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Reviewing Manuscripts for Peer-Review Journals

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What do editors want from papers?

- Importance
- Originality
- Relevance to readers
- Usefulness to readers and, ultimately, to patients
- Truth
- Excitement/ "wow" factor
- Clear and engaging writing

What is Peer-Review of Scientific Papers?

- Is the process of reviewing (evaluating) an author's scholarly work, research, or ideas by peers who are experts in the same field, before this work is published
- Is designed to assess the validity, quality and often the originality of articles for publication.
- **Includes:**
 - internal review (by editorial staff)
 - external review (by experts in the field)

What do the editors look for in reviewers?

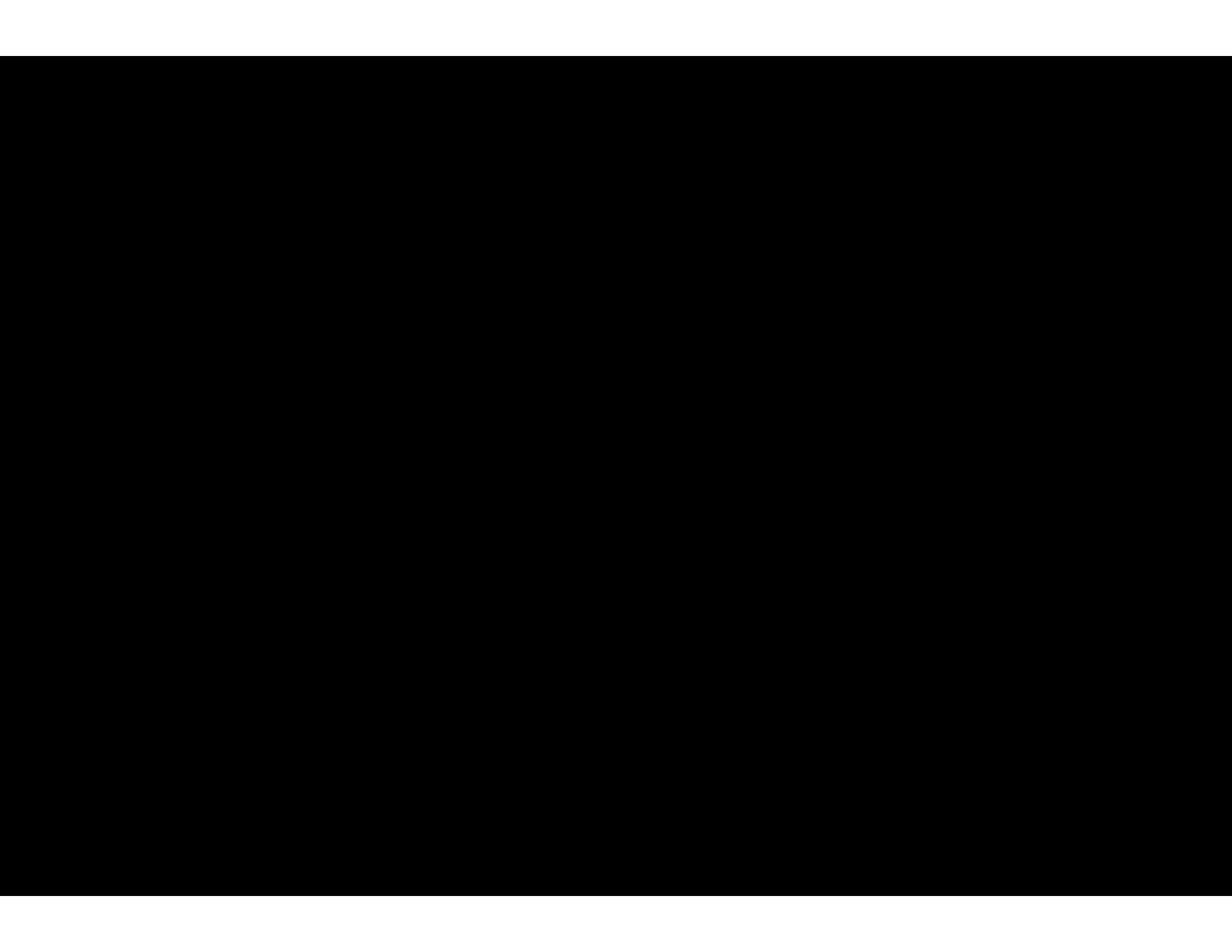
- Expertise in one or more areas of paper
- Objectivity
- No conflicts of interest
- Good judgment
- Able to think clearly and logically
- Able to write a good critique
 - Accurate
 - Readable
 - Helpful to editors and authors
- Reliable in returning reviews
- Punctuality

Do you have any conflicts of interest

- Institutional affiliations
 - Through current institution
 - Past institution (recent enough)
- Collaborators and colleagues
 - How close?
 - When?
- Other relationships with the authors
 - Family
 - Personal friends
 - People you would be reluctant or afraid to give a harsh review to

Financial conflicts of interest

- Often involve a product or process owned or marketed by **a for-profit entity**
- Employment
- Consulting
- Stock and equity
- Patent and license agreements
- Research support
 - Direct funding of research, gifts, provision of reagents or drugs without cost



Content of reviews

- Review form
- Comments to editor
- Comments to authors
 - General comments
 - Specific recommendations
- Journal may ask specific questions to ensure that specific points are addressed

I deal reviewer (From an editor's point of view)

- Researcher in the same discipline **BUT** is not in direct competition with the authors
- Will understand the hypotheses underlying the work
- Will be familiar with the model systems and methods used in the project
- Will be able to judge the quality of the data and analyses and assess the validity of the conclusions
- Will be able to assess the significance of the work

When deciding to accept to review a paper

Do you have appropriate expertise?

