



Infectious Disease



Lovelace Biomedical is a **globally recognized leader in treatment and regulation against infectious diseases**. Our team conducts a full range of infectious disease studies under both Good Laboratory Practice (GLP) or non-GLP guidelines. We have the capability of exploring a variety of infectious diseases with our ABSL 1, 2, 3 & 3+ facilities. We integrate quality, leading-edge expertise, and an experienced and well trained staff to meet study goals.

Infectious Disease Models

Our infectious disease models are state of the art, allowing us to both explore the pathogenesis of disease as well as applying them to develop novel prevention and therapeutic strategies. Our professional staff has a vast experience in programs which include both **In Vivo** and **In Vitro components**. We use these methods, and other capabilities in order to fully understand the host's response to infection, and also evaluate new medical countermeasures against recurring and emerging biological threats. We strive to serve human health through the evaluation of vaccines, therapeutics and other countermeasures targeting infectious diseases.

Capabilities Include

- Production of highly characterized viral, bacterial and fungal challenge stocks for use in evaluation of medical treatments and countermeasures
- Viral and bacterial neutralization and clearance assays using standard titer techniques, serological assays, as well as PCR-based and immunofluorescence methods
- High-resolution histopathology, morphometry, in situ hybridization, and immunohistochemistry with epithelial cell markers for distinct lung cell populations



300,000

square feet of laboratory space



50+

cross-trained research technicians



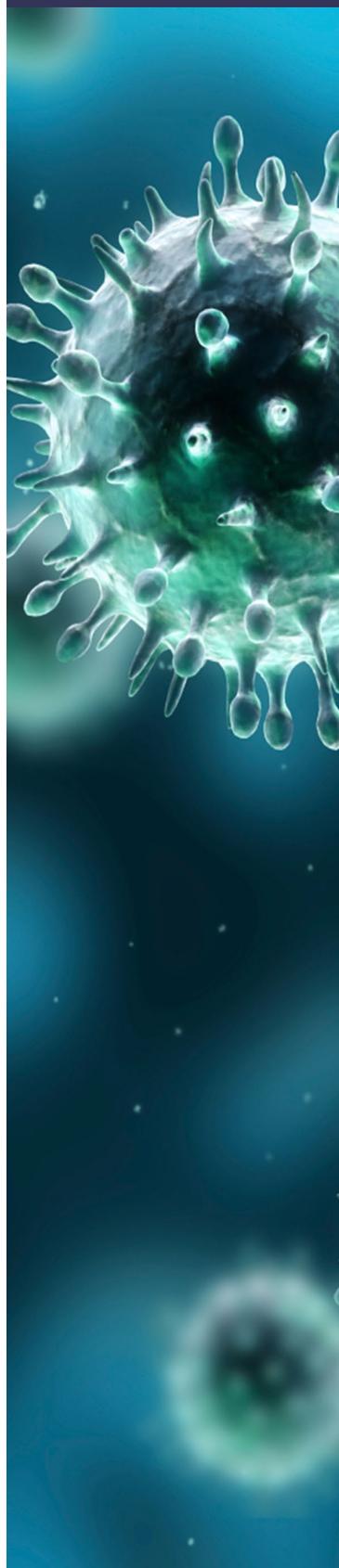
500+ staff

centralized in Albuquerque, New Mexico



70+ years

of toxicology experience



Agent	Mouse	Rat	Guinea Pig	Hamster	Rabbit	Ferret	NHP
Bacterial Models							
<i>Yersinia Pestis</i>	✓	✓	✓		✓		✓
<i>Bacillus anthracis</i>	✓		✓		✓		✓
<i>Francisella tularensis</i>	✓						✓
<i>Burkholderia pseudomallei</i>	✓						
<i>Pseudomonas aeruginosa</i>	✓	✓					
<i>Streptococcus pneumoniae</i>	✓						
<i>Haemophilus influenzae</i>	✓						
<i>Klebsiella pneumoniae</i>	✓						
<i>Staphylococcus aureus</i>	✓	✓	✓	✓			
Sepsis (MRSA, <i>E. Coli</i>)		✓	✓				✓
Additional MDR gram negative bacteria (Carbapenem-resistant Enterobacteriaceae, DR-N. gonorrhoeae, <i>Aceinetobacter</i> , <i>Campylobacter</i> , Vancomycin-resistant <i>Enterococcus</i> , DR <i>Salmonella</i> , <i>Shigella</i> , Group A/B <i>Streptococcus</i>)	✓	✓					
Viral Models							
Coronaviruses (SARS-CoV, 229E, OC43, NL-63)	✓	✓	✓	✓		✓	✓
Influenza (seasonal, recombinant, HPAI, LPAI)	✓	✓	✓			✓	✓
Adenovirus Sub Groups B,C,E	✓	✓	✓				
Rhinovirus Group 1&2	✓	✓					
Hantavirus				✓			
Rabies virus (aerosol, IM, IN)	✓						
Chikungunya virus (aerosol & SC)							✓
Orthopoxviruses (mousepox, vaccinia, rabbitpox, cowpox, monkeypox)	✓	✓			✓		✓
Respiratory Syncytial Virus (RSV)	✓	✓					✓
Dengue virus	✓						
Zika virus	✓						
Fungal Models							
<i>Candida albicans</i>	✓						
<i>Cryptococcus neoformans</i>	✓	✓	✓				
<i>Aspergillus fumigatus</i>			✓				