

Some useful websites for analysis of gene expression data:

Web-based tool for running various tests on microarray data eg. Single-factor ANOVA, PCA, hierarchical clustering, etc (free registration):
<http://lgsun.grc.nia.nih.gov/ANOVA/>

Obtaining Significant Analysis of Microarrays (free registration for academic users):
<http://www-stat.stanford.edu/~tibs/SAM/>

Web-based tool for statistical analysis of genomic data sets using Gene Ontology (free registration):
<http://www.genetools.microarray.ntnu.no/egon/index.php>

A listing of various tools for obtaining statistically significant Gene Ontology terms from lists of genes:
www.geneontology.org/GO.tools.shtml
<http://www.geneontology.org/GO.tools.microarray.shtml>

An Affymetrix web-site for exporting annotation and ortholog information, etc, for lists of probes/genes (free registration):
https://www.affymetrix.com/analysis/netaffx/batch_query.affx

A web-based feature for integrated access to gene and microarray feature information freely available from public databases:
<http://www.genecruiser.org>

Building gene networks and obtaining significant biological functions and pathways represented in various lists of genes from microarray/proteomics data (paid subscription, but free trial period):
<http://ingenuity.com/>

A web-based tool for quickly building Venn diagrams to compare and contrast up to four lists (free):
<http://www.pangloss.com/seidel/Protocols/venn.cgi>

A web-based tool for comparing a user's up- and down-regulated genes with those from cultured human cells (mostly breast cancer cell lines) treated with small molecule FDA-approved drugs. Only probes from human Affymetrix chips are recognized (free registration):
<http://www.broad.mit.edu/cmap/index.jsp>

Cheng Li's website with information regarding dCHIP and downloading various updated versions of this software:
<http://www.hsph.harvard.edu/biostats/complab/dchip/>

Free microarray analysis software that includes all of the initial normalization and clustering tools

<http://www.tigr.org/software/microarray.shtml>

Genecluster 2.0: a free tool for constructing self organizing maps

<http://www.broad.mit.edu/cancer/software/genecluster2/gc2.html>

The Database for Annotation, Visualization and Integrated Discovery (DAVID) a set of functional annotation tools for investigators to understand biological meaning behind large list of genes

<http://david.abcc.ncifcrf.gov/>

Marc Vidal's Interactome website

http://vidal.dfci.harvard.edu/resources_index.htm

KEGG: Kyoto Encyclopedia of Genes and Genomes.

Functional/pathway/metabolomic database

<http://www.genome.jp/kegg>

The site for all things to do with Serial Analysis of Gene Expression

(SAGE) <http://www.sagenet.org/>

The Allen Brain Atlas showing in situs of thousands of probes to cross

sections of the mouse brain, <http://www.brainatlas.org/aba/>

The EMAGE database. The UK database of mouse in situ hybridizations

<http://genex.hgu.mrc.ac.uk/Emage/database/emageIntro.html>

Array vendors

<http://www.affymetrix.com/index.affx>

<http://www.nimblegen.com/>

<http://www.illumina.com/>

<http://www.chem.agilent.com/Scripts/PCol.asp?IPage=494>

Non-coding RNAs

<http://www.ambion.com/>

<http://www.lcsciences.com/>

<http://www.exiqon.com/>

Sanger database of microRNAsmicroma.sanger.ac.uk