NSERC Tips

1. Before you start, get a copy of a NSERC grant proposal that was successful, preferably from someone in your research area (mentor, former supervisor etc.), and use this as a template.

2. Follow the NSERC instructions and use the NSERC wording and order. If you address each point as laid out by NSERC, your committee members will find it much easier to follow.

3. Write a proposal outline, and then flesh out the research proposal. Reference the proposal adequately, so every background statement and technique is backed up with your own work or the literature. Send the proposal to several peers for critical feedback.

4. Write a clear and understandable lay summary that outlines your proposed research and research program. You will have committee members reviewing your proposal who do not have expertise directly in your research filed and the lay summary provides a road map for them. Also, this section is usually read first!

5. Do your homework for quotations – start now! The committee may reduce your funding, or not fund an RTI if they feel that you have not sourced your equipment thoroughly. Remember, there will be other candidates applying for the same instrumentation. If others have obtained a better quote for the same type of equipment, and you have not adequately justified yours, they will get funded and you will not. Alternatively, your funding will be reduced.

6. Get permission and updated information from HQP – start now! It is not looked upon favourably if all HQP are listed as "name withheld". It is important to show that HQP have progressed in their scientific career. Include undergraduates, M. Sc., Ph. D. and PDF trainees. If you only have access to undergraduate students, then their training and fate is important. If HQP have not graduated in a timely manner or have not remained in a related field, explain why. Clearly list each HQP project so that reviewers can see how each fits into your research program.

7. In your CV module, clearly outline your significant contributions using language that all your reviewers can understand. You can have up to five contributions, and each should cite more than one research article (if possible). Since NSERC proposal references are limited to one page, cite your own contributions by referring the reader to your CV model and list as C1, C2, C3 etc., or as L1, L2, L3, where L is the first letter of your last name. This method will clearly delineate your contributions from others, and allows you to cite preliminary work in the form of published abstracts in your proposal. The number of ISI citations for each publication can be

included in brackets, if this is an appropriate measure in your field. Underline your name and bold each of your students' names in your publication list.

8. If an article in your CV arises from more than one funding agency, make sure that you have acknowledged both funding agencies in the paper – some members check this! This will have a bearing on your relationship to other support and whether or not the committee thinks that you are "double dipping".

9. A clear description of collaborators is important for group, multi- and interdisciplinary research. I have a short section in my CV that outlines collaborative efforts, clearly defining my role and student/PDF exchanges, all referenced to my publication list.

10. Make sure that proposed group research is justified and roles clearly defined. New researchers may choose to team up with an established researcher for their first grant. This can be a great strategy if the record of the established researcher will pull up the evaluation of the research team. However, this strategy will be useless if the grantee is unable to demonstrate that the senior researcher will make significant intellectual and practical contributions to the proposed research.

11. Consider including a student thesis or a manuscript in preparation as a contribution if it will bear directly on your proposed research. Your reviewers are your peers, so if you have some data that is important for the proposal, their review is somewhat comparable to journal peer-review. This can really tip the balance for a new researcher during their first renewal if productivity has been slow as a result of establishing their laboratory.

12. If you have been denied NSERC funding in the past for the same project, carefully dissect the NSERC comments (see additional page) and make sure you address all suggestions in the new application. This may be as simple as showing that your NSERC program does not overlap with other funding, stating a research hypothesis, better defining research methods etc. You will only receive a comment if a) there was a "fatal flaw" in some section (see below) of the application b) if there were special circumstances with your application.

Although the HQP, proposal and researcher are now equally weighted for binning, we declared a "fatal flaw" clause that would lead to a "no funding" recommendation. In this way, a poorly written proposal would not be funded just because the research scored well on HQP and past contributions.

The Fatal Flaws

1. Proposal does not represent a research program, but rather only a project or investigation.
Short term goals leading to a long-term research questions (on the order of 10 yrs.) must be outlined, meaning that there is some broad and far-reaching goal of your research. Feasible short-term goals and forward thinking long-term goals must be clearly articulated in the proposal.
NSERC acknowledges that the amount of funding is a "grant in aid" of a research program, so although NSERC will not be giving you enough money for an entire program, they expect you to think this way since it is funding basic research.

2. Proposal does not state a research hypothesis.
Our GSC is expecting hypothesis-driven research. This means that your introduction/background all lead to a research hypothesis that will be tested by formulated a research plan. This hypothesis, or these hypotheses, must feed into the research program outlined above.
Exception: The physical/analytical committees will receive programs that involve methods development. The methods must stem from state-of-the-art technology, aim to push scientific technical limits, be logically laid out and fit within a research program to be acceptable.

3. The candidate, or research group, has not demonstrated adequate expertise in the area of the proposed research. NSERC wants you to be innovative and creative, but if you do not have any grounding in your research area you will not be funded. If you have a great idea and think that you have a particular expertise that can make novel contributions to another field, make sure you team up with someone who has a publication record in that field. Alternatively, if some new technique or a technique with which you have little experience is critical to your research proposal, make sure you

3. The relationship to other support section fails to differentiate the NSERC research program from other current or pending funding applications.
This is very common for health-related committees with members holding or applying to CIHR grants. NSERC acknowledges that grantees will need to hold funding from more than one tricouncil funding agency, other contracts and funds to accomplish their research, but they will not fund a project that is funded, or could be funded elsewhere. This also means that your research must fall under the NSERC mandate. **You have unlimited space in this section, so include the abstract for your other grants and any other material that will clarify your case. Do not use identical titles for different grants.**

4. The candidate did not follow the NSERC guidelines.
NSERC will remove pages beyond those acceptable. If your research proposal is longer than stated in the guidelines, and pages are removed, your committee will not be able to adequately evaluate your proposal.

Flaws Leading to Reduced Funding

1. The role of HQP is not adequately described.
HQP, often graduate students, are integral to the NSERC research program since these are the people receiving training and doing most of the hands on work. Somewhere in your application, preferably in the proposal section, you must outline what parts of the work will be done by which students. Most importantly, reviewers wish to evaluate if the supervisor is realistic about what is an undergraduate, M. Sc., Ph. D. or PDF project.