Analysis of Survey Results on NSERC Programs usefulness for Computer Science faculty.

Survey period: April 22 – May 21, 2018

Number of participants invited: over 900; Number of responses: 261 (~28%)

Position of responders:
- Faculty: 97.3% (254);
- Instructor / teaching faculty: 3.3% (6)
- On admin position (Department Head, Dean): 17.6% (46),
- Not on admin position: 82.4% (215)

Career stage:
- Seasoned researcher: 40.6% (106)
- Mid-career researcher: 37.9% (99)
- Young researcher: 21.1% (55)
- Non-researcher: 0.4% (1)

Type of institution of employment:
- PhD Granting University: 94.3% (246)
- University with no PhD Program: 5.7% (15)

Institution size, based on headcount and location:
- Large (20,000 +): 78.2% (204)
- Medium (10,000 – 20,000): 12.6% (33)
- Small (under 10,000): 9.2% (24)

Located in large urban center (Toronto, Montreal, Vancouver):
- Yes: 40.6% (106),
  No: 59.4% (155)

Province:
- Ontario: 42.9% (112)
- Quebec: 16.5% (43)
- BC: 14.9% (39)
- Alberta: 11.9% (31)
- Saskatchewan: 6.1% (16)
- Atlantic Canada: 4.2% (11)
- Manitoba: 3.4% (9)

Type of Department:
- Computer Science: 82.8% (216)
Summary of results:

Most of the survey questions required participants to rank the listed programs on a scale 0 to 5 where N/A – never used (0), Little Use (1), Somewhat Useful (2), Useful (3), Very Useful (4), Vital (5). Not surprisingly, the programs that were most used received the highest ratings.

The first part of the questionnaire (Overview) asked for relative ratings of the importance of the different programs. The Discovery Grant (DG) program, with 244 out of 261 ratings “Vital” or “Very Useful” (the top-two ratings of the scale).

NSERC Scholarship programs are also rated as very useful with over 170 top-two ratings and only 17 N/A.

The Partnership programs are generally rated as less useful (106 top-two ratings and 52 N/A), with the highest ratings for CRD (over 84 top-two ratings) and Engage (73 top-two rating), but with high number of N/A ratings (120 for CRD and 110 for Engage). The ratings of these two Partnership programs are lower than those of MITACS (non-NSERC programs), which received 93 top-two ratings, and lower number of N/A ratings (73).

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Top-two – Vital + Very Useful</th>
<th>N/A – Never used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Discovery Grants</td>
<td>244</td>
<td>93.5%</td>
</tr>
<tr>
<td>Scholarship Grants (all)</td>
<td>177</td>
<td>67.8%</td>
</tr>
<tr>
<td>Partnership Grants (all)</td>
<td>106</td>
<td>40%</td>
</tr>
<tr>
<td>CRD</td>
<td>84</td>
<td>32%</td>
</tr>
<tr>
<td>Engage</td>
<td>73</td>
<td>27.9%</td>
</tr>
<tr>
<td>MITACS (extra NSERC)</td>
<td>93</td>
<td>35.6%</td>
</tr>
</tbody>
</table>

In addition to programs, the participants were asked to evaluate NSERC online services, the Research Portal and the CommonCV. While the first two received more than 50% “OK” or “Easy to Use” ratings, the Common CV was rated as “Terrible” and “Hard to Use” over 150 times (60%).

A more detailed breakdown of the results and a summary of the participants’ comments can be found in the remainder of this report.
PART 1: Overview Questions

1. Which of the following NSERC programs is most useful for your research?

   ![Usefulness of NSERC Programs](chart1)
   - Vital
   - Very useful
   - Useful
   - somewhat
   - little use
   - N/A

2. Which of the following extra-NSERC programs is most useful for your research?

   ![Usefulness of extra-NSERC programs](chart2)
   - Vital
   - Very useful
   - Useful
   - somewhat
   - little use
   - N/A
3. Which of the following NSERC Partnership programs is most useful for your research?

![Usefulness of NSERC Partnership Programs](image)

Summary of Open Ended Comments to the Overview Questions (81 responses)

**Discovery Grants:**
- Widely Supported
- Needs larger amounts
- Appreciated because of flexibility of spending
  - Often used to fund students, buy equipment (see RTI section)
- Termed as “elitist”; more likely to go to researchers from larger universities, or researchers in “hot” areas
  - Would like selection criteria to funding differences, number of students enrolled (for HQP training), etc. into account
- Many grants support applied/industry research, but this is the only one to support basic
- Funds are also often used to buy equipment (see RTI section)
- Discuss peer review process as a “certificate of quality” and is used to determine eligibility for other grants

**Of those that explicitly mention Discovery Grants**
- 40% explicitly mention increasing the amount given
- 19% explicitly mention changing the selection process to make it more equal
  - Often mentioned that researchers at small universities are at a disadvantage

**Notes on RTI Grants:**
- Mostly Supported
- Would like more flexibility in spending (e.g. to spend on computing resources for students)
PART 2: Scholarship Programs

4. Which of the following NSERC Scholarship programs is most useful for your research?

Summary of Open Ended Comments to Section Scholarships (51 responses):

- 33% explicitly mention increasing the number of scholarships
- 16% explicitly mention raising dollar amounts (usually to compete with industry)
- 16% explicitly mention increasing discovery funding (professors usually use these funds to support students that don’t get scholarships, such as international students; this is often mentioned as an alternative to increasing the number of scholarships)
- 13% explicitly mention increasing the duration of the graduate fellowships, as was previously the case
- 11% explicitly mention supporting international students

- At universities not near urban centers, 21% explicitly mention supporting international students
PART 3: Do you have suggestions for new programs that NSERC can create? (76 responses)

This part contained only one question asking for open ended comments. In summary:

- 62% of respondents would not want new programs created
  - 52% of these responses specifically mention that they would rather have funds reallocated to support the Discovery Grants Program rather than new programs
- Several suggestions for new or revived programs, such as:
  - Reviving the UFA (University Faculty Award) to increase diversity in Computer Science
  - Programs specifically aimed at international collaboration
  - A program with an open call for any projects within NSERC's mandate that have a specific purpose and defined endpoint. Similar to CIHR's Project Grant.

Part 4: Other feedback to NSERC, e.g. about the research portal, use of common CV, and others?

Summary of Open Ended Comments – 99 responses:

- Comments almost universally criticize the Common CV
- Many comments suggest a full redesign rather than improvements
- This question had the most responses, and responses were often very detailed, suggesting those surveyed have strong emotions regarding this subject
- Often mentioned to standardize to one system instead of using both Form 100 and Common CV