An Overview of the Open Access Movement in Canada

This chapter will provide an overview of how the open access movement has evolved in Canada since the 2002 Budapest Open Access Initiative. With an emphasis on open access to literature and the role of academic libraries, we will explore stakeholder perspectives, key initiatives, and recommendations for the future implementation of open access (OA) in the Canadian higher education sector.

An Overview of Open Access Implementation in Canada

In “Canadian Universities and Sustainable Publishing,” a white paper recently issued by the Canadian Association of Research Libraries, Martha Whitehead and Brian Owen described the scholarly communications landscape in Canada as being on the cusp of transformative change:

Many factors are converging: the continuing impact of digital technology on teaching and research, the growing expertise of academic libraries in utilizing and supporting technology-based initiatives, the move
towards policies on open access, the oligopoly of international academic publishers, and the financial constraints of university budgets.²

These converging factors have fostered initiatives across the country, with the end goal of enabling research results that are “as widely distributed and accessible as possible, internationally, in high quality publishing venues at the lowest possible costs.”³ The forms, extent, and approaches to openness vary greatly, are highly nuanced, and are dependent both on stakeholder mandates and the values and perspectives they bring to the OA agenda.

This chapter will present an overview of the stakeholders and organizations underpinning the open access movement in Canada, beginning with the government, funders and research institutions, and then the publishers, authors/creators, and consumers of information. We will also summarize perspectives and highlight key initiatives that support the successful implementation of OA.

The Government of Canada

Canada has been moving towards opening up its government publications and information. It has demonstrated its commitment to openness, accountability, and transparency to citizens by becoming a member of the international Open Government Partnership. In 2012, the government of Canada issued a public statement of commitment to Canada’s Action Plan on Open Government 2012–14:

Canada’s commitment to open government is part of the federal government’s efforts to foster greater openness and accountability, to provide Canadians with more opportunities to learn about and participate in government, to drive innovation and economic opportunities for all Canadians and, at the same time, create a more cost effective, efficient and responsive government.⁴

Progress has also been made towards making Canadian government information “open by default.” This has included open access to government data and information via Canada’s Open Data Exchange, the Open Data portal, and the federal Open Science and Citizen Engagement initiatives.⁵ Canada is currently drafting its 4th Plan on Open Government 2018–20 with an open call for participation and ideas to shape commitments for Canada’s next plan on open government.⁶

Unlike the United States, Canadian government information is protected by Crown copyright. Based on the concept of “royal prerogative,” Canadian Crown copyright is not subject to the statutory length of copyright protection for published works, the life of the author plus fifty years. As a result, published or unpublished works may be protected “permanently or at the whim of the Crown.”⁷ Amanda Wakaruk, a librarian at the University of Alberta,
recently initiated a petition to the Canadian government advocating for the abolishment of Crown copyright. Wakaruk outlines the problem with Crown copyright on the fixcrowncopyright.ca website that she created to accompany the petition:

"Canada is one of many countries stating a commitment to Open Government. It is also, conversely, one of a decreasing number of countries to retain a legal provision that gives the government the sole right to reproduce and distribute works produced for public consumption. For example, the vast majority of federal U.S. government works are in the public domain (i.e., not protected by copyright and thus available for the public to re-use without permission)."

Wakaruk’s petition received 1,481 signatories from all of the Canadian provinces and territories. The government responded by reaffirming its position on open government, while also stating that “current practice gives flexibility to different governmental branches and agencies to adopt the most appropriate way to handle the content they produce or publish.” The Canadian government is currently conducting a review of the Canadian Copyright Act, so there may be scope for some changes to Crown copyright as a result of the review process. This report is not expected until 2019.

**Canada’s Federal Funding Agencies**

The government of Canada supports three federal funding agencies: this Tri-Agency, as it is known, consists of the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Social Sciences and Humanities Research Council of Canada (SSHRC). These federal granting agencies “promote and support research, research training and innovation within Canada.” Acknowledging its commitment to open access to research results and the “principle of knowledge sharing and mobilization—an essential objective of academia,” the Tri-Agency issued an Open Access Policy on Publications funded in whole or in part by the agencies, which took effect on May 1, 2015. The policy stipulates that “grant recipients are required to ensure that any peer-reviewed journal publications arising from Agency-supported research are freely accessible within 12 months of publication.” Recipients can do this through one of the following routes: deposit in an online repository (institutional or subject repository), Green Open Access, or by publishing in an open access journal (Gold Open Access).

