TIPS & TEMPLATES - NSERC DG PROPOSAL

SUMMARY OF PROPOSAL

If this is the last thing a reviewer reads before submitting your score, are you confident they will judge you well?

TIPS

- □ What are your key messages?
 - Key messages add context, elicit emotion, and provide a story-telling element to the proposal.
 - This may be a writing style you are not used to ask for assistance from your Grant Facilitator, Communications Officer, or SPARC!
 - o Key messages may be different than objectives.
- □ Explain the proposal in language that the public can understand.
- □ You may also provide a summary in the other official language in the text box identified for that purpose.

TEMPLATE

- □ Using simple terms, briefly describe:
 - o the nature of the work to be done,
 - o why the research is important,
 - o to whom the research is important,
 - o the anticipated outcomes; and,
 - o how your field and Canada will benefit.

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MAIN PROPOSAL

You have five pages (eight pages for team applications with at least one eligible co-applicant; five pages with two additional pages per co-applicant for SAP projects) to convince the readers the **Merit of your Proposal**. Images and graphics are included in the above-mentioned page limitations.

TIPS

- □ Use the headings provided.
- ☐ Goal = "Proposed research program is clearly presented, is extremely original and innovative and is likely to have impact by leading to ground-breaking advances in the area/ or leading to a technology or policy that addresses socio-economic or environmental needs"
- ☐ If results are appropriate for dissemination, what is your knowledge mobilization plan? Who is your target audience? Note: tri-councils are promoting "open access".
- ☐ Must be clear, comprehensive and convincing.
- ☐ If your research is interdisciplinary, you may wish to consult the NSERC <u>Guidelines for the Preparation and Review of Applications in Interdisciplinary Research</u>.

TEMPLATE

- □ Recent Progress
 - Place this proposal within the context of work to date and long term goals. For renewals,
 identify progress attributable to your previous DG. Link to the newly proposed work.
- Objectives
 - o Define the short- and long-term objectives of your research program.
 - o Are the relationships between long and short objectives clear?
 - Are the objectives well-focused and realistic? In scope, breadth and depth.
 - o Be clear how objective be reached within the proposed time frame.
 - o Match short-term objectives with travel, conference milestones.
 - Relate objectives to student training.
 - Long term objectives put the proposal into context of overall research program.
- □ Literature Review
 - o Discuss the literature pertinent to the proposal.
 - o Be critical; don't just "review it". Identify research gaps, justification for your work.
- ☐ Methodology
 - Describe the methods and proposed approach, providing sufficient details to allow the reviewers to assess the feasibility and appropriateness of the research activities.
 - o It's a strategic balance between details and rationale of your approach.
 - Explain the feasibility of access to necessary equipment and resources (i.e. number of trainees in relation to available equipment).
- □ Impact
 - Explain the anticipated significance of the work. How will your research outcomes impact knowledge, local national and international industry, the economy, and society in general?

TIPS AND TEMPLATES – NSERC DG HQP TRAINING PLAN AND PAST HQP CONTRIBUTIONS

HIGHLY QUALIFIED PERSONNEL - HQP

NSERC encourages researchers to participate in outreach activities and activities designed to engage students in the natural sciences and engineering, and to improve teaching and learning in these disciplines. You have a maximum of one page (two pages for team applications) to present the training plan and a half a page to demonstrate past contributions to HQP training.

TIPS

- Goal: "Training record at highest level with HQP contributing to top quality research. Most HQP move onto positions that required highly desired skills, obtained through training received.
 Research plans for trainees are appropriate and clearly defined. HQP success highly likely."
- ☐ Training ranges from undergraduate theses and summer projects to the postdoctoral level, and includes technical and other research personnel.
- ☐ The level and content of the training should be appropriate to the research field, with opportunities for interaction and collaboration with other researchers inside and outside the university, where appropriate.
- □ In collaborative research involving non-university partners, student training may be enhanced by an exposure to an industrial work environment. Similarly, industry personnel can benefit from being involved in academic research.
- □ NSERC also recognizes that not all research is appropriate for training and there will be circumstances when training will be limited. In these cases, the onus is on the applicant to provide an explanation of the absence of a training component.
- □ The fact that an applicant has trained, is training, or plans to train students, technicians, or postdoctoral fellows, is not in itself a sufficient rationale for awarding a grant. A researcher's contribution to training will be assessed in terms of its quality and impact, and not solely in terms of the number of people supervised.
- □ It is expected that most trainees supported from a grant will produce theses and other high-quality contributions to knowledge and will move on to professional careers in fields related to science and engineering in all sectors.

