

Use This ChatGPT Prompt to Review Your Research Paper or Grant Proposal in Minutes—Like a Scientific Peer

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Before submitting a research manuscript to a journal or sending off a grant proposal, most scientists perform several rounds of self-review. But after weeks or months of working closely with the text, it's easy to overlook gaps in logic, unclear interpretations, or unjustified conclusions. Reviewing your own writing objectively becomes a challenge. What if you could bring in a neutral, intelligent assistant to help you critically evaluate your work—quickly and efficiently—before it reaches a reviewer's desk?

This is where large language models (LLMs) like ChatGPT can play a transformative role. Whether you're reviewing your own manuscript, assessing a peer-reviewed paper, or evaluating a grant proposal, ChatGPT can assist by identifying logical inconsistencies, weak experimental rationale, missing controls, or overstated conclusions. It can act as a scientifically literate second reader—one that never gets tired and can process your content paragraph by paragraph or all at once.

Below is a detailed prompt designed for scientists to use ChatGPT as a critical review assistant. This prompt is structured to help you assess the scientific rigor, clarity, and validity of the content you're working with—be it your own or someone else's. Best of all, you can do this in minutes.

Prompt Template for Reviewing Scientific Manuscripts or Grant Proposals

Suggested Use: Copy and paste this prompt into ChatGPT, replacing the placeholders with the relevant content from your paper or proposal. Use it for self-review or while peer reviewing journal articles and funding applications.

Prompt:

Act as a senior research scientist with expertise in [insert field, e.g., molecular oncology, neuroscience, or developmental biology]. I am preparing to submit a [insert: journal manuscript / grant proposal / peer review] and would like your critical evaluation of the following section.

Please review the text and provide feedback on the following aspects:

1. Is the **research question or hypothesis** clearly stated and well-justified?
2. Is the **experimental design or proposed methodology** appropriate to test the hypothesis?
3. Are the **results logically presented**, and do they support the claims made?
4. Is the **interpretation of results** sound and not overstated?
5. Does the **conclusion align** with the data presented?
6. Are there **any missing experiments, key controls, or alternative interpretations**?
7. Suggest improvements in **clarity, scientific logic, and structure**.

Here is the content to review:

[Insert section of text from your manuscript, article, or proposal here.]

How to Use This Prompt:

You can use this prompt to review your manuscript section by section—starting with the Introduction, then Methods, Results, and Discussion. It can also be applied to individual grant sections such as Specific Aims, Research Strategy, or Innovation. Customize the placeholder “[insert field]” so the feedback is tuned to your area of research.

Paste your content into ChatGPT and run the prompt multiple times as needed. Replace the placeholder content with new sections to get comprehensive feedback across your entire document. You’ll receive critiques that can help clarify your rationale, tighten your arguments, and polish your message before submission.

Final Thought:

Scientific writing is a craft that benefits from multiple rounds of refinement. ChatGPT won't replace your peer reviewers or mentors, but it can act as an intelligent first-pass reviewer—helping you catch issues early and improve your work before it leaves your hands. By using AI thoughtfully, you can boost the quality and credibility of your science—efficiently and effectively.