Key questions defining research program:

- What are key host determinants of infection-induced lung injury?
- What host factors contribute to immunosuppression in sepsis?
- How do professional phagocytes such as macrophages and neutrophils recognize, respond to pathogen and resolve inflammation following lung infection?
- How do hematopoietic cells such as platelets shape the course of injury following alveolar barrier dysfunction?

Key words describing research program:

- Host defense
- Lung injury
- Critical illness
- Pneumonia
- Sepsis

Titles for shovel-ready research projects:

- Screening serum sensitivity of multi-drug resistant *K. pneumoniae* isolates
- Impaired serum killing of XDR *K. pneumoniae* in ICU patients
- Kinetics of complement activity and host factors in the ICU
- Platelet-specific thrombospondin-1 knockout mouse in *P. aeruginosa*-triggered alveolar injury

Data sources for shovel-ready research projects:

- Mouse models of bacterial pneumonia and pathogen-triggered lung injury
- Clinical database from ICU cohort
- Biosamples from ICU patients
- Clinical isolates of *P. aeruginosa* and *K. pneumoniae*