

# Seizing Canada's Moment

CARL's Submission to the Science, Technology  
and Innovation Consultations

*6 February 2014*



**Canadian Association  
of Research Libraries**

**Association des bibliothèques  
de recherche du Canada**

## **Who we are**

The Canadian Association of Research Libraries (CARL) represents the country's twenty-nine largest university libraries. Enhancing research and higher education are at the heart of our mission. CARL promotes effective and sustainable scholarly communication, and public policy that enables broad access to scholarly information.

## **Summary of recommendations**

Information management is fundamental to successful research efforts. CARL members enable access to and preservation of information throughout Canada's largest universities. We welcome the opportunity to submit our views on these important matters.

The government rightly notes the central contribution of research in maintaining our competitive edge. This research rests on strong public programs that support researchers, such as the granting agencies, the Canada Foundation for Innovation (CFI), the National Research Council (NRC) and Libraries and Archives Canada (LAC).<sup>1</sup>

The government can also leverage existing knowledge by supporting digital infrastructure that maximises the exchange of reliable data and by encouraging open access to publicly funded research. We believe that the government can build upon its achievements to make sure Canada remains globally competitive.

While our submission will focus on reliable data, empowering researchers and strengthening public institutions, our main recommendations to the consultation document themes are:

- Business innovation
  - Open access to publicly financed research can allow small and medium businesses access to a wealth of research information that was hitherto unavailable because of high subscription costs.
- Developing innovative and entrepreneurial people
  - The granting agencies play a crucial role in supporting Canadian researchers. Increasing their funding, including money for academic discovery, will lead to greater innovations.
- Higher education and public research
  - Universities play a central role in research and we encourage the government to continue supporting them. We believe increased government investment will strengthen public institutions, such as LAC, to continue playing a key role in Canadian research.

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<sup>1</sup> LAC and NRC-CISTI are CARL members. However, they do not participate in any of CARL's advocacy discussions or activities.

## ***Introduction***

Information management is fundamental to successful research efforts. Our members play a central role, enabling access to and preservation of information throughout Canada's largest universities. Canada's research universities are at the centre of innovation, liaising with public institutions and private enterprises through a host of partnerships.

We believe the future science, technology and innovation strategy should commit Canada to reliable data, empowering researchers and strengthening public institutions and university research.

Canada can harness the power of big data by connecting researchers to existing information through research data management and by encouraging open access to publicly funded research. Having the necessary digital infrastructure will enable access to, and preservation of, precious existing data – avoiding effort duplication in the process.

CARL is an active member of the Digital Infrastructure Leadership Council and has had the opportunity to discuss this submission with our sister organizations within the council in the context of *The Digital Infrastructure Summit 2014* recently concluded in Ottawa.<sup>2</sup>

The government can attract the best researchers in the world by investing in people. Increasing the funding of the granting councils would continue the government's commitment to our researchers. This investment across disciplines, strengthening support for discovery research, will lead to new discoveries and make Canada an international leader.

The Government of Canada establishes the base for innovation through its funding of strong public programs and institutions, such as the NRC, CFI and LAC. Additionally, maintaining funding for the Indirect Costs Program and Compute Canada balances support for our national research infrastructure.

We believe that these three elements form a solid base from which private and academic research and development can flourish.

## ***Favoring business innovation through open access and reliable data***

Data is essential to research. Governments and universities produce vast amounts of data to support service delivery in areas such as health, environment, agriculture and natural resources, much of which may have enduring value for new enquiry or application.

Bringing together and preserving this information should be a priority as it allows us to re-use existing information in new ways. We can accomplish this by enabling affordable access to broadband Internet services for all Canadians, assuring open access to publicly funded research and implementing a national infrastructure for research data management.

We believe the public has a right to access research results funded by taxpayers' money. CARL strongly supports the granting agencies' draft policy on open access and we encourage the government to give its full support to this measure. Our members stand ready to help the government and the granting agencies implement this policy.