The CIHR and SSHRC advocate for the preservation and sharing of data to the widest possible audience at the earliest opportunity, and both of these agencies have research data archiving policies. The SSHRC policy statement in this area dates back twenty-five years. The Tri-Agency is currently
developing a comprehensive shared policy on research data, as outlined in its “DRAFT Tri-Agency Research Data Management Policy for Consultation.” This statement advocates for a shared responsibility among award stakeholders to strive towards “a robust and open research data environment in Canada.” Recognizing the sensitivity, especially in areas such as health-related research, that is involved in making underlying research data findable and accessible to the wider community, the emphasis of this policy is on the application of data management best practices and is expected to come into effect in 2018.

**Canadian Research Institutions and Their Researchers**

In seeking to capture the perspectives of Canadian research institutions and their members on open access, it is necessary to understand the relationship between the individual researchers as creators of research and the institutions that employ them. In the Canadian higher education sector, “most universities now have intellectual property policies that form part of their employees’ conditions of employment and are subject to collective bargaining.” For example, at the authors’ home institution, Queen’s University in Kingston, Ontario, the faculty collective agreement stipulates that “all intellectual property is owned by the Member(s) who create(s) it,” except in a few given exceptions. Clauses such as this help to ensure that researchers and instructors have academic freedom, or “the right to freely communicate knowledge and the results of research and scholarship.” In their “Statement on Academic Freedom,” Universities Canada state that the university, for its part, must “defend academic freedom against interpretations that are excessive or too loose . . . [and be] committed to integrity and free to act in the institution’s best interests.” This juxtaposing of individual academic freedoms with the collective interest of the institution as a whole may influence the approaches to implementing OA at an institutional level. The following sections will explore the OA viewpoints of authors and creators and their institutional employers.

**Authors**

Since authors generally do not relinquish their copyrights to their institutional employer (unless they choose to do so via a separate agreement), they decide upon both the method and route for disseminating their research. The perceptions of many authors of OA journals can be summarized in the following well-documented issues:

- **What counts in order to get ahead:** “Prestige is the currency of academia . . . a scholar’s chances for promotion, tenure, a higher salary, etc., increase with his or her prestige. Prestige comes from doing high-quality research. Given the difficulty in measuring quality, shorthand measures, such as the reputation of the journal in which an article is published or the number of citations it generates, are used instead.”
While there are many high-quality, reputable open-access journals, there are scores of less reputable ones with highly questionable marketing and peer review practices. Deceptive publishers (also commonly referred to as “predatory journals”) are for-profit entities that purport to publish high-quality academic research, but do not follow accepted scholarly publishing best practices of rigorous peer review and editorial workflows. Their ultimate goal is to make money by levying article processing charges on unsuspecting authors, not publish quality research.

**Open access as synonymous with poor quality and high costs:** Authors value the services rendered by the established publishing houses responsible for the production of most high-impact journals, and are willing to relinquish their copyrights to these publishers in return. In delivering this same quality service package, many Gold Open Access journals deflect their publishing costs away from the subscribing library to the author via article processing charges (APCs). APCs are fees paid by individual authors in order to publish a journal article. In light of these concerns, there is a gap between authors’ acceptance of the principles of openness and the actual practice of going open. The European Commission’s Open Science Monitor report (June 2018) on trends for open access to publications states that only 13.9 percent of EU-funded research is available via Green OA and 14.4 percent via Gold OA. For Canada, Green OA surpasses this regional benchmark at 17.3 percent while Gold OA is lower, at 8.1 percent. Similarly, Archambault et al. found that many journals indexed in the Directory of Open Access Journals are small national titles which researchers at research-intensive universities are unlikely to target for their publications.

