

## RNA and DNA Requirements for Genomics Cores

- For Affymetrix expression arrays the RNA needs to be at a concentration of 83.3 ng/ul with at least 5 ul of sample.
- RNA or DNA concentration measured by Nanodrop (or equivalent spectrophotometer) for all microarray samples
- RNA or DNA concentration measured by Qubit for all sequencing samples
- $A_{260}/A_{280}$  ratio greater than 1.7 for RNA samples, greater than 1.6 for DNA samples
- $A_{260}/A_{230}$  ratio greater than 1.7 for all samples. See: <http://www.bcm.edu/garp/?PMID=3100>
- RNA must have a RIN score of 7.5 or higher.
- Bioanalyzer tracings on all samples after receipt in core lab
- The Bioanalyzer can give an estimate of RNA concentration based on the areas under the 18S and 28S rRNA peaks. This should be similar to the Nanodrop readings. However in some cases Nanodrop can give substantially higher readings, particularly with sorted cells (reason unknown). If this occurs sample concentration should be retested by Qubit.