BNFO301 – Introduction to Bioinformatics (Spring 2009)

Final Project: Advice on Oral Presentation

Date: Wednesday, 6 May 2009

Time: 8:30 AM – 11:00 (but we'll probably finish long before then)

Place: Life Sciences North, Room 250 (i.e. our usual place)

Duration: About 5 minutes (***not much time!***)

Medium: Any way you like, but you won't be very successful without visual aids, and PowerPoint may be the easiest way to make them visible

Audience: Your BNFO301 colleagues. You may presume a minimal knowledge of matters we have considered this semester. Don't presume more than that.

To deliver: The presentation of course. In addition, I would like a copy of the presentation. If you e-mail it to me before 8:00 AM, Wednesday, 6 May 2009, then you've dispatched that responsibility. I will make sure your presentation is on the classroom computer and ready to go. If you don't mail it by that time, then please come to class at least 5 (better 10) minutes early to load the presentation. If you prefer to present from your own computer, please let me know the kind of computer you have and whether you have a video output cable. I still want a copy.

General advice regarding content:

- Your goal 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.
- You will watch ~20-times as many presentations as you give. You will thank those presenters who are ***interesting***. Focus on what is interesting about your findings. Generalities are (in general) not very interesting. Stories are. If you can work your findings into a story of discovery, we'll all be much happier.
- In almost every presentation you will ever give, the proper place to begin is by explaining the overall goal motivating the work you're presenting. In this special case, where every one of you could describe the same motivation, let's declare a truce and stipulate that no one needs to do this – otherwise we'll hear pretty much the same thing 20 times. But recognize that this is a special case.
- Tell a story (yes, I said this before, but it's worth saying more than once).
- Don't resort to black boxes. If you used a technique that is not standard knowledge to your audience, explain it.
- As your story proceeds, make sure your audience understands your motivation in going to the next step. Not "*I did this, then I did that.*" but rather "*I wanted to find out this so I did that.*"
- Show actual results, but in a way that your audience can grasp within seconds. You may have to take output from a program and put it in another form yourself for simplicity.
- Don't show more than a few words on a slide at any one time. You can put more on a slide, but do so sequentially. We in the audience saturate after a few words.
- DON'T READ. And don't tempt yourself by putting complete sentences on slides.
- Never use a word or phrase that you do not understand.

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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:

- Your goal 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.
- Introduce the work: 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.
- Tell a story: 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.
- No result without a method: Your goal is to convince. No conclusion is convincing without supporting results. No result is comprehensible without a description of how it was obtained.
- No fact without a reference: If you appeal to a fact that is not generally known, cite a reference.
- Show actual results, 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.
- Use graphics: We are a visual species. We understand through images.
- Wrong turns and dead ends: You'll have to decide whether to include them or not. Sometimes they add to the story, sometimes they don't.
- Communicate to your audience: 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.
- Tell a story: (no harm in saying it again)