**Research Institutions**

At the time of writing, almost all Canadian research institutions have policies that require graduate-level theses to be released open access and included in institutional repositories. Sixteen of these institutions have put in place open access statements affirmed either by their faculty senate, board of governors, or the library: “most statements recommend that authors strive for the best possible effort to make research OA, and that universities make the best possible effort to support them.” None of these institutions apply sanctions on noncompliance, and all have an opt-out or waiver option. With regard to the academic freedom of their authors to choose the most appropriate publication venue for their work, research institutions in Canada are disinclined to take a top-down, directive approach to influencing faculty on the matter of where and how they disseminate their work.
Canadian Success Stories

There are a number of Canadian success stories when it comes to open access. Most notable is the Montreal Neurological Institute and Hospital (MNI), which has adopted a strategy of stakeholder innovation through open science. MNI’s open science policy affirms that “open science needs to be stakeholder driven by the researchers themselves.” Taking a highly practical, grassroots approach, the MNI has developed an open research publishing platform in collaboration with F1000Research, supporting rapid publication timelines (average seven days), open peer review of research, and modest APCs for articles of between £116 and £775. Pricing is listed in pound sterling because F1000 Research Ltd. is located in the United Kingdom. Though aligned to considerations of researcher reputation and institutional rankings systems, the measures of scholarly impact and worth continue to revolve around quantitative proxies of impact such as the impact factor of a given journal title. The 2012 San Francisco Declaration of Research Assessment (DORA) calls attention to the misuse of such measures and the need for alternative assessment tools beyond peer review, along with incentives and rewards for openness and sharing. There are seventeen individuals and organizational DORA signatories from Canada.

Publishers

Since the rise of digital publishing in the 1990s, commercial publishers have evolved into a monopoly of large-scale key international players with robust end-to-end scientific publishing workflows and tools. The business model for journal subscriptions rests on two key pillars:

1. A pay-to-access revenue stream largely through library or consortium subscriptions on behalf of their institutional authors.
2. The provision of value-added editorial and distribution services that package and distribute research findings in publications with high-quality editorial processes and markup. Mackie-Mason refers to this as the “unbundling and re-bundling phenomenon. The corpus of information can be broken apart into its constituent pieces . . . and then repackaged [and sold] in other ways.”

Bolstered by healthy revenue streams, these commercial publishers have successfully established intrinsic title-level prestige and reputation at all levels of the higher education promotion, award, and ranking system at the institutional and author levels. However, many commercial publishers have also embraced the Gold Open Access model, which provides readers with free access to the final published version of research articles, with the publishing costs recouped through article processing charges paid by the author.
Schimmer et al. assert that “it is a truism among publishers that new journals nowadays can be brought to market only if they are open access; a new journal has no real future if it is placed on the subscription track.”30 To this end, there are a number of homegrown OA journal success stories in Canada. One example is Facets, an independent, not-for-profit scholarly publisher that levies a flat-APC fee of $1,350 Canadian dollars, plus applicable taxes per publication, for researchers in Canada.30 Another major open project, Érudit, is a multi-university consortium between the Université de Montréal, the Université Laval, and the Université du Québec à Montréal that “supports mostly, but not only, French-language scholarly publications, including journals, books and proceedings, theses and dissertations, and documents from research centres.”31

**Academic Libraries**

Libraries at their core support access to information. Canadian libraries have been among the strongest and most passionate advocates of open access. A notable Canadian strength is that there are a number of highly coordinated national and regional library organizations which underpin the open access agenda.

The first of these organizations is the Canadian Association of Research Libraries (CARL). CARL represents 31 research libraries, 29 of which are academic libraries in Canada’s most research-intensive universities. For 40 years, CARL has been working to ensure sustainable and open scholarly publishing in Canada, including a wide variety of web materials and documents related to open scholarly publishing. A related organization is the Canadian Research Knowledge Network (CRKN), a national consortium that “conducts negotiations with publishers and vendors to license large-scale digital journal and database content”32 on behalf of the seventy-five universities in Canada. The CRKN is involved with a variety of projects and collaborations that drive open publishing in Canada.

In addition, there are a number of regional consortia that also play a role in supporting open publishing at Canadian universities. These consortia include the Council of Prairie and Pacific University Libraries, the Ontario Council of University Libraries (OCUL), a Bureau de Coopération Interuniversitaire, and the Council of Atlantic University Libraries (CAUL). Since 2011, the Ontario Council of University Libraries (OCUL), a consortium of twenty-one university libraries in Ontario, has maintained a shared technology infrastructure arm called Scholars Portal (SP). SP operates a journal platform that indexes a wide variety of open access journals. SP also maintains an open journal and monographs hosting service via Canada’s Public Knowledge Project, namely, Open Journal Systems and Open Monograph Systems. On behalf of Ontario’s universities, SP currently hosts 115 journals and 7 monographs.
(with 3 forthcoming as part of a pilot project at Queen’s University). SP is also a “trusted digital repository,” which demonstrates “OCUL’s commitment to its members to provide access to a diversity of learning and research materials, and to ensure their preservation through sustainable and responsible stewardship.” Another example is CAUL, which has an active scholarly communications committee and a digital scholarship toolbox.

