

Evaluation of the Collaborative Research and Development Grants Program

Management Response

Context

The objective of the Collaborative Research and Developments Grants program is to give companies that operate from a Canadian base access to the unique knowledge, expertise, and educational resources available at Canadian postsecondary institutions and to train students in essential technical skills required by industry. It is the flagship university-industry partnership program in the Research Partnerships Program Directorate and the primary funding source for university professors working with industry partners on projects that are relevant to these partners. The program also aligns well with the Government of Canada's S&T Strategy, particularly the emphasis on partnerships. In fiscal year 2009-2010, there were 711 active CRD grants with approximately 600 industry partners, supported by over \$52M of NSERC funding. An evaluation of this program was conducted in 1991 with a follow-up completed in 1992. Further, follow-up surveys with university researchers and industry partners were conducted in 2000 and 2002. Considering the importance of the program to Canadian industry and academic researchers, the alignment of the program objectives with the Canadian government's S&T Strategy, and the length of time since the last evaluation, it was the ideal time for a full evaluation of the program. The evaluation focused on the following issues: relevance, design and delivery, impact/success and cost-effectiveness. The evaluation was conducted between March 2009 and April 2010, with the final evaluation report submitted in June 2010.

Comments

Overall, the results of the evaluation are very positive. They strongly correlate anecdotal evidence obtained through project final reports, regular interactions with stakeholders (academic and industrial), and extensive consultations performed recently while developing NSERC's new Strategy for Partnerships and Innovation (SPI). In fact, SPI resulted in a number of new initiatives that align well with the findings and recommendations of the evaluation. Therefore, this program evaluation validates the importance of CRD as NSERC's flagship university-industry partnership program, and the resulting recommendations can only strengthen the pivotal role this program will play in SPI. Findings from the evaluation will be useful for promoting the CRD program to potential industry partners and university researchers and will also be valuable in terms of demonstrating NSERC's contribution to supporting the Canadian government's S&T Strategy and research-based innovation.

Recommendation #1. Maintain the CRD program in its current form. Incremental improvements to program delivery should continue to be made in response to changes in the research landscape, in the needs of key beneficiaries, and in the number of applications and ongoing CRD grants.

Management Response: Agree. The results of the evaluation confirm that this program continues to be consistent with NSERC and government-wide priorities. Stakeholders generally believe it is an effective means to initiate and support university-industry collaborations, and it responds to a large proportion of the needs identified by academic and industrial partners. Management commits to maintaining this program over the next 5 years with increased funding allocation to help deliver on the SPI objective to double the number of industry partners

supported through NSERC university-industry research collaboration projects. Though recommendation #1 simply states that incremental improvements should continue, an internal process efficiency working group has been established to consult with all program staff to identify and prioritize key process improvements. They will work over the summer months and produce a Report by September 2010. Implementation of the recommendations from this Report should take place over the following six months.

Recommendation #2. Increase the outreach and visibility of the CRD program—particularly among industry—to promote awareness about the design and benefits of the program among stakeholders and to increase industry “pull”.

Management Response: Agree. Although the CRD program is reaching 44% of the top corporate R&D spenders, a survey by Statistics Canada of Small R&D Performers¹ found that only 2% of respondents participated in R&D work funded by the Natural Sciences and Engineering Research Council of Canada (NSERC) over the 2003 – 2007 period. Of these, only 20% indicated having participated in the CRD program. For the non participants, 72% reported not being familiar with the program. This confirms to Management the need to increase outreach and visibility of the CRD program to industry. Management was aware of this challenge, and moved to mitigate it in April 2009 by focusing its five regional offices on facilitating industry-academic partnerships. NSERC also plans to work closely with Federal and Provincial partners, such as the National Research Council – Industrial Research Assistance Program and the Ontario Centres of Excellence who’s primary clients are Canadian and Ontario industry, to promote the benefits of the CRD program for industry. Visibility of the program and its benefits to industry will also be highlighted through strategically placed success stories in both industry publications and the *IN Partnerships* newsletter.

Recommendation #3. Pursue plans to explore a Pre-Collaborative Research and Development (Pre-CRD) grant pilot program, with a reduced requirement for partner contributions and a streamlined application process.

