

## Supplemental material

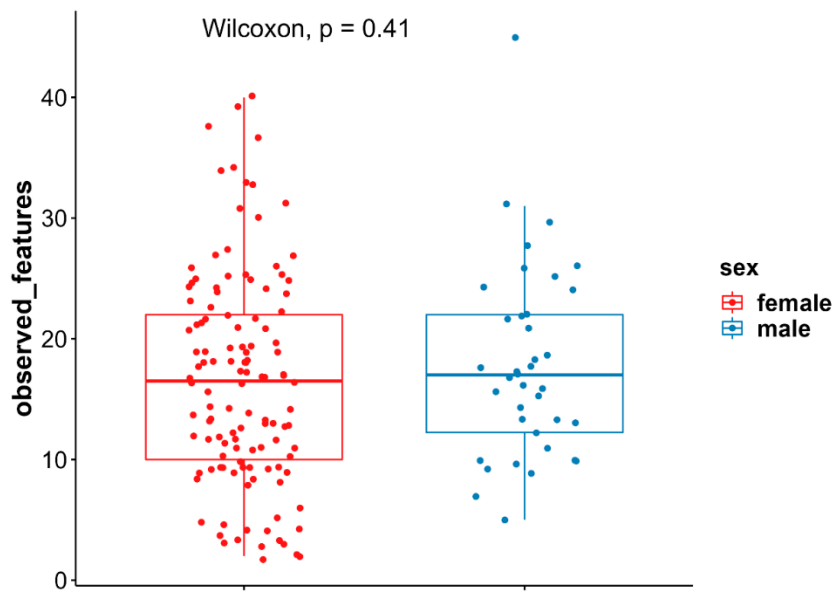


Figure S1. Observed features at ASV levels for female (n=125) and male (n=38) subjects (Wilcoxon test).