It is noteworthy that Canada no longer has a national library association. The Canadian Library Association voted to disband on January 27, 2016. As a replacement for this group, the Canadian Federation of Library Associations (CFLA) was formed as the “national voice” of Canada’s library association. The CFLA does not have a strong advocacy position on open scholarship, although it does advocate on behalf of libraries on related issues like copyright, access to information and communications technology, and intellectual freedom.

Building on initiatives at a national level, research libraries in Canada have undertaken a number of initiatives to advance open access in the higher education sector. These are summarized below.

**Funding support for open monographs.** In 2016, CRKN announced a collaboration with the Canadian Federation for the Humanities and Social Sciences to award eleven CRKN member institutions small grants to facilitate their participation in the international Knowledge Unlatched (KU) initiative. KU offers free access to scholarly content for readers via their “crowdfunding platform where they can support Open Access by selecting publisher titles at a clear and sustainable price.”

**As agents of change in shifting market dynamics.** Academic libraries have acted as information brokers for the “big deal” packages provided by commercial publishers. The big deal package represents a business model in which publishers sell libraries online access to large bundles of electronic journals. Like funders, libraries control significant budgets and have the potential to use that power to encourage and support change. Over the past few years, a number of universities in Canada have canceled big deal packages. However, decisions to cancel big deals have in many instances resulted in retractions. These retractions followed resistance from within the research community which, often unaware of the amounts that libraries spend on subscription packages, feared that its core activities would be impeded if access to these subscriptions was suspended or hindered. On May 1, 2017, Rick Anderson published a blog post which collated most of the big deal package cancellations in North American libraries. This post included information about Canadian universities which had either canceled big deals, or had announced cancellations and then backed away. This list of cancellations included the Université de Montréal, University of Calgary, Brock University, Memorial University of Newfoundland, and the University of Ottawa. Two of these organizations—Brock and the Université de Montréal—have since reentered the big deals that they canceled, and the University of Ottawa renegotiated its big deal after it
had announced cancellation.\textsuperscript{36} These cancellations (and retractions) may be a symptom of Canada’s relatively small market share and therein reduced bargaining power with journal publishers.

Where decisive moves to cancel big deals have failed, a number of Canadian institutions in partnership with CRKN are currently collaborating to take a more proactive, data-driven approach. They are reaching out to their researchers to gather tangible data about their journal usage (publishing and citation behavior) and analyze this information to determine the dollar value of big deal packages, in order to inform future purchase decisions. This project, called the Journal Usage Project, builds on a study originally conducted by Vincent Larivière at the Université de Montréal and, with three other universities in Quebec, “offers individual institutions insight into usage, citations, and faculty perceptions of journal value.”\textsuperscript{37} Another related project designed to help research libraries is the “Responding to Unsustainable Journal Costs” brief prepared by Kathleen Shearer for CARL and in consultation with CRKN. In this document, Shearer outlines the major causes of unsustainable journal costs, including rising subscription prices and a weak Canadian dollar, and then goes on to outline a number of direct responses that libraries can employ to manage rising journal costs. The report outlines a number of recommendations for libraries to help address this problem, including supporting libraries and consortia in taking a stance against price increases, raising awareness of both the issues and the limitations of impact-factor measures, and investing resources to create sustainable grassroots publishing platforms and services.\textsuperscript{38}

Supporting compliance with funder policies on open access. Research libraries are currently undertaking the majority of open access work. They are hosting repositories and managing the ingest of open materials, which involves navigating complex funder policies and confusing publisher embargo rules. The costs associated with maintaining this complete infrastructure are high, since content recruitment practices are often fairly resource-intensive. The evidence also suggests that OA mandates do not result in high deposit rates (for Green Open Access) without support for depositing content.\textsuperscript{9} In addition, less than 15 percent of Canadian universities have opted to provide central funds supported via the library or other academic units to help authors pay the APCs for Gold Open Access. In 2016, the CARL Open Access Working Group’s Library Open Access Funds subcommittee published a report titled “Library Open Access Funds in Canada: Review and Recommendations.” This report revealed that OA funds vary greatly in size across participating institutions, ranging from $10,000 at Brock University to $350,000 at the University of Calgary. The authors of this report observe that there is “a greater need for accountability and transparency of the funds, as well as clear policies about who and what is eligible. Thus a cost-benefit analysis would be difficult.”\textsuperscript{40}

