

Format for IPBS Qualifying Examination (Grant-writing Exercise)

Page size: 8 ½ x 11 inches

Font: Arial 11 or 12 point, black (smaller font sizes are allowed in figures and legends as long as they are legible)

Margins: at least 0.5 inch top, bottom, left, right

Header: Student's name, "IPBS Qualifying Examination", Month, Year

Footer: page number (number consecutively starting with 1 on the first page)

Language: English (avoid jargon)

Page limits (double spaced):

Project Summary/Abstract	30 lines plus 2-3 sentences
Specific Aims	2 pages
Research Strategy	18 pages
Literature Cited	no page limit

General format:

Project Summary/Abstract: The purpose of the Project Summary/Abstract is to describe succinctly every major aspect of the proposed project. It should contain a statement of objectives and methods to be employed and must be no longer than 30 lines of text. The abstract should include:

- a brief background of the project;
- specific aims, objectives, or hypotheses;
- the methodology (action steps) to be used to accomplish the specific aims or objectives or to test the stated hypotheses.

A second component of the Project Summary, usually called the **Project Narrative**, is a statement describing how your proposed project is relevant to public health. The Narrative should not contain more than two to three sentences. While your Project Summary will contain some direct benefits of your proposed project, the Narrative should contain more long term and far reaching benefits.

The **Specific Aims Page** should include an introduction explaining the context of the proposed research and the broad, long-term objectives, making reference to the health relatedness of the research. Provide a strong rationale supporting your hypothesis. This rationale will explain the logic behind your reasons for proposing your specific hypothesis. Next, state the goal(s) of the specific research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology. The "Specific Aims" should then be enumerated with an indication

of the strategies proposed for achieving the goals(s), including a brief description of the types of methods that will be employed.

The **Research Strategy** should include background information leading to the proposed research, the significance of the research, and the research approach (design and methods) for achieving the Specific Aims. The information may be organized into the following sections:

A “Background & Significance” section should be a brief sketch of the background leading to the present application. Critically evaluate existing knowledge and specifically identify the gaps that the project is intended to fill. State concisely the importance and health relevance of the research described in this application by relating the specific aims to broad, long-term objectives and to the mission of the NIH. An “Innovation” paragraph should be included at the end of this section to describe what new critical information will be obtained from your studies

“Preliminary Studies” – For this exercise, a description of preliminary studies is not required, but it may be beneficial to include pertinent data from the literature (with appropriate citations) to support the hypotheses under investigation and/or the feasibility of the approach.

“Research Design and Methods” – This section is a description of the research design conceptual or clinical framework, procedures, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted. Provide a specific rationale for each set of experiments, and include expected/alternative outcomes of the proposed studies. Describe any new methodology and its advantage over existing methodologies. Describe any novel concepts, approaches, tools, or technologies for the proposed studies. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims. As part of this section, provide a tentative sequence or timetable for the project. Point out any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised.

The **Literature Cited** section should provide complete references. For journal articles include all authors, title, journal name, page numbers, and year of publication. A consistent format should be used throughout the document.

The proposed research may involve the use of vertebrate animals or human subjects. Although not required for this exercise, be aware that an actual research proposal involving animals or human subjects would require additional detailed sections describing the specifics of their intended use, justification for their inclusion, as well as approval by the respective compliance committees of the university (IACUC and IRB, respectively).