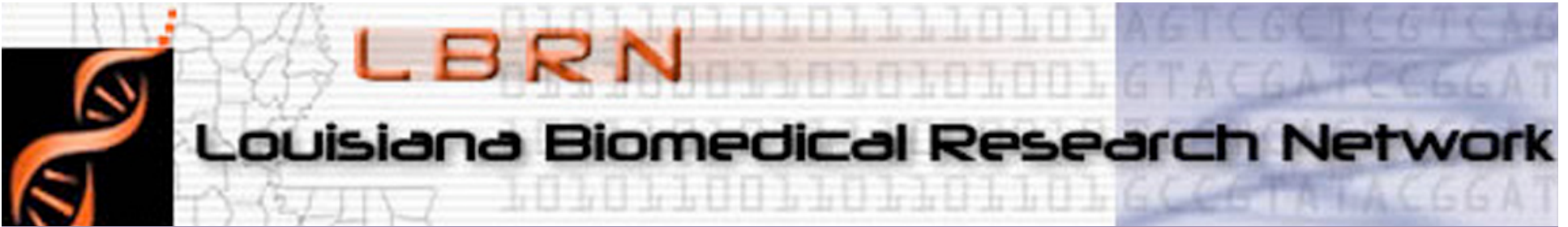




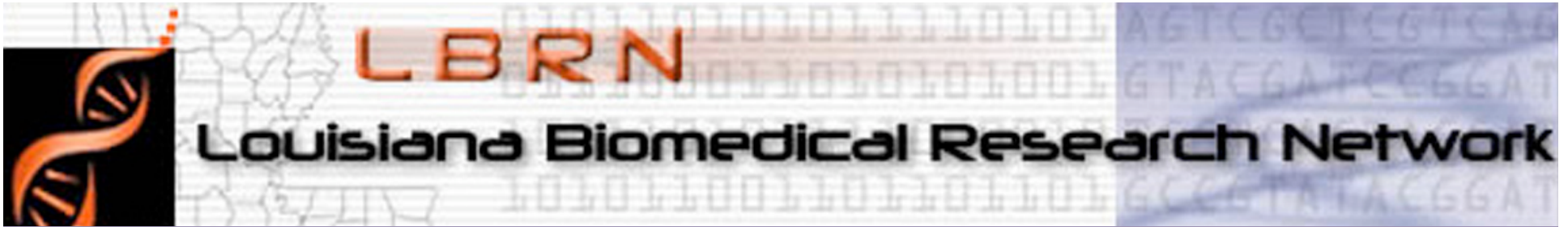
# PetaShare All Hands Meeting

March 3, 2008



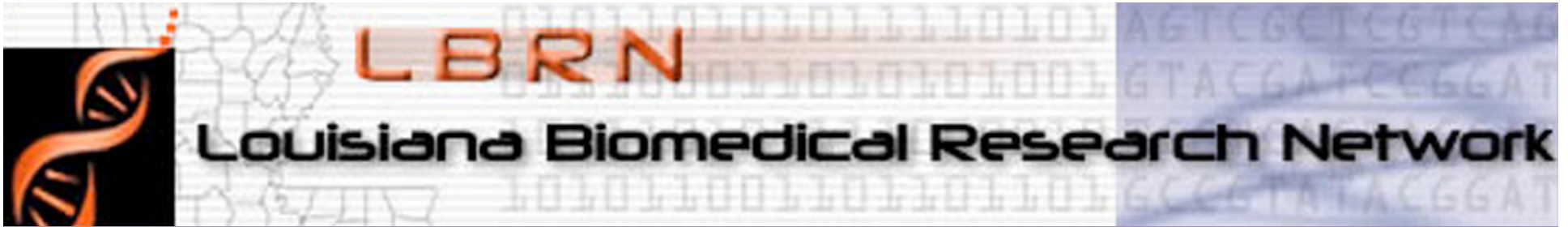
# Overview

- LBRN Overview
- LBRN/PetaShare Resources
- LBRN Research



## What is LBRN?

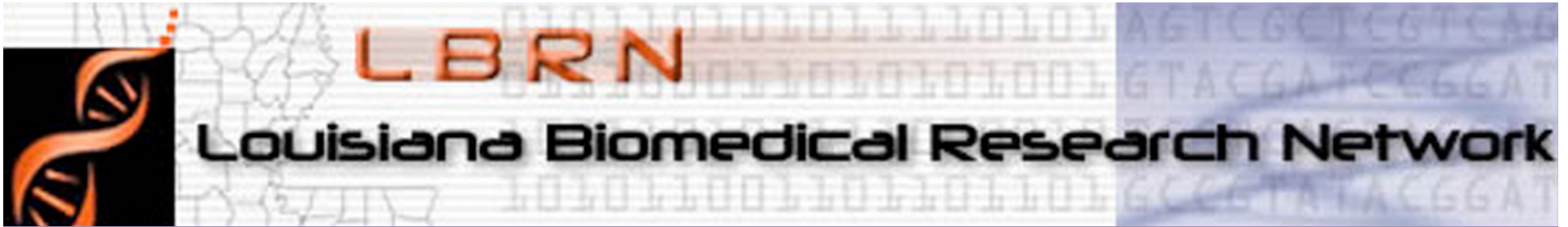
- NIH Funded
- National Center for Research Resources
- IDeA Program



