

How to Write a Scientific Paper - Recommendations by Dianna updated 2022

1. Find the best time of day for your brain to work. Try to arrange your writing time to take advantage of best brain times. Write for one hour every day. Binge writing is much less effective.
2. Work on little pieces at a time. That way you have a sense of satisfaction when you complete each task, and you complete tasks often.
3. Find a comfortable working space for your writing. If you need quiet, then find it. Make sure you are physically comfortable (e.g., chair at a good height, good lighting, tea and cookies, whatever makes you feel good). Associate positive things with writing.
4. Start with a simple outline. No full sentences. Just outline each section your paper. This should not be more than 2 or 3 pages.
5. Redecorate your outline until you find it flows well, makes logical sense, and covers everything you think needs to go into it.
6. Start work on the Materials and Methods section only.
7. Write whole sentences for each entry in your outline in that section. Always use the ACTIVE VOICE and the first person when appropriate. Also, use conversational style- NOT formal English. Write your sentences as you would speak them if you were describing your work to a new acquaintance.
8. When you are happy, turn each sentence in to a paragraph.
9. You will find as you write that there are things you need to add, so add where appropriate.
10. If you get stuck writing a sentence - read **it** out loud to yourself. Your ear is generally a much better editor than your eye. If it is hard to read out loud, it is confusing.
11. If the logic gets stuck, put aside what you have written. Start with a clean sheet of paper (or empty document) and write a new outline of what you want to say. Then go back to what you have written and hang your sentences and paragraphs on your new outline.
12. Once the Materials and Methods are done, Proceed with each section in the following order- Results including Tables and Figures, Discussion, Introduction, Abstract. Your strongest results should be the highlight of your Discussion section. It does not matter why you did the study originally, what is important is what you can say that is of scientific interest. Once you have crafted a good discussion, then the context for the Introduction is set. Your Introduction sets the stage for the rest of the paper and should draw a focus to the most important questions you address. The Abstract summarizes the paper, so you need to know what your paper is before you can summarize it.
13. Find a good title, fix your references.
14. Write a cover letter to the editor, including what is important and new in your paper. Why should they want to publish it? Why is it important for their journal?
15. Upload everything into the journal's web portal. Pay attention to required formatting for figures, etc. Do not underestimate how much time this will take - usually more than one hour, sometimes more than 4 hrs.
16. Buy yourself a Mocha Milkshake or the treat of your preference. Submitting a paper should include a celebration.