- Ideal reviewers seldom exist
- Editors often send papers to multiple reviewers, with different areas of expertise and different perspectives
- Young reviewers tend to underestimate their expertise
- If in doubt, contact the editor and discuss your concerns

Some ethical issues to consider

- Can you contact the author about the work or the paper?
 - No – this destroys the blinding of the review process
 - If you need information from the author, contact the journal staff, and they will contact the author

Can you give the paper to someone else to review?

- Only with the permission of the editor
- Permission sometimes granted in cover letter; if not, the editor should be contacted in advance
- The reviewer initially contacted should always let the editor know that the manuscript has been given to another reviewer
 - Important for journal records
 - Journal staff may need to configure web portal for the new reviewer
 - Allows actual reviewer to receive credit for his/her efforts

How do you handle the paper?

- Manuscripts under review are confidential documents.
- They contain unpublished data and ideas, which must be kept confidential.
- You cannot share the paper or its contents with your colleagues.
- Manuscripts should be kept in a secure place, where they will not be readily accessible to the curious or unscrupulous.

Remember:

- You cannot use the information in the paper in your own research or cite it in your own publications.
- This can raise serious ethical issues if the work provides insights or data that could benefit your own thinking and studies.

A seriously flawed paper must be challenged

- Articles in peer reviewed journals are trusted by readers who would be skeptical of claims made in non peer reviewed sources
- The reviewer therefore has an ethical obligation to support work of high quality while appropriately challenging flawed papers

What to look for? check-list points

- The importance and novelty of the work
- The appropriateness of the materials, methods and experimental model systems
- The experimental design (including the inclusion of appropriate controls)
- The quality of the data
- The appropriateness of the statistical analyses
- The interpretation of the data
- The value of the discussion of the data
- The validity of the conclusions drawn in the paper
- Is this journal the right place for this paper?

Scientific Evaluation

- Title and Abstract/summary
 - does it reflect accurately what the paper says?
- Research question
 - is it clearly defined and appropriately answered?
- Research hypotheses, if stated, should
 - (a) follow logically from the literature review (b) be clearly stated, and (c) be testable
- Overall design of study
 - is it adequate?



Scientific Evaluation

- Results
 - does it answer the research question? Credible? Well presented?
- Usefulness of tables and figures?
 - Is the quality good enough? Can some be eliminated? Is the data correct in the tables?

Scientific Evaluation

- Interpretation and conclusions
 - are they warranted by and sufficiently derived from/focused on the data? Message clear?
- Discussion
 - It offers the “how” and “why” explanations for study findings, Study limitations
 - presented possible alternative explanations for their findings
- References
 - are they up to date and relevant? Any glaring omissions?

Miscellaneous Considerations

- Review Length
 - depend on the manuscript's quality, as well as the type of manuscript under review
- Sensitivity When Reviewing for International Journals
 - English quality
- Copy Editing a Manuscript
 - "The manuscript contains numerous spelling and grammatical errors" or "References do not follow journal style guidelines."

How to put it in words?

- Brief summary of the findings
 - helps organize your own grasp on the data
 - helps the AE and editorial board to understand the content of the manuscript
 - it shows the author that you have read and understood the manuscript.
- Give a general comment on the article on
 - novelty
 - overall impression of the data
 - manuscript preparation

How to put it in words?

- list major comments. Number them
 - comments, questions and/or suggestions that are in your view essential points that need to be appropriately addressed for the manuscript to become acceptable for publication
- list minor comments
 - typographic errors
 - suggestions for additional non-essential data to be included.

What to recommend?

- You give **advice** to the editor regarding the manuscript
 - It is a **misconception** that reviewers decide
 - the **editor and editorial board** ultimately decide
- Consider recommending a major revision
 - paper would become acceptable for publication if your suggestions are adequately addressed
 - Paper would be insufficient for publication even after revision, e.g. based on limited novelty, rejection would be more appropriate.

Also keep in mind:

- Be kind
 - Rudeness, personal criticism are never appropriate. Because you are anonymous to author, don't make unkind remarks.
- Be fair
 - Try to be objectively critical. Identify flaws in the manuscript, but keep eye for balancing criticism with potential strengths of the manuscript.
 - If you give criticism, also give a motivation, including literature references if applicable

Also keep in mind:

- Be concise
 - Give brief but comprehensive comments, clear and in a few words.
- Be 'action-able'.
 - Provide practical suggestions for textual changes or additional experiments which helps convey what you think would improve the manuscript better than simple criticism.
- **Do** reread your review, **Don't** send the review off without looking it over at least once.

Thank you
and

Good luck with you review!

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