

A guide to reviewing articles for Developmental Neuroscience

Purpose of Peer Review: A thorough review of an article benefits both author and reader and serves several functions by:

- Assisting the editor in understanding the data reported in the manuscript, the significance of the findings and whether the manuscript will require significant or minor revisions.
- Determining if the topic of the manuscript is appropriate for the journal.
- Providing thoughtful criticism and specific recommendations for revision, thus improving the quality of the final version.
- Ensuring that the reported findings are appropriately interpreted.
- Ensuring that the research is of high quality and that only manuscripts that contain significant new data are published.

A good rule of thumb is to re-read your review after you've completed it asking yourself how you would feel if you were on the receiving end. A well-written review provides explicit and constructive criticism.

Conflicts of Interest: If you are concerned that you cannot provide an objective review of an article, please contact the Editor. Typical reasons for declining an invitation to review an article due to a conflict of interest are:

- You have collaborated with one of the authors within the last 3 years.
- One of the authors has worked with you within the last 5 years.
- One of the authors is in your department or at your institution.
- You have a financial connection with one of the authors.

Components often included in the reviewer's comments to the authors: A text box is provided on the online reviewer assessment form for your written comments to the authors that are prepared off-line.

A. Summary and General Comments

This component provides a brief synopsis of the paper to help the editor understand what was reported and whether the findings are original and significant. The summary will describe the strengths and weaknesses of the article.

B. Suggestions for Major Revisions:

This section suggests revisions that will be substantial. Such revisions might require additional experiments, new analyses of the data or a major re-write of the manuscript.

C. Suggestions for Minor Revisions:

This section indicates specific suggestions for revision. Aspects include requests for specific papers to be cited and discussed; requests for additional methodological details or clarifications of approaches. Language aspects can include specific requests for improved spelling and grammar; however, if the entire article is poorly written, the role of a reviewer is not to correct the language, rather to advise the editor and allow him to take the appropriate action.

D. Comments on Figures, Tables and Legends:

This section is used to transmit specific suggestions for revisions to the figures and legends.

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As a reviewer please refrain from stating whether the article should be accepted or rejected in your written comments to the authors as other reviewers may feel differently, and the decision to accept or reject a manuscript belongs to the editor. Your recommendation and priority score can be entered in the online assessment form. You may request a colleague's assistance to evaluate a manuscript. The name and e-mail address of the colleague should be provided in the appropriate field on the online assessment form.

Where should my confidential comments to the editor go?

Developmental Neuroscience no longer accepts confidential comments to the editor because it belongs to the Neuroscience Consortium, which was formed to support efficient and thorough peer review of original research in neuroscience to speed up the publication of research reports and to reduce the burden on peer reviewers. For complete information about the Consortium, please visit <http://nprc.incf.org>. Accordingly, in your review please clearly communicate your evaluation of the strengths and weaknesses of the submission to the authors to help them understand the basis for your decision.

You will be able to select on the online assessment form whether or not you agree to have your name forwarded to the next journal in the consortium should the authors choose to retain your review. Be assured that under no circumstances will your identity be disclosed to the authors.

Aspects of the paper to evaluate:

Title: *Approximately 15 words is a desirable length.*

Does the title reflect the paper's content and/or conclusions without over interpretation?

Is the title too short or too long?

Abstract: *Abstracts for Developmental Neuroscience should be at most 500 words.*

Does the abstract provide a precise and accurate synopsis of the data reported?

Does the abstract state the novelty and significance of the work?

Is the abstract too long or too short?

Introduction: *A typical Introduction for Developmental Neuroscience contains about 500 words.*

Does the Introduction adequately describe the gap in our knowledge?

Are appropriate prior studies reviewed?

Is the Introduction too long?

Methods/Materials:

Will the reader be able to reproduce the experiments?

Are the reagents used clearly indicated?

Are the methods of analysis and statistics employed defined clearly?

Are there ethical considerations concerning the use of animals?

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Results:

- Are the results reported clearly?
- Do any key experiments still need to be performed?
- Did the authors include all the necessary controls for their studies?
- Are the results reported objectively?
- Do the results flow logically according to the methods?
- Is there too much discussion?

Discussion: *A typical Discussion for Developmental Neuroscience contains about 1,500 words.*

- Are the results discussed adequately?
- Are reasonable conclusions drawn from the data?
- Does the article support or contradict previous studies?
- Are there clear statements of the implications, significance and novelty of the research?
- Is the Discussion scholarly with sufficient and appropriate citations or is it simply a re-statement of the Results?

Tables and Figures and Legends:

- Are all of the data necessary or can some be removed?
- Are the figure legends understandable without referring to the text?
- Do the legends describe what and how the experiments were performed?
- Are all symbols and abbreviations defined?
- Are scale bars and statistics defined?

References: *A typical article for Developmental Neuroscience will have about 50 citations.*

- Is the number of citations appropriate – too many, too few?

As a reviewer you are expected to perform a literature search. If there are manuscripts that have been published and are relevant to the article under consideration which are not referenced, then please provide these citations in your review and request that the authors discuss and cite these papers.

Reviewers should not:

- Contact authors to discuss the manuscript.
- Reveal, cite, or in any way disclose information about a manuscript prior to publication.
- Agree to review a manuscript if there is an actual or perceived conflict of interest.