**SUPPLEMENTARY FIG S1. Beta-diversity dissimilarity does not differ by smoking status.** Dots on the PCoA plots reflect the degree of similarity or dissimilarity in microbial community composition. Non-significant dissimilarity by smoking status was noted for Bray-Curtis (PERMANOVA p = 0.084), Unweighted Unifrac (PERMANOVA p = 0.116) and Jaccard (PERMANOVA p = 0.179) metrics. Red dots represent non-smokers while teal dots represent smokers, as per the legend.
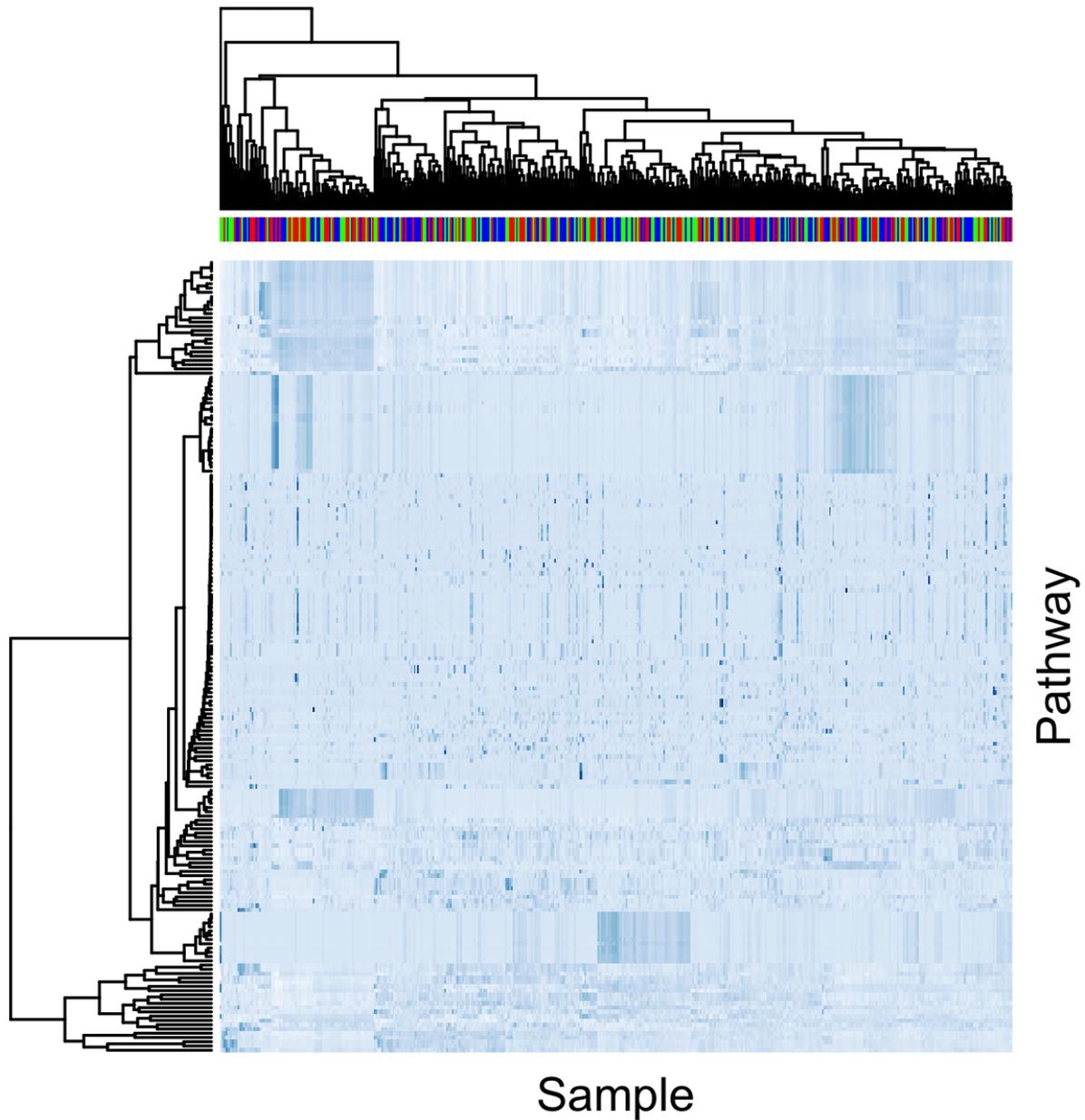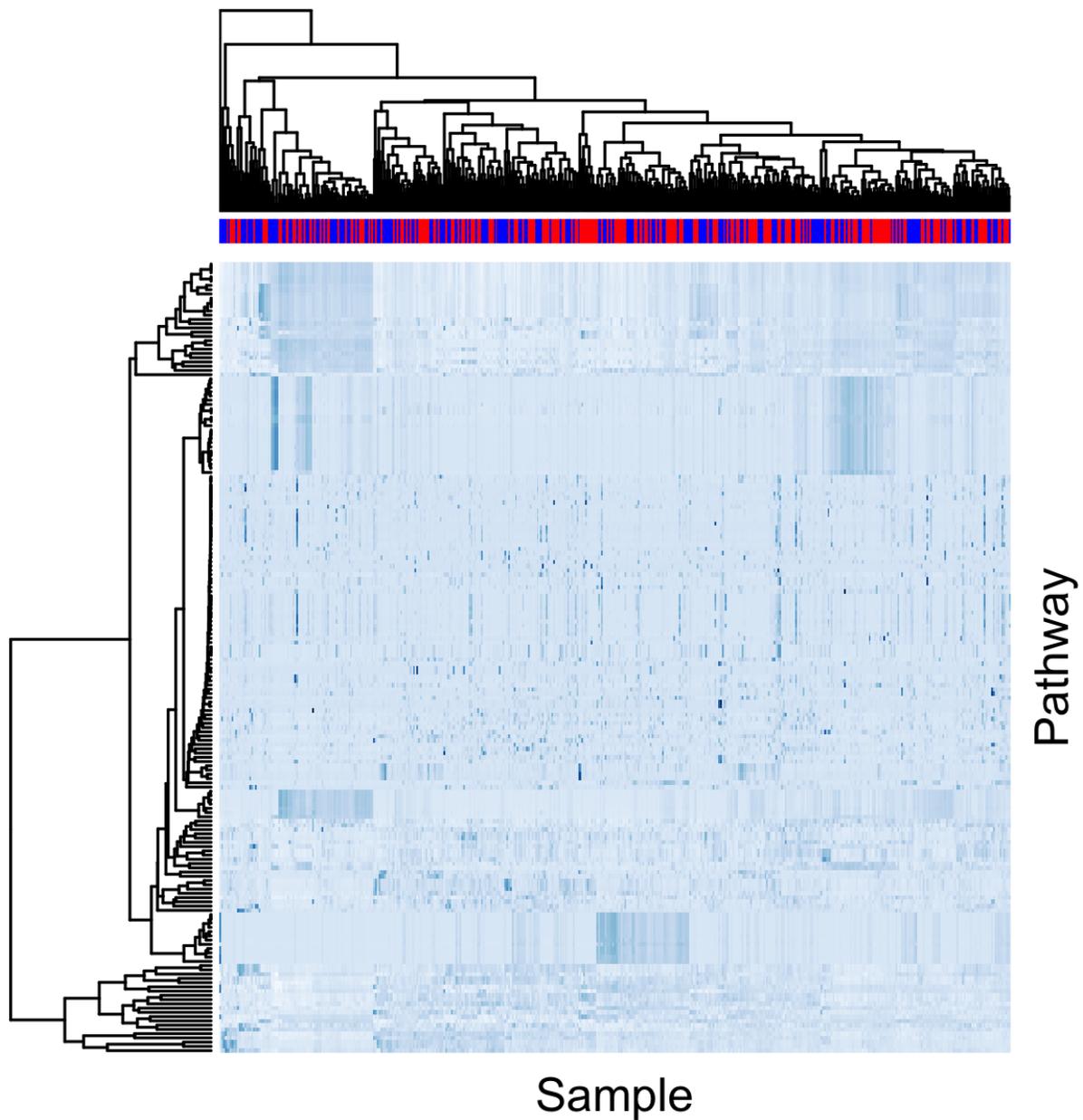
SUPPLEMENTARY FIG S2. Heatmap of clustered pathways shows no general association between differentially abundant pathways and BMI class. Dendrograms represent hierarchical clustering by Euclidean metric and complete method. Above the heatmap, lean, overweight, and obese BMI class are represented in red, blue, and green, respectively. Sample n = 385. Pathway n = 419.
