

**Writing and Publishing Scientific Papers:
Ways to Decrease Stress and Increase Success**
College of Medicine Graduate Student Organization Seminar
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Preliminaries

1. Start thinking about publication when you plan your research.
2. Keep publication in mind as you gather your data.
3. Decide early on a tentative list of authors.
4. Use oral presentations and poster presentations as ways to start shaping your paper.
5. Decide early on a target journal.
6. Obtain the journal's instructions to authors, read them, and follow them.
7. Find analogous papers in the same journal, and use them as models.
8. Begin by writing whatever part of the paper you find easiest (often the Methods).

The Methods Section

9. Present the Methods in appropriate detail for your target journal.
10. Typically, include in the Methods sufficient detail to replicate and evaluate your work.
11. If appropriate, make the Methods more accessible by using items such as subheadings, diagrams, and flow charts.

The Results Section

12. If feasible, structure the Results in parallel with the Methods.
13. Summarize findings rather than providing extensive detailed data.
14. Avoid using tables or figures for information that can be presented briefly in the text.
15. Decide thoughtfully between using graphs and using tables.
16. Refer to each figure and table when readers would first want to look at it.
17. In the text, present the main points of tables and figures rather than repeating information from them in detail.

The Introduction

18. In the Introduction, make clear what question the research addressed.
19. Keep the Introduction fairly brief.
20. Move from general (the overall research topic) to specific (your own research) in the Introduction.

The Discussion

21. Begin the Discussion by briefly summarizing your main findings.
22. In the Discussion, provide the answer to the question the research addressed.
23. In the Discussion, note and discuss limitations of your research.
24. In the Discussion, relate your research to previously published research.

References

25. Check references carefully.
26. Be sure that references are cited whenever warranted.
27. If you have used wording from elsewhere, be sure to present it as a quotation and cite the source.

The Title and Abstract

28. Provide a title that is concise yet informative.
29. Organize the Abstract like the paper.
30. Include in the Abstract the most important points from the paper.
31. Include in the Abstract only material that appears in the paper.

Writing Style etc

32. Write to communicate, not to impress.
33. Remember that many readers are not native speakers of English.
34. Where possible, use simple, common words.
35. Define terms that might not be familiar to readers.

36. In general, use only standard acronyms.
37. In general, use acronyms only for items that are repeated several times or more.
38. Try to avoid using very long sentences and paragraphs.

Further Steps

39. Revise, revise, revise.
40. Show drafts to others. Then revise some more.
41. Recheck the instructions to authors before submitting your paper.
42. Whatever the journal's decision, make good use of the feedback from peer reviewers.
43. When submitting a revised manuscript, include a cover letter addressing each requested change.
44. If the manuscript editor has queries, address them carefully.
45. When you receive the proof of your article, review it promptly and carefully.

And Also . . .

46. Apply what you learned in writing the current paper to writing the next paper.
47. Consider taking a course in scientific writing.
48. Read and consult one or more textbooks such as the following:

How to Write and Publish a Scientific Paper, by Robert A. Day and Barbara Gastel.
6th edition. Greenwood Press, 2006.

Essentials of Writing Biomedical Research Papers, by Mimi Zeiger.
2nd edition. McGraw-Hill, 2000.

49. Use reference works such as the following:

Scientific Style and Format: The CSE Manual for Authors, Editors, and Publishers.
7th edition. Council of Science Editors, 2006.

AMA Manual of Style: A Guide for Authors and Editors.
10th edition. Oxford University Press, 2007.

50. When your paper is published, celebrate!