and disease severity which has implications for therapeutics, especially in heart failure.

- CMR detects pathology and excludes pathology differently than other modalities, and most consider CMR as a clinical reference standard. These data have important implications for efforts to optimize processes of care. Imaging serves to match patients to the optimal therapy—should any be required.

Key words describing research program:

- Myocardial fibrosis
- Cardiac MRI
- Outcomes (e.g., heart failure hospitalization, mortality, ICD shock)
- Comparative effectiveness

Titles for shovel-ready research projects:

- See https://www.ncbi.nlm.nih.gov/pubmed/?term=schelbert+e

Data sources for shovel-ready research projects:

- Large, prospective, REDCap database with >3000 consecutive patients providing written informed consent. Outcomes, comorbidity, CMR data and novel quantitative measures of myocardial fibrosis are included.