List Generator (Venn Diagram)

Introduction

Partek Flow has a *List generator* function that allows you to investigate unique and common features between different lists within a project. These can be visualized in a Venn diagram consisting of up to five sets.

Filtering Lists

Feature lists can be generated by RNA-Seq tasks such as GSA and ANOVA. Filter your feature lists as needed. In the example below, three feature lists were generated by filtering the same multivariate GSA result on three different contrasts. Each filtered list appears as its own layer on the *Analyses* tab.
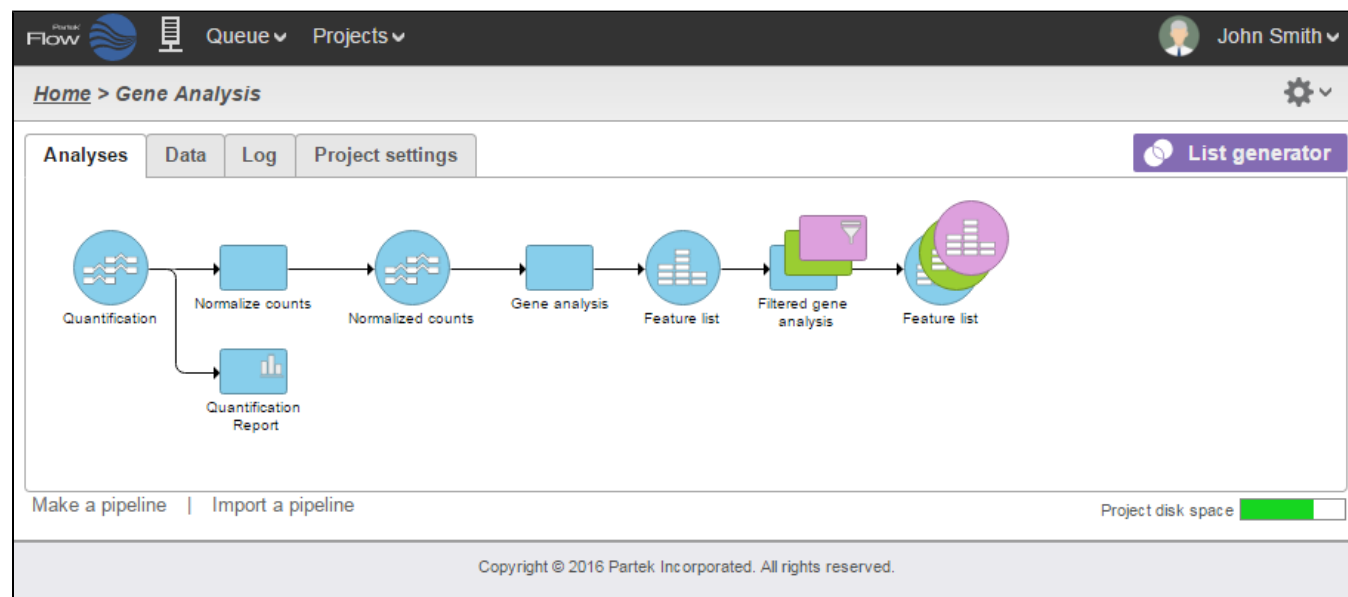

Figure 10. Project with multiple gene lists

Selecting Lists for Venn Diagram

To invoke the Venn diagram, click the **List generator** button. This brings up the list selector window. Select the data nodes you would like to include on the diagram using the check boxes.

