## **M2** Research Article: Extra Content Guidelines

Many of these guidelines are copied directly from the wiki so please be sure to find the other relevant parts of the assignment here:

http://openwetware.org/wiki/20.109%28F14%29:\_System\_engineering\_research\_article http://openwetware.org/wiki/20.109%28F14%29:Guidelines\_for\_writing\_up\_your\_research

Because the data collection was not exactly as we anticipated it would be, here is a framework for presenting the RESULTS and DISCUSSION that I'd like everyone to follow.

## **RESULTS TEXT**

Begin this section with a three sentence review/overview of experimental goal, then...

- o *Topic 1*: Characterization of Initial System
  - Detail bacterial photographs and light/dark exposures
  - Detail β-gal data
- o Topic 2: Screen for pCph8 mutants + characterization if you have some
  - Detail mutant hunt
  - Detail how candidates pursued (seq. prot gel...not  $\beta$ -gal)
- o Topic 3: Characterization of select mutants (H537A + Y541R, Y, P, or L)
  - Detail β-gal data
  - Detail bacterial photographs

## **RESULTS FIGURES**

Figure 1: for data in Topic 1 Figure 2: for data in Topic 2 Figure 3: for data in Topic 3

## **DISCUSSION**

Begin this section with a three sentence review/overview of paper so far then dive into what you can say about the two mutants that were isolated, seq'd and tested in Topic 3. If your initial 2 mutants fit smoothly into that narrative, then great! Please include them. Otherwise frame the story of the mutants you isolated in Topic 2 as a "pilot" to get the screen underway and discuss the mutants you tested in Topic 3 as the critical data collected.

Other relevant info on wiki still holds, i.e.

- draw conclusions you can draw from your work, and consider any uncertainties,
- discuss other data (published or personal communications) that support or contradict your ideas
- discuss limitations of your work, e.g. what kinds of experiments/controls/samples would have been great to include
- describe next experiments you would like to try to extend your findings and strengthen your conclusions