Medical Student Research Office

How to Prepare a Final Report

Final reports are frequently requested from funding agencies to assess progress. In many cases, they can determine whether you will be refunded or receive funding in the future. Final reports are also a helpful way to summarize your data and thoughts and can form the basis of a subsequent manuscript submitted for peer review.

The report must be well organized, clearly written, and formulated to make a story. Be certain that what you did and what resulted is clear. Your mentor or the Medical Student Research Office faculty can help you with any questions you have.

Use the general outline of a manuscript to be submitted for peer review. Tell the reader what your aims were, your hypothesis or the question you asked, why the study was important, and the methods used to accomplish your aims. The length will vary, depending upon the situation, so consult the specific program guidelines. No matter what the length, be succinct, clear, and focused. Work with your mentor and have him/her read your drafts. You'll learn a lot from the feedback you get.

Structure:

**Cover Page** – Include your name, your mentor’s name, the title of the project, the institution and department where the project was carried out. The title should let the reader clearly know what your study concerned.

**Abstract:** A brief summary, 250 - 300 words, of the aims of the project, the hypothesis/question asked, methods used, the most important findings, and conclusions.

**Introduction/Background:** What question did you ask or which hypothesis did you test, what is known in the literature about the problem, and which published studies led you to formulate your hypotheses or select the question you asked? This is an opportunity to explain why your work is important, interesting, and the gap in knowledge you wanted to fill.

**Materials and Methods:** Describe the principle methods you have used to test your hypothesis or answer the question you asked, each in a separate section. The nature of
the methods will vary, depending upon the type of study. If you did a clinical study, include eligibility for patient enrollment. Discuss with your mentor which methods are appropriate to include. Detail should be sufficient for someone to judge whether the methods are appropriate for the study. This is where you mention that you had IRB or IACUC approval and anything about informed consent of subjects, if this was a study involving human participation.

**Results:** Divide the results into sections, each with an informative title. You are telling a story in this section. Start at the beginning and proceed logically through the development of the project. Select carefully what to include. You don’t need to show everything you’ve done. Prepare tables or figures to present the results discussed in each section. Indicate where the figure/table belongs in parentheses and then place figures and tables at the end of the report. The results section is a factual presentation of what you did. Your interpretation of the findings comes in the discussion.

**Discussion:** Here you get the chance to talk about what you think is the significance and implications of your work. Begin by briefly summarizing the study. Then discuss in more detail what the results mean, whether they support your original hypothesis, and possible future directions for the project, even if you won’t be continuing the project. It’s very valuable for you to think about where your project could go. If there were surprises or stumbling blocks, you could discuss those here and how you might solve them in the future. End with a concise conclusion, which is the take home message.

**References:** Reference all literature cited. Unless the program’s instructions say otherwise, use any format in the literature.

**Acknowledgements:** It’s appropriate to thank anyone who helped you, but wouldn’t earn an authorship on a resulting manuscript. This could be someone who helped in a purely technical manner or a colleague who read the manuscript and gave you feedback.