**Customer Information**:

PI Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Email:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contact: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Institution: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Department: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sample Name(s) (As labeled on tube):

Account #: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Libraries:**

□ **Prepared Library (please submit 25ul at 1-2ng/ul)**

□ **Library Prep**

□ gDNA □ RNAseq (mRNA) □ small RNA □ Mate Pair

Source Organism: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Concentration/Quality Requirements**

Concentration: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Measured by: (must provide documentation)

□ Nanodrop □ PicoGreen □ Bioanalyzer □ other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For DNA samples, customers must provide a gel image.

**Sequencing:**

□ **Ion Proton** □ 200 SE

□ **Illumina MiSeq** □ 150x2 PE □ 250x2 PE □ 300SE

(other run parameters available on request)

□ **Illumina HiSeq (outsourced)\*** □ 100x2 PE

\*All libraries and sequencing preparations done in house.

(other run parameters available on request)

**Number of Lanes:** \_\_\_\_\_\_\_\_\_\_\_

□ Multiplexed (If multiplexing, how many samples per lane and how do you want them pooled)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**[Core Facility Use]**:

 Date Received: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ By:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sequencing Completion:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Multiplexing Index (If used) \_\_\_\_\_\_\_\_\_

* **Please include sample submission sheet with samples**
* **If shipping, please email a copy of the sample submission sheet to** **GSLNCSU@gmail.com** **so we can prepare and watch for your package.**

**Genomic DNA Requirements**

* 2µg of genomic DNA in 120µl of TE. (If you are unable to produce this much DNA, please contact the GSL.)
* DNA should be of good quality, with no degradation visible when run on a gel. If possible, DNA should be run on an Agilent bioanalyzer 2100
* OD 260/280 ratio should be between 1.8 and 2
* You must provide a gel image of gDNA with a ladder of a known concentration.

**mRNA Sequencing Requirements**

* 2µg of total RNA. (If you are unable to produce this much RNA, please contact the GSL.)
* Illumina Samples should be in 50µl of nuclease free water.
* Ion Proton Samples should be in 20ul of nuclease free water
* RNA Integrity Number (RIN) needs to be greater than 7 and samples should have a 28S/18S ratio of greater than 1.6. The 260/280 ratio should be 1.8-2.0 and the 260/230 ratio should be close to 1.8.
* If you have a gel image or BioAnalyzer image, please submit a copy with your sample.

**Multiplexing**

The Illumina multiplexing kit offers 24 unique tags that can all be sequenced together in a lane.

The Ion Proton multiplexing kit offers 16 unique tags that can all be sequenced together on a chip.