Assignment # 5

Astro 597 – Winter 2020 Writing Workshop

1: Tracking progress

Please continue to note how many words you wrote on each of 4 different days. Write me a short sentence or two about how it's been going, what's been working for you, what changes in your writing process you're experimenting with? etc — basically anything where a bit of feedback, self-reflection, and/or accountability could be useful.

2: Please catch up on reading excerpts handed out class over the past weeks.

Please go back and read any of the past handouts (from "The Scientist's Guide to Writing" by Stephen Heard, from "Writing Science" by Joshua Schimel, and the Gopen & Swan article) that you may not have gotten to in previous weeks. The Heard "Finding Your Story" chapter should definitely be on your list to read if you haven't already!

3: Using a "Word Stack" to Plan a Section

First re-read the section on "Word Stacks" from Stephen Heard's chapter on "Finding your story".

Next, generate a word stack for a section of your document that you intend to outline in more detail. If you're very early in your project, pick a "methods" section. If you're well into a project, it might be time to work on the introduction of the discussion section. If you're done with most of the "making plots" part of your project, maybe tackle an analysis and/or results section. You can choose to do a word stack for a substantial sub-section (rather than a full section). You may also decide to aim for a full section, but then break your work into sub-sections based on what turns up in your stack.

Remember, the point of the word stack is to stream-of-consciousness write down *everything* that could possibly turn up in your paper. Do not edit it down or organize it! Feel free to add to the stack over several days. You can also include items that you haven't actually done yet, but that you know you'll need to write about at some point.

4: Organize your "word stack"

Make a copy of your word stack from #3, and begin to shuffle around the entries to find a good order for your section (first before last, general before specific, straightforward before subtle, etc). If you find any obvious "holes" uncovered by your reorganization, feel free to add additional entries.

While organizing the word stack for a single section, you may want to put in place-holders for other sections, so that there's a destination if you decide an entry doesn't have a natural place in the section you thought you were working on (i.e., if an entry is too big picture, it should go back in the introduction, or if it's really about the spectroscopy and you were trying to build up a section about the imaging, you'll want a new subsection to isolate it).

5: Use your proto-outline to plan ahead

Using your organized word stack from #4, evaluate whether or not you have the information needed to write about the individual entries. For each entry, make a note about whether the entry is "ready to write", and if not, add notes about what you need to do to make yourself ready ("calculate error bars", "read the paper by Prof. X et al", "make a plot").

Use this to plan your writing and effort over the coming weeks.

As you build from this proto-outline towards an actual outline, try to expand on any entries that seem too general and thus might be whole sections of their own (i.e., avoid "Discuss uncertainties" in favor of "Discuss uncertainties due to calibration" + "Discuss uncertainties due to sample size" + "Discuss uncertainties due to choice of fitting function"). This exercise is a good chance for you to do some deeper thinking about what's important, or about what issues might need to be considered. If you can only come up with a general entry, it's a sign you need to dig deeper through a combination of reading, thinking, and discussion with collaborators/colleagues.

For a well-developed outline, try to aim for building down to the one paragraph per outline entry level. You shouldn't expect to get to that level of detail in one step, because there is a lot of work involved in "figuring out what you want to say". However, it is a mistake to think that "Say something about cool stars" is an endpoint, rather than a signal to "synthesize and analyze a lot of literature about cool stars".

4: Write at least two more paragraphs for the main body of your paper

Your choice of what kind and what section! Turn in edited versions.