

Another Week, Another Transformative Open Access Agreement. But Just How Transformative are They Proving to be in Practice?

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Abstract

Transformative agreements offer a new route to increase Open Access (OA) participation and publishing. The presentation offers perspectives from two libraries and a publisher on transformative agreements and the steps they took to increase OA publishing. They address challenges and benefits to setting up a transformative agreement, including establishing comparative data, incorporating multiple funding streams to pay article processing charges (APCs), educating authors on OA options, encouraging publishers to offer multiple OA options to libraries, and maintaining sustainable processes, workload, and costs.

Keywords: Open Access, Open Access publishing, transformative agreement, consortia, article process charges, read and publish agreements.

University of Florida: A research university library's perspective

Judith C. Russell, Dean of the University Libraries for the University of Florida, provided a glimpse into the experiences of an academic

library at a large, public, and research-intensive university. The University of Florida (UF) has over 53,000 students in sixteen colleges, over 30 percent of whom are in graduate or professional degree programs. UF has 150 research centers and institutes and receives close to \$1 billion in research annually. *US News & World Report* currently ranks the UF fifth among public universities in the United States.¹ UF authors generate a large volume of articles in a wide array of journals. In 2020, over 27 percent of the articles from UF authors were published gold or hybrid Open Access (OA). These authors rely on multiple and decentralized sources of funding for the article processing charges (APC). The 27 percent does not reflect corresponding authors; they may participate with other individuals in publishing OA articles.

The UF Smathers Libraries asked UF authors about their choice to publish OA. They found that the lack of access to funding for APCs constrains authors from choosing OA. OA is not free. Authors, libraries, and publishers currently carry the costs. The UF Smathers Libraries partner with a range of publishers to reduce or eliminate APCs for UF corresponding authors through transformative agreements. In some cases, authors receive a percentage discount, while other times all fees are waived. Smathers Libraries maintain a list of these agreements, including changes.²

Ideal transformative agreements are effortless for authors, easily identify authors during their article submission process, and are affordable for libraries, with little or no administrative burden on their employees. These agreements also help publishers accelerate their own paths to OA. The UF Smathers Libraries pursue agreements with moderate costs, which precludes transformative agreements with most large publishers. They forge many of their agreements with society and other small, independent publishers with which the Libraries already have e-resources licenses and through which UF authors actively publish. Examples include the American Chemical Society, Cambridge University Press, Microbiology Society, Public Library of Science (PLoS), the Company of Biologists, and the Royal Society, among many others.

In September 2020, Russell assisted in a seminar for the Association of Southeast Region Research Libraries (ASERL). Five publishers presented on their plans to remain independent while moving to OA. She requested data and pricing from all five publishers and entered into agreements with four of them. For these agreements, the UF Smathers Libraries incorporated APCs into the annual license fees so that UF corresponding authors could publish OA articles with no out-of-pocket costs.

Russell highlighted the agreement with the Company of Biologists. To reduce the amount of negotiation and contract work, the libraries opted for a simple addendum to an existing licensing agreement. The multi-year agreement included minimal annual price increases, eliminated APCs, and provided unlimited and perpetual access to content dating back to 1853 for three journals: *Development*, *Journal of Cell Science*, and *Journal of Experimental Biology*. The cost was based on the current subscription spend added to the average annual APCs from the corresponding authors over the prior three years. Since UF's authors had published in these journals but had not chosen OA in the past, this became an opportunity for their authors to choose OA for future articles. This emerged as a significant motivation for the Libraries to enter into these agreements. The Libraries not only supported the sustainability of these journals in the move to OA, they encouraged UF authors to opt for more OA publishing of their work. As the transformative agreement with the Company of Biologists included uncapped OA publishing, it reassured authors and lowered the administrative burden on the libraries as they would not run out of an established number of articles for which APCs were reduced or eliminated.

Negotiating multiple transformative agreements incurs costs for libraries, consortia, and publishers. The data requested to enter into these agreements are costly for publishers to produce and libraries to analyze. Both libraries and publishers would benefit from the joint development of core, standard terms and conditions to simplify

contract negotiations. Establishing jointly defined minimum data that publishers would provide to libraries would also help the process. Russell recently participated in the COAlition S and the Association of Learned and Professional Society Publishers (ALPSP) to develop a toolkit to foster OA agreements. The toolkit establishes a starting point for negotiations between a publisher and a library and includes a data template that helps publishers collect information needed for negotiations and informs libraries on what data to use to evaluate the agreement. Having an agreed-upon minimum reduces the evaluation and decision-making time by providing all of the necessary information at the beginning of the discussion. In addition, the toolkit offers six adaptable sample licenses as well as a detailed workflow which provides an overview of the entire process from the contract negotiation to achieving compliance with funder policies.