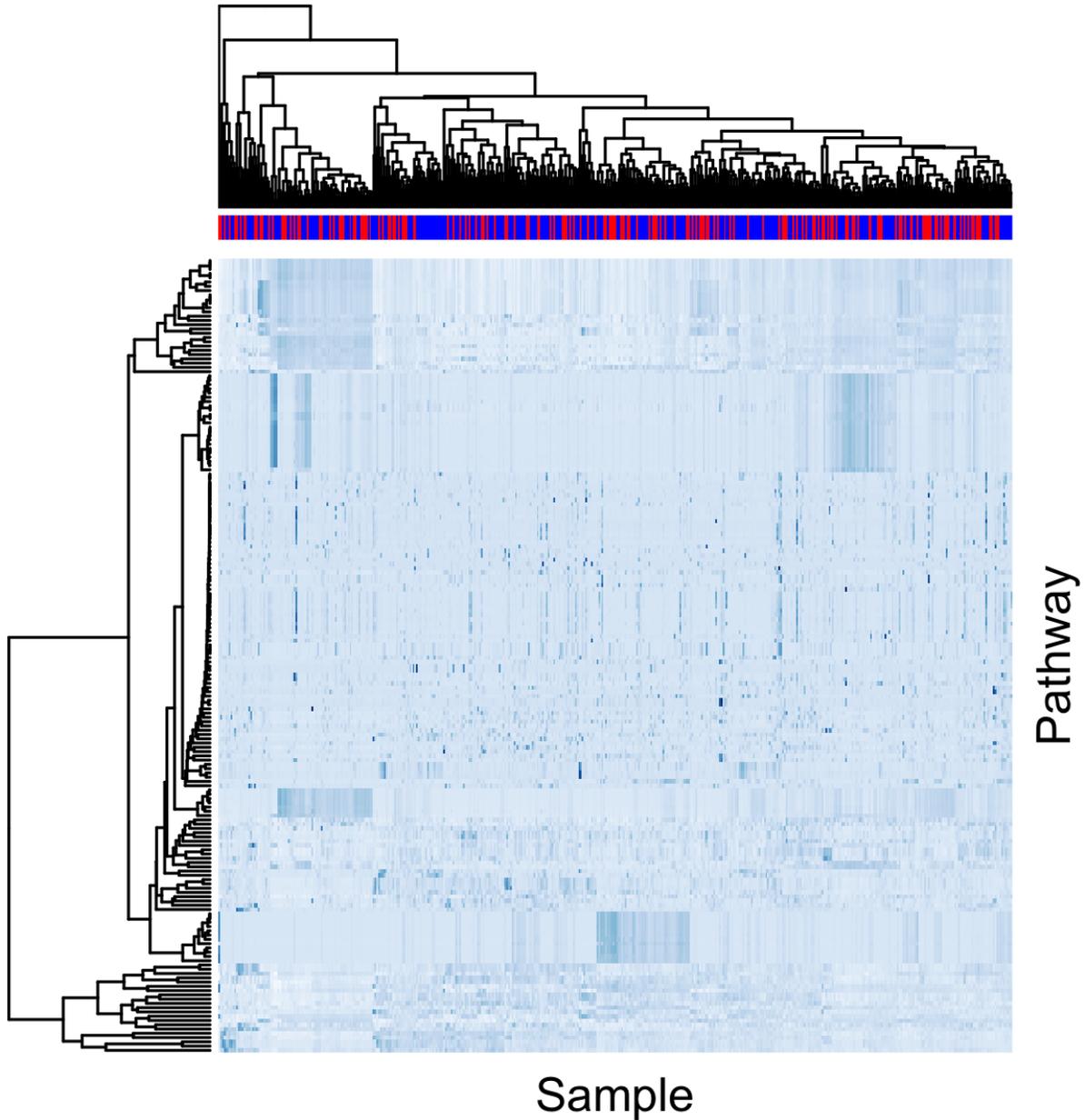
SUPPLEMENTARY FIG S3. Heatmap of clustered pathways shows no general association between differentially abundant pathways and cardiometabolic status. Dendrograms represent hierarchical clustering by Euclidean metric and complete method. Above the heatmap, healthy and abnormal cardiometabolic status are indicated in blue and red, respectively. Sample n = 385. Pathway n = 419.