TEMPLATE - TRAINING PLAN

- □ Discuss the pertinence of the training plans for the research program (what projects are appropriate for HQP training?)
- □ Detail the involvement of trainees in individual projects
 - Address ALL levels: undergraduate, masters, doctoral, postdoc, technicians, research associates; if you are not involving a group, you must justify why!
 - o Consider providing a schedule to link students to and research and milestones
- □ Explain the expected outcomes in terms of contribution to knowledge and the training value of the proposed projects.
- □ Present how the training is expected to lead to high quality contributions; how will it promote the successful transition into NSE careers (all sectors).
- □ Clarify any co-supervision roles, present the value-added elements of this.

TIPS AND TEMPLATES – NSERC DG HQP TRAINING PLAN AND PAST HQP CONTRIBUTIONS

- ☐ If accurate, be sure to mention student access to collaborative or unique training environments: (i.e. NSERC CREATE, Faculty of Graduate Studies programs, internships, lab exchanges, etc.).
- ☐ The following questions will be used to evaluate your training plan:
 - Are the projects feasible and appropriate for the training proposed?
 - o Will trainees be able to make an original contribution to knowledge?
 - What opportunity will there be for training in a collaborative or interdisciplinary environment, if appropriate?
 - O What opportunity will there be for trainees to work with other sectors, if appropriate?
 - o If little or no training is planned, has an appropriate justification been given?

TEMPLATE - CONTRIBUTIONS TO HQP

- ☐ The following questions will be used as a guide by selection committees and panels when assessing your contributions to HQP:
 - Have the resulting contributions been of high quality?
 - Have the students and other personnel gone on to further research training positions (e.g., PhD program, postdoctoral position)?
 - Have the people trained by the applicant gone on to become respected professionals in fields related to science and engineering, in any sector?
 - In the context of the research field and the applicant's capabilities, is the past level of training activity appropriate? If not, has appropriate justification been provided?
 - o What was the applicant's role in the training of the different types of HQP?
- □ Examples of professional contributions:
 - Transferring new knowledge and expertise from the universities to the Canadian private sector;
 - Starting businesses, creating jobs and new economic opportunities;
 - Maintaining Canada's international competitiveness in research in science and engineering, renewing our intellectual resources
 - Developing and implementing policies, standards and regulations on issues of national interest; or
 - Maintaining and enhancing the national framework for competitive R&D through teaching, administration and research dissemination.

TIPS & TEMPLATES FOR NSERC DG PROPOSAL

BUDGET - Proposed Expenditures & Justification

TIPS

- ☐ Ask for what you need to support a program of quality research that can have a meaningful impact on the field of study.
- □ Develop a realistic budget. Never inflate your costs.
- ☐ Goal: "The budget clearly demonstrates how the research activities to be supported are distinct from and complement those funded by other sources".
- □ Refer to Tri-Council's Use of Grant Funds http://www.nserc-crsng.gc.ca/Professors-Professeurs/FinancialAdminGuide-GuideAdminFinancier/FundsUse-UtilisationSubventions eng.asp
- Provide sufficient information in the budget justification to allow reviewers to assess whether the resources requested are appropriate.

TEMPLATE (Budget Justification)

Salaries and benefits

- □ For students, postdoctoral fellows, and research staff give the:
 - o names (if known),
 - o categories of employment,
 - o proposed salaries (with explicit indication of the non-discretionary benefits) ,
 - o (briefly describe) the responsibilities for each position,
 - o the percentage of time they will be spending on this project over its life span.

Equipment or facility

- ☐ Give a breakdown of the items requested, models, manufacturers, prices, and applicable taxes.
- ☐ Fees to be paid for the use of equipment or a facility should be described (e.g., hours and rate).

