

Open Access White Paper

University of Oregon

SENATE SUB-COMMITTEE ON OPEN ACCESS

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Introduction

The state of global scholarly communications has been evolving rapidly over the last several years, as libraries and publishers have sought to hasten the spread of **Open Access** to the results of worldwide research. More recently, this evolution has gained momentum as academic institutions around the globe have begun negotiating and signing **transformative agreements** with for-profit commercial publishers,¹ and as innovations to the methods of disseminating scholarly research have become more widely adopted. The consequences of these developments have been largely positive, both for the academy and for taxpayers, funders, and millions of people around the world who do not have access to potentially life-changing knowledge that has historically been locked behind expensive **paywalls**.

The aim of this report — the Open Access White Paper by the Senate Subcommittee on Open Access at the University of Oregon — is to review the issues that have precipitated these recent changes and to explain their relevance for members of the UO community. We begin by defining the Open Access movement and briefly summarizing its history, in broad terms and with respect to the University of Oregon specifically. Then we provide a more detailed review of current trends and practices in Open Access followed by a discussion of the effect of Open Access trends in the process of research and dissemination of scholarly works at UO. In the last section we consider some of the challenges and opportunities for further advancement of OA at the UO and beyond. Many of the key terms used throughout this document are defined in the **Glossary**.

Definition and History of the Open Access Movement

A brief review of the origins of the Open Access (OA) movement is useful for understanding its trajectory today. The movement began in the early 1990s,² as an increasing number of academic faculty and librarians expressed strong opposition to the ever-escalating cost of access to academic products, especially research. The relentless inflation of journal pricing and

¹ Lisa Janicke Hinchliffe, “Transformative Agreements: A Primer,” *The Scholarly Kitchen* (blog), April 23, 2019, <https://scholarlykitchen.sspnet.org/2019/04/23/transformative-agreements/>.

² Information Products Open Access, “Der Freie Zugang Zu Wissenschaftlicher Information / History of the Open Access Movement,” IPOA en, accessed January 22, 2020, <https://open-access.net/en/information-on-open-access/history-of-the-open-access-movement>.

escalation of costs prompted widespread serial cancellations and gave rise to the Serials Crisis.³ In response, the majority of academic libraries joined in so-called **Big Deals** with large commercial publishers.⁴ These deals, which involve licensing large aggregations of e-journal content at a cost “less than the price increases that would apply if the library continued to purchase the individual journals,” were accepted by academic libraries as a means of balancing the need to control inflation while simultaneously expanding access to widely-read academic products. Over time, the effectiveness of these deals was called into question as reductions in collection budgets could not sustain the ongoing cost of the large packages without displacing the focus of cuts on sectors of the collection not tethered to multi-year commitments. Expressing opposition to the practice, Kenneth Frazier, then Director of the University of Wisconsin-Madison Libraries, wrote, “All Big Deals are based on the presumption that libraries can continually increase expenditures for journals and that publishers must have perpetual revenue growth. This future cannot and will not happen.”⁵

Propelled by recognition that the traditional model of scholarly publishing was breaking down, the OA movement became increasingly well defined in the early 2000s. A seminal statement of OA principles was declared in the **Budapest Open Access Initiative** drafted in 2002.⁶ This document states:

“The literature that should be freely accessible online is that which scholars give to the world without expectation of payment. Primarily, this category encompasses their peer-reviewed journal articles, but it also includes any unreviewed **preprints** that they might wish to put online for comment or to alert colleagues to important research findings.”⁷

³ Anup Kumar Das, “Serials Crisis,” In *Open Access for Researchers, Module 1: Scholarly Communication*, ed. S Mishra and M.P. Satija (Paris: UNESCO, 2015), 44-167, https://www.researchgate.net/profile/Anup_Das7/publication/274007827_The_Serials_Crisis/links/551234520cf2obfdad50d2bo/The-Serials-Crisis.pdf

⁴ Kenneth Frazier, “What’s the Big Deal?,” *The Serials Librarian* 48, no. 1-2 (May 23, 2005): 49-59, https://doi.org/10.1300/J123V48N01_06

⁵ Frazier.

⁶ Leslie Chan et al., “Read the Budapest Open Access Initiative,” Budapest Open Access Initiative, accessed January 22, 2020, <https://www.budapestopenaccessinitiative.org/read>.

⁷ Chan et al., 3rd paragraph.

It goes on to add:

“By ‘open access’ to this literature, we mean its free availability on the public internet permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited.”⁸

Mention of the “public internet” in this statement is key, as increasingly widespread use of the internet among academics at that time made it clear that improvements to the methods of publishing and disseminating research were overdue. This point continues to resonate today, as noted in the definition of OA provided by the Scholarly Publishing and Academic Resources Coalition (**SPARC**): “Open Access is the free, immediate, online availability of research articles combined with the rights to use these articles fully in the digital environment. Open Access is the needed modern update for the communication of research that fully utilizes the Internet for what it was originally built to do — accelerate research.”⁹

It is important to note however that OA is not merely an initiative to make all scholarship free; to the contrary, there is strong evidence of “a meaningful diversity of goals and definitions within the OA movement.”¹⁰ The basis for this diversity has become more and more clear over time, given the wide range of organizations involved in the OA movement and increasingly nuanced distinctions among various aspects. For example, mutually incompatible definitions for OA have been endorsed by groups with differing priorities in terms of the immediacy of access (i.e., provisions for and against **embargoes**) or **copyright** restrictions (i.e., insistence

⁸ Chan et al., “Read the Budapest Open Access Initiative.”

⁹ SPARC, “Open Access - SPARC,” accessed February 19, 2020, <https://sparcopen.org/open-access/>. See the SPARC OA Fact Sheet for an excellent two-page summary on why OA is important, how it works, and how scholars and scientific researchers can advance its adoption. https://sparcopen.org/wp-content/uploads/2017/04/Open-Access-Factsheet_SPARC.11.10-3.pdf.

¹⁰ Rick Anderson, “Diversity in the Open Access Movement, Part 1: Differing Definitions,” The Scholarly Kitchen, January 23, 2017, <https://scholarlykitchen.sspnet.org/2017/01/23/diversity-open-access-movement-part-1-differing-definitions/>.

that works should or should not be placed in the public-domain).¹¹ Thus, caveat emptor is needed, as it cannot be assumed that two people talking about OA are defining it in the same way.

The evolution of the OA movement from 2000 to 2020 into a nuanced and, at times, confusing ecosystem is well-illustrated by a review entitled “The Ascent of Open Access.”¹² This work charts the influence of several innovations that have propelled the movement forward, including several topics that are discussed further in subsequent sections of this document or the glossary such as [discipline-based OA repositories](#), [institution-based OA repositories](#), the rise of the [Open Data movement](#), the increasing use of [article processing charges](#), and changes in the governance landscape such as mandates for the use of OA from grant-funding organizations and academic institutions.

History of Open Access at the University of Oregon

Over the last few decades, a multitude of declarations¹³ have been made by academic institutions in support of OA. The University of Oregon has contributed to this literature periodically by addressing issues related to furthering OA and suggesting actions that UO faculty could take to advance the cause. A summary of these contributions is provided below:

🔗 In 2001, the University Library Committee completed a report entitled Crisis in commercial scholarly publishing and serials costs (dated March 14, 2001) and sent related recommendations to the University Senate. These were adopted by Senate Resolution US00/01-5. These recommendations included: retaining [copyright](#); identifying high-cost duplicate journals held by the UO, OSU and PSU and establishing target amounts for cancellation; educating faculty and graduate students about unethical pricing structures and lobbying professional societies to put pressure on Elsevier and other publishers of inordinately costly publications; making sure that promotion and tenure evaluation criteria hold faculty harmless for declining to publish in journals with business models detrimental to the free circulation of ideas.

¹¹ Anderson.

¹² Digital Science et al., “The Ascent of Open Access,” report (Digital Science, January 24, 2019): 1-2, <https://doi.org/10.6084/m9.figshare.7618751.v2>.