- Goal  
Link Institutions across Louisiana
- Participating Institutions  
LSU, LSU HSC, SUBR, LSU-S, LA Tech, and  
ULM,
- Outreach Partners  
All PUI institutions in the state

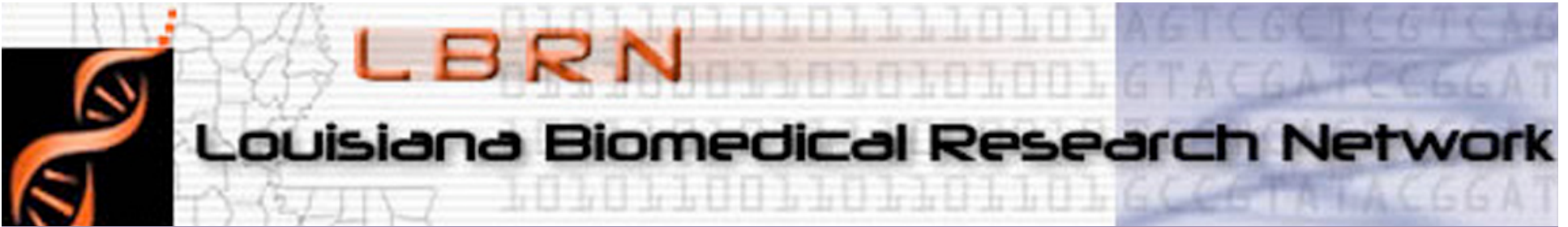






## Program Activities

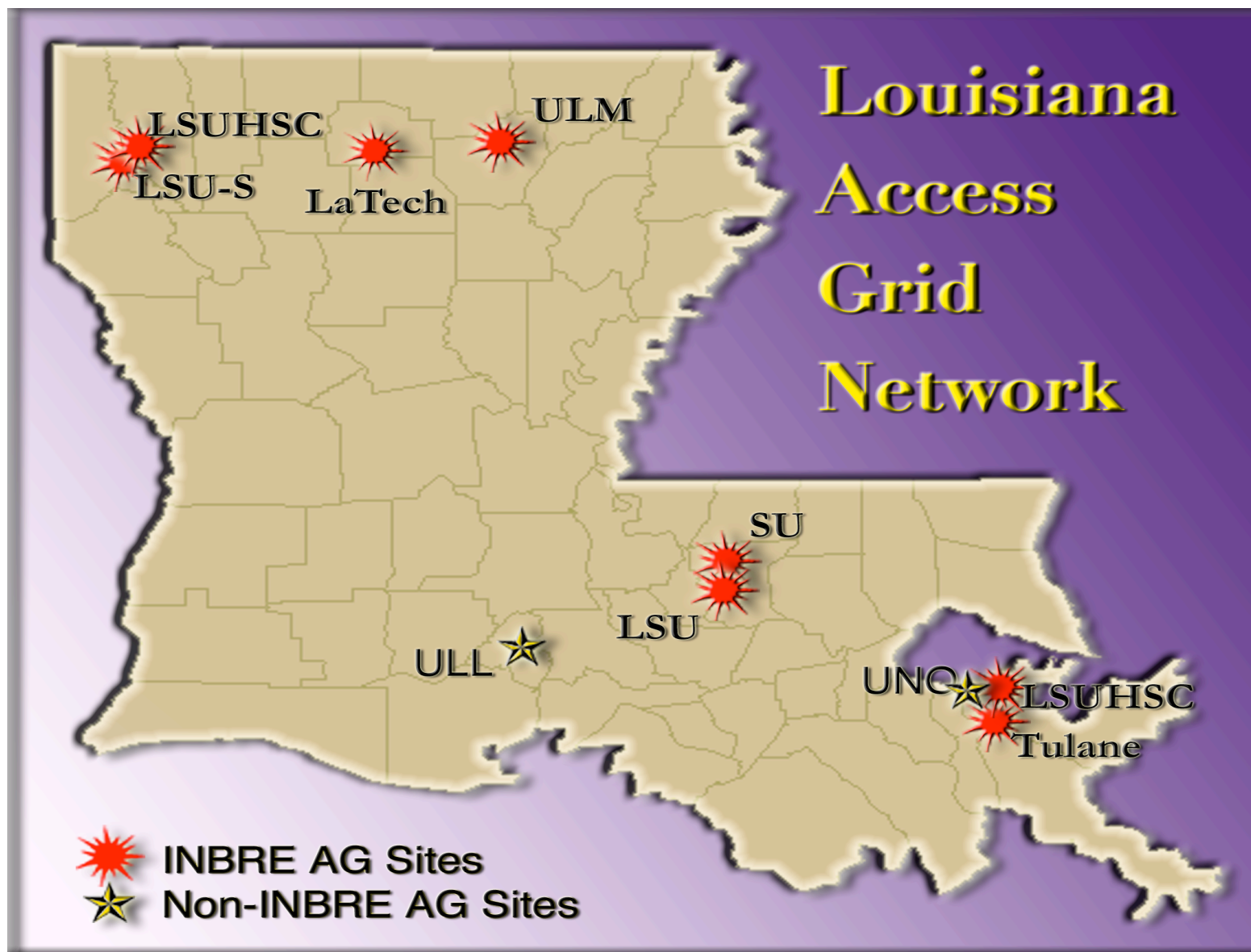
- Infrastructure Enhancements
- Research Programs/Collaborations
- Workshops



