

Academic Publishing: State of Play

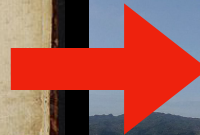
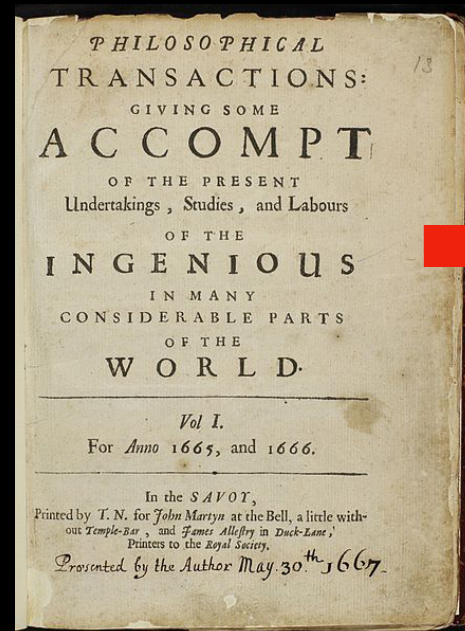
A very quick overview of challenges and opportunities

Brandon Butler 7.22.21

Good morning! Thanks for joining us. I'm Brandon Butler, the Director of Information Policy at the Library, and I'm going to give a very quick overview of the challenges and opportunities in academic publishing today. I'll focus on articles and journals, and my colleagues will talk later about data, software, and other things.

Background

From mission- to profit-driven publishing



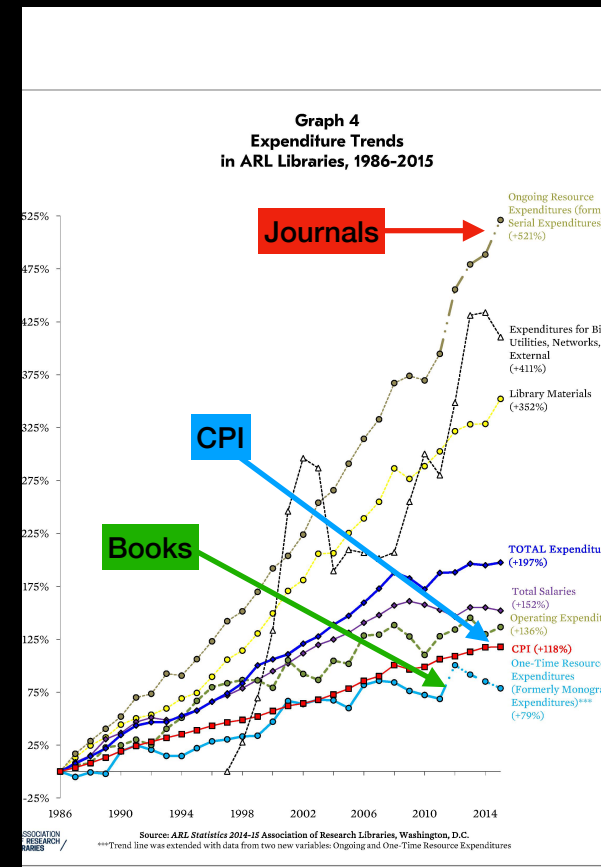
The key overarching challenge we are reckoning with right now is the devolution of scholarly publishing from the world of the Philosophical Transactions, the first-ever scholarly journal and a mission-driven undertaking owned and operated by scholars for scholars, to the world of the super-yacht Lady Ghislaine, purchased with the proceeds of the profit-driven scholarly publishing empire Pergamon Press, later acquired by Elsevier.

Philosophical Transactions: <https://royalsociety.org/journals/publishing-activities/publishing350/history-philosophical-transactions/>

The Lady Ghislaine: https://en.wikipedia.org/wiki/Dancing_Hare

Challenges

- **Unsustainable subscription price increases**

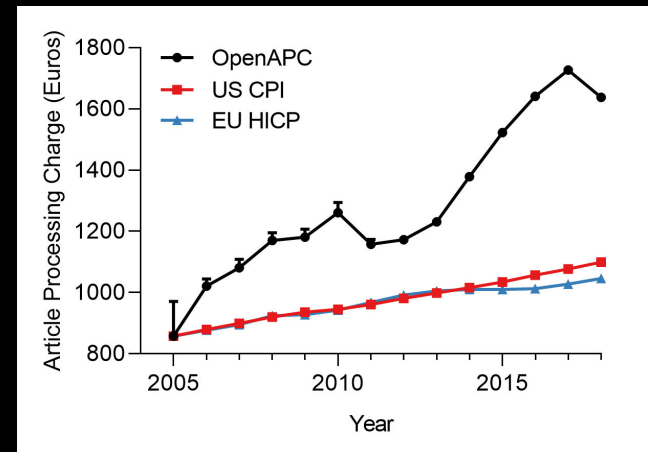


The first challenge we face is one of the oldest: the exploding price of journals, which has outpaced the consumer price index for decades. The growth in journal prices is unsustainable, and is forcing libraries around the world to make difficult decisions with finite resources.

Chart source: Association of Research Libraries, Expenditure Trends in ARL Libraries 1998-2018, <https://www.arl.org/wp-content/uploads/2019/10/expenditure-trends.pdf>

Challenges

- Unsustainable subscription price increases
- **Unsustainable OA fee (APC) growth**



Shaun Yon-Seng Khoo, Article Processing Charge Hyperinflation and Price Insensitivity: An Open Access Sequel to the Serials Crisis, 29 LIBER Quarterly 1 (2019).