The data template would have helped the UF Smathers Libraries reduce the back-and-forth with publishers. While the data template was in development, the UF Smathers Libraries' Open Access Task Force validated it, recognizing the template had sufficient data to make an informed decision. The data template answers many of the kinds of questions asked during the negotiation process, both inside a library and with outside stakeholders and groups with whom they may consult. Knowing the kinds of information libraries and universities need to help make decisions about the agreement aids the overall process and reduces the need for customized data from each publisher.

While developed to support deals with small, independent publishers, the data template benefits any kind of transformative agreement negotiation. Larger publishers may provide more data, but the template establishes the minimum data that all publishers should provide. Consortia and libraries can facilitate adoption of the toolkit by requesting that publishers use the data template, applying the sample license, and encouraging publishers to use the toolkit to expedite negotiations. These tools facilitate the path toward OA, benefitting stakeholders and users.

University of California: Transformative agreements as a tool for global Open Access

Ellen Finnie, Director of Shared Collections at the California Digital Library, introduced the impacts and challenges the University of California (UC) encountered with their transformative agreements. UC's transformative agreements are one strategy in their overall shift toward OA research.

UC Libraries adopted a workflow called the multi-payer model. This workflow introduces the opportunity for authors to contribute available grant funds toward an article processing or OA publishing charge. They adopted this approach to alter some of their larger agreements with publishers to become transformative agreements. A 2016 Mellon-funded study showed that the allocated subscription amounts in library budgets at research-intensive universities in North America would be insufficient to cover a full shift to OA publishing through an APC-based model. Contributions from research funds potentially addressed this gap. The multi-payer model reflects the concept that libraries and authors' research funds contribute to the single payment stream for the cost of OA publishing.

When an author elects OA, they receive a reduced APC (as negotiated in the agreement) and an initial library subvention, usually \$1000 per article. At a point in the workflow, authors have a choice to contribute grant funds to pay for the remainder of the APC or, if they have insufficient funds, to have the library cover the remaining APC cost. Utilizing grant funds makes the agreements affordable, but the workflow also allows for cases when an author lacks sufficient grant funding. Authors can request full funding, too. Authors who lack grant funding, such as graduate students, early-career or under-resourced scholars, or those with expired grants, use this approach.

UC Libraries has entered into fourteen transformative agreements with publishers of all types and more than one business model. Twelve of the transformative agreements utilize the multi-payer model. The Libraries successfully worked with large and small, commercial

and non-profit, subscription-based and fully OA publishers on this multi-payer workflow and found that authors who publish OA contribute grant funds overall at the levels modeled and anticipated using this workflow.

In addition, UC Libraries continue to experiment with other models. Given variation in revenue models, differing conditions from the publishers can make other options more attractive, essential, or feasible financially. Examples include the Association for Computer Machinery (ACM), who they worked with to develop ACM Open, an output-based, OA publishing model that does not charge author-facing fees. With the Proceedings of the National Academy of Sciences (PNAS) they agreed on a model that addresses PNAS's particular revenue structure. This pilot involves a single, rolled up, and reduced publishing cost for authors who elect OA, which incorporates all page charges for authors. UC libraries could not close the gap to support the full costs, but by working to reduce the costs, they found a way to support and enable authors to elect OA. This model enables the transition of their subscription investment to OA publishing support, instead of paying for paywall access, and in that sense UC Libraries calls it a publishing services fee model. Through negotiating multiple models, UC Libraries meets the needs of publishers while achieving their own strategic aims of containing costs and achieving 100 percent OA.

When entering into transformative agreements, UC Libraries adhered to core principles and attributes to make them manageable, workable, and sustainable. These include shifting subscription investments to investments in publishing OA; incorporating cost controls by taking into account historical expenditures by both libraries and authors and negotiating a reduced or fixed APC price for the duration of the agreement that takes into account increases in price or publishing volume; ensuring that authors control their own publishing through copyright retention and, even if they opt out of OA publishing, a provision for them to deposit their manuscripts under UC's OA policies; and working with a full diversity of publishers to move UC OA research into the global marketplace for scholarly journal articles.

UC Libraries follow a prioritization document that describes their process, identifies publishers for future agreements, and stages their discussions with given publishers. UC Libraries seek agreements that have no caps and provide 100 percent OA to safeguard consistency of author experience whenever they submit.

