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

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

3. **ANALYZE GENE SETS**
   - (Under Analyze GeneSets click on one of the following tools.)
   - **HiSim Graph**
     - Biclique-based analysis is used to generate hierarchical maps of gene set intersections.
   - **GeneSet Graph**
     - Visualize the Gene-GeneSet graph.
   - **Jaccard Overlap**
     - Computes the Jaccard Coefficient (a 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.
   - **MSET**
     - Advanced tool for performing enrichment tests for hypothesis driven GeneSet comparison.

**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

**VIEW PROJECTS & TOOLS**
View your gene sets on the “Analyze GeneSets” page, rename or delete them. Select projects or sets and analyze
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.

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**MORE INFORMATION**

See Introduction to GeneWeaver: [www.geneweaver.org](http://www.geneweaver.org), or see GeneWeaver Interactive Help: [www.geneweaver.org/help](http://www.geneweaver.org/help)

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