

NSERC - How to Prepare a Winning Proposal

No amount of care and effort in preparing a grant proposal will compensate for a weak research program. However, a poorly prepared proposal can prevent a strong research program from being supported. The following items are important in preparing a Discovery Grant application for NSERC.

The research proposal

Remember that the intent of the NSERC Discovery Grants program is to fund a research program (with long-term goals) rather than a single short-term project or a collection of projects. Thus, a good research proposal will:

- place the research within the context of what is currently happening in the field;
- summarize relevant prior work in the field;
- articulate the goals;
- describe a research plan and methodology;
- indicate why the research is useful or important; and
- provide a progress report on work accomplished with previous funding.

You need to convince the selection committee that:

- your research program promises a notable advancement or innovation in the discipline or results of importance to a broad range of applications;
- you have identified well-formulated short- and long-term goals;
- attaining these goals would be a significant contribution to the discipline;
- you have a good chance of attaining the goals with the resources available.

A major portion of the proposal should be devoted to a careful description of the research objectives and of the methodology that will be used. For the research plan, you should at least know how you are going to start out and have some ideas for future options.

Applications are judged according to the following criteria. The onus is on the applicants to address these explicitly in their proposal:

- scientific or engineering excellence of the researcher(s);
- merit of the proposal;
- contribution to the training of highly qualified personnel;
- need for funds.

Describing your ideas

Your proposal will be evaluated by experienced researchers. It is up to you to provide the information necessary for a positive decision.

Acknowledge difficulties honestly. If there are potential problems, say so. It is reasonable to assume that you have thought through your proposal more thoroughly than the reviewers have; consequently, if they see problems that you do not seem to have noticed then they may view your proposal negatively.

In writing a research proposal, you have to address two audiences: 1) the internal and external reviewers, who are likely to be knowledgeable in your field of interest, and 2) the remainder of the committee, who are in your discipline but may have limited knowledge of the area in which you are working. Your proposal must have something for both audiences; there should be enough depth and detail to satisfy the expert, but you must also convince the non-expert of the importance and impact of your proposed research.