What has UC learned so far? Early observations indicate that providing financial support for OA publishing enables more authors to elect OA. These agreements have substantially increased OA to UC research. UC began with a single-digit percentage of authors adopting OA and increased it to half of their authors. No funding requirement exists in the United States to encourage publisher-based OA publishing. In this context—the lack of funder-allocated budgets for OA and limited experience with transformative agreements in the United States—UC’s author adoption of OA represents significant change. This adoption rate represents a momentous cultural shift and change in behavior due to the availability of library-based funding through transformative agreements. UC Libraries have learned, too, that authors will contribute grant funds when available. The funds from the library enable authors, who otherwise would have insufficient funds, to publish OA. By enabling authors to contribute their grant funds, UC Libraries stretch their own budget as far as possible to aid this transition. Keeping processes simple—workflow, metadata, and identifiers—supports all parties involved. While the approval processes vary, they are not overly burdensome, and the use of institutional identifiers is one important element in these agreements.

Currently, UC Libraries continue to investigate options, such as the Open Access Switchboard and its infrastructure for sharing data, as important sustainability components to the OA processing environment. UC also has a pilot underway with the Royal Society, which uses that data to support the agreement. Learning more about author behavior helps UC Libraries to simplify the author fee payment workflow as much as possible, even with the added complexity of incorporating grant funds. UC Libraries agreements demonstrate that a wide range of publishers can build mechanisms to introduce grant funds

into the payment stream, whether they use a third-party service or one of their own. Recently, UC's faculty senate group on scholarly communications came out in support of OA publishing. When authors see their own UC peers support OA publishing, they have a peer-to-peer context for this publishing option.

Why do UC authors opt out of OA? Looking at the initial information from their two largest agreements, with Springer Nature and Elsevier, 70 percent of the time authors declined OA due to costs, such as insufficient or no grant funding. Some authors are unaware of the funding available from the Libraries and the workflow, or they have questions about eligibility (11 percent). Ten percent of the time when authors do not select OA publishing, the author finds the current subscription model sufficient, but this is a minority choice among the authors. This information gave UC insight into the clarifications required to increase support and adoption of OA publishing.

UC Libraries' next steps include assessing existing transformative agreements and looking toward consortia partnerships, especially in California. The current agreements are experimental and transitional. Assessing the agreements will help UC to improve their communication with authors, especially because early indications suggest that many authors do not understand their eligibility. UC Libraries want to collaborate with more publishers. By the end of 2022, 50 percent of research articles by UC authors will be eligible for OA publishing, including a new agreement that includes a consortia beyond UC. By collaborating across institutional boundaries, UC hopes to create opportunities for both read- and research-intensive institutions to gain benefits from these OA agreements and to enable larger shifts toward OA. Europe has benefited from their centralized environment, and UC sees consortia making this kind of scale and progress possible in North America. Consortia will play also an important role in developing standards for transformative agreements, which contributes to sustainability of OA business models. To this end, UC has been involved with the Efficiency and Standards for Article Charges (ESAC) initiative's efforts to identify workflow and data standards.

Looking to the future, UC finds inspiration in Europe. A recent recommendation to the German Council of Science and Humanities suggested that research funding should pay for publishing fees.³ Scientific institutions, including universities, established an integrated information budget, which combines the library budget and research funds to cover the publication costs at the institutional level. This process mirrors UC's aim through the multi-payer model at the author level. The call in Germany targets a higher, more aspirational level for funding that could provide a shift in budgeting that goes beyond author-facing charges. Recognizing the transitional phase in the United States, UC continues to advance OA in ways that align their principles and budget.

The Company of Biologists: A publisher's perspective

O. Claire Moulton, publisher at The Company of Biologists, provided a publisher point of view on how transformative agreements have changed publication of OA material. Their route toward the OA transformation takes two key paths: transformative journal status and transformative agreements (read-and-publish). Alongside these agreements, they continue to build their transparency by mapping their progress to date and communicating the benefits of OA publishing through transparent metrics. Above all, collaboration and relationship building are the keys to their continued success.

The Company of Biologists is a not-for-profit publishing organization dedicated to supporting and inspiring the biological community worldwide. They aim to profit science, not shareholders; they produce prestigious research journals, provide charitable grants for their communities, host scientific meetings, and—in particular—help to build early-career communities. The Company of Biologists has long-standing commitment to OA because they believe it benefits science. They offer three subscription journals—*Development*, *Journal of Cell Science*, and *Journal of Experimental Biology*—that have offered OA options since 2004. Plan S awarded these journals with

transformative status—the first in the world. In addition, The Company of Biologists publish two fully gold OA journals: one flipped to OA in 2011 (*Disease Models & Mechanism*), and one was born OA in 2012 (*Biology Open*).