¹³ See: http://oad.simmons.edu/oadwiki/Declarations_in_support_of_OA

- 6 In 2008, the University Senate passed Motion US07/08-17: Initiative to protect the rights of faculty authors of scholarly publication on February 13. This motion established an ad hoc working committee which submitted a report to the University Senate on May 5 that was focused on the issue of [author addendums](#). On May 14, the University Senate passed Motion US07/08-20, To endorse and implement the report of the Ad Hoc Committee on Scholarly Publishing.
- 6 In 2009, the faculty of the University Libraries was the first body on campus to pass a resolution committing itself to [self-archiving](#) of professional publications in the University of Oregon's open-access repository, [Scholars' Bank](#).¹⁴ Shortly thereafter, the faculty of the Department of Romance Languages passed a mandate committing itself to the same.¹⁵ This move was highly praised by Peter Suber, Director of the Harvard Office for Scholarly Communication and Director of the Harvard Open Access Project, who described the Department's OA mandate as follows:
- “This is one of the strongest policies anywhere. ... It seems to say that promotion review of journal articles will be limited to those on deposit in the repository ... Moreover, it does not allow embargoes beyond the date of publication unless the author seeks a waiver. All this in another unanimous vote. Kudos to the whole department.”¹⁶
- 6 In 2010 under the direction of then-Dean of Libraries, Deb Carver, a fund was established to subsidize [article processing charges \(APCs\)](#) for faculty that wished to apply and use the support to publish their research in OA journals. Once the initial \$50,000 set aside for this purpose ran out, the subsidy was discontinued for lack of a recurring funding source. Beginning around this time, the UO Libraries began intermittently sponsoring educational events on campus in association with the annual Open Access Week¹⁷ that occurs each October.

¹⁴ <https://scholarsbank.uoregon.edu>

¹⁵ Peter Suber, “First Humanities Department OA Mandate,” Open Access News, May 14, 2009, <https://web.archive.org/web/20190206144637/https://legacy.earlham.edu/~peters/fos/2009/05/first-humanities-department-oa-mandate.html>.

¹⁶ Suber, “First Humanities Department OA Mandate.”

¹⁷ <http://www.openaccessweek.org/page/about>

The Senate Subcommittee on Open Access at the University of Oregon

Despite these efforts to promote OA, little headway has been made to galvanize the University of Oregon faculty as a whole in comparison to several institutions where faculty have endorsed strong statements in support of OA and/or adopted binding commitments to consistently publish in a manner consistent with OA principles.¹⁸ The lack of broad consensus has been offset, however, by strong acceptance in some disciplines where open science has gained more attention and priority (e.g., psychology, biology). To promote the case for taking a stronger stand on OA, then-Dean of Libraries Adriene Lim and Associate Dean, Mark Watson, attended a working forum at UC Berkeley in October of 2018. The workshop — titled Choosing Pathways to Open Access — followed the release of a call to action by the UC Systemwide Library and Scholarly Information Advisory Committee in 2018.¹⁹

In their call to action, the UC system laid out the “urgent need to reduce costs to the levels that the University can sustain” and “to transform research production and dissemination in order to make research outputs openly accessible.” The workshop elucidated various models for achieving these goals and laid the foundation for the UC’s historic and well-publicized decision to cancel its contract of more than \$10 million with Elsevier in March 2019.

In December 2019, the UO Senate President (Elizabeth Skowron), the UO Senate President-Elect (Elliot Berkman), and the Senior Vice-President and Provost (Patrick Phillips) created the Senate Sub-committee on Open Access (SSOA). The SSOA was subsequently charged with undertaking “an investigation into the state of open access trends and practices and the role they play in the process of research and dissemination of scholarly resources and works at the University of Oregon.” As a case study, the SSOA was also asked to examine the nature of the University Libraries’ relationship and contract with Elsevier and to suggest options for the

¹⁸ See: http://oad.simmons.edu/oadwiki/Unanimous_faculty_votes

¹⁹ UC Systemwide Library And Scholarly Information Advisory Committee, “Negotiating Journal Agreements At UC: A Call To Action” (University of California, 2018), https://libraries.universityofcalifornia.edu/groups/files/slasiac/docs/NegotiatingJournalAgreementsAtUC_ACallToAction_final.pdf.

renegotiation process before the current agreement expires.²⁰ The charge dictated that the SSOA's report be submitted to Senate Leadership and the Provost by June 10, 2020.

To fulfill its mission, the SSOA has created a multi-step process and a small working group of members to carry out the sub-committee's work. Among its first tasks, the working group created a website to document its progress (<https://openaccess.uoregon.edu/>) and began working on this project — the SSOA Open Access White Paper. This white paper will fulfill two important goals: (1) to provide an overview of the current landscape of OA trends and practices; and (2) to describe the role that OA plays in the process of research and dissemination of scholarly resources and works at the UO. Upon its completion, the SSOA aims to share this white paper broadly with UO stakeholders in order to solicit input on recommended next steps for furthering the adoption of OA across the community. The SSOA believes this input will be particularly useful for making suggestions about the renegotiation process with Elsevier.

Through the completion of its charge, the SSOA hopes to bring the UO community together around a mutually agreed upon definition of OA and to advance further adoption of OA principles and practices on the University of Oregon campus. One step that might be taken, for example, might be an institutional endorsement of OA signaling UO's commitment and intent. Several academic institutions have made such endorsements in recent years through initiatives like OA 2020.²¹ More than 140 institutions (including universities, academic libraries, funding groups, and more) are now signatories to this large-scale initiative,²² and participation by the UO would signal its desire to contribute to the OA movement.

²⁰ The UO Libraries current agreement with Elsevier, with a few exceptions, provides access to all of its published journals titles. Statistics reveal that these journals are heavily used on campus. SSOA wants to learn from its UC colleagues and other libraries in the U.S. that have cancelled their contracts as well as others that have moved ahead with renewals. Given that it took the UC system nearly two years of education and advocacy to arrive at its momentous decision, jumping straight to cancellation at the UO is unrealistic and ill-advised. Instead, the UO Libraries is working with its OSU and PSU colleagues to seek a one-year extension in order to provide adequate time for the UO to consider the options that SSOA will put forth.

²¹ <https://oa2020.org/>

²² OA 2020, "Expression of Interest in the Large-Scale Implementation of Open Access to Scholarly Journals," accessed February 19, 2020, <https://oa2020.org/wp-content/uploads/pdfs/Expression%20of%20Interest%20with%20signform.pdf>.

Overview of Current OA Trends and Practices

Given the breadth and rate of change within the OA movement, it seems likely that a thorough review of current trends and practices would be unwieldy and quickly out-of-date. That said, a good understanding of the major developments and their consequences can be gained with the help of a brief primer. In this section, we will outline the current landscape of OA trends and practices by focusing first on the the primary formats of open access, and then its benefits and weaknesses.

Open Access Formats

The OA movement provides many benefits to the landscape of publishing and information exchange. In recent years, OA has also become recognized as an increasingly important component of scholarly communication, as it is defined by the Association of College and Research Libraries: “the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use.”²³ Of course, scholarly communication occurs through widely different formats across — and sometimes even within — different research areas. Much of the discussion surrounding OA has historically focused on the format of research articles, and this has been driven by the scope of **Big Deal** contracts with commercial publishing companies. As described below however, there are additional considerations to be made for other scholarly output formats as well.

OA Journal Articles: Since the 1990s, most of the existing journal literature has moved online.²⁴ Libraries provide access to this ever-growing body of knowledge through subscriptions to individual titles and often through licensed packages. As noted earlier, ever-increasing costs have motivated libraries to support OA, both to reduce the barrier to access and to seek a higher degree of affordability. Given this concern over high subscription costs, a number of approaches have developed over time to facilitate OA publishing, but these can be loosely grouped into the following three broad categories:

²³ ACRL Scholarly Communications Committee, “Principles and Strategies for the Reform of Scholarly Communication 1,” Text, Association of College & Research Libraries (ACRL), June 24, 2003, <http://www.ala.org/acrl/publications/whitepapers/principlesstrategies>.

²⁴ Lorraine Estelle, “The Effect the Changing Digital Landscape Is Having on the Dissemination of E-Books and E-Journals in a World Dominated by Google,” in *Trends, Discovery, and People in the Digital Age*, ed. David P. Baker and Wendy Evans (Elsevier Science & Technology, 2013), 91–104.

🔗 **Commercial OA business models:** Every major publisher now offers authors the opportunity to publish their articles and make them openly accessible. Unfortunately, the number of OA business models adopted by journals has proliferated rapidly (to say nothing of the number of journals themselves), and some business models are entirely idiosyncratic to a single journal. The University of California Libraries has produced [a chart](#) summarizing the various approaches.²⁵ A color naming system has been adopted to describe the most widely used approaches (see the glossary for definitions of [gold](#), [hybrid](#), [bronze](#), and [diamond OA models](#)).

