Figure 2 – figure supplement 3. Confidence cutoffs for correlations and universality scores.
The three plots in panel **(A)** show density distributions of the observed correlations between taxa
(blue distributions) compared to random expectation (gray distributions) for three taxonomic
partitions of the data: ASVs, family/order/class-level assignments, and phyla. The random
distributions were generated by permuting the data 10 times per-host, shuffling taxonomic
identities within individual microbiome samples and re-calculating taxon-taxon correlations in
these permuted data sets. Mean correlations for the observed distributions are shown as black
points below each distribution. The observed correlations for ASVs range from -0.767 to 0.904
(mean = -0.009; median = -0.010); for family/order/class designations range from -0.719 to
0.803 (mean = -0.028; median = -0.029); and for phyla from -0.645 to 0.687 (mean = -0.088;
median = -0.092). Panel **(B)** shows density distributions of the observed universality scores in
blue compared to random expectations in grey, for pairs of taxa at the ASVs, family/order/class-
level, and phyla. Small, dashed black lines underneath each density indicate the mean observed
universality score at that taxonomic level.