



BSL-3 Laboratory

BSL-3 LABORATORY AT THE UNIVERSITY OF TEXAS AT EL PASO

The Bioscience Research Building houses a newly constructed BSL-3 laboratory. The laboratory occupies 3,000 square feet that is divided into two independently operating East and West suites. This design allows for greater flexibility in research projects and maintenance. The East facility has two rooms for testing new therapies within animal models of human disease and a procedure room. The West facility has two sub-laboratories and a procedure room for infectious disease studies. Both venues have bench space and laboratory equipment to accommodate infectious disease projects.



DEPARTMENT OF BIOLOGICAL SCIENCES

The University of Texas at El Paso
500 West University Ave.
El Paso, Texas 79968

915.747.5844

www.utep.edu/biology





BSL-3 LABORATORY PROVIDES A SAFE WORKING ENVIRONMENT

Like all research projects, BSL-3 microbes may present a risk to the researchers and staff. The BSL-3 laboratory is designed specifically to provide a safe working environment to study these microbes. All BSL-3 laboratory workers will be trained on how to handle these pathogens safely by researchers with experience in this area. These scientists, who will wear appropriate protective clothing and equipment, will adhere to strict biosafety practices that require all handling of microbes to be done within biological safety cabinets or other physical containment devices located inside the laboratory. The facility incorporates special design and engineer-

ing features that restrict access, limit exposure to disease-causing microbes and prevent them from leaving the facility. All rooms are equipped with safety features, including air pressure monitors, a sterilizer to decontaminate all waste before it is incinerated, and fire alarms.

In this specially-designed work area, knowledgeable and well-trained staff will be able to study and test remedies for some of the complex diseases that afflict the people of this region.

PURPOSE OF THE BIOSAFETY LEVEL 3 (BSL-3) LABORATORY

The BSL-3 laboratory provides critically needed space to complement ongoing research activities on infectious diseases at The University of Texas at El Paso. Most research projects conducted in the Bioscience BSL-2 laboratories are focused on diseases that affect the El Paso – Juárez community, such as Chagas disease, giardia, human immunodeficiency virus (HIV), influenza, mycobacterium avium, and leishmania. The purpose of these projects is to gain an understanding of the biology of the microbes to develop novel and improved methods for diagnosing, treating and preventing these diseases.

The BSL-3 laboratory will allow these studies to be expanded to new pathogens that affect the borderland area. UTEP can now enlarge the scope of its infectious disease research to include studies on BSL-3 level microbes that cause diseases such as West Nile encephalitis, St. Louis encephalitis, yellow fever, hantavirus pulmonary syndrome, multi-drug resistant tuberculosis, and severe acute respiratory syndrome (SARS). New work in the laboratory will include basic and translational research with a focus on developing treatment and prevention strategies.

