Sample Prep for Sequencing

MSPACMAN Sample Prep

1. Generating and Sending Box Maps
2. Find and record Box IDs of interest by selecting Storage🡪Boxes and sorting by Study ID

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1. Go to Sample Management🡪Lab Operations and sort by Box ID-Sorted. Paste the box ID into the field

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1. Select all samples listed in the box and download an Excel file

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1. Remove columns “Visit”, “Label”, “Quantity”, “Tissue”, “Study”, “CD”, “Custodian”, “Status”, “Colony Morphology”, “ID Microbial Species”, “Quarantined?”, “Expired?”, “Expiration Date”, “Testing Complete”, “Archive Sample”, “SPRISOL ID” .
2. Highlight the row of headers and select Sort & Filter Icon🡪Filter

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1. Select the A to Z (Ascending Order) filer on the Ext Participant ID Column using the drop arrow on column header

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1. Save document as Box Name mm-dd-yyyy using the date the file was made a
   1. For example, using MSPACMAN Seq Cryovials Box 1:
      1. File Name: Seq Cryovials Box 1 01-01-2024
2. Send file to Katie and MSPACMAN team
3. Shifting Samples in Boxes for Sequencing

This step is used to shift samples in cases where the endotracheal sample from Wednesday was not collected. Therefore, Katie will indicate that samples from either Monday or Friday collections will need to be added into the sequencing box. Other cases that will require checking in and out samples include inadmissible samples meaning there were less than 4 collections of specimens due to participant being discharged early or unenrolling in the study. In this case samples will be transferred to inadmissible boxes that have been made.

1. Collate a list of sample barcodes (S#s) in a document. Go to the Lab Operations page🡪Select the “…”🡪Select Other Tasks🡪Select Alias Search
2. Paste list of barcodes into window 🡪Select Search
3. Check all the samples of interest 🡪Select the “Check Out”🡪 Add “need to move” to text box🡪Select Ok
4. Go to Storage🡪File Samples. Scan barcodes of samples that need to be added to sequencing or inadmissible and file sample into respective box.
5. Confirming Samples
6. Generate a box map for the box of interest
7. Print a copy of the box map
8. Check each diagonal of the box as well as three samples in every row to spot check that samples are in the correct position as listed on the map
9. If there are differences about the location of the sample, reconcile by shifting samples into correct position and generating new box maps. Send final copy to MSPACMAN group email with the most updated version of the box maps
10. Sample Drop-Off
11. PI will reach out to Ahmed Moustafa(moustafaam@chop.edu) to coordinate sample drop off time (open from 10am-4pm). Penn-CHOP Microbiome drop off is located Abramson 9th floor room 903G.
12. Add dry ice to Styrofoam box to transport samples
13. Print out completed Microbiome Center Sequence Core Sample Receipt Form and bring with samples for delivery
    1. Project ID is CHOPMC-208\_Chiotos\_16S

SeqCenter Sample Preparation

1. Go to the SeqCenter website and have the PI generate a quote
2. Create file of samples of interest for sequencing
3. Have PI set up a PO for payment
4. Using Eship generate a shipping label
5. Go to eShip 🡪Select Address Book🡪Select New🡪Add SeqCenter address

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1. Go to Ship🡪Select Yes🡪Select Domestic🡪Select Biological Materials.

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A screenshot of a shipping selection

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1. If shipping biological samples on ice, Select “Biological Materials”. If shipping Category B specimens select the following:

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1. Enter name of samples in material name field. List an approximate quantity in package (need to complete this field even if samples are solid or non-liquid). Type “1” for Net Value in USD field. Select “Continue”

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1. Select Load from Address Book to add SeqCenter. For package info, select “Dry Shipper” for type, approximate the weight, and enter and measure the dimensions. For special instructions, check “Dry Ice” and enter weight of dry ice in the respective field. For email notifications, check “Notify Shipper”, “Notify Shipper on Delivery”, and “Notify Others on Delivery”. Enter the PI(s) email addresses into the respective field.

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1. Select “Show Quote”🡪Select cheapest overnight shipping option
2. Save and print shipping label
3. Package isolates for shipment
4. Weigh the empty Styrofoam box
5. Add the dry ice to the box and weigh the box
6. Calculate the weight of the dry ice
7. Put samples in box
8. Print out a copy of the SeqCenter Quote Information and enclose it in the shipment
9. Affix the proper labels and shipping label on the outer cardboard box
10. Deliver package to pick up location (located in lobby by loading deck in BRB or in Blockley Hall). Times for pickup change depending on the time of year so be sure to check these prior to drop off.
11. Email SeqCenter (CC the PI or any other relevant personnel) to notify about shipment (include tracking information) and that they received the sample intake form