Without question, the most important and contentious detail of these various business models relates to the cost incurred when authors seek to make their work openly accessible (OA). Most models require the payment of an [article processing charge \(APC\)](#), an approach which shifts the cost of OA from the library to another entity (e.g., the authorship team, a funder, or the institution). The business model for [hybrid OA journals](#) is seen as particularly problematic because it requires APCs to be paid in addition to the subscription fees paid by the institution (i.e., through library contracts), creating a practice known as “double dipping.”²⁶

🔗 **Non-profit OA repositories (Green OA):** OA repositories include both institutional repositories and discipline-specific repositories, though the basic approach is similar — these outlets do not have costs for individual authors (free to publish) or audiences (free to read). It should be noted that these outlets are not without cost; the expenses incurred for publishing and ensuring sustainable access are funded by institutions. Importantly, OA repositories typically do not provide peer-review, though this is not uniformly true and there are now technologies in place to provide reviews through these outlets.

🔗 The UO Libraries, like most of its peers, has developed an IR that can be used to provide open access to pre-prints, post-prints, instructional materials or data sets. Started in 2003, [Scholars' Bank](#), is used to facilitate [Green OA](#) (e.g., [self-archiving](#)) at the University of Oregon. Used in a systematic manner, self-archiving can literally make the entire output of scholarly research freely available on the Web. The only barrier to doing this is a lack of incentive derived primarily from the fact that faculty lack the time to self-archive and are

²⁵ University of California Libraries, “Chart Summarizing OA Approaches and Strategies,” 2018.

²⁶ Martin Paul Eve, “On Open-Access Books and ‘Double Dipping,’” Martin Paul Eve, January 31, 2015, <https://eve.gd/2015/01/31/on-open-access-books-and-double-dipping/>.

“highly incentivized to publish in high-ranking journals because of the associated prestige.”²⁷ Discipline-specific examples of **Green OA** include prominent pre-print and post-print servers such as **arXiv, bioRxiv, and PsyArXiv**. While **arXiv** has been operating since 1991, most discipline-specific repositories are relatively new (**bioRxiv** began in 2013; **PsyArXiv** was launched in 2016 along with several other discipline-specific repositories hosted through the **Open Science Framework**).

6 Non-profit OA Journals: Between commercial OA models and non-profit OA repositories, non-profit OA journals offer an opportunity for authors to publish in journals without cost. The University of Oregon has collaborated with Oregon State University since 2008 to provide access to **Open Journal Systems** (OJS), an open source platform for publishing peer-reviewed academic journals. As of January 2020, there are four active UO-based journals published through OJS (***Humanist Studies and the Digital Age***,²⁸ ***Konturen***,²⁹ ***Puncta***,³⁰ and ***Peripherica***³¹) and an additional journal published through the University’s WordPress installation (***Oregon Undergraduate Research Journal***).³² The University could provide additional support for publishing OA journals on the OJS platform. The publication of OA journals through OJS offers several benefits, including cost savings, furthering of the University’s academic reputation, the creation of mentoring and publishing opportunities for students, and an overall increase in the number of publication outlets for university scholars.

OA E-Books: The preferred format for communicating research results in many disciplines continues to be the printed monograph.³³ Unlike journal articles, the process towards OA in the world of monographs is undergoing a slower rate of change. Nevertheless, business models are developing, if slowly. Publishers may offer an OA version of a monograph alongside the publication of a print volume. Libraries, university presses and institutions are increasingly

²⁷ Estelle.

²⁸ <http://journals.oregondigital.org/index.php/hsda>

²⁹ <http://journals.oregondigital.org/index.php/konturen>

³⁰ <http://journals.oregondigital.org/index.php/pjcp>

³¹ <http://journals.oregondigital.org/index.php/peripherica>

³² <http://ourj.uoregon.edu>

³³ Eelco Ferwerda, “Open Access Monograph Business Models,” *Insights* 27, no. 0 (April 8, 2014): 35–38, <https://doi.org/10.1629/2048-7754.46>.

providing “e-publishing activities by making available the infrastructure or staff of the parent institute, or by embedding the publishing activities within the university library.”³⁴ Considerable activity in this area is evidenced in both Europe³⁵ and the United States.³⁶

OA Datasets: Open Data is not always explicitly considered as part of the OA movement, perhaps because data has not traditionally been distributed by for-profit publishers. However, the procedures for sharing Open Data and Open Access are nearly identical and some repositories host both OA manuscripts and data sets (in addition to other research materials). It is also the case that OA repositories have benefitted from the increasing visibility and adoption of Open Data repositories; researchers who make use of open data repositories become familiar with the process of sharing research materials while also gaining a broader understanding of the merits of OA publishing.

Dozens of large data repositories now exist for many scientific disciplines,³⁷ and in 2019 the U.S. federal government mandated the development and use of a central repository (data.gov) for data collected with federal funding.³⁸ Grants from federal agencies, including the National Institutes of Health and the National Science Foundation, now require data management plans (DMPs) that require researchers to provide detailed information about how their data sets will be described, managed and stored to facilitate OA. The UO Libraries routinely provides **assistance** with the formulation of DMPs.

Advantages and Challenges to the Open Access Approach

If the relative strengths and weakness of OA approaches to scholarly communication can be measured by the growth of the OA movement, it is quite clear that the weaknesses are few. The growth of OA has been most dramatic with respect to OA journal articles (in comparison to e-books and datasets). One means of measuring this growth is with the number of journals

³⁴ Ferwerda.

³⁵ Eelco Ferwerda, Frances Pinter, and Niels Stern, “A Landscape Study On Open Access And Monographs: Policies, Funding And Publishing In Eight European Countries” (Zenodo, August 1, 2017), <https://doi.org/10.5281/ZENODO.815932>.

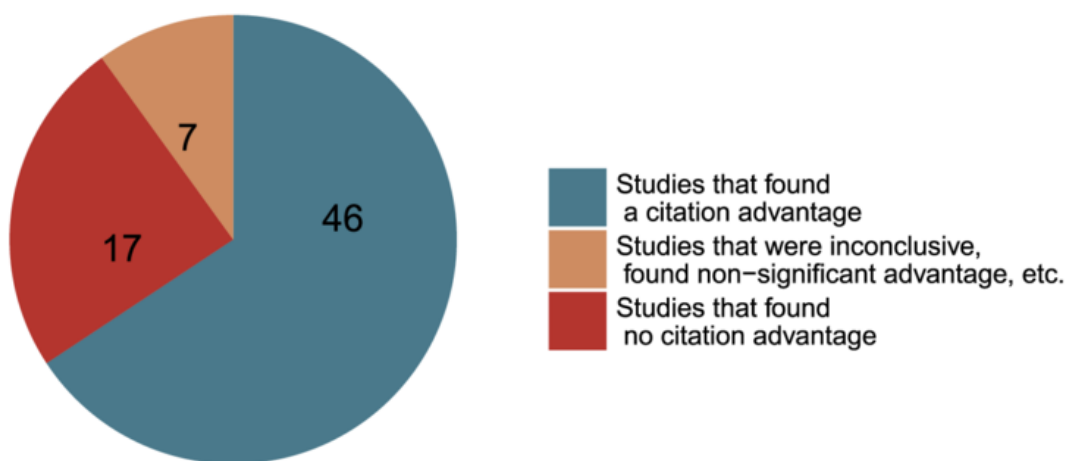
³⁶ “Open-Access Monographs: New Tools, More Access,” accessed February 9, 2020, <https://er.educause.edu/articles/2019/5/open-access-monographs-new-tools-more-access>.

³⁷ See: http://oad.simmons.edu/oadwiki/Data_repositories

³⁸ “OPEN Government Data Act,” Data Coalition, accessed February 9, 2020, <https://www.datacoalition.org/policy-issues/open-data/open-government-data-act/>.

qualifying for inclusion in the [Directory of Open Access Journals \(DOAJ\)](#). As of February 2020, there are 14,292 journals indexed in DOAJ (11,332 of which are searchable at the article level) covering research from nearly all fields of study and representing 133 countries. This represents dramatic but steady growth from only 289 journals in 2005, 5,936 in 2010, and 10,963 in 2015.³⁹ Over 4 million articles are openly available currently in OA journals. The majority of journals listed in DOAJ are peer reviewed and do not require article processing charges (APCs).⁴⁰

One of the factors driving the growth in OA has come to be known as the OA citation advantage.⁴¹ Open Access articles have been shown to be more cited than articles behind [paywalls](#). As Tennant et al. show in *The Academic, Economic and Societal Impacts of Open Access: An Evidence-Based Review*, articles either published originally in OA venues, or with separate OA copies available elsewhere after publication, are cited more than articles posted only to publishing venues behind [paywalls](#) (i.e., in fee-based subscription journals).



