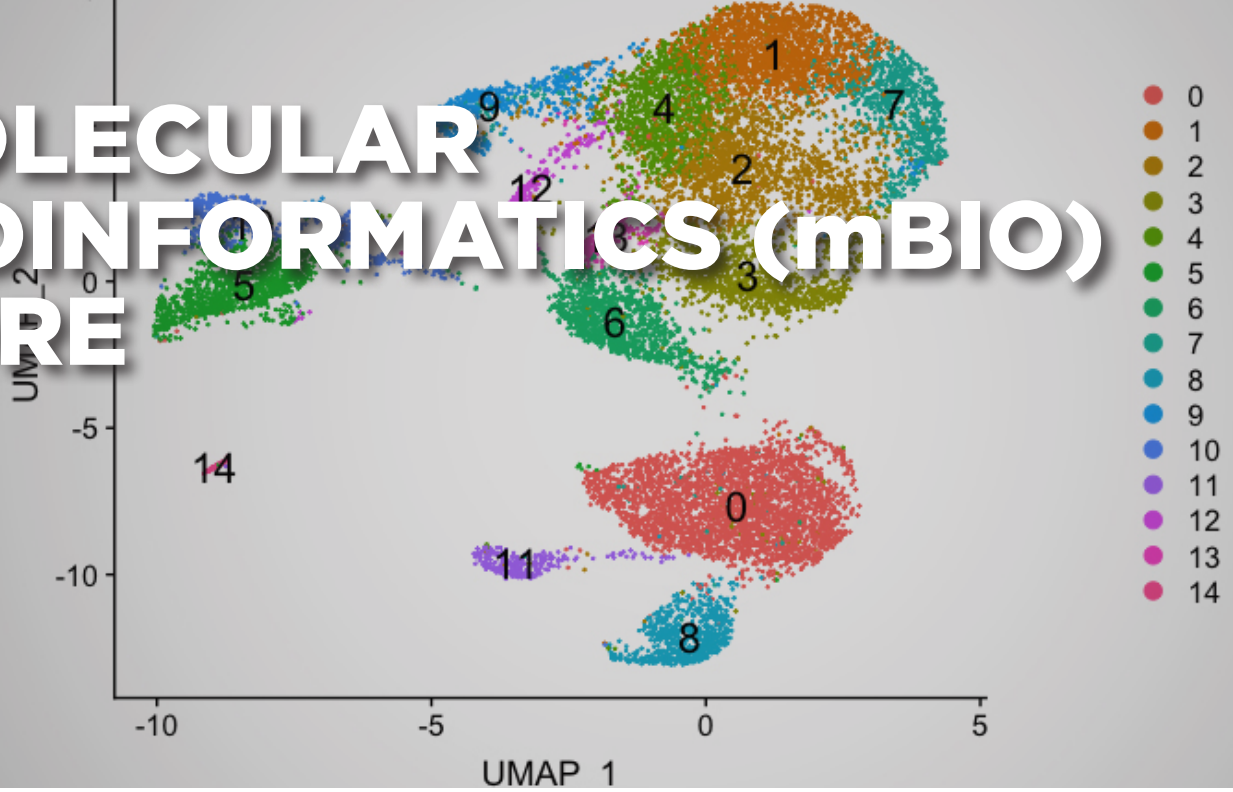


MOLECULAR BIOINFORMATICS (mBIO) CORE



The mBIO Core provides the latest technologies, workflows, and standards for analyzing molecular data to researchers on all UTHSC campuses. It complements the services offered at the Molecular Resource Center (MRC), and the Proteomics and Metabolomics Core (PMC) allowing one-stop data generation and analysis.

SERVICES

The mBIO Core offers consultation services during the experiment design phase and performs data analysis after raw data are generated. Services include sequence assembly, sequence alignment, differential expression analysis, and custom software designs. Expertise is also available related to protein structure/function prediction and proteomics/metabolomics.

EQUIPMENT AND SOFTWARE

The mBIO Core maintains four AMD 16-core blade servers to offer researchers the computational power needed to handle the terabytes of next-generation sequencing (NGS) data that is generated every year. Long-term data storage is available as a fee for service. Additional software includes availability of site licenses for Prism statistics software by GraphPad.

The mBIO Core also provides frequent workshops and hands-on training opportunities for PIs, postdocs, and UTHSC students who are interested in learning the software, analysis pipelines, and statistics needed to perform bioinformatics analysis independently.

STAFF



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Dr. Johnson earned his BS in Computer Science and Mathematics, his MS in Computer Science, and his PhD in Molecular

Biosciences at Arkansas State University. He was previously the lab manager for Arkansas State University's bioinformatics program.

He has experience in analysis of microarray data and next-generation sequencing gene expression, including RNAseq, ChIPseq, whole exome sequencing, and in managing and querying electronic medical records.

Dr. Johnson has published multiple papers in the field of bioinformatics, focusing on differential expression analysis and protein structure prediction. He joined the UTHSC team in 2015.

For more information:

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uthsc.edu/research/institutional-cores/mbio/