How to be an academic peer reviewer

- **Read the article fully** – please read the full text of the article and view all associated figures, tables and data;
- **Be thorough** – a peer review report should discuss the article in full as well as individual points, and should demonstrate your understanding of the article;
- **Be specific** – your comments should contain as much detail as possible, with references where appropriate, so the authors are able to fully address the issue;
- **Be constructive in your criticism** – do not hesitate to include any concerns or criticisms you may have in your review, however, please do so in a constructive and respectful manner;
- **Avoid derogatory comments or tone** – review as you wish to be reviewed and ensure that your comments focus on the scientific content of the article in question rather than the authors themselves.

### Stay in scope
“Keep comments within the scope of the paper.”
- Sheila McCormick, University of California, Berkeley

### If it’s good, say so
“Don’t be afraid to be positive. If a paper that you are asked to review is really good, say so!”
- Anthony Imbalzano, University of Massachusetts Medical School

### Focus on the science
“If the paper is in English, but not written by a native speaker, please be tolerant and just point out anything which changes the meaning.”
- Sue Malcom, University College London

### Be constructive
“View your reviewer role as an opportunity to help improve the paper you are reviewing.”
- Bruce MacIver, Stanford University

### Organize your comments
“When listing your specific concerns, separate them into ‘major’ and ‘minor’ points and, if your list is very long, consolidate the most minor points.”
- Robert Fisher, Mount Sinai School of Medicine

### Consider the statistics
“It’s helpful if you comment on the number of replicates, the controls, and the statistical analyses. This information is crucial for understanding how robust the outcome is.”
- Christine Mummery, Leiden University Medical Center

---

**RESEARCH ARTICLE**

- Is the work clearly and accurately presented and does it cite the current literature?
- Is the study design appropriate and does the work have academic merit?
- Are sufficient details of methods and analysis provided to allow replication by others?
- If applicable, is the statistical analysis and its interpretation appropriate?
- Are all the source data underlying the results available to ensure full reproducibility?
- Are the conclusions drawn adequately supported by the results?

**SYSTEMATIC REVIEW ARTICLE**

- Are the rationale for, and objectives of, the Systematic Review clearly stated?
- Are sufficient details of the methods and analysis provided to allow replication by others?
- Is the statistical analysis and its interpretation appropriate?
- Are the conclusions drawn adequately supported by the results presented in the review?

**REVIEW ARTICLE**

- Is the topic of the review discussed comprehensively in the context of the current literature?
- Are all factual statements correct and adequately supported by citations?
- Is the review written in accessible language?
- Are the conclusions drawn appropriate in the context of the current research literature?

Adapted from F1000 Research. @OpenAcademics