Open Access at Concordia University A Report for the Office of Research

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Academic freedom and openness are the hallmarks of scholarship. Researchers publish their results, not for financial return, but to enable other researchers to build upon them and to contribute to the progress of knowledge in their fields. As such, most scholars want to share their work as widely as possible with colleagues, students, and others who may be interested.

The current scholarly publishing system does not reflect these needs and values. Skyrocketing costs of journal publications are greatly inhibiting the availability of research results. The problem may not be obvious for those at institutions that can afford subscriptions to digital editions of journals. Yet, many potential users don't have access. In the developing world, which includes approximately 80 percent of the world's population, even modest charges can be beyond the economic means of libraries and institutions. In addition, many individuals that stand to benefit from research knowledge, such as policy makers, professionals, and the public, do not have direct access to published research.

In the print environment, the subscription-based model was the only viable option. However, with the internet, there is an unprecedented opportunity to transform the scholarly publishing system to one that more effectively responds to the needs of scholars, students, and the public.

What is open access?

Open access (OA) is a rapidly emerging trend that promises to better serve Concordia University and the broader community by greatly improving the dissemination, visibility, and impact of research findings.

Open access is not vanity or self-publishing, nor is it about the literature that scholars might normally expect to be paid for. It concerns the outputs that scholars normally give away for free – peer-reviewed journal articles, conference papers and datasets of various kinds.

According to the three original, formal definitions of open access (referred to as BBB definitions), OA is the immediate, online, free availability of research outputs without the restrictions on use commonly imposed by publisher copyright agreements. That is, open access strives not only to provide free access to all, but also the ability to re-use and re-distribute scholarly works as long as

¹ The costs of academic journals have been sharply climbing for over two decades now. According to the Association of Research Libraries (ARL), the average cost of a serial subscription for ARL member libraries increased by 315% from 1989 to 2003. This increase far exceeds the rise in the Consumer Price Index of 68% for those years. From 2003 on, average journal prices have increased more slowly, but still continue to rise by about 9% a year.

² Journal subscriptions, especially in science, technology, and medicine, can cost thousands of dollars each year, and some cost more than \$20,000.

there is proper attribution for the author.

Open access is part of a broader technology-driven trend impacting the way research is conducted, conveyed, and shared. Digital technologies are greatly accelerating the progress of knowledge by seamless linking of data, knowledge, and scholars. In support of this, new mechanisms for sharing scholarship and new economic models to sustain the process are emerging.

How is open access implemented?

Most scholarly articles published can already be made freely available through one of the two primary vehicles of delivery: OA repositories or OA journals.

OA repositories or 'archives' collect and provide free online access to a range of research outputs. They can be discipline-based, such as PubMed Central or arXiv, or institution-based, such as the one being developed by the Concordia University library. The vast majority of journals (over 90%),³ including those produced by most major publishers, currently allow authors to make a pre-print or post-print version of their articles available through an open access repository.

OA journals are journals that employ the same peer-review processes as traditional journals, but have funding models that do not charge readers or their institutions for access. Open access journals employ a variety of business models to recoup their costs such as subsidies, article-processing fees, charges for hard copy versions, institutional membership fees, or some combination of these. There are now over 3900 open access journals⁴ representing about 15% of the approximate 25,000 peer-reviewed academic journals in existence. In addition, many subscription-based publishers offer authors the option of paying a fee to make their articles freely available.

There are other variations in terms of how open access is implemented. John Willinsky of the Public Knowledge Project describes nine types of OA. 'Delayed OA', for example, makes published articles freely available after a certain amount of time under subscription (typically from 3 to 24 months), and 'Partial OA' makes some journal content freely available and other content available through subscription only.⁵

³ The SHERPA-ROMEO directory which currently monitor the policies of over 10,000 peer-reviewed journals indicates that 97% of the journals (63% of the publishers) currently allow self-archiving: http://romeo.eprints.org/stats.php

⁴ The Directory of Open Access Journals currently lists 3914 quality controlled scientific and scholarly journals: www.doaj.org

