

PROPOSAL TITLE:

Hypothesis: Provides a brief/succinct statement outlining the hypothesis to be tested through the proposed work. It should not exceed a sentence (preferably fitting within a line, and not exceeding two lines). The goal is to make sure that the research is hypothesis-driven and has a specific purpose.

Introduction: Introduce the central theme of the research topic around which the proposal is developed. Clearly outline the problem and state why it is necessary to undertake the proposed research. Please note that the introduction should be captivating; it should pique the interest of the reader and convince the reader that undertaking the work will fill a critical gap in current knowledge. Therefore, undertaking the work will play a key role in the resolution of the problem being addressed. Any preliminary data already generated by you must be mentioned as your strength.

Rationale & significance: Justify why the work must be undertaken. Specify the key findings expected from the work and their overall impact. Clearly describe the socio/economic impact of the work, including how it will impact the region/state/nation and what populations will benefit from the results. Highlight how advancements made through the proposed work will strategically promote the institution above others in the nation (or globally), what future directions are possible from the results, and how your career development and increasing independence (specially for postdocs) will be supported through the work.

Long-term goal: Clearly state the larger outcome: what you aim to achieve by conducting this work. Paint the bigger picture. This is the ultimate goal of the proposed work; therefore it must be broad and high-impact. Attainment of this goal will result in a permanent solution to the problem being addressed. Must not exceed 2-3 lines.

Short-term goal: Your long-term goal - a permanent/lasting solution to the problem at hand - may require that you conduct research in two or more phases. During the current phase, what definitive milestone do you aim to reach to get closer to your final goal? In other words, the short-term goal is the goal you plan to achieve through the experiments outlined in the proposed project. Must not exceed 2-3 lines.

Specific objectives to accomplish the goals: The set of experiments needed to achieve the short-term goal outlined above must have clearly defined objectives. These objectives are the blueprint of the 'work-plan' through which the short-term goal (or the central goal of the current proposal) will be attained. Usually, the objectives must be standalone so that their success is not dependent on the other objectives. However, the objectives may be interdependent or interlinked; if linked, they must be arranged in a logical sequence with adequate justification (e.g., success of each objective is already tested through preliminary data).

Work-plan under each of the objectives: A brief outline of experiments that will be carried out under each of the objectives will provide an overview of how goals set for the proposal will be achieved. If space permits, experimental design may also be provided and source of experimental material cited.

Anticipated outcome of the work: Provide a summary of the potential outcomes of the work carried out under each objective. Essentially, list each objective and what will be provided by its results. The summary should tell how something concrete will be achieved through the proposed work.

Impact: The selling point of a proposal is its impact: the utility, significance, importance or the bearing of the anticipated results. The impact could be at a basic level (increasing scientific knowledge of an issue), at the societal level, at an economic level, or at any level important to the agency providing funding. Essentially, research/discovery must have an impact which in turn makes the case for conducting research.