The Company of Biologists see themselves at the center of a set of relationships-- with libraries and consortia, authors, readers, other like-minded publishers, and funders--to accelerate the transition to OA. As previous speakers mentioned, The Company of Biologists has found that removing APCs encourages authors to select OA publishing. They have been working closely with funders, especially Plan S, which has rolled out metrics, checker tools, and comparison services that aid the community. They have also worked with like-minded, small, independent publishers to try to enable them to enter into OA agreements.

Focusing on libraries and consortia, Claire Moulton covered some of the actions on The Company of Biologists' route to transformation. In 2019, they joined the Society Publishers Accelerating Open Access and Plan S (SPA-OPS) initiative to explore transparency and different transformative models.⁴ As one of the first not-for-profit publishers to do so, they launched a cost-neutral and uncapped Read and Publish initiative. As a result, they have data across 2019 and 2020. Their subscription journals were the first in the world to achieve transformative journal status by Plan S. In 2021, they exceeded their OA growth targets. As transformative journals, they commit to grow the percentage of OA by at least five percent each year. In 2022, in response to feedback from librarians, The Company of Biologists added their two fully OA journals to their read-and-publish agreements. They also connected to the OA Switchboard to provide real-time information to their library partners.

How transformative are The Company of Biologists? To find out, they compared their policies and processes against ESAC's comprehensive "How Transformative Is It?" table.⁵ The table covers metrics like price transparency and optimizing the process of OA. Their score illustrated how central transformation is to everything that they

do. Their read-and-publish agreements have grown quickly in numbers from ten participating institutions in 2020 to 415 in 2022. As of June 2022, they have over 470 participating institutions, across more than thirty countries. They hold agreements with such consortia such as National Institutes of Health and the University of California in the United States. They also have been exploring variations on their standard read-and-publish agreement with the Max Planck Digital Library and the University of California.

Are these agreements transforming OA publishing? Between 2019 and 2021, there has been a big increase in the percentage of OA publishing in The Company of Biologists' three hybrid (now transformative) journals, and they attribute this result to their read-and-publish agreements. One of the journals, which began with the lowest percentage of OA publishing in 2019, has grown the most in the last three years. They envisage that journals with low numbers of OA articles will grow rapidly and may catch up with the other journals. But, they expect growth to slow as they move into higher levels of OA. They targeted a five percent growth in OA content in their transformative journals between 2020 and 2021, but the actual figures surpassed that with a 10–15 percent growth in OA articles. In the global context, OA publishing progresses at different rates in other parts of the world. Worldwide about 10 percent of The Company of Biologists' authors continue to take the APC payment route to OA, with an additional 20 percent using the read-and-publish agreements. Pulling out data from the United States and Canada, they found slightly lower levels of OA, but they see significant progress as the percentages grow through read-and-publish agreements.

Alongside the agreements, they increased their data transparency. They produce machine-readable data on acceptance rates, speed to publication, article review rounds, and article-specific metrics. Metrics comparing OA articles with non-OA articles in the same journal clearly show the benefits of OA publishing. In one journal, usage increased three times for the OA articles as compared to non-OA.

Transformation has certain challenges. As a small not-for-profit organization, The Company of Biologists' main challenge was gaining attention, so they greatly appreciate the support they received from libraries and consortia in developing transformative agreements. Being small, this transformation meant that all their staff, irrespective of roles, helped with some aspect of the read-and-publish agreements. These agreements are time-consuming when manually gathering the needed data for negotiations. To achieve this, they increased their sales and customer service staff, which in turn increased their costs. In addition, they cannot provide the same metrics as large commercial publishers, so they had to be realistic about what they needed to and could produce.

Despite these challenges, The Company of Biologists sees plenty of positives in transformation. Their transformative journals comply with funder mandates, making it far easier for authors to choose where and how to publish. Their transformative strategy has led to a rapid increase in the proportion of articles published immediately OA, which aligns with their mission to support biologists. Read-and-publish agreements provide them with a baseline income for the upcoming years as they continue to focus on the quality of their publishing. They increased their transparency and are pleased with the comparative metrics demonstrating the benefits of OA publishing to their authors. They received positive feedback from librarians and authors. Finally, The Company of Biologists looks forward to their future collaborations with libraries, consortia, and authors as they continue their transformative journey.

Contributor Notes

Ellen Finnie is the Director of Shared Collections at California Digital Library.

O. Claire Moulton is a publisher with The Company of Biologists and is responsible for their journal and digital content strategy.

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Notes

- 1 University of Florida Staff, "U.S. News & World Report ranks University of Florida fifth among top public universities in its 2022 Best Colleges rankings." University of Florida News, September 13, 2021, <https://news.ufl.edu/2021/09/usnr-ranking-2022/>.
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