Management Response: Agree. The evaluation revealed that networking opportunities and ways to identify potential academic partners for research collaborations is an industry need that is not being met through the CRD program. The evaluation also revealed that the existence of a pre-established relationship between academic researchers and industry partners is a key facilitating factor for program participation. These findings support Management’s decision to introduce two new funding programs to foster new research partnerships as part of its Strategy for Partnerships and Innovation. Interaction Grants provide up to \$5000 to a Canadian company and university researcher to meet and identify a company-specific problem they could solve through collaboration. Engage Grants provide up to \$25,000 to support short-term R&D projects aimed at addressing a company-specific problem. In both programs, the relationship must be new, and no financial contribution is required from the industry partner. These grants are being heavily promoted by Regional Office staff and as of June 1, 2010, over 115 new partnerships have been formed as a result of these new programs. NSERC will explore expanding the budget for these two programs over the next five years.

¹ Stat Can Survey of Small R&D performers (<http://www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=5154&lang=en&db=imdb&adm=8&dis=2>)

Recommendation #4. Maintain support for the participation of HQP—including students—in CRD projects. As part of Recommendation 2, communicate more prominently to program stakeholders both the contributions of HQP to CRD projects and the benefits of CRD participation for HQP.

Management Response: Agree. Training of HQP is an important NSERC mandate and providing students an enhanced training opportunity, through exposure to industrially relevant research and collaboration with industry partners, is an essential objective of the CRD program. Therefore, NSERC management commits to upholding its mandatory requirement of involving HQP training in the CRD program. This commitment reflects the essence of the People Advantage of Canada's 2007 S&T Strategy in which the government committed to help increase the supply of the highly qualified and globally connected S&T graduates that businesses need to succeed in today's economy. The evaluation finding that access to HQP is a driver of industry participation and that the majority of HQP benefit professionally from participation, confirms that this aspect of the CRD program is highly valuable and should not change. The benefits of HQP participation to both industry partners, and the students themselves, will be strongly promoted within the mechanisms outlined under Recommendation #2.

Action Plan

Recommendation	Agree/ Disagree	Action	Responsibility	Timeline
Recommendation 1: Maintain the CRD program in its current form. Incremental improvements to program delivery should continue to be made in response to changes in the research landscape, in the needs of key beneficiaries, and in the number of applications and ongoing CRD grants.	Agree	<ul style="list-style-type: none"> – Maintain delivery of CRD as indicated in the current NSERC 5 year budget plan – Identify and develop key process improvement to increase CRD program delivery efficiency – Implement recommendations of the process working group 	<ul style="list-style-type: none"> – RPP management (vice president and directors) – The process improvement working group – RPP management (vice president and directors) 	<ul style="list-style-type: none"> – Ongoing – Sept 2010 – March 2011
Recommendation 2: Increase the outreach and visibility of the CRD program—particularly among industry—to promote awareness about the design and benefits of the program among stakeholders and to increase industry "pull".	Agree	<ul style="list-style-type: none"> – Focus efforts of NSERC regional offices on liaising with local industries to increase industry knowledge of the NSERC program opportunities – Partner with federal/provincial departments (e.g. NRC-IRAP, OCE) to increase visibility of U-I programs – Increase communications thrust on success stories and articles in industry magazines and IN Partnerships newsletter 	<ul style="list-style-type: none"> – NSERC management – RPP management (vice president and directors) – IN Partnership e-bulletin to communicate success stories launched in January 2010 	<ul style="list-style-type: none"> – Oct 2009 (completed) – Ongoing-MOU with OCE signed; – On-going agreement with IRAP – Ongoing
Recommendation 3: Pursue plans to explore a Pre-Collaborative Research and Development (Pre-CRD) grant pilot program, with a reduced requirement for partner contributions and a streamlined application process.	Agree	<ul style="list-style-type: none"> – Develop and launch ENGAGE/INTERACTION initiatives as pre-CRD opportunities – Work to expand the impact and reach of the ENGAGE/INTERACTION program over next 5 years 	<ul style="list-style-type: none"> – RPP management (vice president and directors), Regional Offices – RPP management (vice president and directors) 	<ul style="list-style-type: none"> – Nov 2009 (completed) – Ongoing
Recommendation 4: Maintain support for the participation of HQP—including students—in CRD projects. As part of Recommendation 2, communicate more prominently to program stakeholders both the contributions of HQP to CRD projects and the benefits of CRD participation for HQP.	Agree	<ul style="list-style-type: none"> – Uphold contribution to HQP training as an essential selection criteria for CRP projects – Improve communication strategies to better promote the benefits of HQP training in CRD projects (to be done simultaneously with the third action from recommendation 2 above) 	<ul style="list-style-type: none"> – RPP management (vice president and directors) – Communications and RPP management 	<ul style="list-style-type: none"> – Ongoing – IN Partnership e-bulletin launched in January 2010