

Guidelines for Student Presentations

I. Introduction (5-10 min):

1. The student should begin presentations by briefly stating the main problem(s) or hypotheses being addressed (2-5 min). Then introduce the authors, the paper and point out why the paper is important
2. The student should give a short review of the necessary background information (5-10 min or so). They should read a review article or a previous paper from the authors and use figures from the review in the background to provide an intellectual framework for the problem or the area being covered in the paper.
3. Briefly outline the experimental design for the paper, (e.g., "The authors used Cryo-EM, a melted DNA template along with superimposed crystal structures to understand..." (2-3 min).

II. Data/Figures

4. The student must then explain, using key figures from the paper, how the data support the conclusions and fit into the model. Do not try to cover every single figure. Remember to critique the data, i.e., control experiments that should have been done or alternate explanations for the results.
5. When each student is describing an individual figure, first state the reason for this particular experiment or structure analysis and its conclusion. Then briefly mention how this particular experiment was done and describe what you are showing. Remember that it is not necessary to explain every aspect or panel. Pick out the crucial ones and always contrast a result with the control. Sometimes it is necessary to describe in more detail how an experiment was performed; be prepared to explain the methodology if the audience or instructor feels it has not been explained well enough. Finally, end the discussion of each figure with a brief conclusion and transition to the next slide or next presenter.

III. Summary (5 min):

6. After they have covered the figures, they finish with a short summary of the conclusions and a summary figure (usually a schematic), how the data justify (or not) the original hypotheses and present any general comments you might have on the paper.

IV. Ending. The student should conclude the presentation with wrap-up summary followed by a simple "Thank you for your attention" or Thank you. Are there any questions?"

Points to enhance the presentations:

- Speak to the audience not to the screen.
- Speak loudly enough for those in the back of the room to hear you.
- Figures must be large and readable from the back of room. A single slide should show one piece of data or at most two.
- Don't overdo the text on a slide. Don't simply read the text. Have it be a short summary of what you are verbalizing.
- Leave your phones in your backpacks purses or pockets. Anyone texting in class will be asked to leave.
- Good luck and don't be nervous or defensive. We're all friends and this is meant to be an educational training experience!
- All presentations should be in Powerpoint or equivalent format.

Student Responsibilities (See Rubric)