

## **PantherDB**

Web tool: <a href="http://software.broadinstitute.org/gsea/index.jsp">http://software.broadinstitute.org/gsea/index.jsp</a>

Panther Tools: Gene List Analysis tab

- 1) Cut/paste DE gene list (upregulated genes or down or both) e.g. padj < 0.05, log2FC > 0 (up), baseMean > 5 (expressed)
- 2) Select organism (human)
- 3) Select statistical overrepresentation test and annotation set (GO-slim or pathway DB)

Page 2: As a reference list, select Default whole-genome list: Homo sapiens

Page 3: Default Test Type (Fisher's Exact)

Default Correction (Calculate FDR)

Launch Analysis

## Results:

Table showing gene sets (GO terms, pathways) with FDR<0.05 To see list of genes for each row, click the number under Client Text Box Input, column '#'  $\rightarrow$  can send list to file