

Introduction to Bioinformatics
Problem Set 8: Annotation Projects

*All problem sets are legitimate fodder for exams.
 However, this one has a special relationship.
 You may be certain that the questions listed below
 will in some form be included in the second exam*

Annotation of Wally or Batiatus

1. Do you now have a portion of your group's phage (Wally or Batiatus) assigned to you to annotate?
2. Have you found genes in your portion of your group's phage? What method(s) did you use? What coordinates and directions did you find? You are aware (yes?) that there is provisional (= not necessarily very good) gene assignments for both phages in the shared directory (wally.txt and batiatus.txt)?
3. Have you decided whether each gene you found is or is not a legitimate gene? How? What were your decisions?
4. Have you checked the nominal start sites for each gene you found? What went into your decisions to accept or reject proposed start sites?
5. Have you looked for functional roles for each of the genes? How? What are those roles?
6. Have you assessed how each gene might be regulated? Do you believe it is part of an operon? Where do you believe it's promoter lies? What is the basis for your beliefs?
7. Have you detected any other interesting DNA features in or near the genes?
8. Have you posted your decisions to the annotation pages for the genes within PhAnToMe?*

Group Research Projects

9. Have you chosen a particular focus that fits within the focus of your group? What is it?
10. Have you developed a perhaps exhaustive list of articles, including research articles that are pertinent to your individual focus? I'd like to see it.
11. Have you used PhAnToMe to edit the annotation page of a phage gene in light of what you learned from a research article?
12. Have you written a summary of a pertinent research article? I'd like to see it.
13. Are you looking forward to the Research Symposium at the end of the semester at which your group will present its findings?
14. Are you looking forward to the individual report you will write at the end of the semester in which you will present findings on your individual focus? You can learn more about this by going to <http://www.people.vcu.edu/~elhajj/bnfo301-11/Units/final-report-advice.pdf>

* At time of writing, the annotation pages for Wally and Batiatus are still not available through PhAnToMe / BioBIKE. This better change soon!