Materials and supplies

□ Provide details and explain major items.

Travel

- □ Explain briefly how each activity relates to the proposed research
- □ Relate travel to your objectives and the stages of your work. For example: year 1 meeting with potential partners, year 3 conference to disseminate first round of findings, year 5 guest lectures at partner institution to share conclusions.
- □ Incorporate value-added opportunities for your students

Dissemination

- □ Provide details of publication costs, user workshops or other activities
- □ Refer to concepts of "knowledge mobilization" and "knowledge translation"

Contributions from other sources (if applicable)

□ If appropriate, explain any contributions from other sources.

Other Documents

 If you need to provide a summary and budget page from other proposals or projects (see Relationship to Other Research Support), describe the document, scan as one document and attach these documents electronically.

TIPS & TEMPLATES FOR NSERC DG PROPOSAL

RELATIONSHIP TO OTHER RESEARCH SUPPORT

TIPS

- □ No page limit.
- □ Any relationship and/or overlap, conceptual or financial, with work supported by NSERC or other funding sources must be FULLY explained.
- ☐ The onus is on the applicant to provide sufficient information to enable the reviewers to evaluate the relationship between this application and other sources of support
- Other sources of support include: grants and contributions from funding agencies, organizations, the private sector, institution start-up funds, research chairs, the primary place of employment (for adjunct professors), and other institutional research support.
- ☐ The consequence of not providing adequate information to assess the relationship to other research support may be a rating of insufficient for the Merit of the Proposal.

TEMPLATE

- ☐ Use additional pages to provide the following information:
 - o Information on the conceptual and budgetary relationship or difference between this application and all other support (currently held or applied for).
 - For each grant currently held or applied for, clearly describe the main objective and provide a brief outline of the methodology, budget details, and details on the support of highly qualified personnel.
- Applicants who currently hold, or have applied for, research support from CIHR or SSHRC <u>must</u>
 provide the summary and budget page of these proposals.
 - o Failure to provide these documents will result in an incomplete application.
 - Use the Other Documents page to provide the required information.
- □ Optional: A summary and budget page from proposals submitted for funding from sources other than CIHR or SSHRC can be provided.

TIPS AND TEMPLATES - CCV for NSERC DG

Canadian Common CV (CCV)

