

Regional Innovation Acceleration fund

Sustaining capacity for the acceleration of
SME's innovation and regional economic
development

**Brief for Pre-budget consultation in advance of budget
> 2018 submitted to the Standing Committee on Finance of
the House of Commons - Canada**

August 4, 2017

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Executive Summary

In Budget 2018, the federal government should invest \$27 million annually to establish the Regional Innovation Acceleration Fund (RIAF) unlocking the tremendous potential of Canada's colleges and Cégeps and responding to the ever-growing applied research and business innovation needs of companies of all sizes, across the country.

The proposed RIAF would be a first in the history of Canadian college applied research, and would accomplish two main objectives:

- Provide stable, predictable annual funding to allow colleges to properly set up, staff and sustain applied research offices (or equivalent) to meet the increasing business innovation and applied research needs of companies and partners in their region.
- Assist colleges in offsetting the indirect costs of administering federally funded applied research grants, freeing up much-needed funding to dedicate to core R&D activities to the benefit of SMEs.

Emergence of college applied research

Cégeps, colleges and polytechnics (collectively named "colleges") focus on later stage demand-driven applied research, helping firms bridge the commercialization gap and get their innovations to market. This mission is especially pertinent today considering that "Canada lags behind on innovation and business sophistication, which are especially central for advanced economies"¹.

Compared to our long-standing tradition of university research; college applied research is still relatively recent (mid '80s). Many efforts were made to mobilize the publicly-funded, industry-facing facilities, equipment and expertise of the colleges to address the mounting innovation and commercialization challenges of companies, particularly SMEs, who lacked their own in-

house R&D capacity. Characteristic of the collegial approach to innovation is the development of SME friendly relationships using language and business practices that are highly compatible². Unfortunately, these efforts lead to unequal results regionally since provincial and federal support was scarce and unstable.

In 2004, the Natural Sciences and Engineering Research Council (NSERC) launched an innovative pilot program - exclusively for colleges - called the College and Community Innovation (CCI) Program. In 2008, the CCI pilot was made permanent with a modest \$15 million budget.

Today, with significant time and money invested from each, 110 colleges are NSERC-eligible, and CCI's \$50 million annual budget allows competitions for many applied research initiatives:

- Technology Access Centres
- Industrial Research Chairs for Colleges
- College-University Idea-to-Innovation grants
- Applied Research Tools and Instrument grants

All having tremendous impact in communities from coast to coast to coast.

The CCI results show that the colleges who established applied research offices early or could rely on well organised research centers, fared significantly better than their latecomer peers lacking financial and human resources to compete effectively. As CCI's budget remains static, this disparity between colleges continues to grow and has a negative impact on SMEs accessibility to college applied research resources across the country. While the federal government has taken a strong leadership role over the years, provincial and institutional support remains inconsistent in nature and intensity across the country, further contributing to this disparity.

From the 110 NSERC-eligible colleges, significant potential remains untapped

across the country. Unleashing that potential requires federal leadership and a modest amount of stable, predictable, multi-year funding to enable all colleges to attract and retain applied research talent, mentor those employees, and spark interest for applied research amongst college faculty and regional firms.

As noted by Colleges and Institutes Canada, Canada's extensive network of colleges plays a critical role in over 3,000 communities across the country. Large research institutions are not present in all of these communities, yet the SMEs that employ their residents still face the same innovation barriers as firms in large urban areas. Tapping into the facilities, equipment, and expertise of Canada's colleges to assist these SMEs will move the needle on Business Expenditures on Research and Development (BERD), and help to turn Canada's failing innovation rankings around.

Missing support for hidden costs

In 2003 the Indirect Costs of Research Program (now Research Support Fund - RSF) was established to assist Canadian postsecondary institutions with the costs associated with managing their research enterprise.

Grants can be used to:

- maintain modern labs and equipment
- provide access to knowledge resources
- provide research management and administrative support
- meet regulatory and ethical standards (financial risk management, responsible conduct of research, ethical conduct in research involving humans and animals)
- transfer knowledge to the private, public and not-for-profit sectors

The RSF tracks an institution's three-year rolling average of awards received from peer-reviewed, competitive tri-council programs and provides financial support according to a formula that provides 80% reimbursement for the first \$100,000 in

average revenues, 50% for the next \$900,000, 40% for the next \$6 million, and an annually calculated percentage for the remainder based on available funds.

Unfortunately, the CCI program has always been excluded from the RSF program. While the policy rationale for excluding CCI remains unclear 10 years later, the colleges have been allowed to use up to 20% of their CCI awards for "overhead and administration" as defined by the Program Administration Guide, though eligible expenses are more restrictive.

To compound the problem, those funds are only available to colleges who have an active CCI award, which puts emerging colleges at a disadvantage and also puts at risk all the expertise earned once projects conclude.

With their extensive range of high tech equipment and facilities, colleges have the same maintenance, regulatory compliance, insurance, heating, cooling, hydro, safety upgrades, administration, outreach, security and indirect costs of research that universities have, but without RSF support.

Why not just have the Research Support Fund include the CCI program?

In the past, groups have advocated for opening the RSF to colleges, as the CCI program was the only federally-funded, competitive, peer-reviewed research program not eligible.

While a laudable goal, we feel that the existing RSF would not be best adapted to the reality of colleges. Given the unique nature of college's interventions, NSERC concluded that a specific program dedicated to colleges, with its own objectives and metrics, was necessary. The same logic should apply to indirect costs associated with college applied research activities.

