<u>Expectations for Bioinformatic Portion of Final Presentation, June 2019:</u>

First of all, do not be nervous! These presentations are not meant to be stressful experiences, rather opportunities for you to reflect on your experiences and what you have learned. I am only writing this outline because I believe it could be a helpful point-of-reference for what we have covered in this portion of your summer REU. Below are a series of questions that are meant to act as prompts for you to outline your presentation.

1. What gene were you provided?
   a. What is its annotation?
   b. What domains does it have?
   c. Are there any related genes that have known function (i.e. BLAST hit to well-documented gene)?
2. How is this gene expressed?
   a. Does it increase expression in response to pathogen challenge (i.e. the RNA-seq dataset we worked with)?
   b. Is this increase or decrease significant?
3. How has this gene evolved?
   a. What orthogroup does it fall into?
      i. What is an orthogroup?
   b. Is it a large or small orthogroup?
      i. What does that mean?
   c. What does the phylogeny look like?
      i. What is the pattern of duplication?