

1. Report on Finishing Your Fosmid

Spring 2006

Dear Bio 4342 students,

Your written and oral report detailing your efforts to finish your fosmid clone will be due Friday, March 3, 2006. The oral report should be approximately 10 minutes long and should be done with PowerPoint figures. The written report should be provided in hard copy before your presentation, and should include the same data figures, plus additional figures as needed. (Two copies, with color figures are required; you can print color at no cost in the Biology Library.) You may format your written report as you wish; feel free to write in first-person. This is your project!

Your written report will document the process you used to finish your fosmid, and should include the items listed below plus commentary. Since you only have 10 minutes for your oral presentation (and we will need to stay on time!), you will not have time to explain every problem region in your oral report. Show one region of several similar regions and explain unusual areas that other students may not have come across. Make sure you explain differences between the reads that you called and the reads called by Autofinish. After seeing the Autofinish results, did you choose to call any more reads in any areas? Did Autofinish call reads that you thought were unnecessary?

You should make sure you include the following in your reports:

1. Figure showing assembly view of your initial assembly
2. Description of problems from your initial assembly
3. Table detailing reads called to fix these problems; comparison with Autofinish
4. Figure showing assembly view with new reads added
5. Description of problems with the second assembly
6. Table of reads called to fix these problems; Autofinish comparison if applicable
7. Repeat number 4-6 as necessary for further major assemblies
8. Figure showing final assembly (as of the report date) of your fosmid
9. At least two figures showing restriction maps and *in silico* digests
10. Description of final checklist of relevant items, particularly any remaining problems

The following should be helpful in describing problem regions:

1. Figures showing zoomed in view in aligned reads window
2. Figures showing problem areas/edits in traces window
3. Figure showing problems from Navigator window
4. Figure showing compare contigs window if you forced joins

Usually, these figures can be created by screen capture of the appropriate consed window on your Mac. In addition to Screen Capture (apple + shift + 4) there are two applications for this purpose: Grab (in the utilities folder) or Snapz Pro. If you have any problems with capturing images, please ask during class! There are prototype reports on the web (<http://www.nslc.wustl.edu/elgin/genomics>; go to Bio 4342) and we will have prototype

presentations from last year's students during class. If you have any further questions about the report, please e-mail and they will be answered in class. Good hunting!