#core diversity analyses (rarefaction, beta diversity, alpha diversity)

#sampling depth of 503 chosen from table.qzv interactive sample detail. Excludes 1 sample #(FL103.058.2; sample depth = 57)

qiime diversity core-metrics-phylogenetic \

--i-phylogeny ~/FL103/DADA2\_350\_unfiltered/rooted-tree.qza \

--i-table ~/FL103/DADA2\_350\_unfiltered/table\_filtered.qza \

--p-sampling-depth 533 \

--m-metadata-file ~/FL103/FL103\_MapFile.txt \

--output-dir ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/

#Plot alpha div

#used previously created data with table\_filtered.qza (excludes mock community sample)

qiime diversity alpha-rarefaction \

--i-table ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/rarefied\_table.qza \

--i-phylogeny ~/FL103/DADA2\_350\_unfiltered/rooted-tree.qza \

--m-metadata-file ~/FL103/FL103\_MapFile.txt \

--p-max-depth 533 \

--o-visualization ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/alpha-rarefaction.qzv

#UniFrac

qiime diversity beta-group-significance \

--i-distance-matrix ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/unweighted\_unifrac\_distance\_matrix.qza \

--m-metadata-file ~/FL103/FL103\_MapFile.txt \

--m-metadata-column Trt3 \

--o-visualization ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/unweighted-unifrac-treatment-significance.qzv \

--p-pairwise

qiime diversity beta-group-significance \

--i-distance-matrix ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/weighted\_unifrac\_distance\_matrix.qza \

--m-metadata-file ~/FL103/FL103\_MapFile.txt \

--m-metadata-column Trt \

--o-visualization ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/weighted-unifrac-treatment-significance.qzv \

--p-pairwise

qiime diversity beta-group-significance \

--i-distance-matrix ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/weighted\_unifrac\_distance\_matrix.qza \

--m-metadata-file ~/FL103/FL103\_MapFile.txt \

--m-metadata-column Trt2 \

--o-visualization ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/weighted-unifrac-treatment2-significance.qzv \

--p-pairwise

qiime diversity beta-group-significance \

--i-distance-matrix ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/weighted\_unifrac\_distance\_matrix.qza \

--m-metadata-file ~/FL103/FL103\_MapFile.txt \

--m-metadata-column Trt3 \

--o-visualization ~/FL103/DADA2\_350\_unfiltered/diversity\_DADA2\_nomock/weighted-unifrac-treatment3-significance.qzv \

--p-pairwise