



Research Proposal Guidelines

Center for Clinical and Translational Science (CCaTS)

Educational Resources

Instructions: The following guidelines are based on the CTSC 5010 Protocol Development course guidelines. Submit entire research proposal packet to your CCaTS program Education Specialist/Coordinator.

Include the following items in your Research Proposal:

1. Cover Page (include the following components)

Title:

Other Investigators: List all investigators and indicate your mentor.

Program: Indicate your program (Certificate, Master's, Ph.D., Other)

Thesis Advisory Committee Members (Master's scholars only): Follow the [TAC Composition Guidelines](#) when selecting your proposed committee members.

Abstract: Describe your project in approximately 200 words. You may paraphrase the aims.

2. Specific Aims - 1 page maximum

Describe your research proposal in terms of the driving motivation and overarching hypothesis, an overview of the details, and how you will accomplish your goals; including the potential clinical and/or scientific impact of your project. Emphasize the key strengths of your proposal such as 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

You should list succinctly 2 to 4 specific aims (with or without parallel hypotheses) in the research proposal.

3. Research Strategy (5 pages not including references)

a. Significance

Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.

Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.

Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

b. Innovation

Explain how the application challenges and seeks to shift current research or clinical practice paradigms.

Describe any novel theoretical concepts, approaches or methodologies, instrumentation or intervention(s) to be developed or used, and any advantage over existing methodologies, instrumentation or intervention(s).

Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation or interventions.

c. Approach

- Defend validity and reliability of measurements.
- Discuss preliminary studies, data, and/or experience pertinent to this application that helps establish the likelihood of success of the proposed project, including expertise and experience with study procedures, access to eligible subject populations, availability of infrastructure and resources to support the project, etc.
- For clinical/epidemiological studies: define study sample, describe study design including any interventions, and define primary/secondary outcomes.
- Describe the overall strategy, methodology, and statistical analyses/power to be used to accomplish each specific aim of the project. For most projects, this should ideally be completed in collaboration with a statistician.
- As appropriate, include a section discussing Potential Problems, Limitations, Alternative Strategies or Solutions, Timeline, and Benchmarks for success anticipated to achieve the aims.

4. Literature Cited

List all references cited in the proposal. Number references consecutively as they are cited. Use the “Vancouver” or “New England Journal of Medicine” style for the reference format.

Format

Submit your final proposal as a Microsoft Word document following the guidelines below:

- No longer than 6 pages in length (including specific aims page (page 1), but excluding bibliography)
- Single spaced
- ½” margin
- 11 pt font
- Arial typeface