# COLLABARRAY: A STORAGE AND COLLABORATION UTILITY FOR GENE EXPRESSION-BASED RESEARCH

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Gene expression-based technologies are utilized in nearly every aspect of modern research and have vastly increased our understanding of biological processes. Technologies such as microarrays and quantitative PCR generate extremely large datasets that can be difficult to manage. Additionally, the scope of the associated research projects often involve the collaboration of many scientists. Since gene expression experimental data can be functionally difficult to share and organize among groups of collaborators, we have created CollabArray to facilitate this type of data management. CollabArray is a central, user-friendly storage and collaboration utility for microarrays and other gene expression-based research methodology. It is designed to allow the storage of experiments, to support the creation of user groups to share and contribute common datasets, and to allow for direct export to NCBI's (National Center for Biotechnology Information) GEO (Gene Expression Omnibus). The operation of CollabArray employs similar concepts used in social networking tools in order to create a familiar, easy-to-use, web-based data sharing environment. Data submitted to CollabArray must be MIAME compliant and is organized by sample, experiment, or groups of experiments. The system also provides extended annotation of genes and information related to the submitted experiments through the use of the National Center for Biomedical Ontology's (NCBO) web annotation tool. CollabArray is an open-source project that is currently in alpha revisions, but will be made publicly available upon completion. The system can currently be accessed at http://www.collabarray.org