



STCEID

South Texas Center for Emerging Infectious Diseases

The Mission of The South Texas Center for Emerging Infectious Diseases is to advance the fields of Microbiology, Immunology, and Infectious Diseases through Research, Education, and Collegial Interaction.

The South Texas Center for Emerging Infectious Diseases (STCEID) was established to focus state and national attention on UTSA in the fields of molecular microbiology, immunology, medical mycology, virology, microbial genomics, vaccine development and biodefense. One of the major areas of emphasis at STCEID is on the pathogenic mechanisms of emerging infectious diseases.

UTSA has assembled an impressive group of researchers who specialize in the study of infectious diseases creating one of the premier centers for this type of research in the nation. State-of-the-art facilities –including high-level biological containment, extensive infectious disease animal modeling, high throughput drug and genomic screening, and immunological profiling– and the diverse expertise of the STCEID faculty provide an excellent environment to answer critical questions relating to emerging and bioweapon-related diseases.

The facilities and faculty at the Center serve a very important role in providing hands-on training to undergraduate and graduate students who intend to pursue careers in science and technology. The Department of Molecular Microbiology and Immunology offers Bachelor of Science and Doctoral degrees in Microbiology and Immunology. The Department of Integrative Biology houses the Biology M.S. program which offers a thesis option with an emphasis in Microbiology and Immunology.

STCEID Research Expertise

- ☀ Autoimmune Disease
- ☀ Biodefense
- ☀ Bioinformatics
- ☀ Drug Discovery and Development
- ☀ Host-Pathogen Interactions
- ☀ Immunology
- ☀ Immunopathology
- ☀ Microbial Genomics
- ☀ Microbiology
- ☀ Neuroinflammation
- ☀ Parasitology
- ☀ Pharmacology
- ☀ Vaccine Development
- ☀ Vector-Borne Diseases
- ☀ Virology

STCEID Resources

- ☀ Two licensed ABSL-3 Facilities
- ☀ Two certified ABSL-2 Facilities
- ☀ Cell Analysis Core
- ☀ Genomics Core
- ☀ High Performance Computing
- ☀ Infectious Diseases Animal Modeling / Humanized Mice
- ☀ Laboratory Animal Resources Center
- ☀ Mass Spectrometry & Proteomics Core
- ☀ Multi Photon Microscopy Suite
- ☀ Stem Cell Core
- ☀ Partnership with Texas Biomedical Research Institute
- ☀ Partnerships in Global Infectious Diseases

STCEID Members

Hamid Badali, Ph.D.

Assistant Professor of Research

Research: antifungal screening, drug development

Astrid Cardona, Ph.D.

Professor of Immunology

Research: neural immunology

James Chambers, Ph.D.

Professor of Biochemistry

Research: biosensors, bacterial pathogens

Mark Eppinger, Ph.D.

Associate Professor of Microbial Genomics

Research: bioinformatics, microbial genomics

Thomas Forsthuber, M.D., Ph.D.

Professor of Immunology

Research: autoimmune disease

Neal Guentzel, Ph.D.

Professor of Microbiology

Research: microbial pathogenesis and immunology

Kirsten Hanson, Ph.D.

Assistant Professor of Biology

Research: host-parasite interactions

Hans W. Heidner, Ph.D.

Professor of Virology

Research: alphaviruses

Chiung-Yu Hung, Ph.D.

Associate Professor of Microbiology and Immunology

Research: host-pathogen interactions

Karl Klose, Ph.D.

Professor of Microbiology

Research: bacterial pathogenesis

Soo Chan Lee, Ph.D.

Assistant Professor of Biology

Research: host-human pathogenic fungi interactions

Jose Lopez-Ribot, Pharm.D., Ph.D.

Professor of Microbiology

Research: pathogenesis of candidiasis

Rahul Raghavan, Ph.D.

Associate Professor

Research: microbial genomics

Jesús A. Romo, Ph.D.

Assistant Professor

Research: fungal-bacterial interactions

Stephen Saville, Ph.D.

Associate Professor of Genetics

Research: fungal pathogen *Candida albicans*

Janakiram Seshu, Ph.D.

Professor of Bacterial Pathogenesis

Research: host-pathogenic bacteria interaction

Yufeng Wang, Ph.D.

Professor of Bioinformatics and Computational Biology

Research: comparative genomics, molecular evolution, systems biology

Jieh-Juen Yu, Ph.D.

Associate Professor of Research

Research: bacteria-host interactions

Guoquan Zhang, DVM, Ph.D.

Professor

Research: aerosolized intracellular bacterial pathogens

Yan Zhang, Ph.D.

Associate Professor of Research

Research: host cell-microbial pathogen interaction