Note that you must be a collaborator in the project to see the purple **List Generator** button.
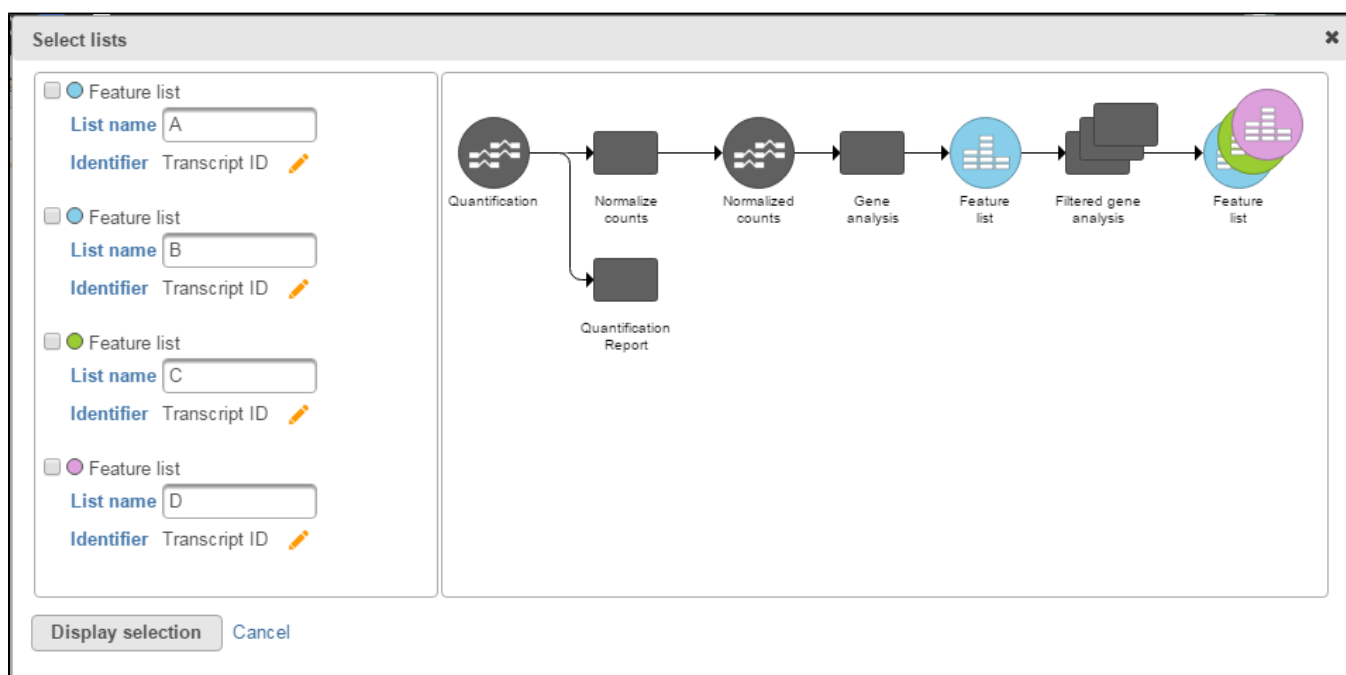
Figure 11. List selector window

If the current project does not contain any feature lists, a message will appear.
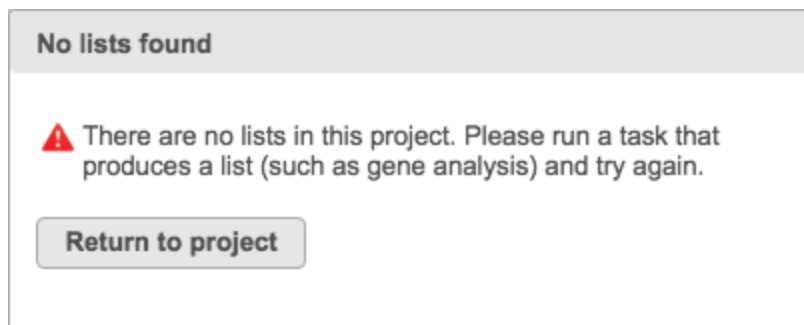