“Studies that investigated the citation advantage grouped by their conclusion. The majority concluded that there is a significant citation advantage for Open Access

³⁹ <https://poeticeconomics.blogspot.com/2006/08/dramatic-growth-of-open-access-series.html>

⁴⁰ Jayaprakash G. Hugar, “Impact of Open Access Journals in DOAJ: An Analysis,” *International Journal of Advanced Library and Information Science* 7, no. 1 (2019): 448–55, <https://doi.org/10.23953/cloud.ijalis.399>.

⁴¹ Jonathan P. Tennant et al., “The Academic, Economic and Societal Impacts of Open Access: An Evidence-Based Review,” *F1000Research* 5 (September 21, 2016), <https://doi.org/10.12688/f1000research.8460.3>; SPARC Europe, “The Open Access Citation Advantage Service (OACA),” SPARC Europe, accessed January 22, 2020, <https://sparceurope.org/what-we-do/open-access/sparc-europe-open-access-resources/open-access-citation-advantage-service-oaca/>.

articles. Source: Data from The Open Access Citation Advantage Service, SPARC Europe, accessed March 2016.”⁴²

The mechanisms behind the citation advantage likewise benefit the audience as well. The most intuitive benefit stems from global access to read and to publish research.⁴³ Without OA, access to research within academia is restricted to the terms negotiated through one’s institutional affiliations. The ability to gain access to prior research varies widely depending on the size of the institution, prioritized areas of research, subscription contracts, and interlibrary loan policies. Outside of academic institutions, access is further restricted. Students who have graduated find themselves without the access with which they learned to do research. Unaffiliated researchers must piece together access through OA outlets or **grey market** options.

A second benefit to the research audience beyond increased access is improved **accessibility** (e.g., by incorporating principles of universal design that do not discriminate on the basis of ability).⁴⁴ Many pdfs and other scholarly materials are not accessible/ADA compliant — sometimes by design, due to the use of **digital rights management (DRM)** tools that block the use of accessibility tools.⁴⁵ While OA pdfs often require additional work to follow best practices in accessibility, principles of OA have significantly helped to further these best practices.

There is also substantial benefit to members of the general public outside of academia, and many have argued the importance of providing this audience broader access to publicly funded research. In recent years, an increasing proportion of publicly funded research has become subject to an OA mandate from federal governments around the globe, though the procedures for meeting these requirements are often unclear and unevenly enforced.

⁴² Figure and caption from: Tennant et al., “The Academic, Economic and Societal Impacts of Open Access.”

⁴³ For more on this topic, see: Margaret Heller and Franny Gaede, “Measuring Altruistic Impact: A Model for Understanding the Social Justice of Open Access,” *Journal of Librarianship and Scholarly Communication* 4, no. 0 (August 16, 2016): eP2132, <https://doi.org/10.7710/2162-3309.2132>.

⁴⁴ Angel Antkers et al., “Authorship and Accessibility in the Digital Age: An Authors Alliance, Silicon Flatirons, and Berkeley Center for Law & Technology Roundtable Report,” *SSRN Electronic Journal*, 2018, <https://doi.org/10.2139/ssrn.3254959>.

⁴⁵ Samuel Kent Willis and Faye O’Reilly, “Enhancing Visibility of Vendor Accessibility Documentation,” *Information Technology and Libraries* 37, no. 3 (September 26, 2018): 15–16, <https://doi.org/10.6017/ital.v37i3.10240>.

In the United States, the requirements of federal funding agencies (e.g., NIH, NSF) have clearly accelerated the growth of OA in the biomedical and natural sciences. The federal repositories PubMed/MEDLINE, for example, were searched 3.3 billion times in 2017.⁴⁶ This trajectory seems likely to extend into other research areas with the [Fair Access to Science and Technology Research Act](#) currently under consideration by the U.S. Congress.⁴⁷ In fact, many research disciplines have already developed their own options for open access hosting of content with support from non-profits, research institutions, or scholarly societies. Prominent examples include [arXiv, bioRxiv, and PsyArXiv](#). Similarly, many colleges and universities (including UO) have developed [institutional repositories](#) to provide a mechanism for sharing the collective scholarly output of their institutions. These federal, institutional, and discipline-specific repositories have dramatically increased accessibility of research outputs through any number of interfaces, including the repositories themselves, through so-called mirrors or aggregators, and search engines like Google Scholar.

To the extent that there are disadvantages in the shift to OA approaches, they largely stem from differences in models of OA publishing. OA journals that require high [APCs](#), for example, present a barrier to researchers without funding who seek to publish in these journals. Institution-supported journals without APCs and Green OA journals that allow OA posting of a version of an article help remove this barrier. Yet, APCs are also an issue with many subscription-based journals. In many fields, it is common to “pay triple” to read research from your own institution: the researcher who is paid by the institution to conduct the research pays an APC to publish in a journal for which the institution pays a subscription fee. Note that this is one step beyond the “double dipping” described previously, a term used to describe the levying of APCs to authors affiliated with institutions that also pay subscription fees to [hybrid journals](#).

As previously mentioned, the publication and hosting of online content does involve many costs, from technology to human labor. As such, sustainable OA will never be free. Much as with accessibility, keeping up with changing technology is essential to maintaining access to scholarship, and this requires planning, funding for technology and labor, and significant amounts of invisible labor to maintain and update systems. Sustainability is an issue for traditional subscription-based publishing as well, both in terms of the vendor maintaining long

⁴⁶ https://www.nlm.nih.gov/bsd/bsd_key.html

⁴⁷ “Fair Access to Science & Technology Research Act (FASTR) FAQ,” SPARC, accessed February 9, 2020, <https://sparcopen.org/our-work/fastr/faq/>.

term access over the course of a subscription, as well as on-going access outside of current subscriptions (i.e., a scholar or institution maintaining access to older content). APCs are a valid mechanism for covering these costs, though they are unpopular when encountered in addition to other expenses. Large institutional and discipline-based OA repositories are better situated to plan sustainable practices for ongoing access than individual researchers attempting to maintain their own long-term solution.

A final element of access is discoverability. Important components of the invisible labor and expense involved in publishing (open or not) are the steps needed to index content and label it with well-crafted metadata. These steps increase the likelihood that content will be found by those who need it; this ensures the work will be part of the cumulative and iterative nature of scholarship and, more practically, that it will be cited. Fee based journal publishers have traditionally rolled this expense into subscription fees. Large publishers have often promoted their indexing and search features as major selling points of their databases. As OA publishing has developed over the past few decades, it has encountered the same expenses and a variety of solutions have been developed, from APCs to the use of membership programs for research institutions such as libraries. Similarly, large organizations such as the Directory of Open Access Journals have provided indexing that goes well beyond an individual journal's ability to make itself findable.

Library search platforms, databases, and services like Google Scholar now integrate OA journal records into their systems in the same manner as fee-based publishers can. Likewise, OA ebook projects like Knowledge Unlatched provide benefits that include full records for the many university press books they have opened access to, so that they appear in library catalogs alongside print books and purchased ebooks. Beyond funding, there is no longer the significant barrier to finding open content that existed in the early 2000s. Additionally, once a researcher finds OA content, they do not encounter **paywall** barriers as they would with subscription journal articles. Services like the widely-used Google Scholar search interface encounter fewer barriers with OA content than with content behind pay-walls; surprisingly, many database paywalls prevent Google Scholar from indexing all of the scholarly content that is available.⁴⁸ DOAJ and Institutional Repositories are typically well represented in Google Scholar and similar systems' results, so articles published in fully OA journals, as well as pre-

⁴⁸ For instance, compare the "cited by" numbers for any given title found in Google Scholar against the number for the same article in Web of Science; they are not finding the same information due to access. (Note, each can find content that the other cannot, neither is necessarily better than the other.)

prints posted to a repository are more readily indexed in search results (feeding the OA citation advantage.)