The provision to provide a basic level of support to all tri-council eligible colleges, enabling a college applied research system

everywhere in Canada is also absent from RSF.

Also, while always striving for excellence, the evaluation criteria need to rest on different grounds, as the output expected from colleges are different than universities, which was well recognised by both NSERC and SSHRC in their own college programs.

Therefore, we feel that leadership is needed to create a standalone, college-specific Regional Innovation Acceleration Fund to have the most positive impact for all parties.

Benefits of a standalone Regional Innovation Acceleration Fund

Increase college applied research capacity: Stable, predictable and sustainable funding allows all colleges, to build and enhance their applied research capacity in order to better serve innovative SMEs.

Develop regional innovation talent: Increase the number of learning opportunities for college students (capstone research projects, internships, assistantships). A competent college applied research office could also host experiential learning opportunities for local university students, giving them an opportunity to apply the theoretical knowledge they've acquired in their academic programming, and adding a different perspective and skillset to the project teams.

Track innovation outputs and outcomes: Colleges would be responsible for annual tracking and reporting on designated applied research outputs, outcomes, and performance metrics. With colleges across the country reporting on the same metrics provides the federal government a much better picture of Canadian innovation activity.

Better efficiency in the awarding process: Separating indirect costs from direct costs will also help granting agency examination committees to focus on what they are expert on: evaluation of the quality of the projects,

instead of having to offer an opinion on the use of funds for administration.

Federal leadership in college applied research: The opportunity still exists for an unprecedented investment in maximizing the potential of the applied research and innovation capabilities of Canada's colleges. No federal government has ever provided Canada's 110 colleges with the stable, predictable, consistent funding needed to establish and enhance applied research offices solving industry-identified innovation challenges, and providing innovation skills acquisition and experiential learning opportunities for students and graduates.

Design

The RIAF would be open to all NSERC, SSHRC, and CIHR-eligible colleges. Universities, colleges with NSERC-university eligibility and outside organizations/not-for-profits would not be eligible for RAIF. The program would be voluntary and require that the institution apply for an RIAF award.

Grant calculations would be similar to the existing RSF, but would use a two-year rolling average of competitive, peer-reviewed awards received from college-specific programs within NSERC, SSHRC, and CIHR (at present, only CCI and CoCoSIF). Grants would be five-years and renewable.

To accelerate deployment of applied research resources in all eligible colleges, a funding floor would be established. Colleges with a yearly award average lower than \$375,000 would receive \$150,000 per year, for five years, to assist them in establishing a proper college applied research office and retaining talent for multi-year engagements.

Established colleges who have received an average of over \$375,000 per year would receive 40% of that amount in the next year. For example, a college with a 2-year average of \$800,000 would receive \$320,000.

Funding would be used by the college applied research office or research centers to help offset costs similar in scope to those covered by the RSF.

Delivery

The federal government has multiple mechanisms at its disposal to deliver the RIAF.

1. Launch the RIAF as a new, national, college-specific program, similar to the existing Research Support Fund, administered by, and accountable to, one of the federal granting councils, or by Innovation, Science and Economic Development Canada.
2. Re-launch a college-specific version of the Intellectual Property Mobilization Program through NSERC and design the program to the specifications of the RIAF.
3. Have federal Regional Development Agencies (RDAs) deliver a common program, providing the financial support to the colleges within their area. This option lends itself to the mandate of the RDAs in enabling colleges to service the applied research and innovation needs of firms in their region, with the goal of making them more competitive while also growing the regional innovation talent pool.

Cost

The proposed RIAF, using a two-year rolling average, and including a floor of support and a different grant calculation formula than the RSF, would cost \$27 million per year, while providing significant benefit to 110 colleges in all parts of the country.

On the other hand, including the College and Community Innovation Program in the existing Research Support Fund, using the existing grant calculation formula, would cost \$25 million, yet only provide modest benefit to 87 colleges.

While the CCI program's budget has been static for years, future increases in annual

funding to the CCI program would require an increase to both the RIAF or the RSF, very much like past increases to the RSF in years where the granting councils receive additional funding for new competitions.

About [Réseau Trans-tech](#)

Réseau Trans-tech is the network of 49 College Centres for Technology Transfer (CCTT) affiliated to Cégeps and colleges in Québec.

Réseau Trans-tech coordinates activities for CCTTs, facilitates access to their services, support collaborations between CCTTs and other innovation actors and represents its members in dealings with government, agencies or industrial organisations.

Annually, 1,800 applied research projects³, 5,700 technical assistance projects and 1,250 training and information related activities are realized. The network comprises over 1,300 experts in technological and social innovation serving 4 300 businesses and organizations annually.

CCTTs contribute directly to the economic and social development of regions by increasing productivity, competitiveness and developing a highly skilled, more creative and enterprising workforce, which represents an annual added-value of 1.3 billion dollars to the Canadian economy and supports 10 000 jobs⁴.

For additional information:

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¹ [The Global Competitiveness Report 2016-2017, World Economic Forum.](#)

² [Collaborer pour innover, Michel Trépanier, July 2005](#)

³ [Sommaire statistique 2014-2015 : Ministère de l'Éducation et de l'Enseignement supérieur, August 2016.](#)

⁴ [Contribution économique des cégeps et CCTT, KPMG, November 2014](#)