Open infrastructure. The largest and best-known organization that is building infrastructure around open publishing in Canada is the Public Knowledge Project (PKP). The PKP was created in 1998 as a research project
by John Willinsky and has since become a partnership between the University of British Columbia, the Canadian Centre for Studies in Publishing at Simon Fraser University, OCUL, and two American institutions. The PKP has been instrumental in building open publishing platforms and tools, beginning with the release of Open Journal Systems (OJS) in 2001. Open Journal Systems is a system designed for open access journals that “provides an online management tool for one of the most time consuming and costly components of journal publishing—the article submission and review process.” OJS is open source and is made available under the GNU General Public License.

Another major infrastructure project is Islandora, which is supported by the Robertson Library at the University of Prince Edward Island. Islandora is “an open-source software framework designed to help institutions and organizations and their audiences collaboratively manage and discover digital assets.” Islandora is most frequently used as a digital asset management system, but it is also being used as an OA repository at some universities like Ryerson in Toronto.

Leveraging open access to Canadian research at an international level. In November 2017, CARL launched an Open Repositories Working Group that was tasked to develop a strategic agenda for repositories in Canada, which would include raising the visibility of repositories in Canada, promoting the adoption of next-generation repository functionalities, and overseeing the collaboration with the OpenAIRE initiative. OpenAIRE supports open access and open science across the European Union. As a result of this, in January 2018 CARL announced a new collaboration with OpenAIRE to aggregate high-quality metadata showcasing Canadian open-access content.

Open monographs. Among the Canadian university presses that have implemented OA initiatives are the Athabasca University Press, the University of Ottawa Press, and the University of Calgary Press. Athabasca has an active OA program with a commitment from the university to cover staffing and overhead costs, while recouping other costs through publishing grants, sales, and other financial support. Both the University of Ottawa Press and the Calgary University Press are OA-oriented and have strong partnerships with their university library.

Funder support for open monographs publishing. The Canadian Federation for the Humanities and Social Sciences’ Awards to Scholarly Publications Program (ASPP) in 2015 developed a policy to “promote and facilitate” the open-access publishing of ASPP-funded monographs. The policy stipulates free the right holder(s):

grant(s) to all users a free, irrevocable, worldwide, right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship to copy, use, distribute, transmit and display the work publicly . . . [and to
Community-Driven Consortium Initiatives

A community-driven approach to open access is gathering momentum in Canada, with libraries taking a leading role. The Canadian Scholarly Publishing Working Group, a multi-stakeholder group populated by the Canadian Association of Research Libraries, met between July 2016 and May 2017. Representatives from university presses, research libraries, publishers, educational and industry groups, a federal funding agency, and several researchers all contributed to the group.44 One outcome of this working group is a five-year partnership between CRKN members, Érudit, and PKP to create the Coalition Publi.ca. This is a strategic partnership which includes 53 full Canadian library and publisher participants (and 5 supporting participants) and more than 125 journals, 40 of which are currently open access.45 The goal of this project is to use journal subscription fees to make content open access.

Open educational resources and open textbooks. If there is one area of open access with the most momentum in Canada, it would be the drive for the creation, use, and adoption of open textbooks. This began with the first, and the largest, Canadian open textbook project in British Columbia, where the provincial government announced the creation of the B.C. Open Textbook Project in 2012. The goal of this project was to “create a collection of open textbooks aligned with the top 40 highest-enrolled subject areas in the province. A second phase was announced in the spring of 2014 in which an additional 20 textbooks targeting trades, technology, and skills training would be developed.”46 The success of open textbooks in British Columbia has led to major projects in other provinces, with Ontario and Manitoba launching their own open textbook libraries. All of these projects have included frequent calls for grants to help create open textbooks. Alberta also has funding for the creation of open textbooks and is the location of Athabasca University—Canada’s open online university. These types of initiatives and programs have led to a significant rise in the number of open textbooks being used and adopted across Canada.

