UCMERCED
Stem Cell Instrumentation Foundry

Flow Cytometry FACSDiva Data Management SOP

Date of last revision: 2/19/2020
Date of establishment: 6/20/17
Author: David Gravano

Purpose

This SOP describes how data is managed on the cytometers. It is the user responsibility to ensure their data is backed up promptly. The SCIF maintains backup data as a courtesy, but cannot guarantee its retention.

Procedure

How to export your data out of the Diva software:

1. Generate a folder with your lab name and a subfolder with your user name in both of the following directories on the cytometer computers
   - D:\BDExport\FCS\YourLab\YourUserName
   - D:\BDExport\Experiment\YourLab\YourUserName
   - It is recommended to name your experiments in Diva in the following format for ease of organization:
     - "Year_month_day name". For example, "2019_08_29 T cell stimulation"

2. In the BD Diva software, right click on your experiment and choose "Export" → "FCS Files"
   - These files will be able to be opened by any 3rd party flow analysis software
   - Choose FCS2.0, FCS3.0, or FCS3.1 depending on your application. FCS3.1 should now be supported by all current 3rd party software. If you are using old versions of FlowJo or FCS Express you may have to choose and older FCS format.

3. In the BD Diva software, right click on your experiment and choose "Export" → "Experiment"
   - Exported Experiments can be re-imported into Diva and all information will be retained (eg. Plot settings, gates drawn, etc).
   - When exporting the experiment, the FCS files generated may not be properly opened by 3rd party software packages. For analysis, choose export FCS files.
   - You can make an Experiment Template and export it into your folder in the D drive, then simply import the Experiment Template for repeated experiments. This will save all your pertinent settings. Also, if the experiment is still present in the Diva software, you can right click on the experiment and use the "Duplicate without data" feature to use it as a template.

Ways to get your exported data off the cytometer computer:

Once exported, your data will be under the directory D:\BDExport\FCS\YourLab\YourName

1. Use a flash drive to transfer your data
   - This option will work, but often it takes a lot of time to transfer and flash drive space can be an issue for large files.

2. Map a networked drive – if your lab has a network drive, its location can be mapped and data transferred over the network

3. Use Box – each user has access to a large amount of cloud storage through www.box.com. This is supported by UC Merced IT and is our preferred mode of transfer.

UCMERCED
Stem Cell Instrumentation Foundry

<u>Data backup, storage, and deletion:</u>

- Data will remain in the Diva software and in D:\BDExport\ for at least 2 months before being removed from the local hard drive. SCIF staff will export and delete experiments to free up disk space as necessary. Exported experiments will be transferred to the SCIF backup hard drives.
- Data will remain on our SCIF backup drives as long as there is free space. Users will be notified before any archived exported experiments are removed.
  - We will do our best to maintain your exported experiments in perpetuity, but ultimately users are responsible for the archiving of their data.
- Contact SCIF staff for access to archived experiments.

Questions?

- Contact David Gravano by email (dgravano@ucmerced.edu) or phone at (209) 285-5726