

ABSTRACT

Genomic and expression data has increased dramatically over the last several years. This is primarily due to the completion of the human genome project as well as an upsurge in the use of various high throughput technologies. Recent attempts to correlate genomic and expression data have stimulated the scientific community to determine how this data can be used within a clinical setting.^{1,2} LARALink (Loci Analysis for Rearrangement Link) is a database driven web application that utilizes several public datasets to analyze clinical cytogenetic data to identify candidate genes. LARALink allows UniGene clusters or SNPs (Single Nucleotide Polymorphisms) to be queried for multiple patients by cytoband, chromosome marker or base pair. The results can be further refined with the use of an anatomical site, developmental stage, pathology or cell type expression filter. Once a set of UniGene clusters (expressed genes) has been identified either for a single patient or a shared region among multiple patients, the expression distribution profile, EST's (expressed sequence tags) or OMIM (Online Mendelian Inheritance in Man) entries are displayed. The utility of this tool is shown by its application to both research and clinical medicine.

LARALink is a public resource available at: <http://laralink.bioinformatics.wayne.edu:8080/unigene>.