Shipping Instructions for ALL material types:

**SHIPPING - General**

*ALL materials should be shipped FedEx overnight for a 10:00am delivery*

*Shipment Delivery is approved Monday through Wednesday (and Thursday on prior approval)*

*Do NOT ship on Friday, a day before a UNC Holiday, or long weekend*

*Contact HTSF manager for submission of the TracSeq manifest 2-3 weekdays prior to when you wish to ship.*

*HTSF manager will submit samples for you and return the confirmed TracSeq manifest back to you. You need this manifest before you can ship*

**-80°C FROZEN SAMPLES: ALL RNA samples should be shipped in this format**

The samples should be kept frozen at -80°C before being shipped on Monday through Wednesday (preferably). Make sure all materials are frozen solid prior to shipment. Samples can be shipped on Dry Ice (explained below) or in a Cryoport if available at the Shipping location.

A Styrofoam packer and the Cardboard external box will need to be large enough to contain dry ice and samples you are shipping.

- Package samples on the afternoon of shipment, if done earlier maintain package at -80°C until it is shipped.
- Place a copy of the TracSeq confirmed manifest into each of the shipping containers. This is a manifest that has been returned to you by HTSF staff member after you sent the Submission manifest to us. This manifest is necessary for checking in the samples once received.
- Check off each item as it is packed.
- Prepare the samples you will ship.
  - **Individual tubes (<24):** make sure lids are tight. Place them in a Ziploc (puncture holes in bag) bag with Project Name/ Your Name / date clearly labeled on the outside
  - **Individual tubes (>24):** place them in a cardboard freezer box in the order on your manifest submission. Place double rubber bands around each of the freezer boxes. Clearly label box with Project Name/ Your Name / date. If you have several boxes. Number the boxes as you have on the manifest submission.
- 96-well Plates: Make sure each plate is sealed well and is clearly labeled with Project Name/ Your Name / date and Plate number. The project name and plate number should also be on the plate itself and not just the sealer. Place a series of plates inside freezer bag (puncture bag with holes)

- Remove Styrofoam container from shipping card board box before beginning packaging
- Place some dry ice in the Styrofoam inner container (enough to cover the bottom of the shipping container), and begin layering boxes/ plates and dry ice into the container. Make sure all air pockets contain dry ice. Repeat for additional shipping containers as needed.
- The amount of dry ice in the shipping container will vary with the number of samples placed in it
- Put one piece of strapping tap across Styrofoam box top, dry ice gases need to escape. DO NOT SEAL AROUND THE GAP BETWEEN THE LID AND BOTTOM. This is to just hold the lid tight.
- Place the HTSF address and the copy of the confirmed manifest (with the address on top into a Ziploc plastic bag)
- Put top on Styrofoam container
- Put Styrofoam box back into card board box
- Seal the cardboard box containing the Styrofoam box inside securely with strapping tape.
- Affix a Biological Substance Category B (UN3373) label and a Dry Ice label (UN 1845) to the outside of the cardboard box. Please note these labels may or may not be provided by your university EHS.

-20°C Samples:

The samples should be kept frozen before being shipped. Remember shipping should be done Mondays through Wednesday unless prior approval from HTSF manager. Make sure all materials are chilled thoroughly prior to shipment.

- Package samples on the afternoon of shipment, if done earlier maintain package at -20°C until it is shipped.
- Place a copy of the TracSeq confirmed manifest into each of the shipping containers. This is a manifest that has been returned to you by HTSF staff member after you sent the Submission manifest to us. This manifest is necessary for checking in the samples once received.
- Check off each item as it is packed.
- Prepare the samples you will ship.
  o Individual tubes (<24): make sure lids are tight. Place them in a Ziploc bag with Project Name/ Your Name / date clearly labeled on the outside
  o Individual tubes (>24): place them in a cardboard freezer box in the order on your manifest submission. Place double rubber bands around each of the freezer boxes. Clearly label box with Project Name/ Your Name / date. If you have several boxes. Number the boxes as you have on the manifest submission.
  o 96-well Plates: Make sure each plate is sealed well and is clearly labeled with Project Name/ Your Name / date and Plate number. The project name and plate number should also be on the plate itself and not just the sealer. Place a series of plates inside freezer bag
- Pack the container as described above, but use the frozen freezer bricks/ packets rather than dry ice.
- Please DO NOT use Ziplocs filled with wet ice. Those really only keep samples at 4oC for a short time period.
- Remove Styrofoam container from shipping card board box before beginning packaging
- Place some freezer packs in the Styrofoam inner container (enough to cover well the bottom of the shipping container), and begin layering samples and frozen bricks into the container. Repeat for additional shipping containers as needed.
- The amount of ice packs in the shipping container will vary with the number of smaller freezer boxes placed in it
- Put one piece of strapping tap across Styrofoam box top
Place the HTSF address and confirmed manifest (with the address on top into a ziplock plastic bag)
Put top on Styrofoam container
Put Styrofoam box back into cardboard box
Seal the cardboard box containing the Styrofoam box inside securely with strapping tape.

