**Learning Objectives**

After this week’s lecture you are expected to able to do the following:

1. Compare and contrast bioinformatics and computational biology
2. Compare and contrast computational biology/bioinformatics with other biological disciplines
3. Identify cases where the application of computational biology (and/or bioinformatics) is necessary to solve problems
4. Synthesize your knowledge about biology to identify types of “big data” in biology
5. ~~Identify problems in biology that require computational solutions because of their extreme complexity~~
6. Demonstrate comprehension of the relationship between computational ecology and new technologies
7. Demonstrate comprehension of the value of computational skills within and outside of biology