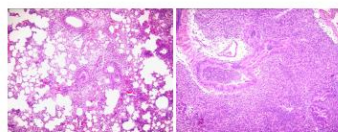


Rodent Infectious Disease Models

1. **Infectious lung disease models:** Mouse lung can be infected intranasally or intratracheally with *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Streptococci*, *Influenza A H1N1*, *Klebsiella pneumoniae*, *Mycoplasma pneumoniae*, etc, to create lung infection model for studying disease mechanism and drug metabolism, testing new treatments and new formulation, and evaluating new administration pathway via respiratory system, etc.

2. **Infectious skin disease models:** Skin is the largest organ and frequently contacts various pathogens in the environment. Animal skin infection model can be created with *Pseudomonas aeruginosa* or *Staphylococcus aureus*, which are common bacteria for infecting human skin. This model can be used to test new treatments or drug formulation, drug absorption, etc.

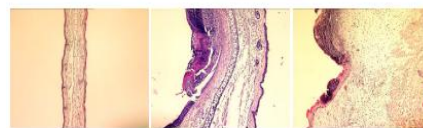
3. **Sepsis models:** We can create sepsis models with either cecal ligation and puncture method (CLP model) or systemic administration of pathogens or endotoxin. CLP model is considered a “gold standard” for sepsis research.



Infected 4 hrs

Infected 48 hrs (photo taken from severely infected area)

Pseudomonas aeruginosa infected mouse lung



Uninfected skin

Infected skin (strain: 8325)

Infected skin (strain: COL)

Staphylococcus aureus infected mouse skin in two strains