

lake. Coding regions from reference genomes and metagenome assemblies were clustered at 97% sequence similarity, and the longest coding region was chosen as the representative sequence. Metatranscriptomic reads were mapped to these representative sequences. Annotations and classifications are derived from the sequence to which each read mapped. Read counts were summed across each lake and log transformed for visualization. Genes with no annotation information or annotations indicating photosynthesis were removed from this analysis.