

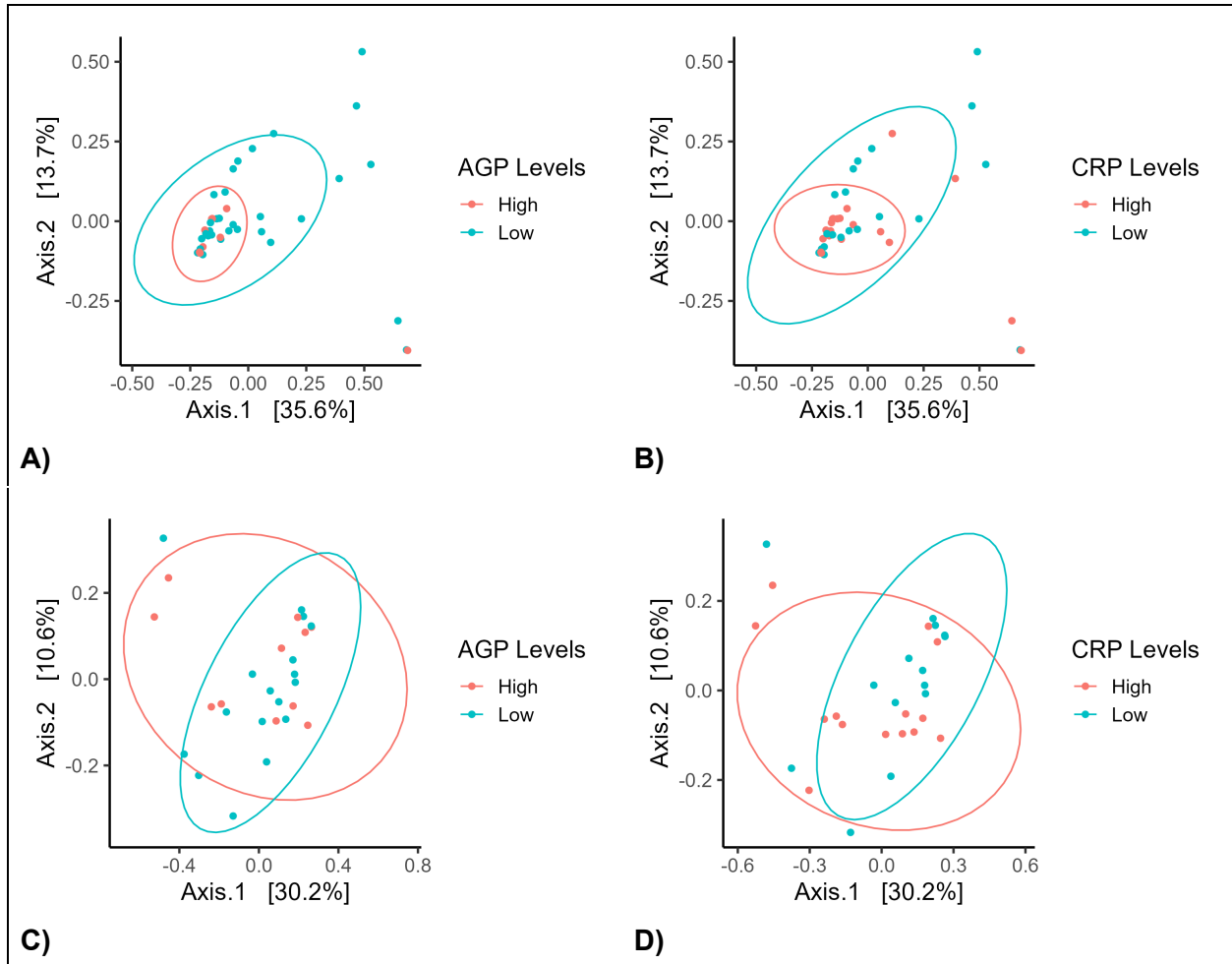
## SUPPLEMENTARY

**Supplementary Table S1. Bray Curtis PERMANOVA results for inflammation in 6 and 12 month old infants.**

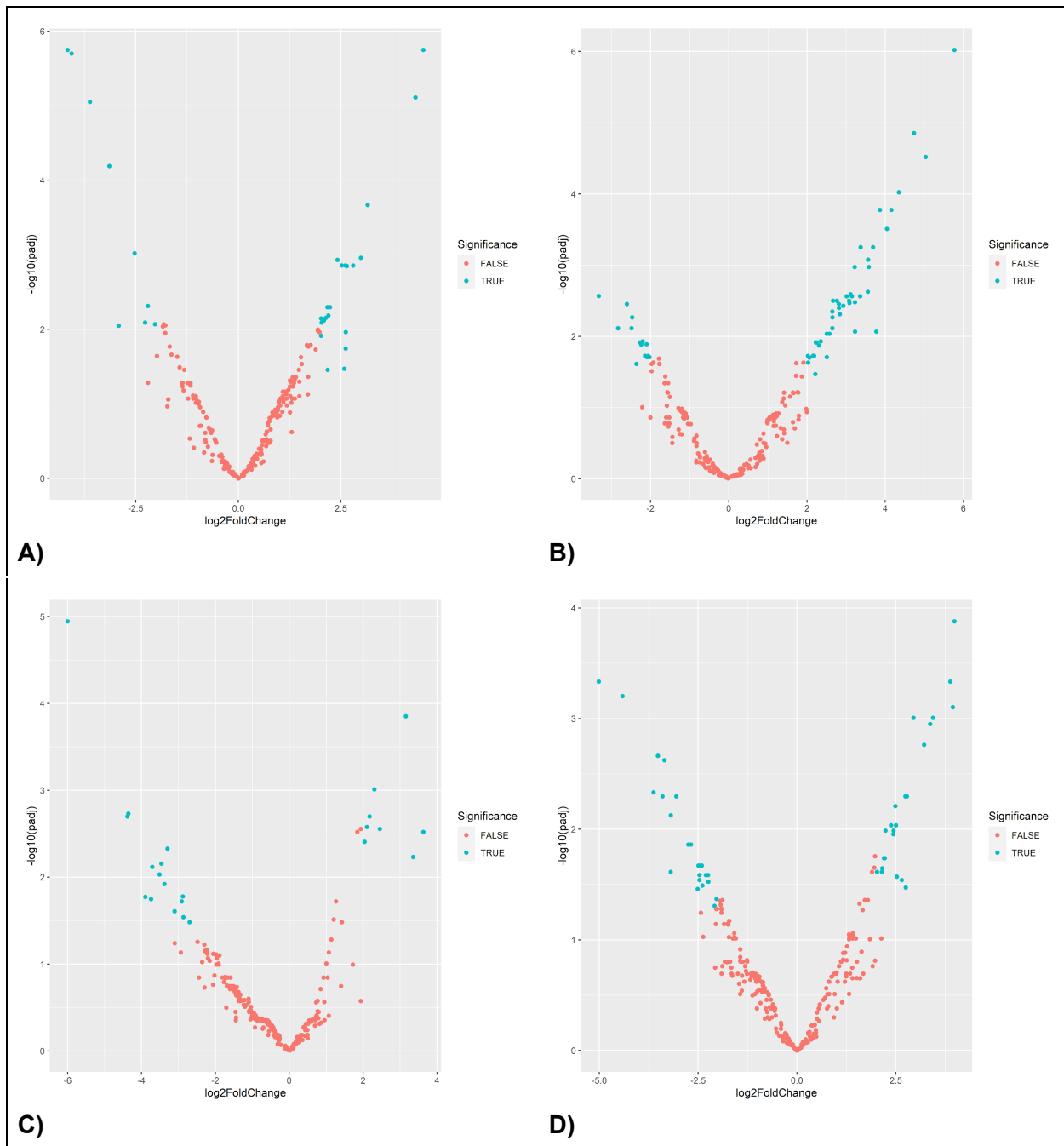
Cohort	Adjusted p-value
6M AGP	0.558
6M CRP	0.493
12M AGP	0.739
12M CRP	0.337

**Supplementary Table S2. Core microbiome analysis results at the genera level.** Detection and prevalence parameters were set to 0 and 0.80 respectively.

	6 Months	12 Months
<b>High CRP</b>	<i>[Ruminococcus] gnavus group</i>	<i>Actinomyces</i>
<b>Low CRP</b>	N/A	<i>Streptococcus</i>
<b>High AGP</b>	N/A	<i>Anaerostipes</i>
<b>Low AGP</b>	N/A	<i>[Clostridium] innocuum group</i>
<b>All categories</b>	<i>Bifidobacterium</i> <i>Escherichia-Shigella</i> <i>Streptococcus</i>	<i>Bifidobacterium</i> <i>Bacteroides</i> <i>Escherichia-Shigella</i> <i>Streptococcus (different OTU)</i> <i>[Ruminococcus] gnavus group</i> <i>Blautia</i>



**Supplementary Figure S1. Beta Diversity of infants is not significantly different between high and low inflammation levels.** Bray-Curtis Principal Coordinate Analysis (PCoA) plots correlating infant inflammation levels and diversity between cohorts. Clustering of cohorts was set at a 95% confidence interval a) Comparison of 6 months old infants with high or low AGP levels b) Comparison of 6 months old infants with high or low CRP levels c) Comparison of 12 months old infants with high or low AGP levels d) Comparison of 12 months old infants with high or low CRP levels.



**Supplementary Figure S2. More significant differentially abundant genera in 12 month vs 6 month old infants.** Volcano plots on the Deseq2 analysis that portrays the same data that was generated in Figure 2 in a different format. The a) 6 month CRP and b) 12 month CRP infants depict all their differentially abundant genera for both the 'High' and 'Low' levels. The c) 6 month AGP and d) 12 month AGP depict all their differentially abundant genera for both the 'High' and 'Low' levels. Significant results were genera of adjusted p value < 0.05.