⁵ From John Willinsky's article, "The Nine Flavours of Open Access Scholarly Publishing": http://www.jpgmonline.com/text.asp?2003/49/3/263/1146

State of play

Universities, funding agencies and researchers around the world are rapidly embracing open access because of its anticipated benefits for scholarship and society. Currently, over 50 funding agencies worldwide⁶ have implemented open access policies including several in Canada: CIHR (The Canadian Institutes of Health Research), Canadian Breast Cancer Research Alliance, The Canadian Cancer Society, Fonds de la recherche en santé du Québec, Genome Canada, and the Ontario Institute for Cancer Research. Researchers who receive funding from these agencies are required to make their journal articles open access within a certain amount of time after publication. In addition, SSHRC has endorsed open access in principle, and NSERC is currently developing a policy. Annex 2 includes the relevant paragraphs from the *CIHR Policy on Access to Research Outputs*.

Several universities have also committed to open access through policy implementation, including MIT, Harvard, and Stanford in the US, as well as institutions in Australia, Belgium, Finland, Germany, India, Italy, Norway, Portugal, Spain, Switzerland, Turkey, and the UK. No university in Canada has yet to follow suit. These university-wide or departmental policies are typically implemented by faculty through a resolution or vote, and call for members to deposit their peer-reviewed articles into the university repository. Annex 3 contains the text of two sample university OA policies.

Why does open access matter for Concordia?

Open access reflects the long-standing scholarly tradition of sharing knowledge. It also "speaks to extending the research capacities of developing nations, increasing public rights of access to knowledge, and furthering the policy and political contributions of research." These values align directly with those of Concordia University, which is highly committed to community engagement and social responsibility, as well as research and education.

For faculty, open access has the considerable benefit of greatly increasing the potential audience for their work. When an article is published in a subscription-based journal, it may only be accessible to several hundred readers. When an article is open access, the potential readership includes virtually everyone with an internet connection. In addition to being more widely read, there is growing evidence that OA articles are also cited more often than subscription-based ones. OA also improves the prospect of digital research outputs being preserved, available and used over the long-term.

For students, OA will improve access to the journal literature they require for education and research. As well, because OA material is not subject to the same restrictive licensing constraints as traditional subscription-based literature, it can be readily re-used and re-packaged with attribution in course packs, class websites, and other formats.

 $^{^{6}\,} The\, SHERPA\text{-JULIET service maintains a list of funders' policies.}\, http://www.sherpa.ac.uk/juliet/$

⁷ From John Willinsky's book, "The Access Principle". MIT Press. 2006, Pg. xiii

⁸ Although more research in this area is needed, early citation studies of open access articles have found a correlation between usage and citation rates, as well as a citation advantage from open access. For details of these studies, see webpage, "The effect of open access and downloads ('hits') on citation impact: a bibliography of studies": http://opcit.eprints.org/oacitation-biblio.html

⁹ The theory of the Long Tail asserts that even very obscure, old or specialized material will get used if it is made available for free on the Internet. See: www.wired.com/wired/archive/12.10/tail.html

Open access will raise the profile and visibility of the research being undertaken at Concordia University allowing the local community and beyond to benefit more directly from that research. Open Access can help to effectively communicate research results within and outside the university and might easily be incorporated into a broader university communication strategy.

Clearly, open access will advance Concordia University's mission of "innovation and excellence in education, research, creative activity and community partnerships" and, given its many benefits for scholarship and society, the principle of open access should be widely supported by the entire Concordia community.

Options

Concordia University has the opportunity to position itself at the forefront of this growing trend. One practical step a university can take in support of open access is to implement an OA policy. This would effectively demonstrate the commitment of Concordia faculty to making their work more widely available.

While most scholars support OA in principle, a policy often provides the necessary impetus for them to actively participate in OA endeavors. Policies implemented elsewhere have had strong, in some cases unanimous, support from faculty.

In terms of policy elements, a number of options can be considered.¹¹ Most policies call for members of a university (or department) to both deposit their peer-reviewed articles into a university repository and to grant the university a non-exclusive license to make those articles available over the internet. Experience of others demonstrates that without a requirement to deposit, the policy is not likely to be widely adhered to.¹² However, since not all publishers currently allow for article deposit, a policy can include a clause for opting out of the license, thereby ensuring maximum flexibility for authors in terms of publishing options. OA policies can also address publisher embargoes by permitting authors to delay access to a deposited article for an agreed upon amount of time.

