The acute respiratory distress syndrome (ARDS) is a common cause and consequence of critical illness. Imprecision in the definition and diagnosis of ARDS has led to many negative clinical trials.

Well-credentialed diagnostic and prognostic biomarkers have remained elusive. No effective pharmacotherapy for ARDS.

Developing a high-fidelity large-animal model of ARDS that translates to the bedside.

- Advance our understanding of ARDS pathogenesis
- Accelerate the discovery and validation of human-relevant biomarkers and therapeutics
- Leverage the Large Animal Intensive Care Unit

Complementary techniques of metabolomics, microbiome science, immunology, and data science are together being applied to a unique large animal model of ARDS.