Figure 12. Error message appears when no lists within a project

The *List name* field can be customized to provide specific information about the selected list and will also serve as the set's name on the Venn diagram. Hovering your mouse over a specific feature list highlights its node location on the task graph.
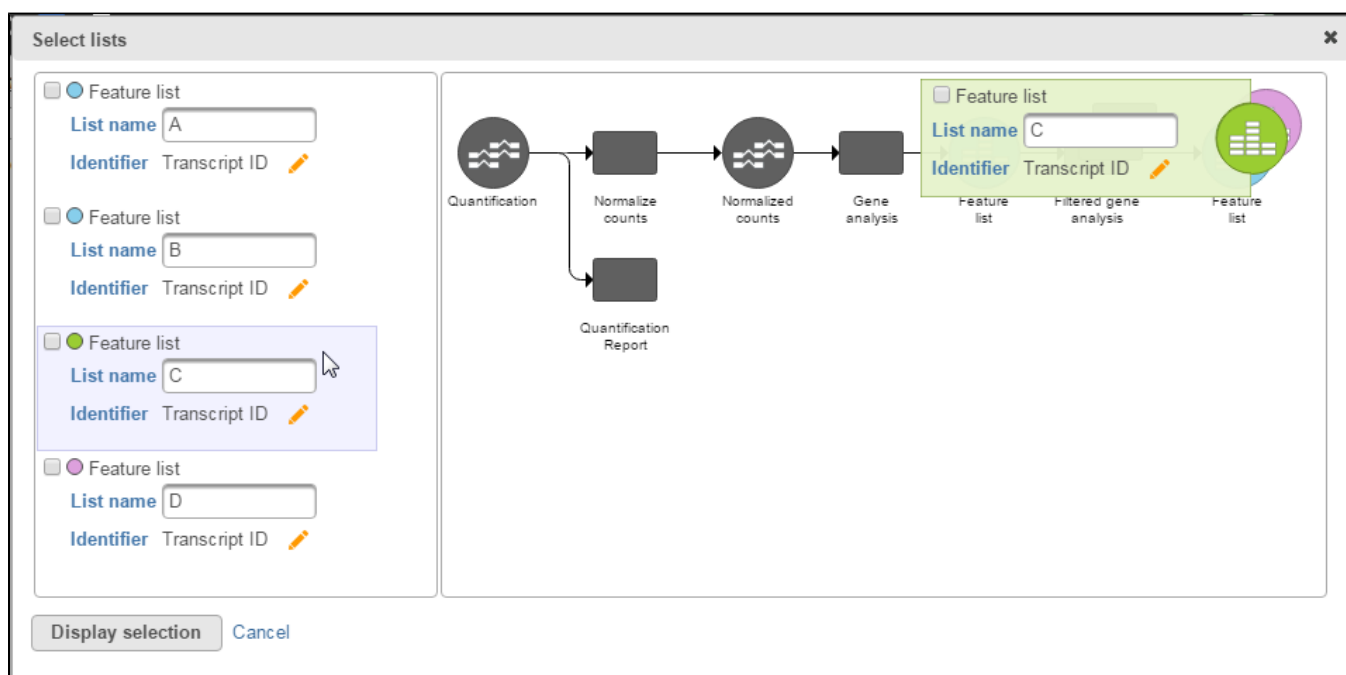
Figure 13. Selecting feature list highlights data node

