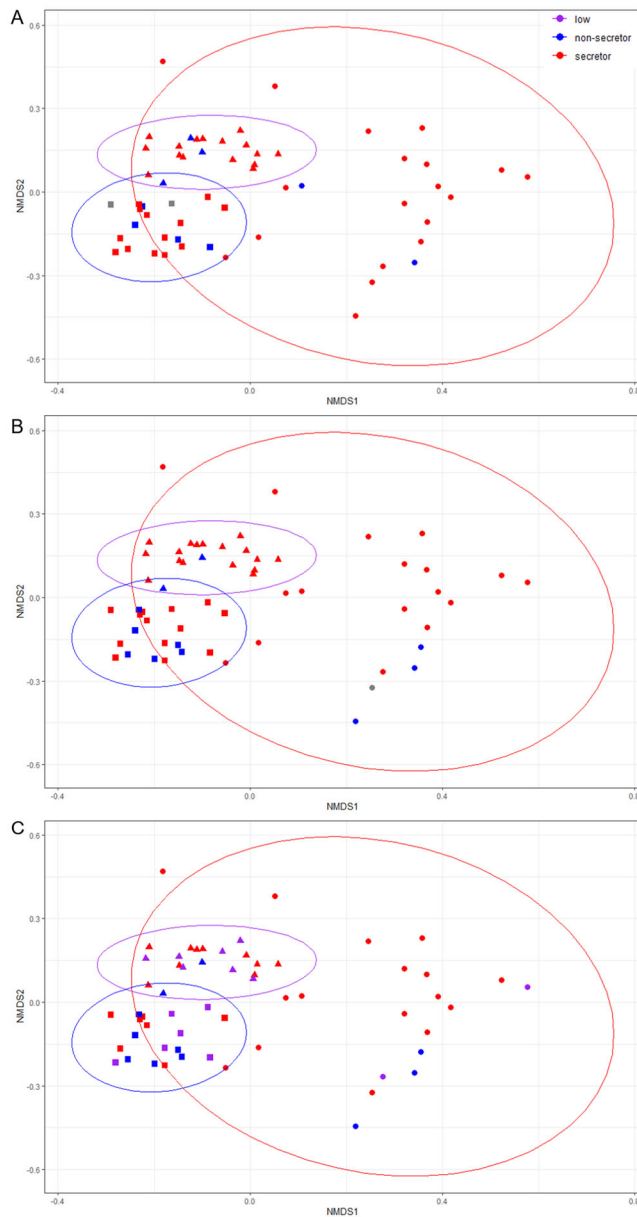
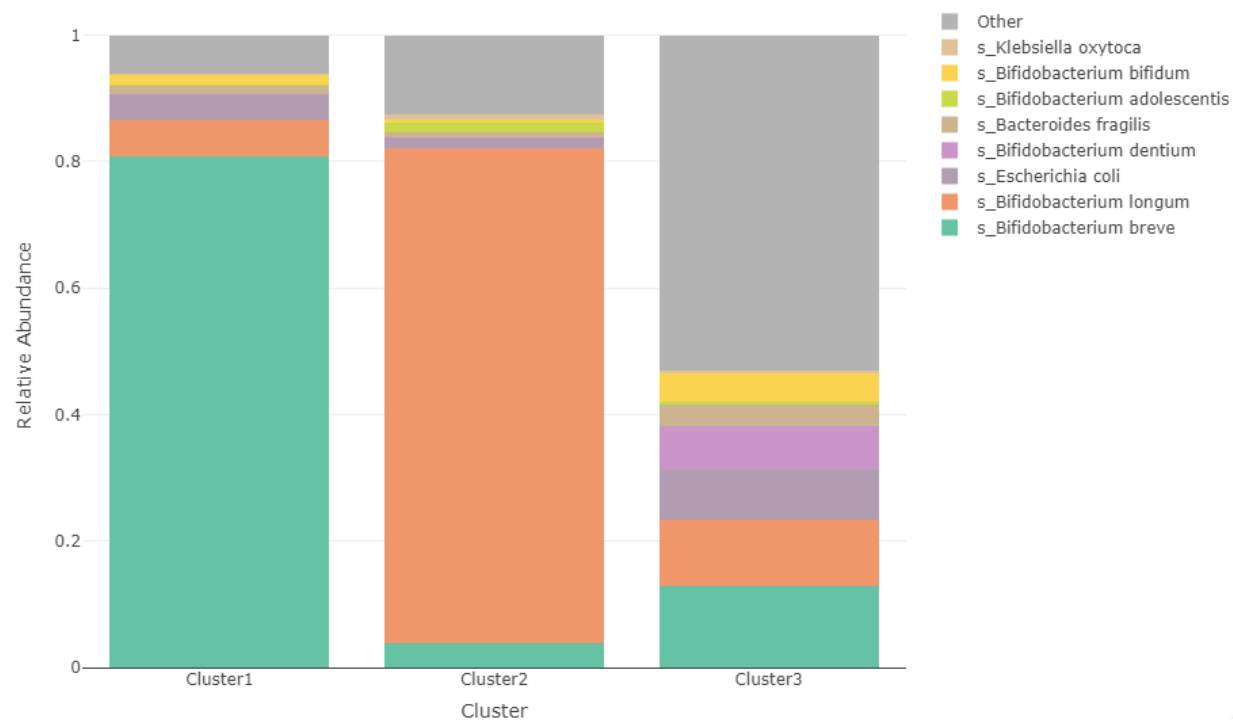


## Supplemental Materials



**Figure S1. Beta diversity ordinations of maternal genotype (A), infant genotype (B), and infant phenotype (C).** Bray-Curtis dissimilarity between stool microbiota of breastfed infants does not significantly cluster by maternal secretor status (A, Adonis  $p=0.68$ ). Bray-Curtis distance between subjects resulted in significant clustering by infant secretor status by both genotype (B, Adonis  $p=0.025$ ) and phenotype (C, Adonis  $p=0.043$ ). The 3 clusters generated by k-means are depicted as triangles, circles and squares and ellipses correspond to k-means ( $k=3$ ) clusters of all points, irrespective of phenotype. Significant association of infant genotype and phenotype to these clusters occurs.



**Figure S2. Relative abundance of the most prevalent species found in each cluster.** The five highest mean abundance species from each cluster were compared across clusters. Cluster 1 was dominated by *B. breve*, while Cluster 2 was dominated by *B. longum*. Cluster 3 was poorly defined, consistent with the beta-diversity ordinations.