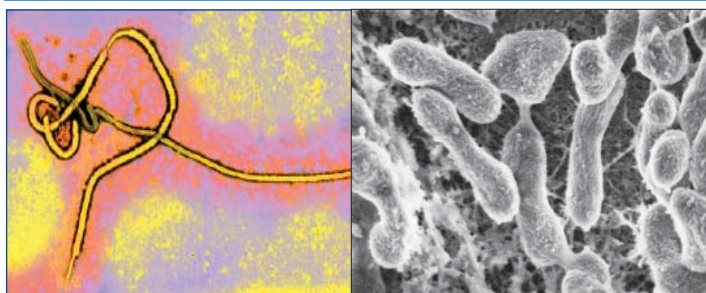


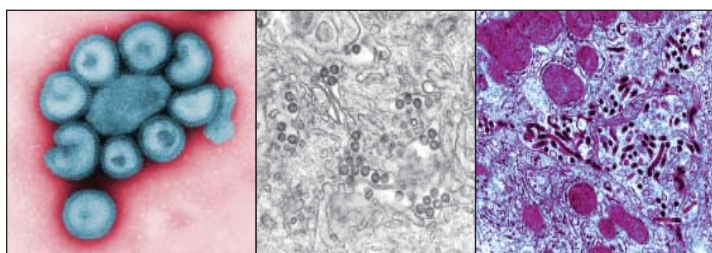
The Preclinical Studies Services Division in the Galveston National Laboratory (GNL) tests potential products for use in the fight against biodefense agents and emerging infectious diseases. Prior to testing in humans, candidate vaccines and other disease treatments are developed and tested extensively by researchers in a laboratory setting and then in different animal models. Data from these preclinical studies give researchers important information about how these products might respond in people, thus making preclinical testing an integral part of the discovery process for new diagnostics, therapeutics and vaccines in support of global health.

- ◆ Preclinical development is a stage of research during which important feasibility, iterative testing and safety data is collected.
- ◆ The main goals of preclinical studies are to determine a product's ultimate safety profile utilizing real time data compiled by these tests.
- ◆ Using minimally invasive techniques often combined in collaboration with other GNL services such as the animal support unit, this division has facilities for various infectious disease models.
- ◆ Division expertise includes surgical implantation of telemetric devices, as well as laparoscopic, endoscopic and ultrasound guided tissue biopsies.



GOALS

- Provide research support services related to the development of animal models, investigation of host-pathogen relationships, and testing of vaccines and therapeutics under various routes of challenge in a biocontainment environment.
- Train and maintain a highly skilled cadre of personnel with expertise related to the support of studies investigating animal models of important biothreat agents and emerging infectious diseases.
- Provide support for surgical implantation of telemetric devices, laparoscopic, endoscopic, and ultrasound guided tissue biopsies to provide real time data from vertebrate animal studies with minimally invasive techniques.
- Assist NIAID-funded biodefense investigators from institutions who need access to high containment animal models involving biothreat agents and emerging infectious diseases, but who lack appropriate facilities, technology or training.



PRECLINICAL EVALUATION

Health monitoring

- Clinical outcomes
- Body temperature
- Body weight

Veterinary Care/Treatment/Surgery

Inoculations/Infectious

- LD50, ED50, antiviral drugs, vaccines

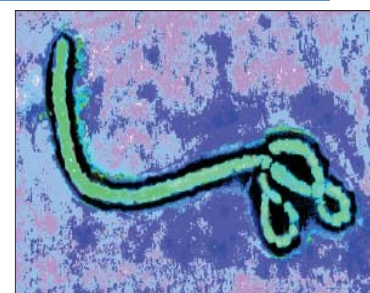
Blood collection

- Hematology analysis
- Blood chemistry

Necropsy

RESEARCH SUPPORT CAPABILITIES

- Experimental design
- Animal protocols
- IACUC protocols
- Established models for: VEEV, EEV, WEEV, Togaviridae, Arenaviridae, Filoviridae, Orthomyxoviridae and Bunyaviridae at the appropriate levels of biocontainment up to and including BSL4.
- Specialized training for investigators



CONTACT

ihii.web@utmb.edu