A sustainable OA repository is an essential element for supporting an open access policy. Concordia University Libraries is currently developing a repository for the university, which will be launched later in 2009. In addition to providing a single access point for the research output of Concordia faculty members, the repository can track usage information for authors and ensure that the content is being preserved appropriately. Indeed, download rates for papers in institutional repositories are reported to be very high.¹³

¹⁰ From Concordia's Draft Strategic Plan, January 2009, pg. 2 http://www.concordia.ca/strategicplanning/draftstrategicplan/

¹¹ See "Open Doors Open Minds" for an in-depth discussion of the optimal elements for a University Policy: www.arl.org/sparc/bm~doc/opendoors v1.pdf

^{12 &}quot;Open Doors Open Minds" provides an in depth discussion of the optimal elements for a University Policy: www.arl.org/sparc/bm~doc/opendoors v1.pdf

¹³ The large repository at the University of California, the e'-Scholarship' repository, has so far seen almost 8 million downloads of the approximately 27,000 articles it houses. http://repositories.cdlib.org/escholarship/. For other examples, see: Swan, A. and Carr, L. (2008). *Institutions, their repositories and the Web*. "Serials Review", 34 (1): http://eprints.ecs.soton.ac.uk/14965/

In addition to the adoption of an OA policy, Concordia might join the many universities which have endorsed major open access statements, such as the *Budapest Open Access Initiative* or the *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities*. This would indicate to the international community Concordia University's formal commitment to open access.

Concordia University may also want to consider other activities to support faculty members' open access endeavors. In particular, the university might encourage faculty authors to modify restrictive publishing contracts so that they can deposit their work into an OA repository. This can be done by signing and attaching the *SPARC Canadian Author Addendum*¹⁴ to the standard publishing agreement.

The university could also support the transition of Concordia-based journals to open access models by providing them with expertise and infrastructure support. There are sustainable business models for open access journals.¹⁵ As well, with little effort, journals can implement a policy allowing the deposit of their published articles in the Concordia University repository.

Finally, the university should continue the practice of giving due weight in promotion and tenure committees to peer-reviewed publications regardless of their price, medium, or business model, and also ensure that scholars are rewarded and encouraged for scholarly works whether or not they fall outside the traditional publishing system.

¹⁴ English: http://www.carl-abrc.ca/projects/author/EngPubAgree.pdf, French: http://www.carl-abrc.ca/projects/author/FrePubAgree.pdf,

¹⁵ There are a growing number of resources for journal publishers interested in converting to OA available through SPARC (Scholarly and Publishing Academic Resources Coalition) in the US (http://www.arl.org/sparc/publisher/index.shtml) and JISC (Joint Information Systems Committee) in the UK (http://www.jisc.ac.uk/aboutus/committees/workinggroups/scholarlycomms/oa/models.aspx)

Annex 1: Major Definitions of Open Access

<u>Budapest Open Access Initiative</u> <u>http://www.soros.org/openaccess/read.shtml</u>

An old tradition and a new technology have converged to make possible an unprecedented public good. The old tradition is the willingness of scientists and scholars to publish the fruits of their research in scholarly journals without payment, for the sake of inquiry and knowledge. The new technology is the internet. The public good they make possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds. Removing access barriers to this literature will 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.

For various reasons, this kind of free and unrestricted online availability, which we will call open access, has so far been limited to small portions of the journal literature. But even in these limited collections, many different initiatives have shown that open access is economically feasible, that it gives readers extraordinary power to find and make use of relevant literature, and that it gives authors and their works vast and measurable new visibility, readership, and impact. To secure these benefits for all, we call on all interested institutions and individuals to help open up access to the rest of this literature and remove the barriers, especially the price barriers, that stand in the way. The more who join the effort to advance this cause, the sooner we will all enjoy the benefits of open access.

