# 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.

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- ☐ 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.