BNFO301 – Introduction to Bioinformatics (Spring 2009) Final Project: Advice on Written Report

- **Date due:** Friday, 8 May 2009, end of business. No later. Well, you can turn it in later, but I do not guarantee that I'll be able to read it before I'm compelled to turn in grades.
- **Medium:** Electronic. Any figures (and there will be figures) should be incorporated into the same file, either on the page where they're referenced (easier to read) or at the end of the file (easier to do).
- Audience: Biology majors who have not taken BNFO301. Note that this is a different audience than your oral presentation. You may presume a knowledge that a biology major may know, but don't presume more than that.

General advice regarding content:

- <u>Your goal</u> is to tell your colleagues what you have found concerning one or more of your metagenome reads, how you found it, and what convinces you (and possibly us) about your conclusions.
- <u>Introduce the work</u>: In almost every report you will ever give, the proper place to begin is by explaining the overall goal motivating the work you're presenting. *This case is no different*. Start with a large goal and proceed in logical steps to make compelling the actual work you did.
- <u>Tell a story</u>: Stories are interesting. Blobs of facts are not. Interesting reports may have an effect on the reader. Uninteresting reports are rapidly forgotten. I have no doubt that you have an interesting story to tell. Tell it.
- <u>No result without a method</u>: Your goal is to convince. No conclusion is convincing without supporting results. No result is comprehensible without a description of how it was obtained.
- <u>No fact without a reference</u>: If you appeal to a fact that is not generally known, cite a reference.
- <u>Show actual results</u>, but in a way that your audience can grasp within minutes. You may well have to recast the result from the original format given by a program.
- <u>Use graphics</u>: We are a visual species. We understand through images.
- <u>Wrong turns and dead ends</u>: You'll have to decide whether to include them or not. Sometimes they add to the story, sometimes they don't.
- <u>Communicate to your audience</u>: Think hard about what they may be expected to understand and what requires more explanation. Again, your audience is not me but biology majors unfamiliar with bioinformatics. Never use a word or phrase you don't understand. They won't either.
- <u>Tell a story</u>: (no harm in saying it again)