THE UNIVERSITY OF TEXAS

MD Anderson
~~Cancer~~ Center

Making Cancer History®

USER DATA MANAGEMENT

PURPOSE

The purpose of the procedure is to instruct Advanced Cytometry & Sorting Facility at South Campus (ACSF) users on how to save and retrieve experiment data, and to ensure that data produced in the ACSF is uniformly organized and simple to locate.

SCOPE

Compliance with this procedure is the responsibility of all employees and users of the ACSF analyzers and cell sorters.

DEFINITIONS

OneDrive.com: A secure online file storage and sharing service.

External User: A user of the ACSF who is not an employee or student at UT MD Anderson Cancer Center.

FACSDiva: Data acquisition and analysis software installed on BD analyzers including LSRFortessa, LSRFortessa X-20, FACSCelesta, and FACSCanto II, and BD sorters including FACSAria IIIu #1, FACSAria IIIu #2, and FACSAria Fusion.

FACS Sortware: Data acquisition and analysis software installed on BD sorters including Influx and FACSJazz.

FCS File: Flow Cytometry Standard file is the file typed used to store most flow cytometry data.

INSPIRE: Data acquisition software installed on the Amnis ImageStream^X.

Internal User: A user of the ACSF who is an employee or student at UT MD Anderson Cancer Center.

Kaluza: Data acquisition and analysis software installed on the Beckman Coulter Gallios.

PHI: Protected Health Information refers to any information about health care that can be used to identify an individual patient.

TI Server: Server for the Transplant Immunology department that is used to store backup data for approximately one month.

MATERIALS AND REAGENTS

- Access to the ACSF and TI server or box.com.

PROCEDURE

1.0 File Naming Rules

1.1. Folders, experiments, and FCS files are named in a standardized way in order to keep ACSF data organized and simple to retrieve in the future.

1.2. Data generated and stored at the ACSF should NEVER contain PHI.

1.3. For naming ruless on FACSDiva instruments follow step A, and for naming rules on INSPIRE, Kalluza and FACS Sortware instruments follow step B.

    A. FACSDiva Naming Rules

- All experiments should be named in the form "[PI name] [user name] [short experiment description] [date in the form YYYYMMDD]".

- All specimens on sorters should be named in the form "[PI name] [user name] [date in the form YYYYMMDD]". All specimens on analyzers should be named in the form "[date in the form YYYYMMDD]".

- Tubes should have short descriptive names.

- Experiment templates should be named like experiments and saved by PI.

    B. INSPIRE, Kalluza and FACS Sortware Naming Rules

- User data folders should be saved on the instrument desktop in a folder named "User Data [current year]". User data for the current month will be stored in a separate folder on the desktop named "User Data [current month] [current year]".

- Within the current month folder, a folder should be created for the PI.

- Within the appropriate PI folder, a folder should be created to store experiment data files. The folder should be named "[user name] [date in the form YYYYMMDD]". Select this folder for experiment data output.

- Acquisition or analysis protocols (Kalluza) and workspaces (FACS Sortware) should be named in the form "[PI name] [user name] [short experiment description] [date in the form YYYYMMDD]" and be saved by PI.

1.4. Experiment templates should be saved whenever changes are made to the experiment.

Note: Users should ALWAYS create a new experiment each day. DO NOT add to an existing experiment.

1.5. For additional information please see the individual instrument SOP.

2.0 Exporting Data from Acquisition Software

2.1. Data should be exported from all instruments immediately after acquisition. Data is deleted from FACSDiva analyzer browsers weekly and from all other instruments monthly.

2.2. FCS files generated from FACS Sortware will be automatically exported to your folder of choice when it is recorded.

2.3. To save a PDF of the FACS Sortware data analysis select the PDF icon on the left of the top toolbar and save it to the desktop under "User Data [current month and year]" > [PI] > [user name] [date].

2.4. FCS files generated from Kalluza will be automatically exported to your folder of choice when it is recorded.

2.5. To save a PDF of the Kalluza data analysis select the files of interest, right click, click Export > Export report sheets to .pdf >, and then save it to the desktop under "User Data [current month and year]" > [PI] > [user name] [date].