The most prominent barrier to general acceptance of OA publishing is the issue of prestige, and this seems likely to continue for the next several years, as many scholars have a lingering skepticism about the quality of OA publications. Major subscription journals continue to be the key venues for publishing due much in part to their long-established prestige and high **impact factors**. Many OA journals are newer and there has been a highly visible history of notable junk/**predatory journals**. This issue has been exacerbated by the variety of OA publishing standards across journals, as this has made it difficult for scholars to keep up with the many changes. Inertia may reflect, to some extent, an absence of marketing and education among non-profit OA outlets.

The situation does seem to be changing however. Peer-reviewed OA journals have become more established in their quality and prestige over the past two decades (e.g., BioMed Central, PLOS, *Collabra*, *Cultural Anthropology*, *Socius*, Philosopher's Imprint). In addition, many traditional subscription-based journals have also switched models, carrying their process and prestige over into the OA world. It is not clear whether the trend towards OA business models was driven, initially, more by the opportunity for “double dipping” or demands made by author teams. Regardless, the consequence has been increasing recognition of OA as a functional, reliable, and credible means of publishing.

OA in the Process of Research and Dissemination of Scholarly Works at UO

A Summary of Current Circumstances

The UO University Libraries (UL) currently spend 72% of the collections budget on electronic “continuing resources” such as journals, serials and databases. In the past the UO has maintained traditional subscription-based licensing agreements with a wide range of brand-name publishing firms. These firms have included Elsevier, John Wiley & Sons, Springer\Nature\Palgrave, Sage, Taylor & Francis, Cambridge University Press and others. The terms of these agreements have varied considerably, including both subscription packages that provide access to a suite of journals (both high traffic and less popular) as well as agreements

that provide access to specific titles. Negotiations for these agreements have focused on limiting inflation costs while maintaining or increasing access to content. These agreements often lock the library into multiyear contracts resulting in less flexibility within the UL budget.

The negotiating strategies of for-profit commercial publishers have proven to be highly profitable and priced many institutions and individuals out of access. Around the globe (and at UO), scholars, students, and the general public have responded to these circumstances — barriers to access and user interface friction — in a variety of ways. Several academic disciplines have seen mass editorial resignations (often followed by the founding of new OA journals), sometimes referred to as a “journal declaration of independence.”⁴⁹

On the consumer side, one-to-one emails requesting access from individual authors have more recently been replaced with semi-anonymous hashtag requests on Twitter (e.g., #icanhazpdf), access requests through subpages of Reddit,⁵⁰ formalized academic social networks like ResearchGate⁵¹ and Academia.edu,⁵² and anonymized file-sharing sites like Sci-Hub.⁵³

In fact, the emergence and resilience of **Sci-Hub** demonstrates the demand for complete content across the disciplines and general frustration with access controls. Since its founding in 2011, Sci-Hub has rattled the publishing, IT security, and defense industries — generating lawsuits, creating concerns about compromised university credentials, and even prompting suspicions of spycraft. Today, it seems that only universal open access would render piratical solutions (like Sci-Hub and other alternatives listed above) completely obsolete.

For users affiliated with the UO, gaining access to subscription content requires the use of an internet connection on campus or a **virtual private network (VPN)** for the sake of security and credentialing. Currently, the Cisco AnyConnect VPN can be used off-campus to access library resources like databases and paid journals as though you were on campus connected to the local network. The use of connection options such as this preclude the need to pursue

⁴⁹ http://oad.simmons.edu/oadwiki/Journal_declarations_of_independence

⁵⁰ For example: <https://www.reddit.com/r/Scholar/>

⁵¹ <https://www.researchgate.net/>

⁵² <https://www.academia.edu/>

⁵³ See: <https://en.wikipedia.org/wiki/Sci-Hub>

unauthorized access for most of the research needs of UO affiliates, even when working off-campus.

Moving Towards Transformative Agreements

More recently, many institutional libraries have been seeking to negotiate newly defined “[transformative agreements](#).” This term has been introduced as many institutions have sought to move away from the format of [Big Deals](#) (such as those described above) to more sustainable models. Transformative agreements seek to shift the relationship between libraries and publishers from subscription models that provide access to paywall-protected journals (and articles) to a model where the institution pays for open access publishing. Importantly, transformative agreements typically also seek to alter the terms of ownership for scholarly work (i.e., [copyright](#) retention) and include clauses requiring transparency of terms.

A first step towards transformative agreements involves an understanding of the expense trade-offs between existing subscription costs and interlibrary lending costs. The UL has recently initiated projects to evaluate “breaking out” of packages. Analyses of subscription costs, usage, and potential [interlibrary loan](#) costs have allowed the UL to refocus expenditures on serial subscriptions towards essential titles and revealed less usage of many titles bundled into these subscription packages than previously understood.

To provide an example of the analyses conducted in these recent projects, the following table lists the usage and cost of titles in the Spring/Nature/Palgrave package:

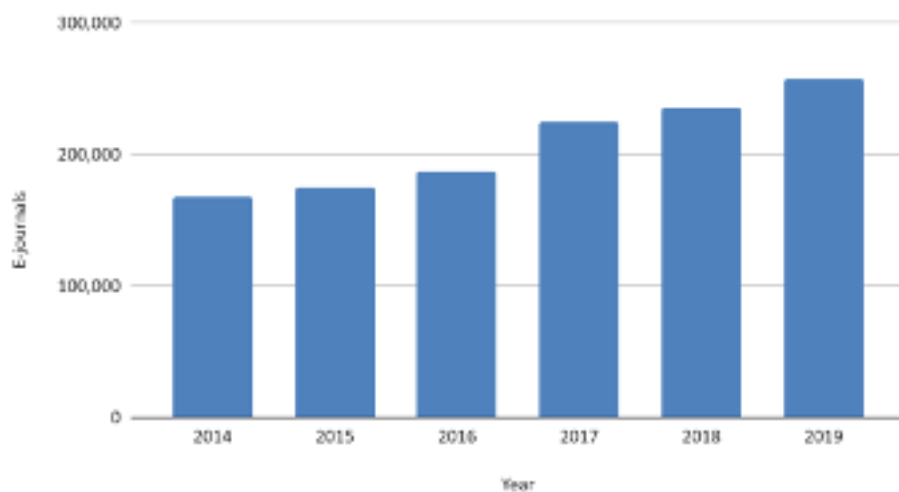
Title	Median Cost Over 5 years	Median Use Over 5 years	ILL Cost for Median Use	Recommendation
Coral Reefs	\$2223	176	\$5460	Keep
Current Genetics	\$3407	35	\$525	Cancel
Deutsche Vierteljahrsschrift fuer Literaturwissenschaft und Geistesgeschichte	\$157	3	\$ -	Cancel
Development Genes and Evolution	\$1452	93	\$2555	Keep
Dysphagia	\$1281	186	\$5810	Keep
Mycorrhiza	\$3419	47	\$945	Cancel
Nature - England	\$19053	14715	\$514325	Keep
Nature Biotechnology	\$6409	1127	\$38745	Keep

The median cost over 5 years gives an estimate of the expenses incurred from 2015 through 2019 and the median use shows the number of times the resource was accessed by a UO affiliate over the same period. The **interlibrary loan (ILL)** cost for median use is a sum of the median use minus 20 free articles multiplied by the \$35 cost of copyright clearance per article. This equation produces an estimate of the cost that would have been incurred without subscription access, allowing for a data driven recommendation to retain or cancel the subscription.

One question regarding this approach is the potential increase in inter-library lending costs. However, libraries such as the University of California System and the University of Florida who have stopped subscribing to some large publisher package deals have reported no significant increase in requests or costs. While these changes are fairly recent, the UO also has not seen a significant increase in costs for inter-library lending as a result of breaking packages.

There are several other factors to consider beyond these cost analyses as well, including the desire to provide sustained access to a high number of e-journals for researchers at the University of Oregon (shown in the figure below) and promote growth in OA alternatives.