<u>Bethesda Statement on Open Access Publishing</u> <u>http://www.earlham.edu/%7Epeters/fos/bethesda.htm#definition</u>

Definition of Open Access Publication

An Open Access Publication[1] is one that meets the following two conditions:

- 1. The author(s) and copyright holder(s) grant(s) to all users a free, irrevocable, worldwide, perpetual 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, as well as the right to make small numbers of printed copies for their personal use.
- 2. A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in a suitable standard electronic format is deposited immediately upon initial publication in at least one online repository that is supported by an academic institution, scholarly society, government agency, or other well-established organization that seeks to enable open access, unrestricted distribution, interoperability, and long-term archiving (for the biomedical sciences, PubMed Central is such a repository).

Notes:

- 1. Open access is a property of individual works, not necessarily journals or publishers.
- 2. Community standards, rather than copyright law, will continue to provide the mechanism for enforcement of proper attribution and responsible use of the published work, as they do now.

Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities http://oa.mpg.de/openaccess-berlin/berlindeclaration.html

Definition of an Open Access Contribution

Establishing open access as a worthwhile procedure ideally requires the active commitment of each and every individual producer of scientific knowledge and holder of cultural heritage. Open access contributions include original scientific research results, raw data and metadata, source materials, digital representations of pictorial and graphical materials and scholarly multimedia material.

Open access contributions must satisfy two conditions:

- 1. The author(s) and right holder(s) of such contributions 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 (community standards, will continue to provide the mechanism for enforcement of proper attribution and responsible use of the published work, as they do now), as well as the right to make small numbers of printed copies for their personal use.
- 2. A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in an appropriate standard electronic format is deposited (and thus published) in at least one online repository using suitable technical standards (such as the Open Archive definitions) that is supported and maintained by an academic institution, scholarly society, government agency, or other well-established organization that seeks to enable open access, unrestricted distribution, interoperability, and long-term archiving.

Annex 2: CIHR Policy on Access to Research Outputs September 2007

Full text available at: http://www.cihr-irsc.gc.ca/e/34846.html

5.1.1 Peer-reviewed Journal Publications

- Grant recipients are now required to make every effort to ensure that their peer-reviewed publications are freely accessible through the Publisher's website (Option #1) or an online repository as soon as possible and in any event within six months of publication (Option #2).
- Under the second option, grant recipients must archive the final peer-reviewed full-text manuscripts immediately upon publication in a digital archive, such as PubMed Central or the grantees institutional repository. Publications must be freely accessible within six months of publication, where allowable and in accordance with publisher policies. Grant recipients may use the SHERPA/RoMEO database to locate summaries of publisher copyright policies. The SHERPA/RoMEO database will help grant recipients determine which journals allow authors to retain copyright and/or allow authors to archive journal publications in accordance with funding agency policies. However, CIHR recommends confirming with editorial staff whether archiving the postprint immediately, and making it freely accessible within six months, is permissible.
- Grant recipients may also wish to submit their manuscripts to a journal that provides immediate open access to published articles (if a suitable journal exists). CIHR considers the cost of publishing in open access journals to be an eligible expense under the Use of Grant Funds.
- Book chapters, reports, monographs, editorials, or conference proceedings arising from CIHR-funded research are not currently covered under this policy.
- Grant recipients must now acknowledge CIHR contributions in all peer-reviewed publications, quoting the funding reference number.

Annex 3: Sample University Open Access Policies

MIT Faculty Open-Access Policy

http://www.earlham.edu/~peters/fos/2009/03/mit-adopts-university-wide-oa-mandate.html

Passed by Unanimous of the Faculty, March 18, 2009

The Faculty of the Massachusetts Institute of Technology is committed to disseminating the fruits of its research and scholarship as widely as possible. In keeping with that commitment, the Faculty adopts the following policy: Each Faculty member grants to the Massachusetts Institute of Technology nonexclusive permission to make available his or her scholarly articles and to exercise the copyright in those articles for the purpose of open dissemination. In legal terms, each Faculty member grants to MIT a nonexclusive, irrevocable, paid-up, worldwide license to exercise any and all rights under copyright relating to each of his or her scholarly articles, in any medium, provided that the articles are not sold for a profit, and to authorize others to do the same. The policy will apply to all scholarly articles written while the person is a member of the Faculty except for any articles completed before the adoption of this policy and any articles for which the Faculty member entered into an incompatible licensing or assignment agreement before the adoption of this policy. The Provost or Provost's designate will waive application of the policy for a particular article upon written notification by the author, who informs MIT of the reason.

