

### PRE-BUDGET CONSULTATIONS IN ADVANCE OF THE 2020 BUDGET

# RECOMMENDATIONS TO THE HOUSE OF COMMONS STANDING COMMITTEE ON FINANCE

Submission by Association pour la recherche au collégial (ARC) for 2020 Pre-Budget Consultations

August 2019

#### List of Recommendations

ARC (Association for College Research) advocates for the recognition of college research as a means of ensuring Canada's competitiveness. As part of the pre-budget consultations in advance of the 2020 budget, Arc would like to make four recommendations.

#### **Recommendation 1**

That the government help cover the cost of providing the support required for college research by funding indirect research costs. This will ensure the development of the research capacity of colleges at the local, regional, national and international levels.

#### **Recommendation 2**

That the government increase total funding available for the full spectrum of college research, from discovery to innovation, in the three generally recognized sectors—natural sciences and engineering; social sciences and humanities, arts and literature; and health sciences—whether projects are conducted by intersectoral, interdisciplinary, inter-level or international teams, to ensure that the contribution of college researchers to research and innovation and also to Canada's competitiveness is greater than it is at present.

#### **Recommendation 3**

That the government support training for the next generation of scientists as certain training programs are offered only at the college level and some types of literacies, such as the literacy of innovation, are closely tied to higher education and are increasingly important for individual and collective development.

#### **Recommendation 4**

That the government do more to encourage private, public and not-for-profit companies to support research and innovation.

## That the government help cover the cost of providing the support required for college research by funding indirect research costs. This will ensure the development of the research capacity of colleges at the local, regional, national and international levels.

Post-secondary educational institutions need federal government support for the five types of operating expenses associated with research activities: a) research facilities, b) research resources, c) management of research activities, d) regulatory requirements and certification standards, and e) intellectual property and knowledge mobilization. There is a broad consensus in the college research community that changes must be made to support college research and that all costs must fully funded. At present, grants provided by the College and Community Innovation Program and the College and Community Social Innovation Fund, which are both very much appreciated by the college community, include amounts to cover operating expenses. However, the funding is inadequate and less than the amount of funding provided to universities by the Research Support Fund. After these funds were created, a significant number of colleges became eligible for funding by Canada's granting agencies and submitted funding applications. Research capacity cannot be developed beyond a certain point-one might say the saturation point-without considering the facilities, resources, administration, compliance with regulatory requirements and, lastly, intellectual property and mobilization of knowledge. More than 95% of Canadians and 86% of indigenous people live less than 50 km from a college. These institutions are well established throughout the country and can play a key role in addressing Canada's current and future challenges, especially climate change, the well-being of an aging population and sustainable development. Businesses that deal with these institutions and their institutes count on them to support all stages of a project, from its design to knowledge and technology transfer, and even accountability. By funding the indirect research costs of institutions, the government would be giving them the means to more adequately support private and not-for-profit companies and even to resolve and prevent social problems that consume significant amounts of public monies. Indirect costs must be incurred to develop research. Yet there is a serious shortfall in coverage for the indirect costs of college research funded by the federal government. Indirect costs should be covered separately from direct costs for all projects. According to calculations by Colleges and Institutes Canada, these costs would total \$40 million Canada-wide.

That the government increase total funding available for the full spectrum of college research, from discovery to innovation, in the three generally recognized sectors—natural sciences and engineering; social sciences and humanities, arts and literature; and health sciences—whether projects are conducted by intersectoral, interdisciplinary, inter-level or international teams, to ensure that the contribution of college researchers to research and innovation and also to Canada's competitiveness is greater than it is at present.