These provincial initiatives have driven significant interest in open textbooks at an institutional level, with many institutions launching their own project groups and internal grants for the development of open texts. The provincial consortia are also engaged in these areas, with OCUL publishing an open textbook white paper in 201747 and CAUL releasing the results of its open textbooks survey in 2018.48

Library support for open data. Another area with significant momentum in Canada is the move towards open data. Leading the way in this area is the Portage Network. Portage was launched in 2015 by CARL to “coordinate and
expand existing expertise, services, and infrastructure so that all academic researchers in Canada have access to the support they need for research data management.” Portage is committed to openness on many levels; its guiding principles include research as a public good, intelligent access, openness (with respect for privacy), and open sources. Portage works in conjunction with university libraries, library consortia, and organizations like Compute Canada, CANARIE, and others “to establish in-kind storage capacity for research data and to provide support for national platforms for data management plans, preservation, and discovery.”

CONCLUSION

To conclude, we will highlight a few thought-provoking considerations for the future of open access in Canada. The government of Canada should demonstrate its commitment by enacting federal funder policies on OA after twelve months of publication into federal law. As indicated above, the Canadian government, through both the open government initiative and the Tri-Agency policy, has demonstrated a commitment to the open access movement. The government should continue down this path by abolishing Crown copyright, as well as legislating an open access policy for all Canadian research and scholarship. John Willinsky deftly advocates for this approach in his column for Slaw: Canada’s Online Legal Magazine. He argues that with a copyright review process currently underway, Canada should consider legislating openness for all publicly funded research, whether it be immediately or after a twelve-month embargo: “it becomes this country to take the lead in extending our right to this body of knowledge. Ensuring that this work is available to journalists, educators, healthcare providers, Wikipedia editors, and interested readers everywhere will serve as another check on the growing web of misinformation and disinformation that is increasingly undermining democratic life.” This type of governmental policy could help universities overcome their inability to pass and enforce mandatory open-access policies and allow them to focus on building infrastructure and services that ensure these publications are open after the embargo period. Willinsky also suggests that academic libraries must

“assert their collective willingness to underwrite the costs of immediate and universal open access, for the same price as they are now paying for either twelve months or a lifetime-plus of exclusive journal access. Publishers can continue to be paid, perhaps through automated (and anonymized) tracking of usage and an updated version of the music industry’s mechanical licensing model, which involves tariffs certified by the Copyright Board of Canada.”

There are also a number of things that research libraries and their institutions and organizations can do to continue to drive open access in Canada.
In the “Canadian Universities and Sustainable Publishing” white paper, mentioned in the introduction to this chapter, Whitehead and Owen state that “the time is right to repatriate scholarly publishing to the academy and disrupt centuries-old print paradigms. We want scholarly publishing that is not only sustainable: we want it to thrive. There are significant issues to be addressed, but there are also impressive developments that can be built upon further.” They go on to recommend that universities work together to challenge the costs of existing journal subscription models and that universities and funding agencies should work together to develop publishing venues.

Creating a sustainable future for open access in Canada will indeed require ongoing leadership and collaboration between publishers, libraries, creators, platform providers, and others at a global level. If we are to move our research communities towards the actual implementation of open access, and beyond mere ethical support for the principle of “openness,” we, as librarians, must take a highly responsive and pragmatic approach that builds beyond advocacy and addresses the persistent challenges explored in this chapter. We must integrate and provide highly use-centric infrastructure, services, and supports that truly deliver on the promise of open access as a means to greater discoverability, affordability, timeliness, and rigor in the fluid dissemination of all forms of scholarship.

Finally, in 2018, sixteen years after the Budapest Open Access Initiative in 2002, leaders of the open access movement issued new guidelines that reaffirm the goal to “accelerate research, enrich education, share the learning of the rich with the poor and the poor with the rich, make this literature as useful as it can be, and lay the foundation for uniting humanity in a common intellectual conversation and quest for knowledge.” The growth of the open access movement in Canada over the past sixteen years clearly reflects this reaffirmation. This growth has been driven by all stakeholders—including funders, publishers, libraries, and universities—and is a clear acknowledgment that the promise of open access has enormous potential in Canada.

The path to rapid, widely adopted, and sustainable open solutions has many obstacles. Creating a truly effective and sustainable future for open scholarship will require vigorous commitment and pragmatic cooperation from the entire ecosystem of research and scholarly communication at a global level.

NOTES
3. Ibid.


11. Ibid.

12. Ibid.

13. Ibid.


19. Ibid.


42. Brin, “CARL Announces Collaboration with Major European Open Science Initiative, OpenAIRE.”


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