**APPLICATIONS IN BPG**

**Homework – Dr. Rogers**

**Phylogenetics**

**Read the following paper (provided):**

Hug, et a. 2016. A new view of the tree of life. Nature microbiology. DOI: 10/1038/NMICROBIOL.2016.48.

https://www.nature.com/articles/nmicrobiol201648

**Describe how this study was performed. Specifically:**

1. What data were used?
2. What was the source of the data?
3. How was the data organized?
4. What phylogenetic methods were used?
5. What are the conclusions of the paper?
6. What can you say about the placements of the Bacteria, Archaea, and Eukarya?
7. What can you say about the genetic diversity of the Candidate Phyla Radiation compared to the genetic diversity of the Proteobacteria?
8. What can be concluded about the evolutionary histories of the Archaea and Eukarya?