E-journals available 2014-2019



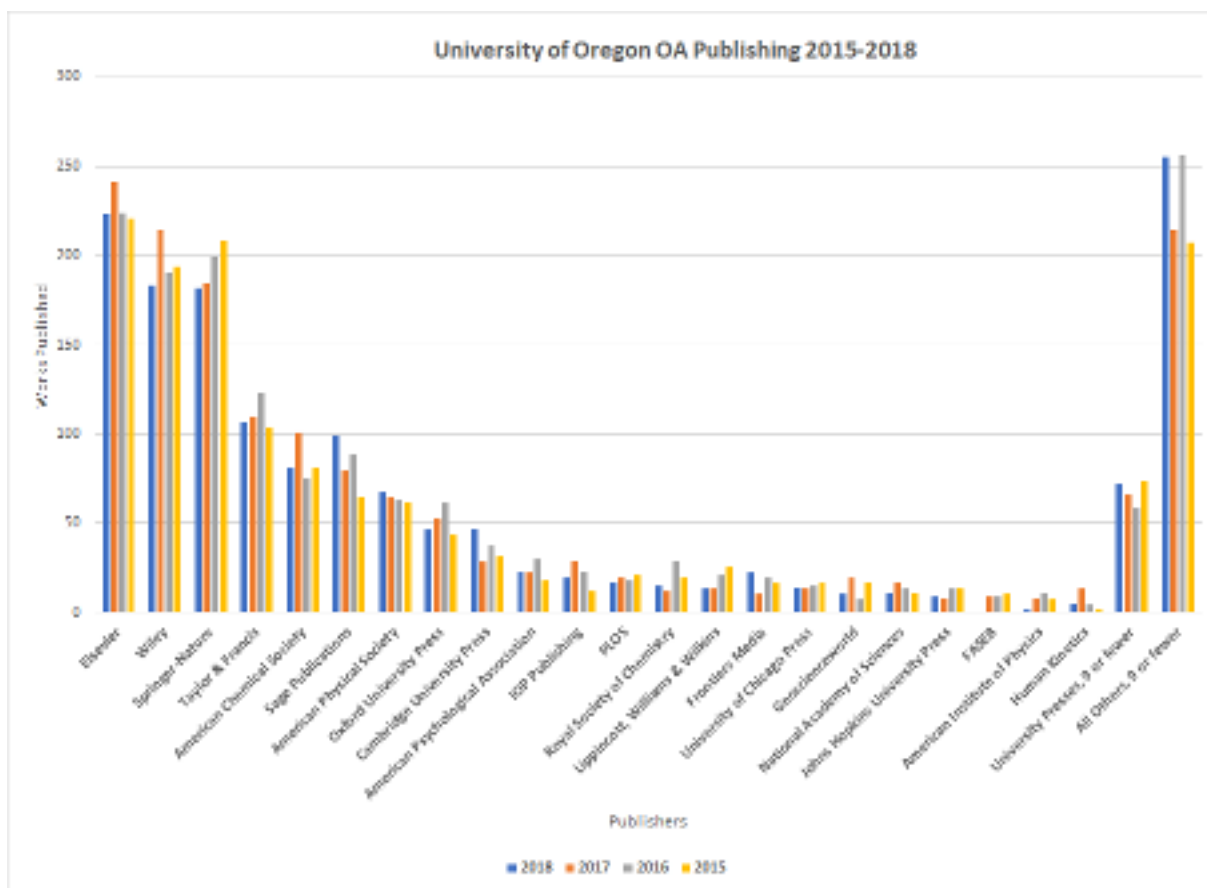
Steady growth in access to electronic journals has been due to both the intentional addition of OA journals to the UL catalog and increased support for a diverse range of open access projects. The UL currently spends more than \$100,000 a year on its support for several projects that serve to reduce or eliminate article processing charges for UO researchers. These projects, listed in the table below, include Knowledge Unlatched, the Global Press Archive, SCOAP³, and BioMed Central/SpringerOpen.

Membership/Title	Price
Directory of open access journals DOAJ	\$238
arXiv	\$1000
PsyArXiv	\$1000
Social Science Research Network	\$1480
OLH = [Open Library of Humanities]	\$2400
CLOCKSS membership	\$2721
OpenEdition., Cléo, centre pour l'édition électronique ouverte,	\$3396
BioMed Central/SpringerOpen membership	\$3486
Nucleic acids research membership	\$5108
Portico	\$9904
SCOAP ₃ membership	\$14512
Knowledge Unlatched - Language Science Press	\$15195
Global Press Archive	\$45000
Total FY19 Expenditures	\$105,440

To date, two distinct types of transformative agreements have been successfully negotiated: **Read-and-Publish** and **Publish-and-Read**. In Read-and-Publish agreements the payments for reading and for publishing in open access journals are both part of the negotiated contract. This differs from the common arrangement of subscriptions and APCs because it brings both types of fees into a single agreement. Publish-and-Read agreements are very similar, though the publisher technically only receives payment for publishing; reading access is included at no cost. The distinction between these two is often only technical, though there may be some important features for either the publisher or the institution depending on the nature of the content, etc. In practice, the challenge with both these models is cost. Publishers are looking for financially tenable agreements that will cover the costs of long-term sustainable access and these are often more than the institutional libraries are able to pay outside of a subscription framework.

Open Access Publishing at UO

In 2017, University of Oregon corresponding authors published a total of 156 OA works in 74 different OA outlets. Corresponding authors are those authors which hold reprint rights to the work and are assumed to have significant influence on the where it is published. University of Oregon authors paid \$207,314 in **APC (Article Processing Charge)** fees in 2017. APCs ranged in cost from none for journals hosted at institutions to \$5200 for publishing OA in *Cell Reports*. The average APC for the University of Oregon in 2017 was around \$1,654. However, a significant number of the works (40%) had no APC charge as a result of the library's membership in SCOAP³. SCOAP³ supports OA publishing in physics and authors from member institutions are not charged. The figure below shows the number of OA works published by UO authors (including authors who are not corresponding authors) by year and publisher from 2015 to 2018. Note that many of these publications were in outlets that incurred APCs.



Advancing OA at the UO and Beyond

As mentioned at the outset, the primary aims of this white paper have been to review the factors that have precipitated rapid changes in the Open Access landscape and explain their relevance for the University of Oregon. However, the Senate Sub-committee on Open Access also seeks to promote discussion of the ways that OA could be furthered in the near future. In that spirit, this final section provides several observations that might inform such discussion among members of the UO stakeholder community. It begins with a review of several obstacles to the advancement of OA before closing with some ideas about local action and/or investment.

Barriers to Moving Forward with OA

The push to realize a world in which **Gold OA** is the universal standard has intensified to hitherto unseen levels. Even the immensely profitable division of the RELX Group, Elsevier,⁵⁴ one of the last of the major scientific publishers to demonstrate a willingness to change its business practices, has appeared in the news recently as it has forged OA agreements with Hungary, Norway, Sweden, the Netherlands and, in the USA, Carnegie Mellon.⁵⁵ In another recent press release that provides evidence of the sweeping change that is occurring, Project DEAL institutions in Germany announced a landmark agreement with Springer/Nature in Germany, following on the heels of striking a similar deal with Wiley.⁵⁶ Everywhere one looks, change abounds as OA comes more and more to the fore.⁵⁷

Still, the efforts required to move the world of scholarly publishing toward OA over the last 30 years have shown that this transition is anything but easy. Here, we review the barriers across multiple stakeholder levels:

⁵⁴ www.elsevier.com

⁵⁵ Diana Kwon, “Elsevier Progresses in Open-Access Deal Making,” *The Scientist Magazine*®, December 2, 2019, <https://www.the-scientist.com/news-opinion/elsevier-progresses-in-open-access-deal-making--66803>.

⁵⁶ Ashley P. Taylor, “Project DEAL in Germany Reaches Agreement with Springer Nature,” *The Scientist Magazine*®, August 23, 2019, <https://www.the-scientist.com/news-opinion/project-deal-in-germany-reaches-agreement-with-springer-nature-66342>.

⁵⁷ For example, see: Alex Barker and Patricia Nilsson, “Mutinous Librarians Help Drive Change at Elsevier,” February 12, 2020, <https://www.ft.com/content/c846c756-49ac-11ea-ae2-gddbdc86190d>.

The Discipline/Researcher: A “one-size-fits-all” approach is doomed to provide insufficient motivation and incentive for scholars working across many disciplines to advance OA publishing. Varying levels of understanding, capabilities and opportunities result in differing perspectives even within the same academic area.⁵⁸ Patterns of publishing behavior and embedded mores about publishing practice that are passed along from one generation of scholars to the next are difficult to change. A preoccupation with publishing in a limited set of journals can work to hold back OA publishing progress and allow publishers to continue charging excessive APCs to publish in a manner similar to the way subscription prices have risen to stratospheric levels. Studies have confirmed that “ untenured faculty ... may not believe they are able to take the risk of publishing with a journal that has not been around long enough to have established prestige.”⁵⁹ Put succinctly, “the power to turn the tide and lower OA publishing costs rests in the hands of the scholarly community, [and researchers...] need to think differently about how they communicate their findings.”⁶⁰ Additionally, pressure to treat “research progress as confidential until a claim to priority of discovery over research findings can be made,”⁶¹ still informs customary behavior in many disciplines where rewards do not necessarily follow full and open disclosure. For researchers seeking advice about how and where to publish, there is now no shortage of resources.⁶² Unless the academic community is willing to rethink the status quo of traditional publishing, the progress toward OA will be slow.

