


FAQ: How to fill out a sort form via Smartsheet

Once you sign up for your sort time, you will need to fill out a sort form. This form will be sent to FCR staff for review and approval. Sort Forms need to be filled out at least 48 hours in advance of your scheduled sort. ***If your Sort Form is not received 48 hours before your scheduled sort time, your sort time may be cancelled.***


You **do not need** to have a Smartsheet account to access and submit a sort form but **it is recommended** as you will need an account to view or edit your forms submitted via Smartsheet. All University employees have Free Collaborator access to Smartsheet and account set up is done using your Active Directory credentials. Instructions on how to set up Smartsheet access can be found on our [website](#). 

Connecting to Smartsheet

All University employees have free Collaborator access to Smartsheet and account set up is done using your Active Directory credentials. Although it is not required to have a Smartsheet account to access and submit a sort form, it is recommended as you will need an account to view or edit forms submitted via Smartsheet.

Connect to Smartsheet in order to view or your edit sort forms. For help with setting up your Smartsheet access click [here](#).

Smartsheet can be accessed from any computer – **you no longer need to be connected to the URMCC network** to fill out your sort form.

There are now specific links to each sorter's sort form. The sort form links can be found below and on our [website](#). 

Accessing the Smartsheet Sort Forms

The instrument specific sort forms can be found here - [Agnes Stonewick](#)  and [Link Hogthrob](#) .

LINKS TO NEW SMARTSHEET SORT FORMS

[LINK HOGTHROB - Cytex Aurora CS](#)

[AGNES STONEWICK - BD Symphony S6](#)

SORT FORM FIELDS & FIELD DESCRIPTIONS

****Note that not all of these fields are present for all of the sorters****

- 1. Please enter your PPMS user name**
 - a. Please enter your PPMS user name
- 2. Date of Sort**
 - a. Please enter the Date you booked in PPMS
 - i. You must book time on your desired sorter through PPMS prior to creating your sort form
- 3. Nozzle**
 - a. The 85um is the standard nozzle. More information on selecting the appropriate nozzle can be found on the [FCR sorting page](#).
- 4. Downstream Processing**
 - a. If sorted cells are being sent to the Genomics Research Center (GRC) for downstream analysis, please select “yes”
 - b. After submitting your sort form, you will receive a separate email with the subject “Please fill out GRC Processing Form” that will have a link to the GRC Downstream Processing Questions form
- 5. BSL Level**
 - a. Most mouse and nonhuman work is BSL1 unless cells have been infected or transfected.
 - b. All work with human cells is considered BSL2 and you will need a GNT number.
- 6. Sample Origin**
 - a. Please enter sample origin
 - b. If selecting “Other” in the drop down menu, please enter information for the Other sample type Other popup
- 7. Sample Type**
 - a. If selecting “Other” in the drop down menu, please enter information for the Other sample type in the Additional Information box at the end of the form
- 8. Has this project been reviewed by the IBC?**
 - a. Please check the box if it has
- 9. GNT number (G Form)**
 - a. GNT numbers are in the format of PI-year-number (ex. Bushnell-16-049)
 - b. Your PI should know the GNT number you need to submit if you are not sure.
 - c. It is important to submit your sort form at least 48 hours ahead of time as the FCR may need to verify your GNT number or other information about your sort with the IBC.
 - i. The FCR will refuse to conduct a sort if the information cannot be verified before the scheduled start of the sort.
- 10. Are these cells infected?**
 - a. Please check the box if they are infected and enter the infecting organism in the popup
- 11. Are these cells from an animal that has been exposed to a human pathogen or infectious agent?**
 - a. Please check the box if they have been and enter the pathogen or agent in the popup

12. Number of Sample to Sort

- a. How many sample tubes do you have? (Include any experimental controls, but not compensation controls.)

13. Number of Populations

- a. How many populations will you be sorting? Please note that if you are collecting into 15mL tubes you can only collect two populations at once. You can collect 4 if you are using 5mL or 1.5mL tubes.

14. Purity Check Post Sort Requested

- a. Please check the box if you would like the FCR Staff to perform a post sort
 - i. A post sort is a purity check of the collected population using the sort gating scheme. We will put your collected cells back on the sorter and record a set number of events to review your sort. This is an important check for the quality of the sort if you can spare the cells but is not mandatory.

15. Sample and Collection Temperature (separate entries for S6 and single entry for Link)

- a. **Sample Temperature**: What temperature do you want your samples at as they are acquired?
- b. **Collection Temperature**: What temperature do you want your sorted cells collected at?
- c. **Sample and Collection Temperature For Link**
 - i. Sample and collection temperature must be the same
 - ii. Sample and Collection temperature can be any temperature between 4C and 37
 1. For a temperature not included in the drop down, choose Custom and put the desired temperature in the Additional Info box at the end of the form

16. Collection Vessel

- a. What type of vessel are you collecting your sorted cells into? The sorters can accommodate various tube and plate sizes. If the plate size you require is not shown, choose Custom and type details into the Additional Info box at the end of the form.

17. Sort Precision Mode (Mask)

- a. Purity is the most common. Some cells of interest may be sacrificed to maintain purity. Yield (Enrich) will sacrifice purity to increase the number of cells of interest sorted. 4-way purity (Multiway) is the most stringent sort mask and sorts less volume than yield or purity. Single-cell is available for sorting into wells or slides. More information can be found on the [FCR sorting page](#).

18. Is this a new panel?

- a. Check the box if this is the first time you are running this panel

19. Template Info

- a. **Link**
 - i. **Have you created or run this panel on any of the following instruments?**
 1. Choose which instrument(s) you have previously run this panel on if applicable
 - a. If you have run this panel previously please also enter the file or template name in the popup

- b. Make sure you have moved the file or template to the Aurora Pipeline if created somewhere other than Link

b. Agnes

i. Have you run this panel on this instrument before?

1. If yes, check the box and whether or not you have a template
 - a. If you have created a template enter the name in the popup

20. How many fluorochromes will you be using?

- a. Enter the fluorochrome number in the field
- b. Please list one per line (no commas) which fluorochromes, fluorescent proteins, or live/dead dyes you are using.

21. Enter any additional information you would like to give us below

- a. For example, other sample types, multiple collection media, aseptic sort needs, custom plates or temperature settings

22. Send me a copy of my responses

- a. Click the box and enter your email address
 - i. Not required but recommended as confirmation of submission

TO EDIT YOUR SORT FORM

****NOTE – You need an account to view or edit your forms submitted via Smartsheet. All University employees have Free Collaborator access to Smartsheet and account set up is done using your Active Directory credentials.** Instructions on how to set up Smartsheet access can be found [here](#).

1. Go to the [PPMS SORT PORTAL](#)
2. Click on Sort Requests
 - a. This will show you all of the sort forms you have submitted through Smartsheet
 - b. You can filter the forms as needed by clicking on the column names
3. Double click on the sort form you would like to edit and a details pop up will appear on the right hand side
 - a. You can change the following items directly
 - i. Nozzle Size
 - ii. Sort Mask
 - iii. Fluorochrome Details
 - iv. Template Name
 - v. Filter Swap Details
 - vi. GNT#
4. Add any other changes you need to make to the “Additional Info” box in the pop up
5. Click the blue Save button on the bottom of the pop up box
 - a. This will change your sort form status back to pending
6. FCR Staff will review your changes and reapprove them or reach out with questions about the changes as appropriate