Developmental Neurobiology
Tips for Discussing Research Papers

These are suggestions for analyzing or presenting research papers in a journal club, class or research discussion seminar:

• Introduce essential background needed to put the problem studied into context of the current state of the field.

• State the question(s) or hypotheses addressed by the study described in the paper.

• Summarize general methodological aspects of the study such as the animal, neurological system and any research techniques used throughout the study.

• For each major part of the study, which typically correlates with each figure, summarize in your own words 1) what was done in the experiment, 2) what was the result and 3) what does the result mean. Concentrate on those results that have a bearing on the problem or hypothesis. Identify critical controls (used or overlooked) that would validate the experimental results.

• Point out potential problems with the experimental design or methods whether mentioned by the author or perceived by you.

• Summarize the major conclusions and show how these relate to the problem or hypothesis posed. Discuss alternative interpretations, misinterpretations by the author, aspects that were not fully addressed by the study, new hypotheses based on the results, etc.

• Summarize the discussion in several concise sentences.