



February 8, 2013

Dr. Gabor Kunstatter
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Dear Dr. Kunstatter,

This is in response to your email of November 27, 2012, addressed to Samir Boughaba, on a data mining exercise carried out at the University of Winnipeg. When we recently met, I undertook to provide some comments on the methodology and the interpretation of the results.

NSERC shares CAP's interest in understanding the impact of the changes in the peer review process implemented in 2009 and 2010 on the outcome for applicants. In fact, this is a key objective of the program evaluation that NSERC is launching for the Discovery Grants program. This evaluation methodology will comprise multiple lines of evidence, including statistical analyses of the 5 most recent competitions and where appropriate, comparisons with pre-2009 competitions. This will include an analysis with similar objectives to those of the study commissioned by the CAP.

I acknowledge the amount of work the CAP dedicated to obtaining the relevant information from the Awards Search Engine and carrying out the data mining analysis. I would like to offer the following commentary on the methodology used as it bears on the interpretation (or potential misinterpretation) of the results:

- I commend the CAP for conducting the analysis on a fiscal year basis since comparing competition years can be misleading due to differences in the five cohorts in terms of numbers of applications and "funding mass". Ideally, a comprehensive comparison should include the five cohorts in the "before" and "after" states.
- A number of the programs listed in Tables 1 and 2 have been introduced (for example, the Discovery Accelerator Supplements) or terminated (for example, Special Research Opportunities) during the two time periods considered.
- Some programs have awards that are of a short duration and can be of a large value, for instance the prestigious prizes (Brockhouse, Herzberg, Polanyi and Steacie), Discovery Ship-time. Thus depending on the researcher's institution, these can have a significant impact on the institution's results, even when multiple fiscal years are pooled.

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- NSERC supports research in 72 institutions through the Discovery Grants program. Some of the institutions that appear to not be accounted for in your analysis include le Centre de recherche informatique de Montréal, BC Institute of Technology, Redeemer, Vancouver Island (formerly Malaspina) Fraser Valley, Algoma, Athabasca, NS Agriculture College, INRS – Institut Armand-Frappier, etc.
- The Awards Search Engine reports data as of March 31 of the given fiscal year and thus reflects the several hundreds of post-awards transactions that occurred during the year. Examples of changes that would lead to post-award transactions are when researchers move from one university to another, resulting in transfers of grants; termination of grants due to retirement, departure from academia, and sadly death; change in eligibility status; deferrals or reinstatements; leaves that may result in a grant put on hold for a year; and a change in position. Over the 2004-2008 period, there was an average of over 850 post-award transactions per year versus the less than 500 in 2009-2011 (the last year for which we have detailed information). Such a difference in the volume of transactions may significantly impact the results.

To minimize these potential data disturbances, NSERC conducts its analysis by selecting only those programs that are active during the full period of analysis (Discovery Grants – Individual and Groups) using the April 1 values. As mentioned, we will carry out the analysis comparing the 5 years since the changes in the peer review process by university size (as defined by the amount of NSERC funding received by institutions) and will present the data on all the lines of evidence generated through the program evaluation to the International Committee. As was the case following the 2007 International Review, NSERC will post the information on its website and entertain exchanges with the community on it.

Sincerely,



Isabelle Blain
Vice-President, Research Grants and Scholarships
NSERC