

OUTLINE FOR NASO RESEARCH PROPOSALS

Contact information: Name, Email, Phone, Institution, Address

Sections A – D below should not exceed 5 single-spaced pages.

A. Specific Aims (Introduction)*

This section should be no more than **one single-spaced page** and include the following: It should express the PI's research goals at three levels:

1. **Broad long-term objective of the research:** Here you express the broadest use of your findings. The objective should be broad enough to justify your research efforts yet narrow enough that your research aims or objectives for this project (and others you will do) are applicable.
2. **Specific Aims or objectives:** This is a statement of the problem to be addressed and how findings of this research effort will be used. This is not a hypothesis or methodology, but rather a succinct statement of the anticipated research outcomes. From these outcomes, the hypotheses can be generated. In your proposal it might be this statement that begins like this: "The specific aim of this research is to determine..."
3. **Hypotheses or questions:** You should express a hypothesis or question that is testable here. This statement should direct the research design and data collection methods.
4. **Research Rationale:** This is a statement that places your research in a context that clarifies why it should be done (e.g. its importance or urgency). Provide some information about the current conditions or positive consequences of the proposed research. This can be done by explaining the contribution this research will make to general knowledge or the need for your research data to further work in this area, etc. Although you will have a more detailed history in the background and significance section, there should be a concise statement here that you can then elaborate upon in the background section.

*This section should state the project aims in a compelling, but objective way. Avoid exaggeration of the project's importance because this may cause reviewers to question its validity.

Sections B – D (No more than four single-spaced pages)

B. Background and Significance (Literature Review or Conceptual Framework)

The literature review is a focused review of other research activities that have led to your application. It **includes only** references directly related to the project's stated objectives and **excludes** references to other related research areas. Be sure to cite recent research. NASO reviewers are not interested in everything that the PIs know, but rather how current and previous work led to your proposed project.

C. Preliminary Studies -- if applicable

Briefly describe the studies and add references to publications you have made related to this work if applicable. Write this section so it states the relationship between your prior work and the proposed research. Summarize highlights of the research. Presenting pilot data is very useful here if you have any. You should include here any pretests. If complicated instrumentation is used, provide evidence that pretests have been conducted and that back-up support is available. The point of this section is to show the reader that the PIs are qualified and have the resources to conduct the research. A complete list of publications (either submitted or accepted) resulting from these studies should be included in the appendix.

D. Research Design and Methods

In this section you clearly describe the design, procedures, and any statistical analyses that will be used to accomplish the specific aims of the study. Include how data is to be gathered, analyzed, and interpreted.

It should include statements pertaining to the following:

Project Design: The design whether experimental or other needs to be explicitly stated and clearly described. A statement such as a “focus group will be used” is insufficient. You must give enough detail for reviewers to determine the appropriateness of the design in terms of its applicability to the project hypotheses. Simpler designs are preferable. Whether qualitative or quantitative, the design needs to be carefully and succinctly described. **If the NASO Survey Data is to be used in whole or in part, a statement to this effect in lieu of Subjects/Instruments/Procedures is sufficient. For all other projects, include the following:**

Subjects: *For Human Subjects:* Here describe relevant characteristics about the sample population(s) to be used. Identify them by age, gender, and number. Describe how you will select your sample. Provide information on projected attrition and if significant, the corrective procedures you will use. It is important to defend the appropriateness of the sample and any anticipated benefits to the population.

Instruments: Describe data collection instruments, including reliability and validity information when appropriate. Do not supply diagrams for equipment, but rather the name (full name and make) and why this one is appropriate (if this might be questioned). Provide information on measurement level of variables. If your data will be collected over time, both short-term and long-term data collection procedures should be provided. When data collection is going to be conducted over a long period of time, incentives for participants to continue as part of the study should be described.

Procedures: Describe data collection procedures. Include enough detail so that someone unfamiliar with the procedures could duplicate major aspects and be able to envision the environment. Also, describe how you plan to record initial data, enter them for data analysis, and store them. Surveys will be administrated to collect data on....” is insufficient. Instead describe the procedure in enough detail so that anyone reading the proposal could envision what and how this will be undertaken, by whom, and when. If there are alternative ways to your procedure that are cited in the literature, explain why you’ve chosen this procedure instead. If data collection requires training, explain how the training will be conducted and by whom.

For all projects, include the following:

Methods of Analysis: Describe statistical approach and related data analyses in detail. Associating the method of analysis with the hypothesis and specific aims is recommended. Spell out these associations carefully so that there are no misunderstandings. The same issue is important when multiple data sets are analyzed. Present any specific statistics to be used. Also discuss the results you expect and how they will be interpreted.

Research Timeline: Describe the time frame for the procedure presented in the research plan. This is a template for what you have requested in your budget.

If the NASO Survey Data is to be used in whole or in part, a statement to this effect in lieu of Section E is sufficient. For all other projects, include the following:

E. Human Subjects

Here you need to provide additional information on human subjects being used. You will describe (among other things) why these subjects were chosen, recruitment plans and informed consent procedures, and an explanation of how risks will be minimized.

NASO requires the following information for research using human subjects.

1. Provide a detailed description of the proposed involvement of human subjects in the work previously outlined in the Research Design and Methods section. Describe the characteristics of the subject population, including their anticipated number, age range, and gender. Identify the criteria for inclusion or exclusion of any subpopulation. Explain the rationale for the involvement of special classes of subjects, such as minors or others who are likely to be vulnerable.
2. Identify the sources of research material obtained from individually identifiable living human subjects in the form of records or data. Indicate whether the material or data will be obtained specifically for research purposes or whether use will be made of existing records or data.
3. Describe plans for the recruitment of subjects and the consent procedures to be followed. Include the circumstances under which consent will be sought and obtained, who will seek it, the nature of the information to be provided to prospective subjects, and the method of documenting consent. State if the Institutional Review Board (IRB) has authorized a modification or waiver of the elements of consent or the requirement for documentation of consent. The informed consent form, which must have IRB approval, should be retained by the PI and not NASO.
4. Describe potential risks (physical, psychological, social, legal, or other) and assess their likelihood and seriousness. Where appropriate, describe alternative procedures that might be advantageous to the subjects.
5. Describe the procedures for protecting against or minimizing potential risks, including risks to confidentiality, and assess their likely effectiveness. Where appropriate, discuss provisions for ensuring necessary professional intervention in the event of adverse effects to the subjects. Also, where appropriate, describe the provisions for monitoring the data collected to ensure the safety of subjects.
6. Discuss why the risks to subjects are reasonable in relation to the anticipated benefits to subjects and in relation to the importance of the knowledge that may reasonably be expected to result.

G. Literature Cited

List all references here. Use a standard style.

Abstract: Write this part last. It should be a summary for what is being proposed and how it will be done. Include the project's long-term objectives and specific aims. The PIs current work can be mentioned if it has lead to the current proposal. A statement of the proposal's relationship to the mission of the NASO program is important to include.

Please submit completed forms to:

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