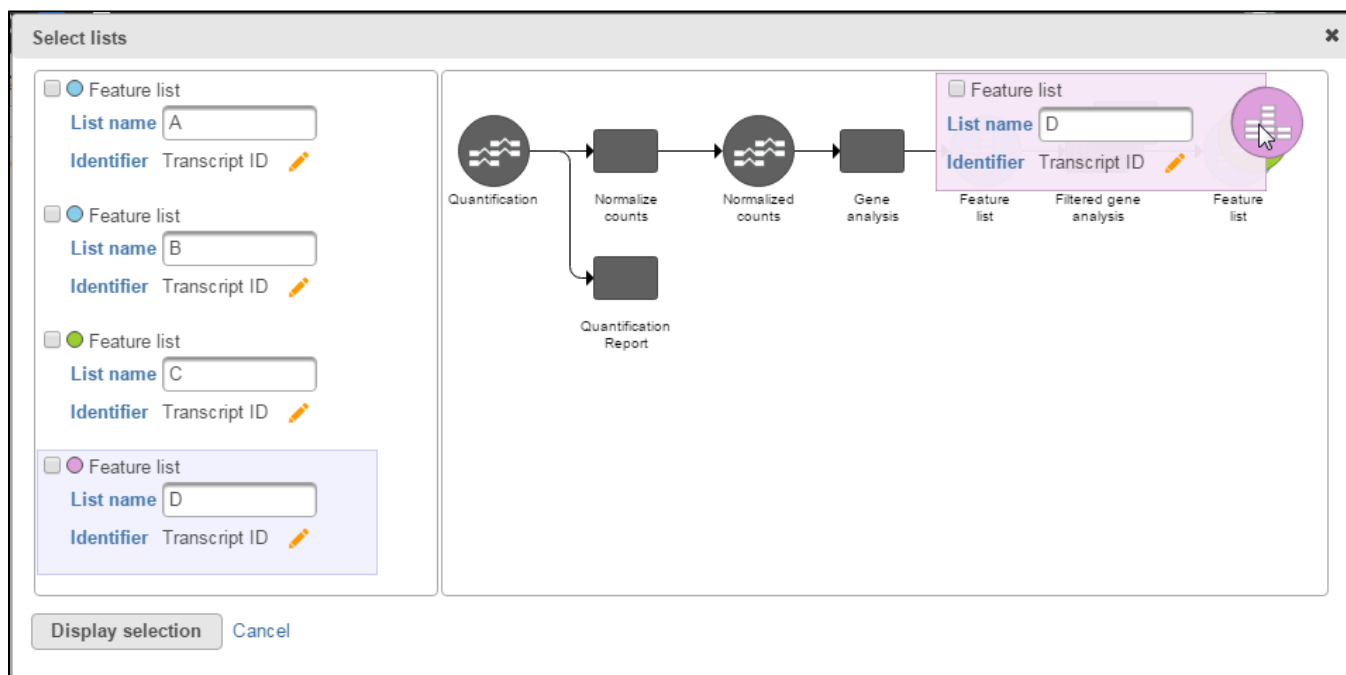Conversely, clicking a feature list data node highlights the feature list on the right panel.