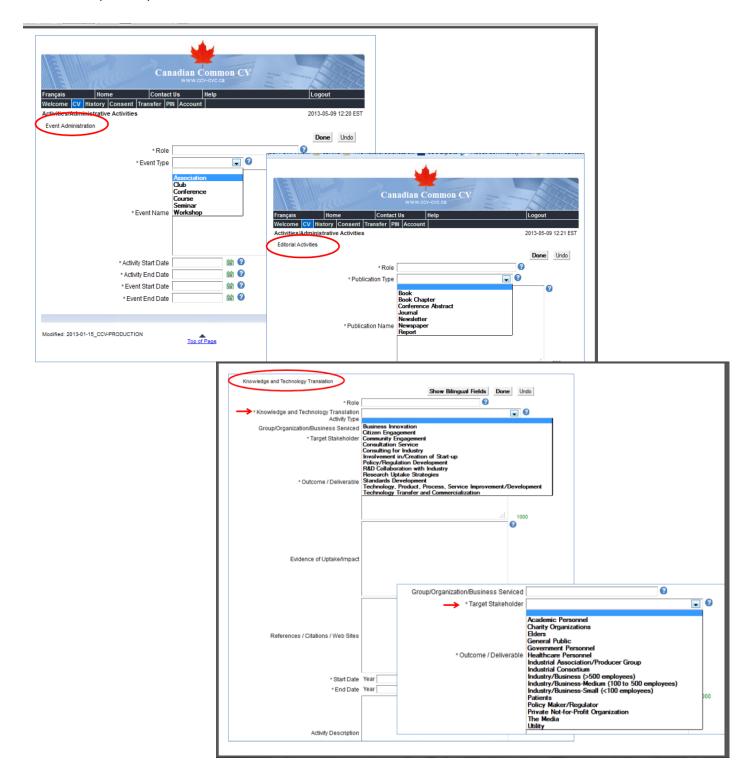
TIPS

- □ It will take many hours to create your CCV; please start now!
- □ There may be several places to enter the same information.
 - o Choose the most logical section.
 - o Enter the information only once (duplication irritates reviewers).
- □ There may not be an obvious destination for your information.
 - Contributions to HQP (1/2 page), additional information on research contributions (1/2 page),
 and most significant contributions (1.5 pages) are now in the application form itself.
- □ Do not feel obliged to provide information for each text box (unless mandatory, symbolized by *). As a template, it may offer categories that are not relevant to you.
- □ Be aware of pre-formatted columns; preview your CCV before submitting!
- Be creative in annotating your entries.
- Address the Selection Criteria of specific funding application (i.e., Excellence of Researcher, Merit of Proposal, Contributions to HQP) by entering strategic supplementary details where allowed.
- CCV information should showcase:
 - o leadership in your field
 - o meaningful collaborations
 - commitment to professional activities
 - o strong publication record in peer-reviewed journals
 - o influential academic and research activities
 - o impact to a broad community
 - o originality and novelty of research ideas
 - o quality student mentorship and supervision
 - o successful training record
- NSERC news release and link to instructions

TIPS AND TEMPLATES - CCV for NSERC DG

TEMPLATE

The CCV is broken down into Modules. It is recommended that you familiarize yourself with the options and entry fields within each module before you begin to fill in the information. As an example, the screenshots below demonstrate options under Event Administration, Editorial Activities and Knowledge / Tech Translation, respectively.



TIPS AND TEMPLATES - CCV for NSERC DG

Table 1: Modules, sub-modules and entry fields for the NSERC DG CCV template

MODULE	SUB-MODULES	ENTRY FIELDS
Personal	Identification	First and last name
Information	Language Skills	 Read, write, speak, & correspondence languages
	Address, Telephone, Email	Primary affiliation contact information
Education	Degrees	Type, specialization, organization, degree received,
	Application of research	supervisor name, date
Recognitions	Recognition	Type (citation, distinction, honour, prize), name,
		description, organization, effective date, amount
User Profile	User Profile	Research specialization, keywords, research disciplines,
		areas of research, fields of application
Employment	Academic Work Experience	Position type, title, status, start date, rank,
	Non-academic Work Experience	organization, tenure status, work description
	·	
	Affiliations	Organization(s)
	Leaves of Absence & Impact on	Leave type, organization, date, description
	Research	
Research Funding	 History (end dates past 4 years) 	 Funding type, title, status, role, year, source, other
History		investigators, breakdown of funding by year
Activities	 Supervisory Activities 	 Role, student name, study level, date, thesis title
	 Student/Postdoc Supervision 	
	Administrative Activities	Role, event type, name, activity and event dates
	 Event Administration 	Role, publication type, name, dates
	 Editorial Activities 	
	Advisory Activities	Role, case, location, description, start and end date
	Expert Witness Activities	note, case, rocation, accompliant, start and cha date
	·	Dala annociation description
	Assessment and Review Activities	Role, organization, description
	 Organizational Review Activities 	
	Knowledge and Technology	Role, type, end-users, stakeholders, outcome, evidence
	Translation	of impact, citations, dates
	International Collaboration Activities	Role, location, dates, activity description
Memberships	Committee Memberships	Role, name, organization, description, dates
	Other Memberships	
Contributions	Presentations	Title, conference, location, audience, invited, keynote,
		competitive, date
		•
	Interviews and Media Relations	Topic, program, network, date
	 Broadcast Interviews 	Topic, forum, publication date
	o Text Interviews	
	• Publications	Title, journal, volume, issue, PubMed ID (retrieve),
	o PubMed Articles	publication date, open access, authors, editors, page
	o Journal Articles	range, publishing status, refereed, date, chapter,
	o Journal Issues	funding source, organization
	o Books, Book Chapters	Turiding Source, organization
		 Title, number, status, filing date, date issued,
	Intellectual Property	_
	o Patents, Licenses	description / contribution / value / impact
	Patents, LicensesDisclosures	_
	o Patents, Licenses	_