

Texas A&M Institute for GENOME SCIENCES AND SOCIETY

An innovative program that has the potential to vastly improve the lives of humans and animals and to advance agricultural productivity by leveraging one of Texas A&M's strengths: collaboration by outstanding faculty, students and staff from several disciplines to address real-world issues.

The Texas A&M Institute for Genome Sciences and Society (TIGSS) functions as a virtual institute to unite and support scientists and trainees with cutting-edge core facilities supporting life sciences and biomedical research technologies to improve human, animal and environmental well-being.

LET US HELP YOU MAKE YOUR RESEARCH AS EASY AS 1, 2, 3.

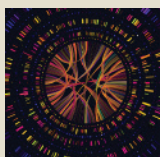
1



TPPC

- Behavior
- Metabolic/ Skeletomuscular
- Cancer/Cardiovascular
- Histology
- Clinical Chemistry

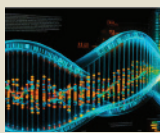
2



Genomics Core

- Optical Genome Mapping, Microarray, NGS
- Single Cell/Nuclei, Spatial gene expression assays
- Long read sequencing (ONT, Revio)

3



Bioinformatics

- Bulk, single-cell, and spatial RNA-seq data analysis
- Genome assembly and annotation; variant calling
- Metagenomic and metabarcoding data analysis

TIGSS CORE FACILITIES:

► Texas A&M Preclinical Phenotyping

Core (TPPC) houses various instruments to measure and quantitate animal physiology and behavior. Our team can help guide you at every step in your translational research. At the planning stages, we provide consulting to determine the optimal molecular, physiological and behavioral assays to address your research goals. We maintain a wide suite of equipment supporting metabolic, immune, skeletomuscular, cancer, cardiovascular, inhalation toxicology and behavioral assays for detailed phenotyping of mouse models. The TPPC houses 30+ state-of-the-art equipment for all your post-genomic research needs.

► Genomics Core

offers a wide array of services, including DNA/RNA analysis, tissue-level and single cell/nuclei resolution Next Generation Sequencing Services, Optical Genome Mapping and Microarray analysis. Additionally, we provide expert consultation to assist with experimental design and offer training for those interested in learning more about NGS methods. Our facility is equipped with over 25 cutting-edge instruments, ready to support your research needs.

► Bioinformatics

TIGSS' bioinformatics Research Scientists provide consulting services for institutional, clinical and commercial clients for a wide variety of gene expression and genomics applications. Gold-standard open-source software is used to develop custom analysis pipelines. Guidance is available from experimental design all the way through the creation of publication-quality figures.

WHAT'S NEW:



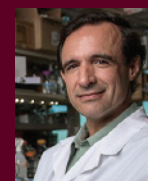
Whole-Body Inhalation Chambers



10x Genomics CytAssist



Single Cell Analysis



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Services and Society

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