## Infrastructure Enhancements

- Laboratory Enhancements
- Access Grid Nodes
- Networking
- Storage

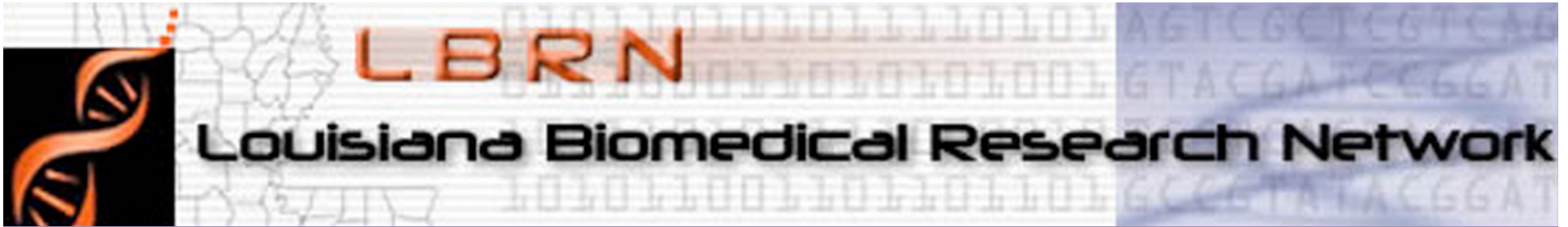




LBRN Storage  
43.2 Terabytes

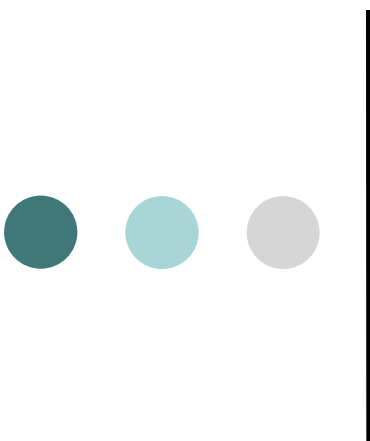






## LBRN Research

- Sumeet Dua, La Tech
- Marjan Trutschl, LSU-S
- Urska Cveck, LSU-S
- Sanjay Kodiyalam, LSU

