



## Genomics and Bioinformatics Facility

Our state-of-the-art functional **Genomics and Bioinformatics Facility** provides the following services:

- Coordinates gene expression experiments utilizing microarray technology
- Provides RNA quality assessment
- Provides Real Time PCR training and troubleshooting
- Compiles and archives generated data
- Performs statistical and bioinformatics analyses

Microarray services include:

- Choice of **CodeLink** Whole Genome arrays or **Applied Biosystems** Genome Survey arrays
- RNA quality assessment
- Labeled cRNA synthesis
- Array hybridization, staining, washing
- Image acquisition and processing
- Expression confirmation via Real Time PCR
- Standard and advanced statistical and bioinformatics analysis of array data

Other services include:

- Total, polyA or microRNA quality assessment by Agilent Bioanalyzer
- Real Time PCR training on AB 7900HT – 96 well or 384 well low density array format

In addition, in order to model, understand and ultimately engineer at the molecular level the dynamic relationships among biological molecules that define living organisms, the core facilitates interaction by developing **Systems Biology**-related technologies (microRNA quantification, actively translated polysomal mRNA isolation) to generate a panoramic overview of gene expression in target tissues. This takes advantage of our cross-disciplinary expertise in Genomics, Biostatistics, Bioinformatics and Engineering.

Please visit our website: <http://cerh.tamu.edu/genomics/>  
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