###Qiime2 codes for PCoA plot generation###

#creation of biom format#

biom convert -i Feces\_PCoA.tsv -o Feces\_PCoA.biom --table-type="OTU table" --to-hdf5

#creation of qiime artifact qza#

qiime tools import --input-path Feces\_PCoA.biom --type 'FeatureTable[Frequency]' --input-format BIOMV210Format --output-path Feces\_PCoA.qza

#calculation of distance matrix#

qiime diversity beta --i-table Feces\_PCoA.qza --p-metric 'canberra' --o-distance-matrix Feces\_canberra.qza

#pcoa plot generation#

qiime diversity pcoa --i-distance-matrix Feces\_canberra.qza --o-pcoa Feces\_canberra\_pcoa.qza

#relative frequency table generation required for PCoA biplot#

qiime feature-table relative-frequency --i-table Feces\_PCoA.qza --o-relative-frequency-table Feces\_rel\_freq\_table

#generation of PCoA biplot#

qiime diversity pcoa-biplot --i-pcoa Feces\_canberra\_pcoa.qza --i-features Feces\_rel\_freq\_table.qza --o-biplot Feces\_PCoA\_biplot

#generation of qzv file for visualization#

qiime emperor biplot --i-biplot Feces\_PCoA\_biplot.qza --m-sample-metadata-file Feces\_metadata\_filtered\_new.tsv --m-feature-metadata-file Feature\_metadata.tsv --p-number-of-features 25 --o-visualization Feces\_emperor\_biplot

ces\_emperor\_biplot\_canberra