Figure 14. Selecting the data node

Click on the ✏ icon to select the identifier that will be used to compare between the sets. The *Select identifier* dialog box will then appear.
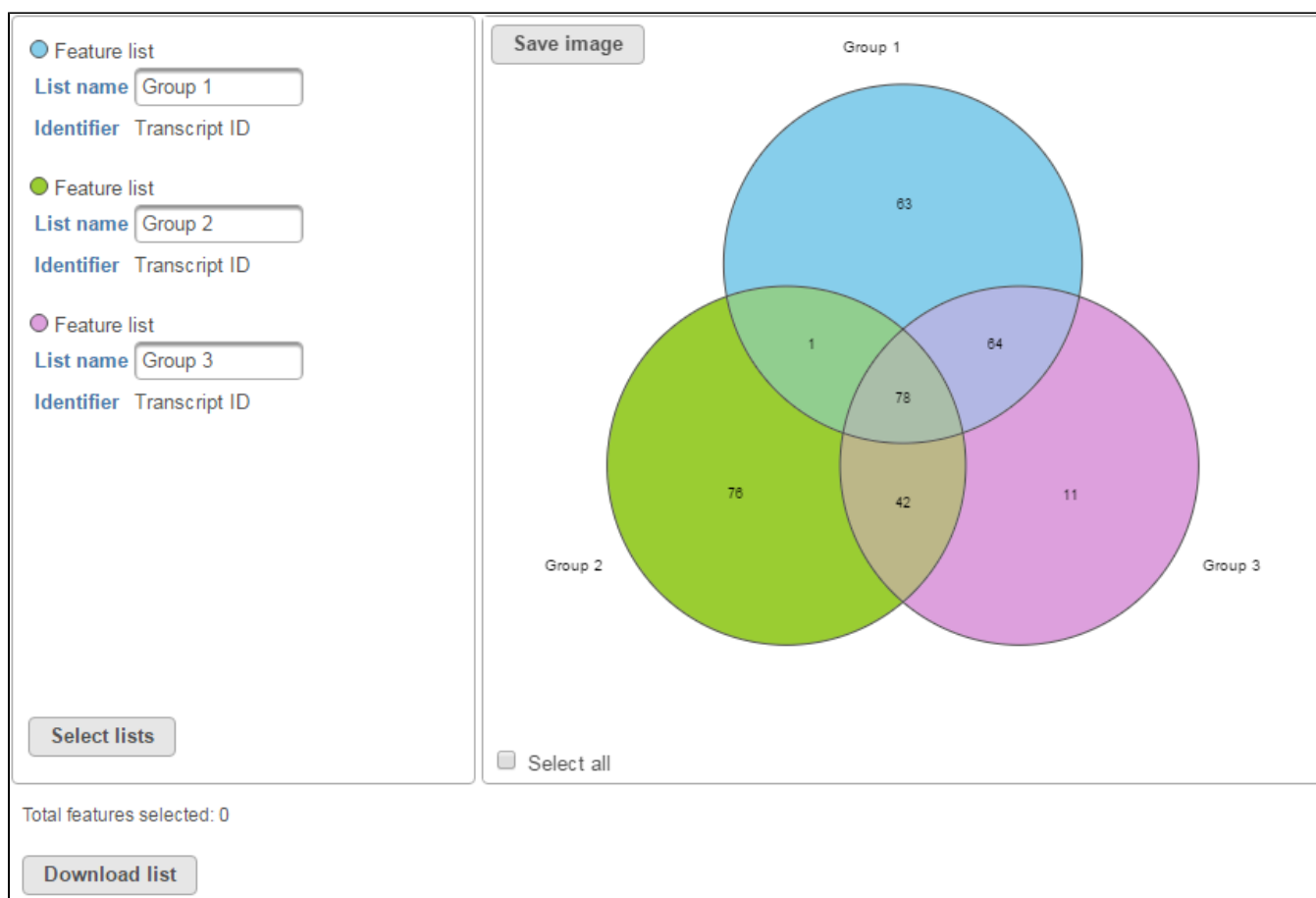
Figure 15. The Select identifier dialog box

For your convenience, example entries for each possible identifier is displayed. Select the radio button of the identifier you would like to use for comparison. Note that the *List generator* only uses Identifiers to determine common features within a list. For feature lists generated by automated tasks like Cufflinks' novel transcript discovery function, keep in mind that these identifiers may not be referring to the same feature.

Venn Diagram

Once you have selected your lists, click the **Display selection** button to invoke the Venn diagram.

Figure 16. Venn diagram window

To save the current diagram displayed, click the **Save image** button. Images can be either in SVG or PNG format. You can also define the size and resolution you want the diagram to be. To maintain the fidelity of the colors in the Venn Diagram, we recommend downloading the image in PNG format. If a vector-based file format is required, you can also export the diagram in SVG format.

The Venn diagram is also interactive. Hovering over specific sections of the diagram highlight the feature list represented by that section. A tooltip also appears describing the number of elements in that section.

Figure 17. Highlighted Venn diagram

To download a list of identifiers belonging to a section, click on the section (a striped pattern will appear) and click the **Download list** button. Multiple sections can be selected to download a merged list of all corresponding identifiers. The *Total features selected* display updates the number of features selected as you select more sections.

Figure 18. Downloading list of sections selected within a Venn diagram

To change the lists displayed, click the **Select lists** button. This will bring up the *List selector* again.

Additional Assistance

If you need additional assistance, please visit our support page to submit a help ticket or find phone numbers for regional support.

Your Rating: ☆☆☆☆☆   Results: ★★★★★ 34 rates