The Institution: In an insightful article on institutional challenges published in 2015, the authors noted that:

The institutional arrangements and the organisation of undertaking scientific research that have developed since the Renaissance have changed little throughout the 20th century. In the 21st century, the diffusion of Information and Communication

⁵⁸ Dagmara M. Weckowska et al., “Managing the Transition to Open Access Publishing: A Psychological Perspective,” *Prometheus* 35, no. 2 (April 3, 2017): 111–35, <https://doi.org/10.1080/08109028.2017.1408289>.

⁵⁹ Stephanie H. Wical and Gregory J. Kocken, “Open Access and Promotion and Tenure Evaluation Plans at the University of Wisconsin–Eau Claire,” *Serials Review* 43, no. 2 (April 3, 2017): 111, <https://doi.org/10.1080/00987913.2017.1313024>.

⁶⁰ “The Challenge of Brand-Name Journals and OA.”

⁶¹ Gagliardi, Cox, and Li, “Institutional Inertia and Barriers to the Adoption of Open Science.”

⁶² Clare Fiala and Eleftherios P. Diamandis, “The Democratization of Scientific Publishing,” *BMC Medicine* 17, no. 1 (January 18, 2019): 12, <https://doi.org/10.1186/s12916-019-1249-1>; “Thinkchecksubmit,” accessed February 16, 2020, <https://thinkchecksubmit.org/>.

Technologies (ICT) and new web-based tools have created a range of new possibilities for conducting knowledge creation activities by exploiting the large investments in cyber infrastructure and the networking capabilities of rich web technologies.⁶³

Nevertheless, real barriers still exist and principal among them are the incentive systems in place where “alternative publishing of ePublications, not at all favoured by promotion and tenure committees, altogether discourage this form of publication.”⁶⁴ Others have gone so far as to suggest that “reexamining or updating the promotion and tenure process may be in order if the institution has made a commitment to support open access by adopting an open access mandate or other measure.”⁶⁵ The gist of this point seems to be that institutional metrics for tenure and promotion review could be better aligned with the priorities of OA through greater emphasis on scholarly dissemination in less well-established outlets.⁶⁶ The time may be ripe for such re-alignment given recent increases in the perceived quality and prestige of many OA outlets.

The Library: In a now-seminal article published in 2015, David Lewis, then-Dean of the IUPUI University Library, wrote that every library should “commit to contribute 2.5% of its total budget to support the common infrastructure needed to create the open scholarly commons.”⁶⁷ Advancing the idea that academic libraries should confront the “dilemma of collection action” to reallocate funds that “are not in their narrow short-term interest,” Lewis challenged the research library community to act in accordance with its values and “justify these investments to campus leadership in a time of fiscal constraint.”⁶⁸

Since the time Lewis threw down the gauntlet, the library community has debated the merits of his proposal. Some reallocation of collection funds has occurred as money has been directed

⁶³ Dimitri Gagliardi, Deborah Cox, and Yanchao Li, “Institutional Inertia and Barriers to the Adoption of Open Science,” in *The Transformation of University Institutional and Organizational Boundaries*, ed. Emanuela Reale and Emilia Primeri (Rotterdam: SensePublishers, 2015), 107–33, https://doi.org/10.1007/978-94-6300-178-6_6.

⁶⁴ Gagliardi, Cox, and Li.

⁶⁵ Wical and Kocken, “Open Access and Promotion and Tenure Evaluation Plans at the University of Wisconsin–Eau Claire.”

⁶⁶ Juan P Alperin et al., “How Significant Are the Public Dimensions of Faculty Work in Review, Promotion and Tenure Documents?,” ed. Emma Pewsey et al., *ELife* 8 (February 12, 2019): e42254, <https://doi.org/10.7554/eLife.42254>.

⁶⁷ David W. Lewis, “The 2.5% Commitment” (IUPUI University Library, 2017), 1, <http://doi.org/10.7912/C2JD29>.

⁶⁸ Lewis, 2.

to memberships in organizations like Knowledge Unlatched,⁶⁹ Open Library of the Humanities,⁷⁰ Reveal Digital,⁷¹ and PsyArXiv.⁷² But, over the near future, it still looks like OA will be driven by APCs, a model arguably as unsustainable as subscription pricing.

It has been argued that libraries are already paying enough money through the pervasive subscription model to “flip the system” and redirect an estimated \$10 billion per year in support of OA. However, APCs present a real and increasingly embedded danger to achieving the ultimate goals of OA. “Scientists in the rich industrialized world, and scholars at a handful of elite Western universities” may find ways to pay for OA publishing, but “researchers from the Global South and nonscientists everywhere” are facing bills that cannot be easily paid.⁷³ The APC model has been aptly described as “the subscription model seen through a camera obscura: author paywalls in place of reading paywalls.”⁷⁴ Some despair that the examples set early on by BioMed and the Public Library of Science (PLOS) guarantee that pay to publish will close off authorship to many of the world’s authors. “Replacing big subscription deals with big APC deals simply flips inequity in accessing content with inequity in publishing content, whilst the same locked-in dollars flow to the same dominant platforms and publishers, stifling price competition.”⁷⁵

The ideal model however, is institution-supported publishing, funding publishing via institutional membership fees (paid by universities and other research institutions, potentially reclaimed from cancelled subscription fees), eliminating the need for APCs. These fees often look the same as subscription fees, paid to an organization that publishes OA content, either as one-time payments, or recurring annual fees. The difference is in the work the fee supports. Beyond supporting general publishing costs, the publisher is fully supported by these

⁶⁹ www.knowledgeunlatched.org

⁷⁰ <https://www.openlibhums.org/>

⁷¹ <http://revealdigital.com/>

⁷² <https://psyarxiv.com/>

⁷³ Ugarte.

⁷⁴ Ugarte.

⁷⁵ Toby Green, “Is Open Access Affordable? Why Current Models Do Not Work and Why We Need Internet-Era Transformation of Scholarly Communications,” *Learned Publishing* 32, no. 1 (2019): 13–25, <https://doi.org/10.1002/leap.1219>.

membership fees, so that authors and unaffiliated researchers encounter no fee barriers to publishing and reading content.

Libraries can contribute to solving this problem, but it will take a collective effort that necessitates “painful negotiations and tough decisions around values and priorities among a motley array of constituencies.”⁷⁶ Committed to sustaining teaching and research activities on their individual campuses, research libraries are hard pressed to view themselves as saviors in a time when budgets are flat or declining and pressure to maintain access to high prestige information resources remains in tension with advancing the shift to OA.

⁷⁶ Rodrigo Ugarte, “The Library Solution: How Academic Libraries Could End the APC Scourge,” *Items* (blog), accessed February 11, 2020, <https://items.ssrc.org/parameters/the-library-solution-how-academic-libraries-could-end-the-apc-scourge/>.

Possibilities for Local Actions at UO

The SSOA Working Group is seeking input about local actions that support Open Access in ways that are aligned with the interests of stakeholders at the University of Oregon. To that end, this section of the White Paper is an ongoing work-in-progress. We have included a list of open-ended suggestions that are intended to prompt discussion and we are eager to add further suggestions based on input from the community. If you have feedback, please visit the SSOA website (openaccess.uoregon.edu) or reach out directly to a representative of the SSOA or the University Library Committee.

- ⑧ Renew/re-constitute the SSOA to carry forward OA work in 2020-2021 academic year
- ⑧ Adopt a “Presidential Policy” or mandate resolution that authors will send a version of research products (or perhaps just scientific articles) to IR or discipline-specific green OA outlet.
- ⑧ Endorse OA 2020 or similar Open Access policy statements. For reference, consider the policies recently adopted by the [University of California](#) and [Oregon State University](#).
- ⑧ Enhance researcher workflows to better interface with ORCID (e.g., Atmire Content & Usage Analysis Module on Scholar’s Bank)
- ⑧ Develop a policy to add publishing fees to grant submissions submitted via SPS
- ⑧ Create a mechanism to allow for better alignment of OA goals with Tenure and Promotion policies
- ⑧ Create a (renewable) source of funds to subsidize OA publishing fees (APCs)
- ⑧ Offer further OER/OA incentives for UO researchers.