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<sup>2</sup> <http://digitalleadership.ca>

Increasing Open Data and open access to publicly financed research can allow small and medium businesses access to a wealth of research information that was hitherto unavailable because of high subscription costs.

- *What actions could be taken, by the government or others, to enhance the mobilization of knowledge and technology from government laboratories and universities, colleges and polytechnics to the private sector?*

Open access to publicly financed research can allow small and medium businesses access to a wealth of research information that was hitherto unavailable because of high subscription costs.

### ***Empowering researchers to develop innovative and entrepreneurial people***

We are happy to note the importance given to discovery research in the consultation document. Applied research facilitates commercialization while basic research opens up a world of possibilities previously unknown.

A recent C.D. Howe Institute report highlights the importance of allowing researchers to pursue subjects that interest them.<sup>3</sup>

- *How can Canada continue to develop, attract and retain the world's top research talent at our businesses, research institutions, colleges and polytechnics, and universities?*
- *How might Canada build upon its success as a world leader in discovery-driven research?*

The granting agencies play a crucial role in supporting Canadian researchers. Increasing their funding, including money for academic discovery, will lead to greater innovations.

### ***Excellence in public and post-secondary research and development through strong institutions***

We applaud the Government of Canada for its continued financial backing for research infrastructure over the years. Programs such as the CFI give researchers the tools they need to get the job done. We hope that the government will commit to CFI to ensure that our research infrastructure remains competitive.

Part of our success comes from maintaining financing for Compute Canada, the Indirect Costs Program, the NRC, the CANARIE network and public research at large. These government programs are tools that benefit all Canadians by supporting researchers, businesses and universities.

Library and Archives Canada and Statistics Canada collect, preserve and enable access to a wealth of information that can be useful to researchers and the private sector. Continued

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<sup>3</sup> Perter Howitt (5 June 2013) *From Curiosity to Wealth Creation: How University Research Can Boost Economic Growth*, C.D. Howe Institute.

investment will enhance LAC's capacity to collect and preserve the country's rich documentary heritage, while investing in Statistics Canada, an internationally renowned data collection agency, furthers researchers' ability to generate reliable knowledge and inform policy.

### **Research Data Management**

Properly described, archived, accessible and reusable data hold vast potential for research verification and reinterpretation. However, research data are all too often discarded or forgotten once a project ends. The data then deteriorate on hard drives and various other storage media, becoming inaccessible. Research data represent a valuable publicly funded asset that, if managed and shared appropriately, can lead to new discoveries and greater innovation. The government can encourage the role played by Research Data Canada and the Digital Infrastructure Leadership Council.

- *Is the Government of Canada's suite of programs appropriately designed to best support research excellence?*

Universities play a central role in research and we encourage the government to continue supporting them. We believe increased government investment will strengthen public institutions to continue playing a key role in Canadian research.

### **Conclusion**

Canada's universities are at the centre of innovation, liaising with public institutions and private enterprises through a host of partnerships. Government programs that allow them to pursue discovery research best support university and commercial research and development. By strengthening our public institutions, increasing funding for the granting councils and committing to our research infrastructure, the Government of Canada will lay the conditions for a competitive and innovative society.

## **More information**

For more information on these issues, consult CARL briefs on our website at <http://carl-abrc.ca/en/publications>.

Our publications include:

- [Facilitation, Collaboration and Cooperation: A Canadian Research Data Management Network](#) (December 2013)
- [CARL response to the Consultation on the Draft Tri-Agency Open Access Policy](#) (December 2013)
- [CARL response to Capitalizing on Big Data: Toward a Policy Framework for Advancing Digital Scholarship in Canada](#) (December 2013)
- [Input on Open Government Consultations](#) (September 2013)
- [Recommendations for Budget 2014](#) (August 2013)
- [2013-2016 Strategic Directions](#) (May 2013)
- [Affordable broadband Internet access for all Canadians, Brief to parliamentary committee](#) (April 2013)

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