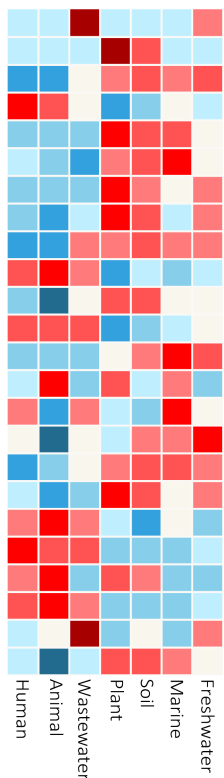
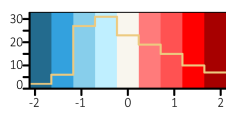
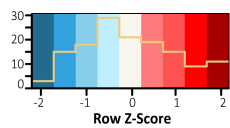
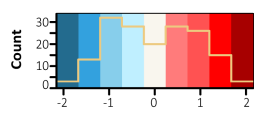
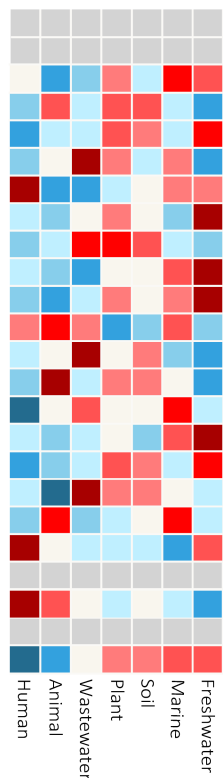


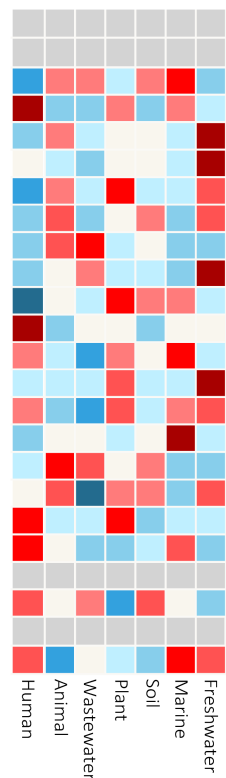
A.



Proteobacteria



Firmicutes



Actinobacteria

COG Categories

- A** - RNA processing and modification
- B** - Chromatin structure and dynamics
- C** - Energy production and conversion
- D** - Cell cycle control, cell division, chromosome partitioning
- E** - Amino acid transport and metabolism
- F** - Nucleotide transport and metabolism
- G** - Carbohydrate transport and metabolism
- H** - Coenzyme transport and metabolism
- I** - Lipid transport and metabolism
- J** - Translation, ribosomal structure and biogenesis
- K** - Transcription
- L** - Replication, recombination and repair
- M** - Cell wall/membrane/envelope biogenesis
- N** - Cell motility
- O** - Posttranslational modification, protein turnover, chaperones
- P** - Inorganic ion transport and metabolism
- Q** - Secondary metabolites biosynthesis, transport and catabolism
- T** - Signal transduction mechanisms
- U** - Intracellular trafficking, secretion, and vesicular transport
- V** - Defense mechanisms
- W** - Extracellular structures
- X** - Mobilome: prophages, transposons
- Z** - Cytoskeleton
- R+S** - General/unknown function