2.6. Files generated from INSPIRE will automatically be exported to your folder of choice when it is recorded.

2.7. After all tubes have been recorded in FACSDiva, right click on the experiment title and click Export > FCS files > select the file version to export > OK > select "Browse" to choose the file path > Choose Directory > Save. The FCS files should be saved in the D drive > PI Folders for Server > [PI] > [user name].

Note: The SCFC recommends using the most updated file version available.

2.8. A batch analysis can be performed on the data by right clicking the tubes, specimens, or experiment to be analyzed > Batch Analysis > select analysis settings > Browse to choose the file path > Save > Start > Ok. The analysis files should be saved in the D drive > PI Folders for Server > [PI] > [user name] > [current experiment].

2.9. To save a PDF of the FACSDiva sort gates on sorters, select the PDF icon on the left of the top toolbar and save it to the desktop under "Daily PDF Saves [current year]" > [current month] > [current day].

3.0   Exporting Data from the ACSF

3.1. After files have been acquired and exported onto local instrument computers, they must be exported so that they are accessible to users once they leave the flow core and to so that space can be cleared on instrument computers.

3.2. Data should be exported from the ACSF immediately after acquisition. Data is deleted from FACSDiva analyzer browsers weekly and from all other instruments monthly.

3.3. Internal users should follow step A for exporting data from the ACSF, while external users should follow step B.

    A.   Internal User Data Export

- Internal users can export their data onto the TI server. To access the TI server, click the start menu > type run > follow the file path \\10.192.90.193 > FlowLab > PI > select the correct PI > select the user folder.

  Note: Access to the server is by PI user name and a randomized password. Please contact the SCFC for your PI's password.

- Go to the data location on the local computer, either the D drive or desktop depending on instrument, copy the experiment files, and paste them into the open TI server folder.

- Ensure that all data copied successfully, close the server data window, and double-click the "Flow Disconnect" icon on the desktop.

B.　External User Data Export

- External users can export their data onto OneDrive. To access OneDrive, open an internet browser and go to OneDrive.com, sign in with an institutional password, copy the experiment files, and paste them into box.

3.4. After returning to your work station, access the data, and then download it to a personal workstation for storage and further analysis.

3.5. Accessing data on a PC can be done in the same manner as it was exported. To access the data on a Mac select Go > Connect to Server > enter the address smb://10.192.90.193 > Connect > FlowLab > PI > select the correct PI > select the user folder.

4.0　Retrieving Archived Data

4.1. Data should be exported from the ACSF immediately after acquisition to avoid needing to search through archived data.

4.2. If experiment data is no longer available on the FACSDiva browser or the desktop of a FACS Sortware or Kalluza instrument, then check for the data on the TI server. To access the TI server, click the start menu > type run > follow the file path \\10.192.90.193 > FlowLab > PI > select the correct PI > select the user folder.

Note: Access to the server is by PI user name and a randomized password. Please contact the ACSF for your PI's password.

4.3. If data is no longer available on the TI server, contact the ACSF with the PI, user name, date of acquisition, instrument of acquisition, and a short description of the experiment.

RELATED PROCEDURES

IN001: BD LSRFortessa Use and Maintenance.

IN002: BD LSRFortessa X-20 Use and Maintenance.

IN003: BD FACSCanto II Use and Maintenance.

IN004: Beckman Coulter Gallios Use and Maintenance.

IN005: BD FACSAria IIIu Use and Maintenance.

IN006: BD FACSAria Fusion Use and Maintenance.

IN007: BD Influx Use and Maintenance.

IN008: BD FACSJazz Use and Maintenance.

IN009: Amnis ImageStream^X Use and Maintenance.

IN012: BD FACSCelesta Use and Maintenance.

REFERENCES

None.

REVISION HISTORY

VERSION	ACTION	DATE	INITIALS
1.1	Version Update	09-9-2021	KC