

BICH676: Bacteriophage and Bacterial Cell Biology Graduate Journal Club Syllabus for Spring 2018

Class Time: Wednesday 12:00 – 1:00 pm, occasionally modified for Instructor’s schedule (officially 1200 – 1250 for 1 credit hour)

Class room: BioBio 106A or TBA

Office hours: By appointment through the course secretary.

Instructor: Ry Young (5-2087), room 311A BioBio; ryland@tamu.edu

Administrative Assistant: Daisy Wilbert (5 -9427), room 308 BioBio; daisy@tamu.edu

Google Drive folder: [BICH676 Spring 2018](#)

TAMU L.E.A.D.S Emergency Information:

<http://studentaffairs.tamu.edu/emergency>

Course structure and objectives:

This Journal Club is an official function of the Center for Phage Technology. While graduate students will constitute the official registered enrollment, CPT staff may also participate. The JC is modeled on the Beckwith-Silhavy literature class of the 1970s, documented in the book “Power of Bacterial Genetics: A Literature-Based Course” (ISBN-13: 978-0879693794). For enrolled students, the educational objectives are (a) to build your knowledge of phage and bacterial cell biology and (b) to develop your presentation and “think on your feet” skills. To these ends, the practical goal is to make each class a highly interactive discussion, so all the participants (including faculty and staff) have the opportunity to participate and learn something, during which the students will get substantial practice in critical reading and presentation. To this end, there are some general principles and rules:

1. There are usually two **Designated Presenters** (DPs) for each meeting. The DPs are responsible for the physical set-up; i.e., making sure the projector(s), transparencies, and lighting are functional. *The DPs have additional responsibility for giving a short background and looking up important methodology to explain to the group.* Powerpoint is optional here; whatever is easier. The expected level of effort will be to generate one or two transparencies or slides, or just write on the board. Nothing has to be memorized; you can use prepared notes for the Intro and you can bring any references you want for the Methods. It would be best if the DPs split the duties, like one person do the background, the other focus on unusual methods, but this is up to the team.

2. **The presentation will be done jointly, by everyone else in the class that day.** In some random order, to be determined each session, an individual will stand up and describe the first figure or table. What is the question, what was the approach, what were the results, and what did it mean? Then the next person does the next table/figure, and so on. If you are called on to do this, and you don't understand something, just say so. The odds are that someone in the room understands, just as others may have questions. The theory is that peer pressure will, at equilibrium, have everyone putting in the effort to read and understand the paper. (This is in part why I insist on part 4, below.)
3. **The Instructor and grading:** The Instructor is there to moderate, to provide experience/expertise, etc. There will be a grade assigned but it depends only on your level of participation, not on your background and depth of knowledge. However, failure to prepare, if I detect this, will attract attention. This is a graduate Journal Club so normally the grading would be A for strong participation, B for adequate and C for inadequate or unprepared participation.
4. **Every student** who enrolls in the fall and is still here in the spring must sign up for the spring too. So you are committing to this process for the whole academic year.

Please let us know dates where you would prefer not to be the Designated Presenter due to some exigency in the schedule.

Choice of Papers

1. All papers will be chosen by enrolled students. Each student should submit a paper of their interest to their lab coordinator and will be the designated "DP1" if that paper is chosen.
2. Each lab submits a prioritized list (ie. vote within you lab) on Google Drive excel file, along with any known dates of absence for students written next to their name.
3. The final compiled list and schedule of papers will be determined based on the number of enrolled students in each lab and chosen by your lab's prioritized list.
 - a. Final schedule will be discussed and agreed upon first day of class (Jan. 17) and any conflicts addressed.
 - b. At this point, DP2 spots (determined by Daisy) must be filled and if you are required to hold a DP2 position this semester you have the opportunity to sign up for a the paper of your choosing by filling in

the empty slot on the JC paper schedule, next to DP1. Any unfilled positions by Fri Jan 19 will be assigned at random by Daisy.

4. Responsibilities of DPs:

DP1-

Since you are presenting the paper of your choosing and are likely very familiar with the concepts presented, you are expected to know the paper inside and out. This removes any confusion between presenters as to how extensive each other's understanding is. As the main presenter you now have full directoral control over how to best present the concepts (and figures) to the rest of the class to make sure everyone is on the same page. In addition to background/introduction discussion responsibilities held previously, DP1 will now be required to also prepare the **SINGLE** powerpoint to also include the methods and significant figures.

- not all figures are necessary
- not all methods need explanation
- encouraged to present CONCEPTS to class rather than just figures
- direct discussion and provide necessary transition into slides (ie. if you feel a method and figure are best discussed back to back you can jump in)
- does not have to be in any particular order as before (ie Background, Methods, Figures) **grading based on how you understand the material and whether the way you direct discussion was constructive to the class's understanding)
- **ANSWER** any questions that arise during discussion; you should have almost expert level knowledge of material you are presenting.

DP2-

Since you also have an opportunity to sign up to present a paper of interest, you will also need to have significant understanding of the paper. You are no longer specifically required to present the methods or prepare any slides, unless your DP1 requests so. DP2 can be tasked to present more novel and difficult methods during presentation if needed. The main NEW responsibility of DP2 is to **RESOLVE** issues that arise during discussion and help keep flow of class. At the end of the presentation (ie. end of paper) the DP2 will provide the class with a "**Summary of discussion and resolution of issues**" that should not just be a repetition of the figures but the take home message people should leave with. In resolving issues, this is usually looking up statistics/info and other data from related publications to answer or address any outstanding

questions the class has. Issues can be resolved during discussion by DP2 if necessary (ie significant to the progression of discussion), but this should be avoided to prevent interrupting the flow of discussion.

There is a mutual benefit for everyone in the class; DP1 has 100% control over presenting the paper of their choice and guiding the discussion. The depth of the class' understanding should reflect whether concepts were effectively communicated and ideally will translate to discussions being more constructive and conclusive. DP2's final summary will also reflect how well the significant concepts were presented and the depth of discussion.