NSERC DG HQP training

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New HQP guidelines

- Latest guidelines based on two sections: training plan and past contributions (HQP training in last 6 years)
- You could separate the sections, use subheadings, be as clear and specific as possible, GIVE LOTS OF DETAILS!
- Contributions to all training levels valued: undergraduate, graduate, postdoctoral, technicians, interns, associates...
- Number of trainees should be proportional to scope of grant.
- Describe how you promote participation from a diverse group of HQP, considering EDI in your project, recruitment, and training plan.
- **NEW 2021!** Discuss challenges and barriers to EDI in research and training environment, and specific actions undertaken to implement it.

MAKE AN EFFORT… 1/3 of your grant evaluation
HQP training plan

- Assessment of HQP training plan based on two components: **training philosophy** and **research training plan**

- Focus on QUALITY, SUITABILITY, CLARITY OF PLAN

- Promote approaches to **increase EDI** and initiatives to ensure an INCLUSIVE ENVIRONMENT (advancement of women and minority groups)

**VERY IMPORTANT FOR NEW PROFS WITH LITTLE OR NO PAST HQP**
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HQP philosophy and research training plan

- Specify HQP involvement in individual projects/activities, tasks/roles/responsibilities, appropriateness for level (undergrad/MSc/PhD/postdoc).

- How will HQP benefit? … your interaction with HQP (frequency, outcomes), specific plan for enhancing training environment, stressing quality/relevance of training to needs of field/academic community/industry/country.

- Emphasize professional development opportunities: mentorship, seniors teaching/supervising juniors, leadership, science outreach/engagement, interdisciplinary research, workshops, collaborations with private/public sectors (industry, government agencies), international exposure.

- How will project benefit? Describe intellectual involvement of HQP and how relates to achieving objectives of your program, expected impact on HQP success.

- Budget – how much $ for your HQP (stipends, travel, workshops)
EXAMPLE FROM SUCCESSFUL NSERC APPLICATION

The various projects and theses present excellent learning opportunities for students. Students will take part (individually and in groups) in tackling challenging theoretical and practical problems. They will be trained in problem solving and research methodologies (e.g., design science research); software design paradigms such as service-oriented computing and service composition; usability assessment; social application design and development skills; software development skills; publication skills; and communication skills. They will be exposed to technical (software) issues as well as business issues related to e-commerce and usability.

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Early Career Researchers: emphasize transferable skills

- Organization/Time management
- Project Management
- Leadership
- Teamwork
- Written and Verbal Communication
- Critical thinking
- Problem solving
- Multi-tasking
- Analytical skills
- Mentoring/Supervising/Teaching
- Setting deadlines/Meeting goals/Prioritizing

Demonstrate the quality of your program in preparing them for their future careers.
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Early Career Researchers: emphasize professional development opportunities

- Scientific outreach initiatives
- Members of student council
- Internships/job shadowing
- International exposure
- Networking opportunities
- Academic competitions
- Teaching or TA opportunities
- Organizing training/discussion groups
- Workshops

Demonstrate the quality of your program in ensuring resources and opportunities are available for growth
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Past contributions to HQP training

Assessment based on 3 components:

- training environment
- HQP awards & research contributions
- outcomes & skills gained by HQP

Describe opportunities you provide to enhance training and professional development of HQP, practical/professional skills they acquired

- mention how they are desired by specific employers
- FOCUS ON QUALITY&IMPACT OF YOUR PROGRAM
Past contributions to HQP training

List all distinctions, research contributions/publications, awards that highlight the success and progression of your HQP and your role in these accomplishments (must have prior HQP consent)

- make sure it's clear what the award means (value, distinction?)
- emphasize continued involvement with HQP beyond their degree training

If co-supervision or collaboration, clearly explain your role in the training and your level of involvement

- describe your contribution to their success

Mentorship alone is not official HQP supervision, but for Early Career Researcher it can support feasibility and successful implementation of future training philosophy and plan.
Over the past 6 years, I have supervised 21 students and postdocs (6 ongoing, 14 completed, 1 withdrew). My contributions to HQP training span the full spectrum of personnel (2 postdoc, 3 PhD, 14 M.Sc., 2 Undergrad). Among those, 8 were co-supervised by colleagues from the University of Ottawa. Funding for the postdocs came exclusively from my Discovery Grants, while students were funded by NSERC, supplemented with MITACS Accelerate grants, University of Ottawa and Telfer School of Management grants.

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Early Career Researchers: emphasize past supervision and progress

- As senior PhD/Postdoctoral Fellow I supervised the work of X (list each separately) who progressed to graduate school/postdoc/other...My role was to ...he/she benefited from my mentorship by... (highlight your contribution to their training, progression and success)

- I supervised the work of....who took over my pilot study/project/work on...I am still actively advising him/her through weekly/monthly discussions, skype/social media/other interactions....(highlight that you care and are a lifelong mentor)

emphasize that the skills transferred and successful progression is evidence of your training abilities
Equity, Diversity and Inclusion

Increasing diversity and gender equity in the research enterprise are key priorities in our current strategic plan, NSERC 2020, and are highlighted in the strategic goal of “Building a Diversified and Competitive Research Base.”

NSERC requires applicants to incorporate EDI in their research and analysis, and in their training plans and research environments.

How to Strengthen EDI Considerations

Four important topics to include in your grant applications: **recruitment, team composition, training, and inclusion**.

1. Become aware of unconscious biases to help implement EDI commitments into your research.
2. Clearly describe the challenges r/t EDI specific to institution and field of study.
3. Clearly explain how your project will consider EDI, if not necessary explain why not.

EDI is a requirement for an **exceptional or outstanding** score in the HQP part of your grant evaluation.

http://www.nserc-crsng.gc.ca/_doc/Professors-Professeurs/DG_Merit_Indicators_eng.pdf
Examples for your application

- Each research team member will be recognized as an individual, primed by culture, gender, and personal experiences, and his/her contributions will be valued.

- Research group will be selected to **foster diversity**, including % female/% different ethnicities/nationalities/minorities/… I am committed to recruiting students of different gender and origin for an inclusive research and work environment.

- Research group discussions will **address unconscious biases explicitly**, and conflicts will be addressed promptly to ensure reconciliation.

- All group members will be offered **training in EDI policies/regulations**: online or workshops (list specific if known or refer to examples above), and a team EDI representative will be available to provide information to new team members, monitor team dynamics, and help resolve issues that arise.

- I will make sure that all team members are aware of EDI principles, and assign a team **representative to explain EDI to new members, monitor team dynamics, answer questions, and address issues as they arise**.

- I will encourage female/visible minorities/specific ethnicity members of your team to become involved in **initiatives specific for women/minorities/ethnic groups**, to find mentorship and engagement opportunities (list specific examples of organizations or associations for women on campus or in local community).
NSERC DG EDI CONSIDERATIONS

Where to find information?

Guidelines on Research Office website: tools for profs and students
https://telfer.uottawa.ca/en/research/support-for-professors-and-graduate-students/tools

NSERC EDI guidelines for applicants, framework, peer review manual:

Online training modules, refer to following links:
- Status of Women Canada: https://cfc-swc.gc.ca/gba-acs/course-cours/eng/mod00/mod00_02_01.html
- AAMC: https://surveys.aamc.org/se.ashx?s=7C7E87CB561EC358
- CIHR: http://www.cihr-irsc.gc.ca/e/49347.html
- Canada research chairs (CRC):
- Implicit association test: to evaluate one’s own biases and alter discriminatory behaviour accordingly
  https://implicit.harvard.edu/implicit/canada/
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