
Infectious Disease Research at UTMB

The world-class infectious disease research programs of the University of Texas Medical Branch are breaking new ground in understanding the nature of infectious diseases, and are working to translate new research concepts into products aimed at controlling emerging infectious diseases and mitigating their effects on society. The programs of the **Institute for Human Infections and Immunity (IHII)**, led by director Dr. Scott C. Weaver, are the hub of infectious disease research at UTMB. The IHII's mission is to coordinate, facilitate and enhance the activities of UTMB's research centers and programs that focus on advancing the fields of infection and immunity.

Infectious disease research programs at UTMB include:

Galveston National Laboratory (GNL) and the Robert E. Shope, M.D. Lab: When opened in 2004, the Shope Lab in the John Sealy Pavilion for Infectious Disease Research was the first full-suit biosafety level 4 (BSL4) laboratory on a U.S. university campus. Today, the Shope Lab is joined by the new state-of-the-art GNL facility bringing total biocontainment lab space in the adjoining facilities to 96,000 ft. sq. Directed by Dr. James W. LeDuc, the GNL is one of the largest and most sophisticated infectious disease research facilities in the US, and is achieving an international reputation for its research capabilities.

Center for Biodefense and Emerging Infectious Diseases: The CBEID is a multi-disciplinary Center that builds on the strengths of more than 60 researchers from various UTMB departments. Led by Dr. David H. Walker, the CBEID works to reduce the vulnerability of the U.S. and the world to the threat of biological weapons, either in warfare or as agents of terror. The center also leads the Western Regional Center of Excellence in Biodefense and Emerging Infectious Disease Research (WRCE) – a key element in the nation's strategic plan for biodefense research.

Sealy Center for Vaccine Development: The mission of the SCVD is to create, perfect and promote the safest and most effective disease prevention strategies. The center focuses on researching the development and utilization of vaccines; developing public policy and education programs to foster vaccine acceptance; and training investigators in the field. Led by Dr. Alan D. T. Barrett, the SCVD is comprised of more than 70 faculty members representing a wide range of expertise in vaccinology.

World Health Organization Collaborating Center for Tropical Diseases: The mission of the WHO collaborating center is to alleviate suffering caused by tropical infectious diseases through the application of basic, applied and field research. The education programs of the center contribute to the scientific infrastructure for tropical infectious diseases research, and also aid others in understanding the importance of controlling these diseases. Led by Dr. David H. Walker, the center has received national and international recognition as a center of excellence for research on emerging tropical infectious diseases.

World Reference Center for Emerging Viruses and Arboviruses: The WRCEVA serves as a virus reference center for the world. Any zoonotic virus suspected of being biologically transmitted by arthropods or vertebrates is accepted for identification and characterization. Led by Dr. Robert Tesh, the center provides prompt analysis of disease outbreaks, as well as identification of new and emerging viruses to agencies around the world; it also serves the world research community with basic certification of arboviruses and arboviral reagents, providing a valuable service to the virology community at large.

McLaughlin Endowment for Infection and Immunity: The James W. McLaughlin Endowment was established in 1952 by Mr. A.C. McLaughlin in honor of his father with the intent of promoting training and educational activities in the fields of infection and immunity. Led by Dr. Ashok Chopra, the endowment primarily supports predoctoral and postdoctoral fellows, medical student fellowships, recruitment of new faculty and other programs.