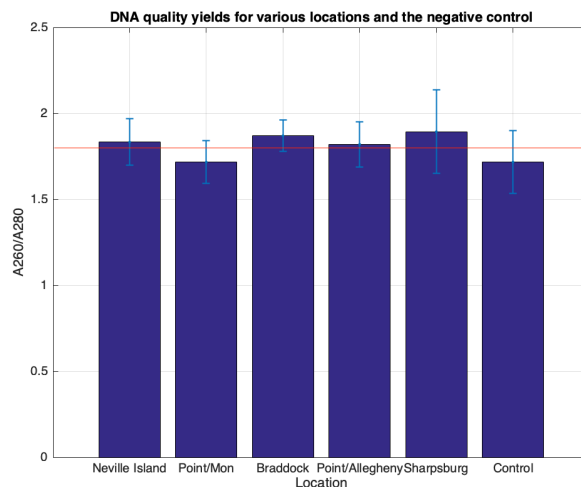
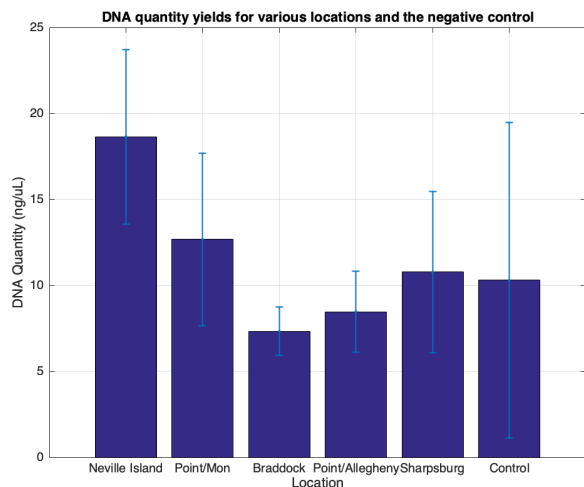


Lab 2 - Microbiome DNA Extraction Figure Assignment



The figures are generated from the quality control data of the DNA obtained by executing the DNA Extraction (DNeasy PowerWater Kit) protocol on river samples. The means and standard deviations of the quantity and quality yields for samples from various locations and the negative control are shown.

From the left figure, the DNA extracted from river samples have reasonable standard deviations. However, the DNA quantity in the control group is not expected since the DNA content in pure water is supposed to be low. In this case, its mean has even exceeded two of the river samples. The standard deviation for the control is quite high, suggesting that one or more of the control group trials might have experimental errors (possibly contamination).

The right figure is a plot of the quality yields. The red line is a reference line for the 1.8 A260/A280 ratio that suggests excellent purity. As we could observe, all six groups are close to the reference line with quite small standard deviations, indicating the relatively good purity for all DNA samples.