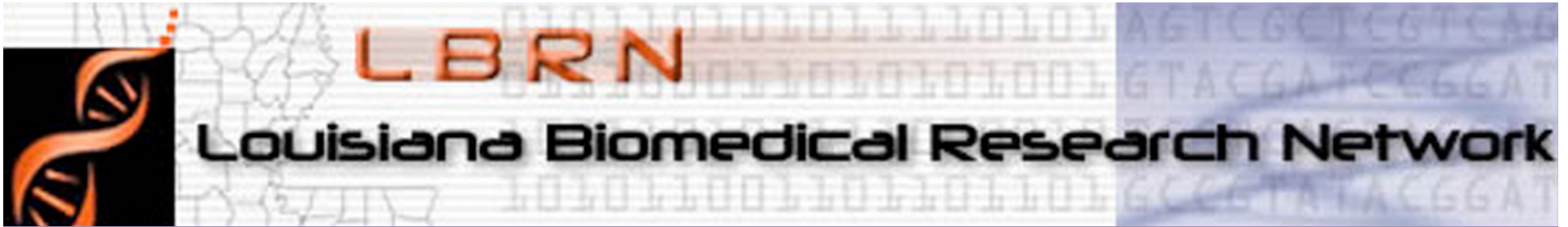


# Data Mining based dimensionality reduction for bioinformatics discovery

Mentee: Sumeet Dua, Upchurch Associate Professor  
Louisiana Tech University

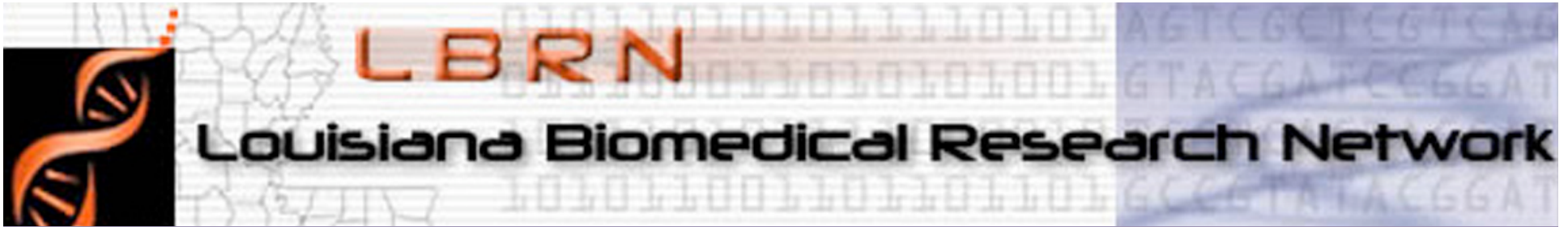
Mentor: Hilary W. Thompson, Ph.D.  
Louisiana State University Health Sciences Center





# Visual and Analytical Tools for Cluster Analysis

- Project Investigator: Urska Cvek, Sc.D., MBA
  - » Department of Computer Science, LSUS
- 
- Mentors: John Clifford, Ph.D.
  - » Department of Biochemistry and Molecular Biology, LSUHSC-S
- 
- Gabrielle Allen, Ph.D.
  - » Center for Computation and Technology, LSU



# Neural Network Enhanced Visualization of High-Dimensional Data

**Project Investigator: Marjan Trutschl, Sc.D.**  
Department of Computer Science, LSUS

**Mentor: Robert Rhoads, Ph.D.**  
Department of Biochemistry and Molecular

Biology, LSUHSC-S



# Large-scale Finite Element Modeling of the Optic Nerve Head

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**Sanjay Kodiyalam**

Biological Sciences, LSU

**Mentors:**

**J. Crawford Downs and Claude F. Burgoyne**

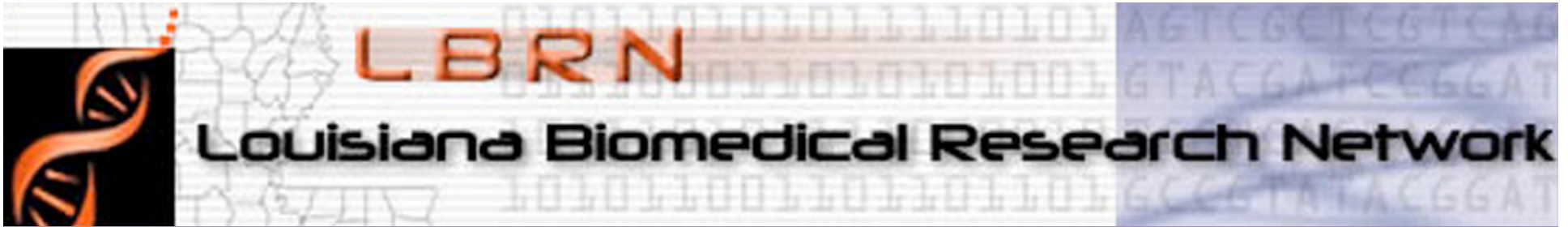
Devers Eye Institute, Portland, OR

**Rich T. Hart**

Biomedical Engineering, Ohio State University

**Donald P. Gaver**

Biomedical Engineering, Tulane University



# Future Data Types/Issues

Medical Data, HIPAA Compliance  
Systems Biology, combining datasets



**LBRN**

**Louisiana Biomedical Research Network**

