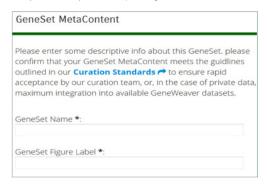


A system for the integration of functional genomics experiments.



1. UPLOAD GENE SETS

- Go to Manage GeneSets and select "Upload GeneSet"
- Describe your data
- Upload or paste in your gene list



- Under "Reference Info" enter a PubMed ID if available
- Click on Review GeneSet Upload

SEARCH FOR GENE SETS

• Locate the search tool on the home page or via the magnify glass icon



- Limit search fields by GeneSet, Genes, Abstract or Ontologies
- After results are retrieved you can further refine by curation tier, species or attribution

2. CREATE PROJECTS

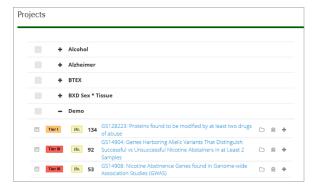
- Check box beside gene sets of interest.
- Create a new project or add gene sets to an existing project using the menu Add Selected to Project
- Search for more gene sets and add them to your projects.
- Locate projects on the Analyze GeneSets page

OR

OR

VIEW PROJECTS & TOOLS

View your gene sets on the "Analyze Genesets" page, rename or delete them. Select projects or sets and analyze



ANALYZE GENE SETS (Under Analyze GeneSets click on one of the following tools.)



HiSim Graph Bicliquebased analysis is used to generate hierarchical maps of aene set intersections.



GeneSet Graph Visualize the Gene-GeneSet graph.



Overlap Computes the Jaccard Coefficient la measure of similarity) for multiple genesets.



GeneSet Clustering Jaccard Distance (a measure of dissimilarity) is used to cluster GeneSets.



ABBA Gene-

Centered Search Find the genes most closely associated with your gene(s) of interest.



Boolean Algebra Use advanced set logic to integrate multiple GeneSets.



Combine **GeneSets** Advanced tool to combine multiple GeneSets into a single association matrix.

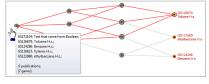


Advanced tool for performing enrichment tests for hypothesis driven GeneSet comparison.

4. INTERPRET & ANNOTATE RESULTS

Click on any gene set interaction to:

- A. Refine and export your result.
- Select a node



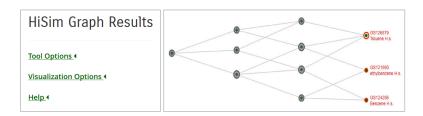
 Choose external link



View result



- B. Modify and export your result.
- Click Tool Options link in the menu to alter levels or number of genes displayed.
- Click Visualization Options link in the menu to highlight genes or export as a PDF, SVG or PNG.



5. USER GROUPS & SHARING DATA

USER GROUPS

To store projects in GeneWeaver, users must first create an account by providing a username and password.

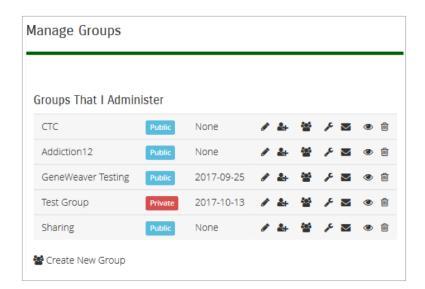
AVAILABILITY

When uploading gene sets onto GeneWeaver (see Step 1), users have the option of making gene sets public, private or available to only members of a specific group.

SET UP A GROUP

If you are a registered user on GeneWeaver, you can create groups on the **Accounts Settings** page. A list of your groups is shown. Click on **Create**New Group enter the new group name and hit

Create. You may use this tool to add members or assign additional administrator privileges. Click on the X icon to exit a group. Click on the people/ groups icon to see the other members of groups that you belong to.





MORE INFORMATION

See Introduction to GeneWeaver: www.geneweaver.org, or see GeneWeaver Interactive Help: www.geneweaver.org/help

Acknowledgements: GeneWeaver was initiated by the NIAA integrative Neuroscience Initiative on Alcoholism (U01AA13499, U24AA13513) and supported by NIH R01AA018776 jointly funded by NIAA and NIDA