TOP TEN PITFALLS of NSERC DISCOVERY GRANT (DG) PREPARATION

Advice compiled from NSERC DG Committee Members and Program Officers for your consideration

1. RESEARCH ELIGIBILITY / CIHR or SSHRC OVERLAP

• The primary objective of any research supported by NSERC must be to advance knowledge and training in the natural sciences and engineering (NSE). The question to be asked is: *does the research challenge lie within the NSE?* Additional information on <u>eligibility</u>.

2. PROGRESS WITHIN THE NSE

- You are being evaluated on your progress, recognitions, and contributions only within the NSE.
- Contributions to non-NSE efforts (e.g., clinical journal, part of <u>interdisciplinary</u> team) must be framed in terms of their NSE impact; evaluators will disregard contributions that do not have clear impact within the NSE.

3. HQP TRAINING AS AN AFTERTHOUGHT

- This represents one-third of your score; a very important component of the application!
- Lists of HQP and activities are not sufficient; explain the <u>quality</u>, significance, outputs, etc., of both past and proposed training. Link training contributions to the big picture of academia and industry such as filling knowledge gaps, advancing skillsets required for the future, developing new partnerships and networks, high employability in specific sectors, etc.
- Equity, diversity, and inclusion (EDI) need to be addressed. A good approach to EDI involves first identifying barriers encountered by underrepresented groups in your particular field, then describing specific, concrete actions that you have taken (or will take) to address them.

4. PROJECT VS. PROGRAM OF RESEARCH

- The Discovery Grants Program supports ongoing programs of research rather than a single short-term project or collection of projects.
- What is your long-term research objective? The overarching goal of your lab? This is your ongoing program. Outline short-term NSE objectives that fit within a five year plan; expand accordingly!

5. OTHER SOURCES OF FUNDING (BUDGET OVERLAP)

- How do your other sources of funding come into play? Leverage points? Overlap?
- Justify everything! Be clear. Be honest. Be <u>realistic.</u>

6. TOO DISCIPLINE-SPECIFIC

• Your proposal is read by five <u>evaluation group members</u>. At least two, maybe more, may be "non-experts". Keep this audience in mind as you explain the significance of the work, your choice of methodology, top journals for your area of research, jargon, author order, impact factors, etc.

7. SCOPE OF PROJECT

- Very ambitious goals detract from the feasibility of the program. Does your track record demonstrate you can do what you are proposing to do?
- Consider providing a timeline or schedule. Identify milestones. Link HQP to proposal objectives.

8. LITERATURE REVIEW & METHODOLOGY

- Lit reviews & background info must be critical (i.e., identify challenge, knowledge gap, urgency).
- How do you know if it is too much or too little detail? Try looking at past successful proposals.
- Confirm access to necessary equipment. Is it necessary to include a Plan B?
- 9. FONT / WHITE SPACE / WRITING STYLE
 - You want reviewers to enjoy reading your proposal: headings, whitespace, boldface (HQP), etc.
- Communicate your passion for your work. A research proposal should also be a business case! 10. EVIDENCE OF IMPACT & SIGNIFICANCE OF WORK
 - How does your research impact industry, the economy, new partnerships, and/or society?
 - Include evidence of impacts from past work and expected outcomes for proposed work.

SPARC Resources for NSERC Discovery Grant

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