

Supporting Guidance for Successful Completion of Institutional Research Committee Research Proposal Applications

School of Health Sciences Research Committee November 21, 2011

Overview

The following document contains guidance on how to successfully construct a research application for consideration by the BCIT Institute Research Committee. While this guidance reflects best practices in areas of both scientific and scholarly inquiry, it should not be considered to be an all-inclusive resource. Instead, applicants are invited to investigate the wide array of resources dedicated to this topic found in both the library and on the web.

Literature Review

This section allows you to show what prior work has been done with respect to your research question. In doing so, the reviewers can assess how your research will advance knowledge in this particular area. You could survey the literature yourself or enlist the aid of a health sciences librarian. Best practices suggest that this section begins with a general statement about why research in this area is important.

Research Question/Hypothesis

This section allows you to state the objectives of your research, including the explicit research question that you are pursuing. How your question is phrased depends on the context of the research. For example, if you are investigating whether a change to curriculum will improve learner outcomes, an appropriately stated research question could be... "this research will test whether applying learning activities in a simulation context improves learner outcomes relative to delivering the same learning activities in a didactic context."

If you are instead investigating the statistical significance of a scientific or quantitative discovery, you may instead choose to state your research question in the form of a hypothesis; for example, "our hypothesis is that marker x is more sensitive than marker y in measuring patient response to metformin administration".

Research Methods

The purpose of this section is to state the methodological approaches you'll be using to carry out your research. This needs to be provided in sufficient detail so that a reviewer can assess the feasibility of you realizing your proposed research outcomes in the allowable time frame. Best practices suggest that necessary elements will include:

- Description of study design including 'test' and control groups and sample size, if appropriate
- Description of any ethical considerations including consent, confidentiality, consideration of participant safety. In cases where human subjects are used, the process to seek research ethics approval must be included.
- Description of experimental methods including any reagents, assays or instruments to be used
- Description of how you will collect and analyze your data, including how you will measure outcomes of your research. This may include statistics or you might instead use other types of quantitative or qualitative assessment tools. Examples of the latter group include summative course evaluations (i.e., examination grades) or measures of end-user satisfaction, such as surveys.

Significance of/Implications for Research

Use this section to describe how your research will advance knowledge and/or practice in this area. This might include showing what follow-on research could be taken up, given the potential findings of your study.

References

Although the size constraints of a research proposal do not allow for the comprehensive use of references, a good research proposal will contain a sufficient number allowing the reviewer to assess the currency/quality of your literature review and the research methods proposed.