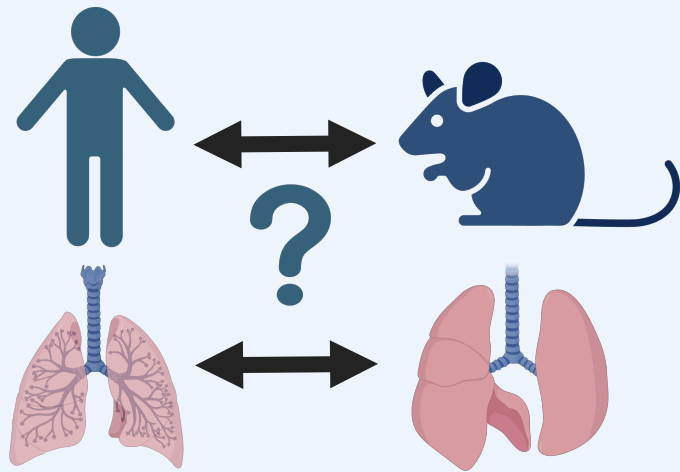


## HYPOTHESIS



Do mouse models recapitulate human pneumonias?

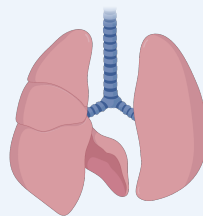
## DATA COLLECTION

Intratracheal instillation of pathogen

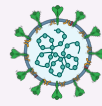
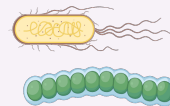


Young - 8 weeks  
Old - 90 weeks

Moribund stage



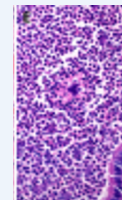
Excise lungs  
100 mice samples



11 different pathogen models

## SCORING & PRE-PROCESSING

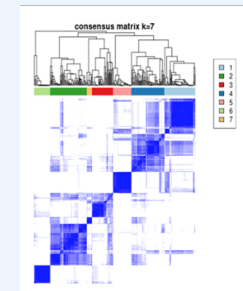
Histopathology slides



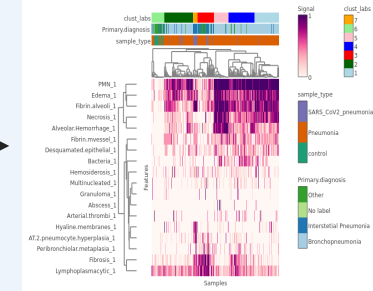
Average scores

100 mice samples, 16 features scored

## ANALYSIS



Determine optimal number of clusters



Identify novel sub-phenotypes of pneumonia

- Establish cluster-feature relationship
- Compare features with human sub-phenotypes
- Identify similarities and disconnects