## Presenter Guidelines Journal Club on the Biological Sciences

Select a peer-reviewed journal article within the theme ("Gut Microbiome and Human Health and Disease") that was published in the last 5 years (from 2015 to present).

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 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 be presented in the paper with very little detail 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.

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