

NGP Journal Club Guidelines, Spring 2016



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Neuroscience Journal Club Goals

- Practice selecting recent (within the last year) papers in high-impact journals that will generate discussion.
- Practice science specific critical reading and oral presentation skills.
- Practice effective teaching skills.
- Learn how to present a polished, professional summary of a recent paper.
- Develop the ability to interpret results, defend your interpretation, and propose further experiments.
- Learn how to answer questions in a public setting.
- Acquire more background knowledge to more fully appreciate future Journal Clubs, Grand Rounds, & Seminars

General Guidelines

No more themes for paper selection

Paper must be selected and approved 3-4 weeks before presentation.
Paper must be approved by your assigned faculty supervisor. See
NGP website.

Pick a catchy title for the talk (not the title of the paper!!)

Prepare a 40 minutes talk

- 40 minute PowerPoint presentation + 15 minutes for questions
- Outline background
- Key figures
- Conclusions
- Future directions

Do at least one practice talk with your faculty supervisor before your scheduled presentation. Faculty supervisors are listed on the NGP website.

Paper Selection

- Select a paper **3-4 weeks** in advance of your scheduled presentation and send it to NGP faculty supervisor for approval. Work with a scientific mentor if necessary. The scientific mentor can be your faculty advisor but does not have to be.
- It is recommended to select an article published within the last year. Some suggestions: **Nature, Science, Neuron/Cell, J Neurosci**, but obviously not restricted to these.
- Pick a 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.
- You should be able to answer these 3 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?

Presentation Requirements: Introduction/Background

- After your title slide, include a slide that answers this question. Why did you choose this paper?
- Give only the background and motivation needed to appreciate the paper
- Build up slowly in the introduction. For example, describe the general topic, relevant definitions, specific topics and their importance to this paper, and end with the precise question at hand (hypothesis).
- Edit the introduction ruthlessly.
- Give only the necessary details regarding methods.
- Narrow the focus rather than try to cover a large, complex topic with generalities in a short period.

Presentation Requirements: Results

- Describe the study and its overarching hypothesis
- For each experiment that will be discussed, make these points clear:
 - Question - why they did the experiment
 - Experiment - what they did
 - Results - what they found
 - Answer to question and its implications - the interpretation of results and effect on overall importance
- The title of each slide should describe the take away message of the experiment
- Link the experiments to each other and to the overarching hypothesis
 - for example, tissue level-molecular level, in vitro-in vivo, steps in genetic pathway.

Presentation Requirements: Conclusion

- Summary Slide
 - Final statements made by the author
 - Limit to 2-3 succinct talking points
- Critique of the experiments
- Conclusion Slide
 - Future directions
 - Final talking points related to overall message of the paper

Preparation of PowerPoint Slides

- Keep the visuals simple. Visuals should complement what you say, not compete with what you say.
- Give titles on all slides.
- Use brief phrases (limit the number of lines) in outline form.
- Use bullets.
- Results slide: State the result/outcome of the experiment in title.
- 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.

Preparation of PowerPoint Slides

- Figures:
 - If copying a figure from a journal, omit the figure legend. Add a brief title above the figure that states the point.
- 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.

Journal Club Mentoring

- Please meet with your faculty supervisor and scientific mentor no later than two weeks prior to your Journal Club presentation, and consult both faculty members as necessary about the papers and your presentation.
- Faculty members are very busy – so schedule your meetings with the faculty mentors AT LEAST 2 WEEKS IN ADVANCE. You should meet with your faculty supervisor at least once to prepare your PowerPoint presentation.
- Your faculty supervisor should also listen to a formal run-through of your presentation. Remember to schedule sessions with your faculty mentor well in advance.

Student Leaders

- Bring feedback sheets to journal club presentation, collect and give to presenter.
- Organize a run through session with a presenter and other NGP students. Not essential but recommended for first time presenters.
- Journal Club presenters should do a run through with NGP student leaders and students prior to doing a run through with the faculty supervisor.
- Student leaders to give first introduction of spring schedule. After this, introductions are given by the week's previous presenter.
- Prepare in advance and ask for important facts about presenter's education and training so you can give a proper introduction.

Presentation Feedback

- Each presenter will receive comments about their presentations from the faculty supervisor and from those attending the journal club presentation.

Non-presenting student responsibilities

- Students will write a one paragraph summary of the week's journal club paper. Bring this summary to journal club and hand in to faculty supervisor or student leaders at the beginning of Journal Club.
- You will answer the following questions:
 - (a) What was the main take-home message of the paper?
 - (b) What part did you like best?
 - (c) What part did you find the least convincing or the most confusing?
 - (d) After reading the paper, what one question would you ask the author?
- Your document should not exceed one page (must be typed, not handwritten). These assignments will be collected at the start of the Journal Club, and, when appropriate, will be used as a basis for discussion. If the student-lead discussion wanes at any point, the course directors will select a few answers and have the authors explain them to the class.

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