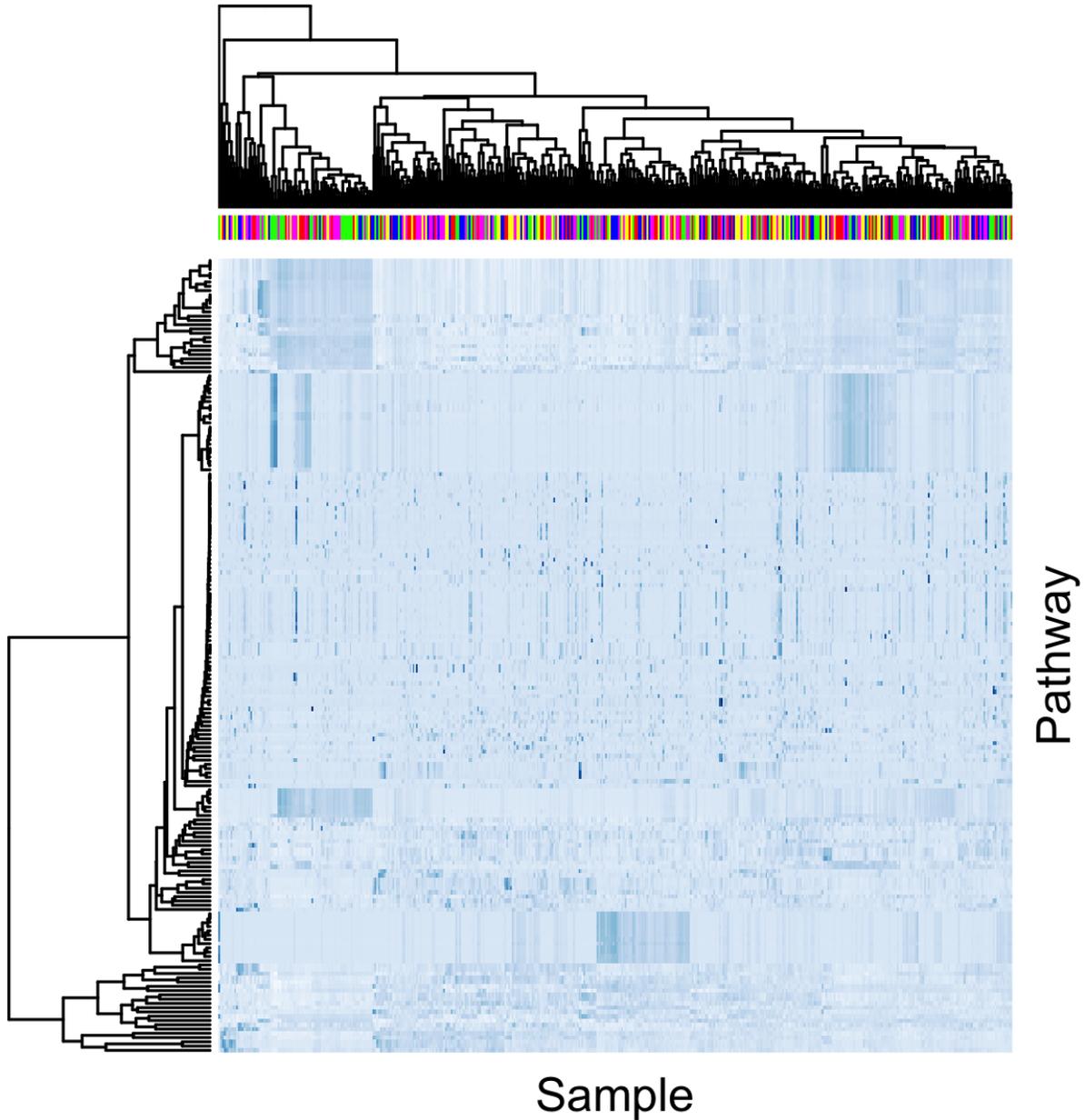
SUPPLEMENTARY FIG S4. Heatmap of clustered pathways shows no general association between differentially abundant pathways and city. Dendrograms represent hierarchical clustering by Euclidean metric and complete method. Above the heatmap, Bucaramanga, Cali, Barranquilla, Bogota, and Medellin are represented in red, blue, green, yellow, and magenta, respectively. Sample n = 385. Pathway n = 419.

SUPPLEMENTARY FIG S5. Heatmap of clustered pathways shows no general association between differentially abundant pathways and sex. Dendrograms represent hierarchical clustering by Euclidean metric and complete method. Above the heatmap, male and female are indicated in blue and red, respectively. Sample n = 385. Pathway n = 419.