To assist the Institute in distributing the scholarly articles, as of the date of publication, each Faculty member will make available an electronic copy of his or her final version of the article at no charge to a designated representative of the Provost's Office in appropriate formats (such as PDF) specified by the Provost's Office.

The Provost's Office will make the scholarly article available to the public in an open-access repository. The Office of the Provost, in consultation with the Faculty Committee on the Library System will be responsible for interpreting this policy, resolving disputes concerning its interpretation and application, and recommending changes to the Faculty.

The policy is to take effect immediately; it will be reviewed after five years by the Faculty Policy Committee, with a report presented to the Faculty.

The Faculty calls upon the Faculty Committee on the Library System to develop and monitor a plan for a service or mechanism that would render compliance with the policy as convenient for the faculty as possible.

Harvard Faculty of Arts and Sciences Open-Access Policy http://osc.hul.harvard.edu/OpenAccess/policytexts.php

voted February 12, 2008

The Faculty of Arts and Sciences of Harvard University is committed to disseminating the fruits of its research and scholarship as widely as possible. In keeping with that commitment, the Faculty adopts the following policy: Each Faculty member grants to the President and Fellows of Harvard College permission to make available his or her scholarly articles and to exercise the copyright in those articles. In legal terms, the permission granted by each Faculty member is a nonexclusive, irrevocable, paid-up, worldwide license to exercise any and all rights under copyright relating to each of his or her scholarly articles, in any medium, and to authorize others to do the same, provided that the articles are not sold for a profit. The policy will apply to all scholarly articles written while the person is a member of the Faculty except for any articles completed before the adoption of this policy and any articles for which the Faculty member entered into an incompatible licensing or assignment agreement before the adoption of this policy. The Dean or the Dean's designate will waive application of the policy for a particular article upon written request by a Faculty member explaining the need.

To assist the University in distributing the articles, each Faculty member will provide an electronic copy of the final version of the article at no charge to the appropriate representative of the Provost's Office in an appropriate format (such as PDF) specified by the Provost's Office.

The Provost's Office may make the article available to the public in an open-access repository. The Office of the Dean will be responsible for interpreting this policy, resolving disputes concerning its interpretation and application, and recommending changes to the Faculty from time to time. The policy will be reviewed after three years and a report presented to the Faculty.

Annex 4: Further Reading

CAUT Intellectual Property Advisory: Retaining Copyright in Journal Articles. July 2008. <u>www.caut.ca/uploads/IP-Advisory1-en.pdf</u>

The Effect of Open Access and Downloads ('hits') on Citation Impact: A Bibliography of Studies. http://opcit.eprints.org/oacitation-biblio.html

John Houghton et.al. *Economic Implications of Alternative Scholarly Publishing Models: Exploring the costs and benefits*. Loughborough University. January 28, 2009. http://www.jisc.ac.uk/media/documents/publications/rpteconomicoapublishing.pdf

Open Society Institute. *Guide to Business Planning for Converting a Subscription-based Journal to Open Access*, Edition 3. February 2004. http://www.soros.org/openaccess/oajguides/html/business converting.htm

SPARC/Science Commons. *Open Doors and Open Minds: What faculty authors can do to ensure open access to their work through their institution*. April 2008. www.arl.org/sparc/bm~doc/opendoors_v1.pdf

Peter Suber. Open Access News. http://www.earlham.edu/~peters/fos/fosblog.html

The University's Role in Research and Dissemination of Scholarship: A Call to Action. February 2009. www.arl.org/bm~doc/disseminating-research-feb09.pdf

John Willinsky. *The Access Principle: The Case for Open Access to Research and Scholarship*. MIT Press. 2006. http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=10611