**All Samples:**

**Paperwork to be sent with samples:** A confirmed manifest form with all samples information should be placed in the box with the packer. This form includes study name/PI name/submitter info in addition to a manifest of all samples to be sent on the shipment.

**Information on the sample labels:** On each sample container please have the study name and sample ID listed. Please double check that the Sample ID you indicate is correct. Please see below for additional considerations when labeling the samples.

a. Please pay specific attention to the participant ID. We have a lot of errors because of poorly labeled samples. This can cause the sample ID to be incorrectly listed in our database. We know that most studies do not have the ability to print labels; therefore, handwritten labels are fine if they are clearly written. If you need to change something, please use a new label rather than crossing out mistakes and then writing over the top.

b. Please make sure to accurately enter the ID into your system. Be precise about the participant ID code – numbers / alpha / punctuation. Make sure to include ALL digits in a long series of numbers. We will be using the confirmed TracSeq manifest as a confirmation of what we should be receiving. SAMPLES RECEIVED THAT ARE NOT ON THE MANIFEST OR MISISSING SAMPLES CAN CAUSE A DELAY IN PROCESSING THE ENTIRE SHIPMENT

c. The HTSF has had issues with labels coming off of the delivered samples. This is especially true for samples that were previously stored at -20oC -80oC. Please make sure that labels stay on tubes for the long term with a few test tubes prior to starting a project. We can help you to find a label material that will work for your project. Please contact us

**Final packaging for shipment:** Secure the box lid / outer packaging and make sure the outer packaging is properly labeled according to DOT/IATA protocol. This should include Diagnostic Specimen IATA 650 labels on multiple sides of the outer packaging. You may need a “dry ice” label with approx. dry ice weight on the outside of the package.

**FEDEX Airbill:** Affix the completed (see below for specifics) FedEx airbill to the following address to the outside of the box. (the airbill is placed in a clear plastic pouch)

*Record the site address and telephone number in section 1.

*Record the HTSF address in section 3

High Throughput Sequencing Facility
Rm. 1153 Genome Sciences Building
250 Bell Tower Drive
The University of North Carolina at Chapel Hill
Chapel Hill, NC 27599
919-962-4395

*Section 4--Check priority overnight
*Section 5 (packaging) = check other

*Section 6 =check “Yes” shippers declaration not required and check dry ice and write on the estimated number of pounds if necessary

Use your institution’s FedEx shipping procedures or call 1-800-GO-FEDEX for pickup.

**HTSF Notification of Shipment:**

Send an e-mail message containing:

1- The tracking number and date of shipment to all of the addresses below.

2- Please include a copy of the confirmed manifest in the email

3- In the subject line please used the Project’s name. We have numerous projects shipping materials– project names help us determine what we should look for.

Email the following people:

Managers:

Amy Perou -- amyperou@med.unc.edu

Chris Nagy -- cnagy@email.unc.edu

Retain a copy of the completed air bill for your records.

***** do not ship on Thursday (unless approved by HTSF manager) **Never ship on Fridays or the day before a holiday**
(as no one will be there on weekends or holidays to receive the samples and store them properly).

**** Please contact HTSF manager if you have questions or need vendor sources for shipping supplies

**CONTACT INFORMATION**

Any Questions, please contact:

Amy Perou
High Throughput Sequencing Facility
Genome Sciences Bldg
University of North Carolina
Chapel Hill, NC 27599

Phone: 919-962-4395
Email: amyperou@med.unc.edu