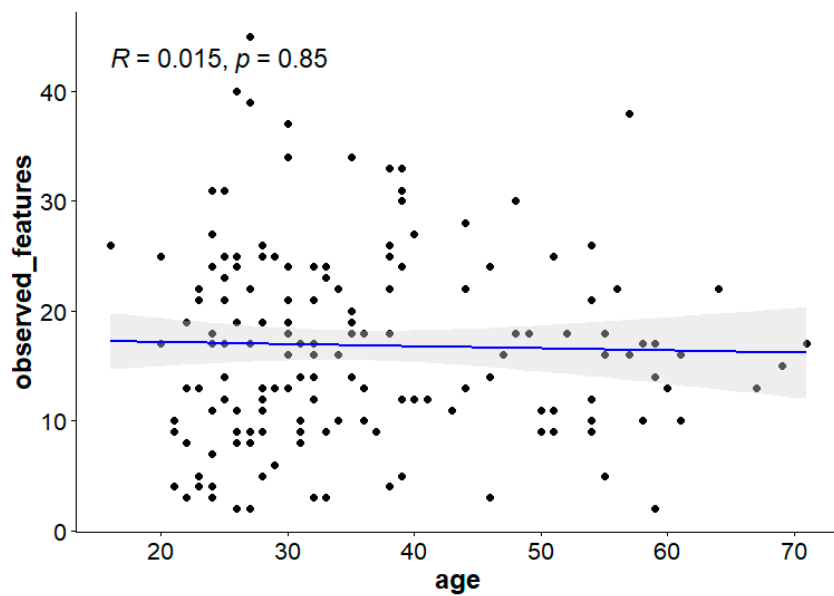
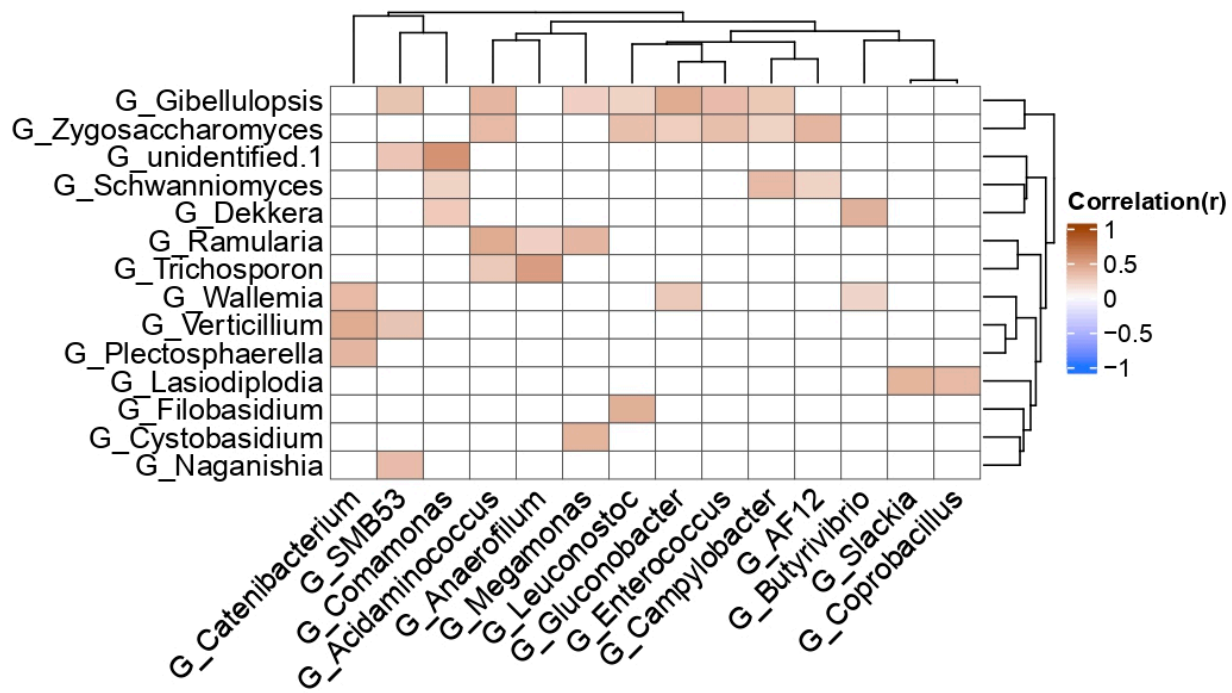
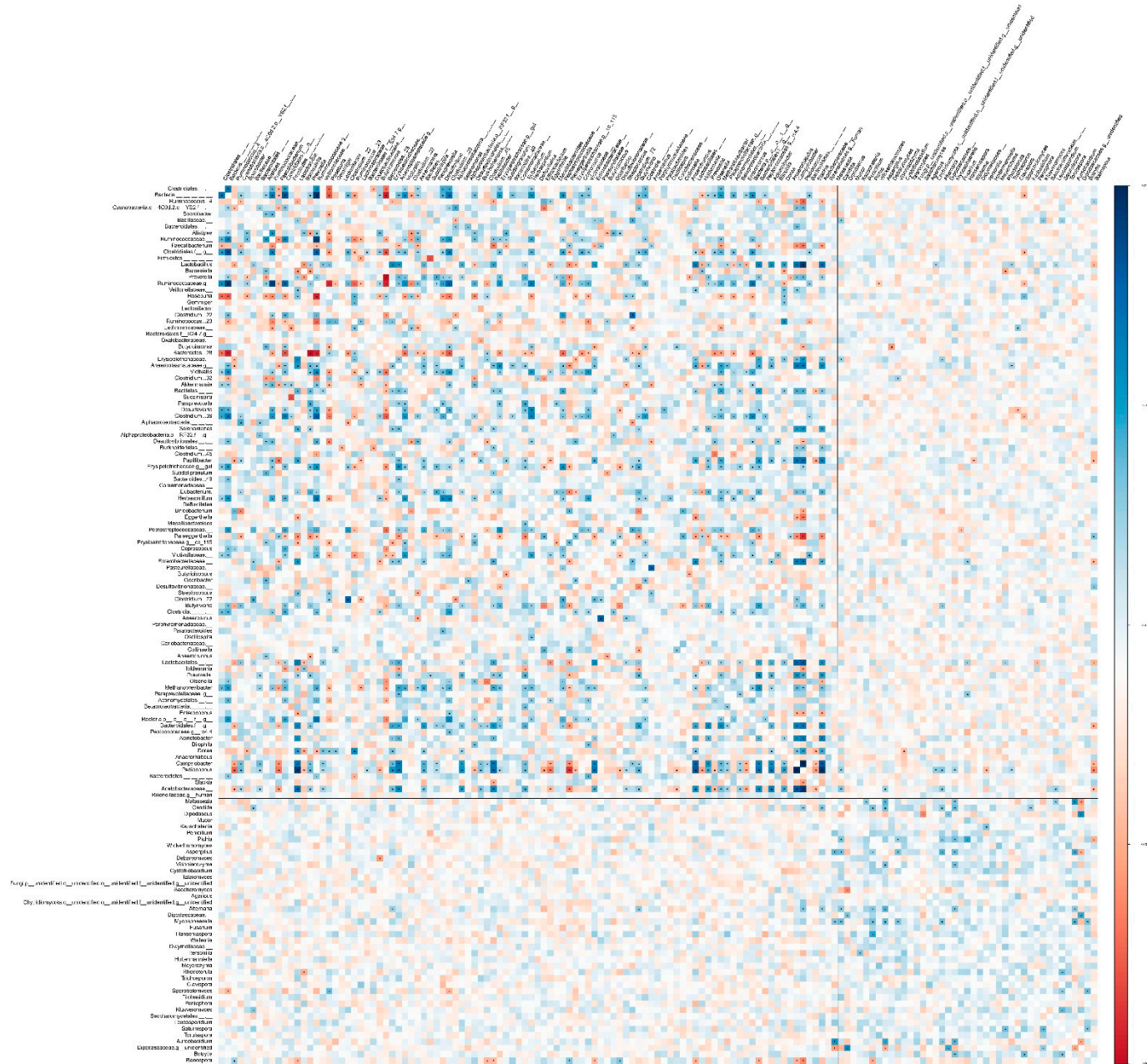


Figure S2. Spearman correlations for observed features at ASV levels for different ages.



**Figure S3.** Correlations between bacterial and fungal genera present in  $\geq 2\%$  samples; corrected p-value after FDR cut-off 0.2.



**Figure S4.** Spearman correlations for all taxa (bacterial and fungal) present in at least 20% of the samples. The horizontal and vertical lines indicate the division between the kingdoms.