Glossary of Key Terms

Accessibility

Distinct but related to open access, accessibility is the degree to which scholarly products can be used by all members of a general audience. Often, this term is used in reference to the accessibility of works for those with disabilities of various kinds. Less commonly, the term is used in reference to the accessibility of works for those who lack knowledge of specific terminology or complex subject matter.

Article Processing Charges (APC)

An article processing charge is a fee charged to authors of peer-reviewed articles to make a work available open access in either an open access journal or hybrid journal.

arXiv/bioRxiv/PsyArXiv

Discipline-based open access repositories for pre-prints and/or post-prints, focused (mainly) on physics, biology and psychology respectively.

Author Addendums

An author addendum can help you modify [copyright](#) transfer agreements to retain rights such as sharing your work with colleagues, using your work in the classroom or on Canvas, and posting your work in disciplinary repositories. For example, see the [SPARC Author Addendum](#) template.

Big Deals

The name given to the practice of offering institutions access to a large set of journals at a discount off of the aggregated list price of each journal individually. When these deals were first marketed in the late 1990s, they were used as a mechanism for institutions to gain access to a large amount of scholarly work at more affordable prices. Over time, the cost of these packages has risen steadily (5%-15%), causing many institutions to question the sustainability of such bundling.

Bronze open access

Research that is accessible through the publisher's website but which is not available for re-use (or which has unclear licensing status) is known as bronze open access.

Budapest Open Access Initiative (BOAI)

A public statement of principles relating to open access to the research literature released after a small conference on the topic in 2001. This public statement is viewed as a galvanizing event in the history of open access. To read the statement in full (about 1,100 words), see the [BOAI website](#).

Copyright

In this context, copyright refers to the right of the creator or their designee to share or reproduce a scholarly work. Several aspects of copyrights are relevant to Open Access. A copyright transfer agreement or copyright assignment agreement is an agreement that allows the copyright to be transferred from one owner to another; some publishers require this as a condition of publication. By contrast, open access works may be published or released under a license that specifies how the work can be disseminated and/or re-used. See also “licensing.”

Diamond open access

Open access outlets that do not require article processing charges are known as diamond open access (also sometimes referred to as [platinum open access](#)). These are distinguished from [green open access](#) in that they require funding from external sources (e.g., academic institutions, societies).

Digital rights management (DRM)

In the publishing context, DRM tools are software technologies that restrict access to and usage of copyright-protected content. DRM tools, for example, prevent unauthorized access to content by those who are not affiliated with an institutional subscriber. See [paywall](#).

Discipline-based Open Access Repositories

These are green open access outlets that serve specific academic disciplines. Examples include [preprint](#) and e-print servers like [arXiv](#).

Directory of Open Access Journals (DOAJ)

The [Directory of Open Access Journals](#) is a website that hosts a community-curated list of open access journals.

Embargoes

The period of time during which a partially open access article is only available to subscribers.

Fair Access to Science and Technology Research Act (FASTR)

This act, which has been introduced several times in various forms since 2006, calls for federally-funded research to be made freely accessible over the internet.

Gold Open Access

Gold open access journals are those in which the publisher makes all articles and related content available for free immediately on the journal's website. Articles are licensed for sharing and reuse via [Creative Commons licenses](#) or similar. Note that these differ from [hybrid open access journals](#) where content can be published open access contingent upon a publishing fee ([article processing charges](#)).

Grey Market

Grey market options for access include unauthorized (and sometimes large-scale) [copyright](#) infringement as a means of providing access to paywall-protected content. This is sometimes referred to as pirated or, in the color naming scheme, black open access.

Green Open Access

Outlets that provide self-archiving of articles by authors without charge are known as green open access. Examples include [Scholars' Bank](#) (UO's institutional repository) and [discipline-specific repositories](#) such as [bioRxiv](#) and [arXiv](#).

Hybrid journals

A hybrid journal is a subscription journal in which some of the articles are open access. Typically, the open access articles in hybrid journals require payment of an [article processing charge](#).

Impact factor

The impact factor for an academic journal is based on the average number of citations for articles published over a specified period of time (often, two years). This is often used as a comparative metric of a journal's prestige or influence.

Institution-based Open Access Repositories

These are green open access outlets that serve specific institutions (e.g., universities). The University of Oregon has an OA repository called [Scholars' Bank](#).

Interlibrary Loan (ILL)

A common service offered by institutional libraries that allows the users of one library to access the holdings of another. For many scholarly works, including journal articles, there are limits on the number of documents (e.g., 20 articles) that can be shared between institutions before fees from the publisher are incurred.

Licensing/Creative Commons licenses

Licensing allows the owner of a copyright to authorize dissemination and usage of the work without assigning ownership of the copyright to another party (i.e., a publisher). Recently, the use of Creative Commons licenses has become the standard method, though it should be noted that Creative Commons offers copyright owners several licensing options. For more information, see the [Creative Commons](#) site.

Open Access

A set of principles (see the [Budapest Open Access Initiative](#)) and procedures for free and unrestricted distribution of scholarly works.

Open Data

Like [Open Access](#), a set of principles and procedures for (relatively) unrestricted distribution of scientific data. For a variety of reasons (e.g., confidentiality, privacy), some data types are not possible to share at all or without restrictions.

Open Science Framework (OSF)

An open source software project aimed at improving the transparency and efficiency of scientific workflows. The OSF is developed and maintained by the Center for Open Science. See the [OSF site](#) for more information.

Paywall

In this context, paywall is the name given to digital rights management tools that prevent access to content for individuals who are not affiliated with a subscriber. Often, the web sign-in pages requiring institutional authentication (at UO, the Shibboleth identity management system) are informally referred to as the paywall.

Platinum Open Access

see [Diamond Open Access](#).

Postprint

This term is typically used to refer to the version of a scholarly work that has undergone peer review and accepted for publication but not typeset by the publisher.

Predatory journals

Academic publishing outlets that charge fees to publishing authors without providing the standard (or even minimum) services associated with publication. The criteria for defining a predatory journal are not well established.

Preprint

This term is typically used to refer to the version of a scholarly work that has not yet undergone peer review.

Publish-and-read

One of two models recently adopted in [transformative agreements](#), these agreements call negotiated payments for publication with free access to reading. This is approximately the opposite of the way that current subscription agreements are structured (where payments are made by institutions for access to read).

Read-and-publish

One of two models recently adopted in [transformative agreements](#), these agreements include payments for reading and for publishing in open access journals as part of the same negotiated contract.

Scholars' Bank

The University of Oregon's [institutional OA repository](#). See the [Scholars' Bank site](#) for more information.

Sci-Hub

A website that provides free access to research, including large amounts of research that are subject to copyright. As the most visible unauthorized repository of pirated content, Sci-Hub has been the source of considerable controversy in the OA movement.

Self-archiving

This is achieved when authors make an online copy of their scholarly work available for others to freely access. This can be done in a variety of ways, including through [green open access](#) outlets, but also on a personal website, etc.

SHERPA/RoMEO

RoMEO is a service run by an initiative called “Securing a Hybrid Environment for Research Preservation and Access” (SHERPA). RoMEO tracks the copyright and OA policies of academic journals. See the [SHERPA site](#) for more details.

Scholarly Publishing and Academic Resources Coalition (SPARC)

A non-profit that “works to enable the open sharing of research outputs and educational materials in order to democratize access to knowledge, accelerate discovery, and increase the return on our investment in research and education.” For more information, see: <https://sparcopen.org/open-access/>

Transformative Agreements

This term is used broadly in reference to recent agreements made with publishers by institutions seeking to move away from [Big Deal](#) subscription packages. A wide range of agreement terms have been included in recently announced deals; two of the more common include “publish-and-read” and “read-and publish.” For more information, see this [informative blog post](#) (a primer) on the *Scholarly Kitchen* website.

Virtual Private Network for UO access off-campus

A virtual private network (VPN) is an extension of a private computing network across a public network (the internet). The University of Oregon's VPN allows users to gain access to scholarly work as if they were physically connected to the university's private network on campus.

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