

Presenter Guidelines

Journal Club on the Biological Sciences

Select a peer-reviewed journal article within the theme that was published in the last 5 years (from 2016 to present). The theme this year is SARS-CoV-2 - Viral genome and particle structure. We will not be discussing Covid-19, the disease caused by this virus. Rather, we will focus on the genome of the virus, the structure of the viral capsid and coat proteins, and the mutations that lead to different coat proteins in the variants.

Your goal as a presenter is to make the paper you selected accessible and understandable to your peers, who have attained a similar level of scientific background or may be a year or two behind you in their training.

I recommend reading the paper at least twice. First, read the paper carefully, highlighting words, techniques, or concepts you don't understand. Spend time looking those terms up and making notes on the paper. Second, review the paper and assess the claims made and the data presented to support the claims. You should be asking yourself if the data is sufficient, if the appropriate controls were performed, if the control data was included, and if the conclusions drawn are supported by the data presented.

Once you have fully understood the paper, you can begin working on your presentation. The skeleton of the presentation will be taken directly from the paper, including the figures, findings, conclusions, and context in the field. When presenting the paper to your peers, however, you will want to provide context and any necessary background information. The guidelines below are to help you in designing a thorough and easy-to-follow presentation of the journal article.

- What background knowledge do we need to understand this paper? For instance, do we need additional information about a particular biochemical pathway, a disease, or a particular species used as a model organism? These details may not be presented in the paper because the paper has fellow experts in the field as its target audience.
- Include a slide with jargon/vocabulary terms and define them.
- The presentation should address the following questions:
 1. Why did you pick this paper?
 2. What is the big question, and what is the question this paper seeks to address?
 3. What are the experimental techniques this paper adopted?
 4. What is the conclusion of each figure? What are the overall conclusions?
 5. What is the significance of this paper? How will this paper impact the field?
 6. What's wrong with this paper? Or, is there a controversy about this paper?
 7. What is the follow-up on this paper? Or, if you were the author, what would you do next to follow up on the study: what is the next question to be answered, and how would you address it?
 8. Has this paper influenced the type of research you would like to get involved in?
- Propose 2 discussion questions about the paper
- At the end, tell us what you got out of presenting a paper and this experience.