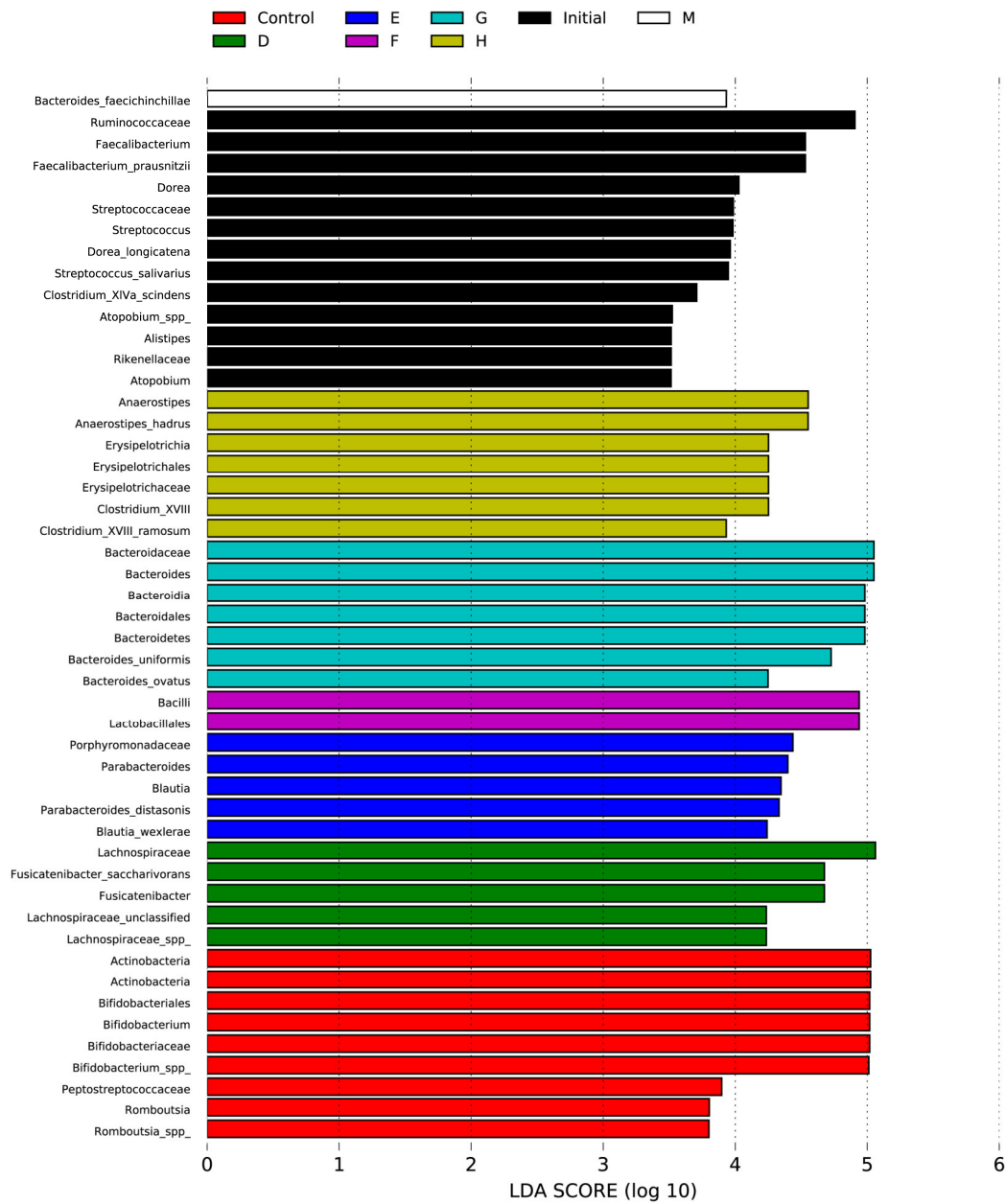
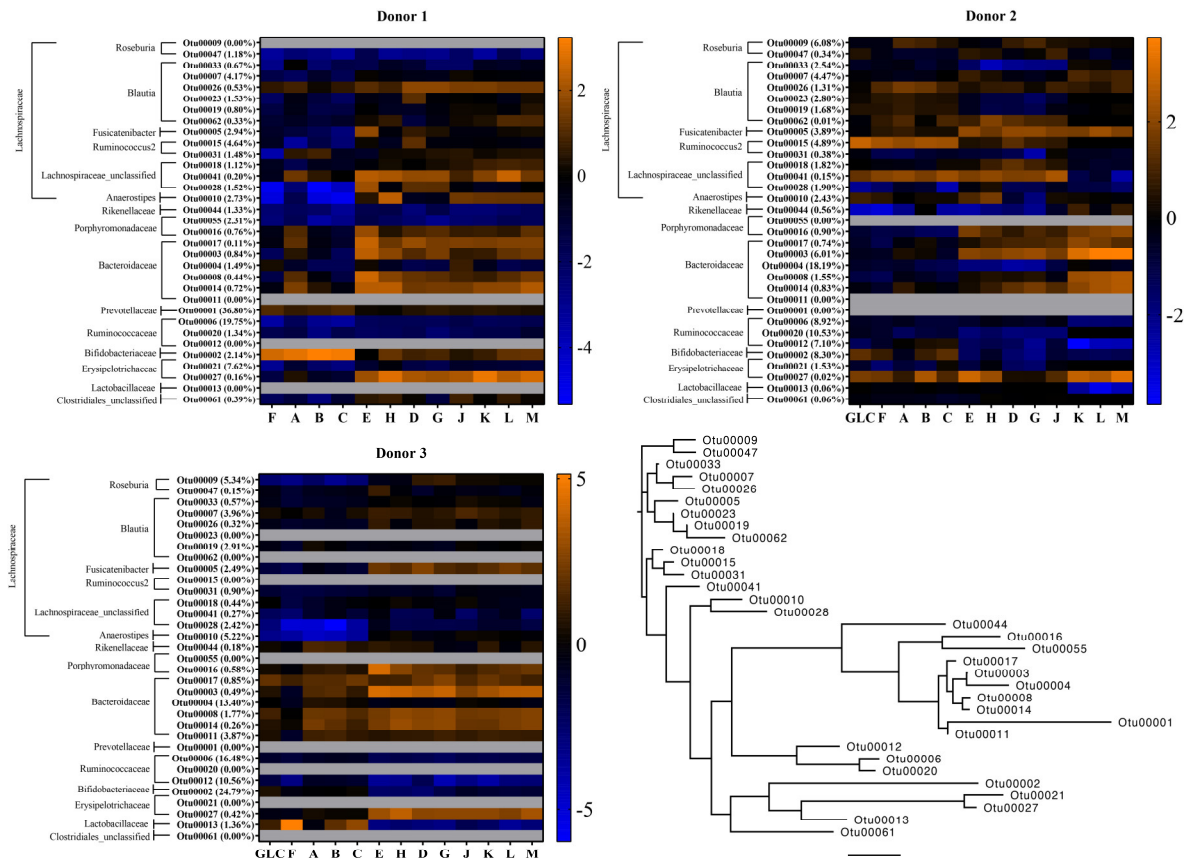


**Figure S1.** Linear discriminant analysis conducted with respect to glucan classes. Taxa with LDA scores  $\geq 3.5$  are shown.



**Figure S2.** Linear discriminant analysis conducted with respect to individual glucans. Taxa with LDA scores  $\geq 3.5$  are shown.



**Figure S3.** Log<sub>2</sub>-transformed changes in relative abundance over 48 hours of fermentation (abundance in 48 hr culture divided by that in initial fecal inoculum) for the most-abundant 33 OTUs across donors. Initial abundances for each donor are noted in parentheses next to the OTU number. Bottom right: phylogenetic relationships of OTUs generated using Fasttree.