According to UNESCO, higher education includes "all types of study programmes, training or training for research at the post-secondary level which are recognised by the competent authorities of a [member country] as belonging to its higher education system."<sup>1</sup> It plays a vital role "in stimulating critical and creative thinking and generating and disseminating knowledge for social, cultural, ecological and economic development."<sup>2</sup> At the college level, research activities are voluntary. Many staff members of educational institutions and their affiliated institutes are both interested in conducting research and gualified to do so even though it may not be a required element of their teaching responsibilities. As Fisher<sup>3</sup> and others point out, since research is voluntary, one of the most important factors for this research to take place is that it must be a separate task for the researchers. This is an essential condition for the development of college research capacity. It is very important to consider emerging requirements, such as the requirements of granting agencies with respect to the environmental responsibilities of researchers and research data management. Budgeted amounts must be adequate, regularly indexed and disbursed to institutions according to their schedule of activities. Three principles can guide the government with respect to direct costs: maintain the voluntary nature of college research activities; provide financial support for the participation of a researcher in a project as soon as he or she is hired by an educational institution, which will support the recruitment and retention of staff; provide the financial resources required to conduct research-related activities at all stages of the process, from the design of a project to the transfer of the resulting knowledge. Federal investments will demonstrate that many types of projects cannot be carried out by just having financial partnerships with private enterprises. There are too many activities that are not feasible with this model, such as: projects that are very relevant in the short term and tend to be carried out on a microsocial scale: projects that are preventative and related to public health, the environment, poverty or social inclusion; projects that could have a major long-term impact and that actually consist of basic research; and, lastly, projects carried out in collaboration with partners that have limited resources, such as community partners. In this regard, we recommend that the government increase the budget of the Community and College Social Innovation Fund and make this a permanent source of funding to ensure that many communities can benefit from the capability of college research to contribute to their well-being. Similarly, it is apparent from many research or innovation initiatives undertaken by the Canadian college network that government support for projects in the health sector is long overdue.

<sup>&</sup>lt;sup>1</sup> UNESCO, Progress Report on the Preparation of the Draft Global Convention on the Recognition of Higher Education Qualifications, August 2017, Annex II, p. 3, <u>https://unesdoc.unesco.org/ark:/48223/pf0000253046</u> (consulted on August 1, 2019).

<sup>&</sup>lt;sup>2</sup> UNESCO, Education 2030. Incheon Declaration. Towards Inclusive and Equitable Quality Education and Lifelong Learning for All, 2016, p. 41, https://unesdoc.unesco.org/ark:/48223/pf0000245656 (consulted on August 9, 2019).

<sup>&</sup>lt;sup>3</sup> Roger Fisher, "A Conceptual Framework for Research at Canadian Colleges" (Sylvie Charbonneau, Trans.), *Pédagogie collégiale*, Vol. 24, No. 1, p. 29.

# That the government support training for the next generation of scientists as certain training programs are offered only at the college level and some types of literacies, such as the literacy of innovation, are closely tied to higher education and are increasingly important for individual and collective development.

According to UNESCO, higher education "underpin[s] the development of analytical and creative capacities that enable solutions to be found for local and global problems in all fields of sustainable development."4 That is one of the reasons why college research across Canada can help increase Canada's competitiveness. Some college students have the cognitive and affective characteristics to actively contribute to research activities that could provide them with a science background and perhaps lead them to a career in science in some capacity. Therefore, we encourage the government to financially support the hiring of youth by research teams, particularly to increase the capacity to introduce students to research starting at the college level, and with consideration for labour requirements in research, innovation and knowledge transfer and the need to develop the capacity for scientific inquiry and innovation in youth. This introduction can be an integral part of the college education of those interested in science who may wish to pursue a career as a researcher, research professional or laboratory or research technician. In this regard, we applaud the very recent Mitacs initiative, which now accepts college students into its Accelerate program. The Government of Canada would benefit from supporting more internships and would also make a significant contribution to improving well-being-and eventually reducing costs-if it ensured that internships in the social sciences and humanities and the health sciences are truly accessible to youth interested in these fields and considering the means of businesses that are interested in providing these opportunities.

<sup>&</sup>lt;sup>4</sup> UNESCO (2016), p. 41.

## That the government do more to encourage private, public and not-for-profit companies to support research and innovation.

According to the OECD, private, public and not-for-profit companies that are market producers of goods and services or that serve companies, work with colleges and their research or transfer groups because they believe education is essential and view it as an asset that will contribute to collective well-being, including that of their own communities. Establishing ties to an educational institution demonstrates this support. Encouraging companies to increase this support would lead to greater collaboration of companies in research and innovation. For example, increasing tax credits for training and support could have a positive impact on for-profit companies. Some programs could include financial resources that would give not-for-profit organizations a subsidy equal to the amount required to replace staff working on a research project. Support for applied research must be considered a benefit in the short term for companies in all sectors and would definitely make Canada more competitive.