UCSF Neuroscience Graduate Program
Weill Institute for Neurosciences

Guidelines for Neuroscience Journal Club Presenters

Goals:

- Practice selecting papers that have added something significant to the field and will generate discussion.
- Practice reading research articles critically and presenting key figures, findings, and conclusions from the paper.
- Develop ability to interpret results, think about how you would answer the same questions, and propose further experiments.

Format:

- 20-25 minute PowerPoint presentation + 5 minute for question
- Outline background, key figures, conclusions, and future directions

General Guidelines (for students only)

- Select a paper 3-4 weeks in advance of your scheduled presentation and send it to a faculty coach for approval. Coaches must be a member of PIBS
- Do at least one practice talk with your faculty coach before your scheduled presentation.
- It is recommended to select an article published within the last year. Some journal suggestions are Nature, Science, Neuron/Cell, JNeurosci, but obviously not restricted to these.

Tips for Neuroscience Journal Club Presenters

"A speech is a solemn responsibility. The man who makes a bad thirty-minute speech to two hundred people wastes only half an hour of his own time. But he wastes one hundred hours of the audience's time-more than four days-which should be a hanging offense" -Jenkin Lloyd Jones

A. Responsibilities of the presenter

- Choose an appropriate paper (see below)
- Send the title for the talk, the paper citation to **Lucita Nacionales**
- Send the evaluation form to your faculty coach (for students only)
- If you are going to use the projector with your laptop, you are responsible for making sure your laptop works with the projector in the assigned Journal Club room before your presentation. If the time comes and the projector doesn't work, you'll be expected to switch to overheads or chalk immediately. Long A/V delays are unacceptable

B. Picking the paper for the talk - Pick an important paper that is likely to interest many of the listeners. If you have any qualms about the significance of the paper, ask someone working in that field. Answer these questions:

- Why would the audience be interested in this paper
- Will it generate excitement for the subject in someone who is not involved in that particular aspect of neuroscience?
- Can I make the information in the paper relevant to all or most of the audience?

C. Pick a catchy title for the talk

D. Prepare talk. Plan for a 20-minute talk.

Beginning: give the background and motivation needed to appreciate the paper

- Build up slowly in the introduction. For example, describe the general topic, relevant definitions, the specific topics and its importance, and the precise question at hand. You could also state the answer to the question and the message of the paper at this point, although this is a matter of preference.
- Edit the introduction ruthlessly. Give only the necessary details regarding methods (unless, of course, your talk is on methods). Narrow the focus rather than try to cover a large, complex topic with generalities in a short period.
- Even when the program specifically calls for an overview, pull out one or two points to discuss in as much detail as time permits (probably about 10 min).

Middle: describe the study and its importance
For each experiment that will be discussed, make these four points clear:

- Question - why they did the experiment
- Experiment - what they did
- Results - what they found
- Answer to question and its implications - the *message* of what the results mean

Link to experiments to each other and to the message, for example, tissue level-molecular level, in vitro-in vivo, steps in genetic pathway. Link each experiment to the message of the paper.

Note:
Data = numbers
Results = what the numbers mean (5-10 points)
Answer = answer to the question or what the results mean (usually 1-2 points)
Implications = extrapolations or going beyond the data.

End: wrap up

- Final statement of the message.

- Critique of the experiments
- Future directions

Timing the talk:

- End your talk on time. Speaking as fast as you can and flashing through your visual material at the speed of light is not the way to condense your talk into the specified time. Your audience will be annoyed and will absorb little of your presentation.
- A useful technique to help stay within your allotted time is to have one visual piece that can be shown at any time and used to deliver your closing message or summary. It should take no more than three minutes to get through. When you are three minutes from your time limit, show this piece and end.
- Even if you find that you have run out of time, never close your talk by saying, "I think I'll stop here." It sends a loud and clear message that you have not adequately prepared.

E. Prepare the overheads or PowerPoint slides

- **Keep the visuals simple**. Visuals should complement what you say, not compete with what you say.
- Give titles on all overheads or slides - for example:
    - **Results slide:** State the point of the experiment in title. The more complex the concept, the fewer lines on an individual slide. Split the concept into smaller points and use more overheads.
    - **Summary slide:** Summary of results, so usually has only 3-4 points
    - **Conclusion slide:** The answer/message; only 1 or 2 points.
    - **Implication slides:** What the authors thought they understood, but didn't have results to make any conclusion

- Text:
    - Use brief phrases (limit the number of lines) in outline form.
    - Use bullets.
    - Covering part of the information on a transparency until you reach that point in your talk is annoying. If you need more than a minute between portions of a single transparency, break the information into separate transparencies to keep the audience with you and focused on what you are saying

- Figures:
    - If copying a figure from a journal, omit the figure legend. Add a brief title above the figure that states the point.
    - Redraw if the photocopy or computer image is not clear.
    - For complex diagrams, use flippies

- Tables:

  - Do not copy from a journal.
  - Retype and enlarge tables, omitting less important details.
  - Never present a complex table and then ask the audience to ignore part of it.

- Fonts:
  - Use 22-point Helvetica (18-point for smallest letters), or some other sans serif font, so that the writing is easy to read from the back of the room.
  - Use font size, color, boldness, spacing on the page to focus on important information.
  - Remember that approximately 10 % of the male population is color blind and red-green is the most common type of color blindness. If possible, avoid those complementary color sets in your visual aids.

(Adapted from Mimi Zeiger's handout)