Post Lab Questions: Week 5

OneCard: 1955791

October 2017

# I. Check for Understanding

**1. Which organisms have the three most closely related psbA proteins to your ORF? (Hint: you can use UniProt, as we learned last week, to figure out what organisms these proteins come from.)**

**2. Based on these results, what might you infer about the photosynthetic organisms in your sample? Are they eukaryotes, archaea, bacteria? Do you think you can make broad conclusions about the whole community of photosynthetic organisms in your sample? Why or why not?**

# II. Mini Research Question

Now come up with a question that you can answer about your own project dataset using trees. If you BLASTed a protein from last week and found some interesting hits and want to learn more about it, this could be your opportunity. Or you could ask an entirely different question.

**For this week's postlab assignment, describe:**

* What question did you ask?
* How did you go about answering it? (Write this like you would a Materials and Methods section: include which databases you searched, which software packages you used, and which important flags you used in your commands. You should include enough information for an intelligent researcher to be able to replicate your results.)
* What were your results? Describe them. (Write this like you would a Results section. Include a tree if appropriate.)
* What does this tell you about your project dataset? (Think of this as a mini Discussion section: I'm looking for evidence that you thought about your results and how they connect more broadly to some ecological or evolutionary pattern in your dataset.)