



*The Killam, Sir James Dunn, Kellogg, MacRae and Sexton Libraries at Dalhousie*

## **Open Access and Data Management at Dalhousie University**

The world we live in is one of constant change. Research plays a critical role in helping us adapt to this change by providing avenues for the discovery of new treatments for disease, new and better ways to protect our environment, means to respond to complex societal and cultural challenges, and foundations for the creation of entire industries around what were once just ideas.

Academic publishing happens to be one of the industries built around these innovative ideas. A lot of publicly funded research and writing, however, is not available to the general public, or even to the academics and scholars who create the content in the first place.

Many are now recognizing that increasing access to this type of research information is critical. Not only would greater accessibility facilitate collaboration and raise a researcher's visibility, but could make the research process better informed and more efficient.

### **Open Access: Making research immediately available to the public**

In 2015, a harmonized policy on access to research publications was released by the three major federal granting agencies, known as the Tri-agency (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]).

The concept is evolving, but generally open access involves making scholarly information available free of charge, immediately and in a permanently accessible, online format.

There are two primary means of achieving open access for scholarly information:

- **Open Access Journals** offer an alternative to traditional subscription-based journals by providing free access to peer-reviewed articles they publish. There are over 10,000 Open Access journals listed in the Directory of Open Access Journals.

- **Open Access Repositories** are relatively new in the scholarly landscape. They collect, preserve, and provide free access to peer-reviewed articles and other types of research outputs. Open Access repositories may be discipline-based or institution-based. Over 2500 repositories are listed in the OpenDOAR Repository directory.

The Dalhousie Libraries are using both of these means to bring the research activities of Dalhousie to the world. They have developed open access resources including the Open Access Subject Guide resource, which helps researchers understand and comply with Tri-agency requirements. The guide outlines and provides resource links to information about the Tri-agency policy and suggests two paths for compliance:

- One path, the “green” option, allows researchers to choose to deposit their articles in an online repository, or to deposit their content into a subject-based disciplinary repository.
- The other path, the “gold” option, provides the researcher with the alternative of publishing their research in a journal that permits immediate open access to the article. Many of these journals charge authors a fee, called an article processing charge (APC), to make the article open access. This fee can be claimed as part of an application for research funding. The Libraries also have access to some APC discounts from selected publishers based on institutional subscriptions.

### Managing research data

Another key piece of open access is research data management. Recently, the Tri-agency



*Donna Bourne-Tyson, University Librarian*

adopted the *Tri-agency Statement of Principles on Digital Data Management*, which outlines the benefits of making research data as accessible as possible, in an effort to maximize research benefits to Canadians and advance knowledge.

“Research data management is a collaborative endeavor involving many stakeholders,” says Donna Bourne-Tyson, University Librarian for Dalhousie.

“Libraries are just one of the stakeholders – we have a strong connection with researchers across disciplines,

a culture of curation and preservation, and experience with systems for managing data in all its forms. Other key stakeholders include Research Services and Ethics Offices, Information Technology Services, and of course, the researchers themselves.”

Dalhousie has tools available to help researchers share and preserve their data. This includes:

- Dal Space, an institutional repository which collects, preserves, and distributes digital material produced by the Dalhousie community.
- A recently launched data repository called Dataverse. Dataverse is an open source software application that allows a researcher to share, cite and preserve research data.

- The Portage Network, launched in 2015 by the Canadian Association of Research Libraries. Portage works within the library community to coordinate expertise, services and technology in research data management. Some of the initiatives supported by Portage include the Data Management Plan (DMP) Assistant for data management planning and the Federated Research Data Repository (FRDR).

### **Open in order to . . .**

As a way of reinforcing how important the concept of open access is, an international Open Access Week has been held every October for the past decade. It provides an opportunity for academics and researchers to continue to learn about the potential benefits of open access, to share what they've learned with colleagues, and to inspire wider participation that will make open access a new norm in scholarship and research.

The theme for this year was *Open in Order to...* and served as an invitation to answer the question about the concrete benefits of making scholarly outputs openly available.

As part of Open Access Week, Dr. Stephen Hawking made his doctoral thesis, *Properties of Expanding Universes* (1966), available to the public. He made the announcement on Facebook, and his post included the prolific statement that "Anyone, anywhere in the world should have free, unhindered access to not just my research, but to the research of every great and enquiring mind across the spectrum of human understanding."

For more information on open access and data management resources and support at Dalhousie, visit the Libraries website at: [libraries.dal.ca](http://libraries.dal.ca)

*The federal Research Support Fund (RSF) program helps to fund, among other things, research resources that help with open access and data management at Dalhousie. Established in 2003, the RSF (formerly the Indirect Costs Program) helps Canadian universities and colleges, along with their affiliated health research institutes and research hospitals, with the indirect costs associated with federally funded research.*

*Last year, the RSF grant provided \$9.3 million to support the indirect costs of research at Dalhousie and affiliate hospitals.*