

Interdisciplinary Life Sciences Building

Focus Areas

The Interdisciplinary Life Sciences Building (ILSB) was designed for research investigation in many different areas of interest in the life sciences. Currently, the facility focuses on three general subject areas—bioinformatics, neuroscience, and structural biology. These are prominent areas in the national and international research communities, interconnected, and have the potential for advancement of human health and the life sciences as a whole.

Bioinformatics

Bioinformatics is a critical technology for neuroscience and structural biology, as well as other areas of life sciences research. The breadth of bioinformatics research ranges from complex multivariate analysis techniques for interpretation of complex data sets to molecular dynamics simulations and density functional quantum calculations on complex macromolecules.

Neuroscience

Neuroscience researchers at Texas A&M are pursuing interdisciplinary projects that focus on aging, learning and memory, neurodegeneration, addiction, and biological rhythms, among others. These topics require expertise at multiple levels, from genes and biochemistry, to cells and systems, to behaviors and outcomes.

Structural Biology

Structural studies are often at the heart of interdisciplinary endeavors. The goal of structural biology is to develop a molecular-level understanding of structure-function relationships, to understand the structural changes introduced by chemical modifications, and to understand how those changes affect the biology of the organism in which they occur.



The \$100 million Interdisciplinary Life Sciences Building—one of the largest construction projects in the history of Texas A&M—is home to first-class researchers who are pursuing some of the most complex and challenging areas of inquiry in the life sciences.

Contact

Mr. Richard Colson
ILSB Operations Manager
Division of Research
979.458.5755
rcolson@tamu.edu



TEXAS A&M UNIVERSITY
Division of Research

Core Services

The ILSB is home to several core services that provide centralized access to several facilities that are indispensable to the progress of the research conducted there.

Laboratory for Biological Mass Spectrometry

Because of its experimental versatility, mass spectrometry plays an increasingly important role in human health-related research, spanning disciplines as diverse as structural biology and clinical diagnosis. This new generation of instrumentation is available only at a handful of academic institutions, none of which are located in this region

Microscopy and Imaging Center

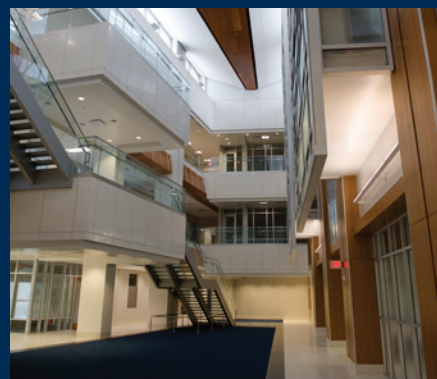
The Microscopy and Imaging Center (MIC) supports research and education by providing current and cutting-edge technologies in microscopy and related imaging for the life and physical sciences on the Texas A&M campus and beyond. The Center promotes cutting-edge research in basic and applied sciences through research and development activities, as well as quality training and education through individual training, short courses, and formal courses that offer credit.

X-Ray Diffraction Laboratory

The X-Ray Diffraction Laboratory enables X-ray crystallography studies that aid ILSB's researchers in efforts such as virtual screening for designing new drugs and structure-based drug design.



On the Inside



The ILSB includes approximately 220,000 gross square feet of space for research laboratories, teaching, and related activities. The building houses:

- around 30 robust, flexible laboratories;
- meeting, seminar, and lecture rooms;
- core support facilities;
- computational equipment and spaces to support informatics activities;
- a 285-seat auditorium and associated auxiliary space; and
- space to house operational staff.

The building's central location makes it readily accessible to both Texas A&M's main and west campuses.

LEED Certification

Leadership in Energy & Environmental Design (LEED) is a green building certification program that recognizes best-in-class building strategies and practices. The ILSB was awarded a gold certification for its numerous green building strategies.