Because the players and the power dynamics are the same, we are seeing the same pattern play out in the open access arena: commercial publishers' OA fees have also grown at unsustainable rates, forcing authors to confront the same harsh realities as libraries.

Chart source: Shaun Yon-Seng Khoo, Article Processing Charge Hyperinflation and Price Insensitivity: An Open Access Sequel to the Serials Crisis, 29 LIBER Quarterly 1 (2019). <https://www.liberquarterly.eu/article/10.18352/lq.10280/>

Challenges

- Unsustainable subscription price increases
- Unsustainable OA fee (APC) growth
- ***Opaque, convoluted pricing***

Institution	Adjustment from List Price	Avg Cost per Journal
FSU	6.4%	\$6239
Iowa State	-14.6%	\$4896
UNC Chapel Hill	-38.5%	\$2448
WVU	-9.1%	\$3720

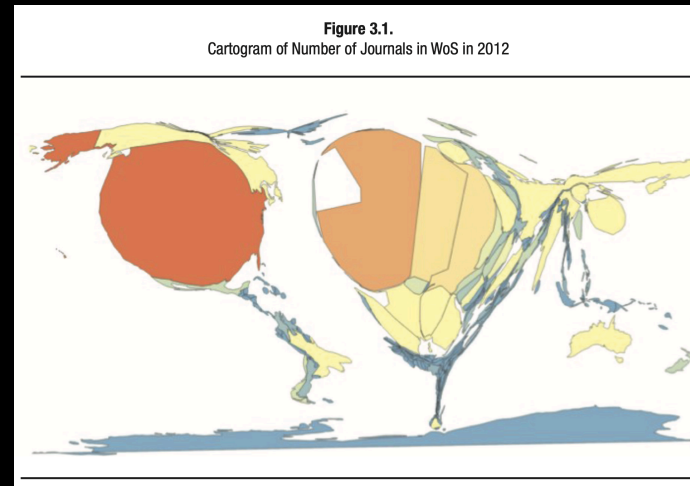
Thornton J. B. & Brundy C., (2021) "Elsevier Title Level Pricing: Dissecting the Bowl of Spaghetti", Journal of Librarianship and Scholarly Communication 9(1). p.eP2410. doi: <https://doi.org/10.7710/2162-3309.2410>

I'm going to skip past this one, since it's more about the inside baseball of how libraries buy journals, but suffice to say that negotiating journal deals makes buying a used car look transparent and painless. [Publisher pricing for electronic journals is opaque and convoluted. Elsevier's CEO has even compared its legacy pricing models to throwing spaghetti against the wall. As you can see in this chart, the result is that institutions pay widely disparate rates for subscriptions, and we typically don't know what others pay thanks to non-disclosure clauses. (Starting in 2017, UVA no longer signs NDAs).]

Table source: Thornton J. B. & Brundy C., (2021) "Elsevier Title Level Pricing: Dissecting the Bowl of Spaghetti", Journal of Librarianship and Scholarly Communication 9(1). p.eP2410. doi: <https://doi.org/10.7710/2162-3309.2410>

Challenges

- Unsustainable subscription price increases
- Unsustainable OA fee (APC) growth
- Opaque, convoluted pricing
- ***Inequity and lack of (biblio)diversity***



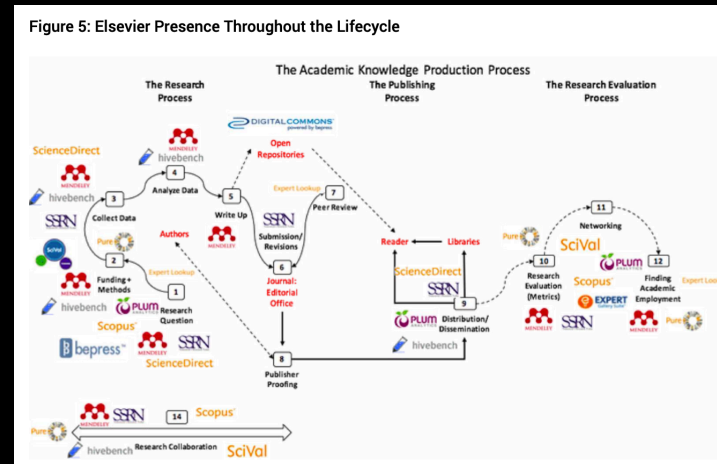
Alperin, JP., Babini, D., Fischman, G. (eds.) 2014. Open access indicators and scholarly communications in Latin America (Buenos Aires: CLACSO, First edition).

Not surprisingly, when the driving force is profit, the result is inequity between those who can afford to participate and those who cannot. This is true for both readers and authors—the current system warps who can access scholarship AND who can contribute to global knowledge.

Map source: Alperin, JP., Babini, D., Fischman, G. (eds.) 2014. Open access indicators and scholarly communications in Latin America (Buenos Aires: CLACSO, First edition).

Challenges

- Unsustainable subscription price increases
- Unsustainable OA fee (APC) growth
- Opaque, convoluted pricing
- Inequity and lack of (biblio)diversity
- **Commercial colonization of the scholarly workflow**



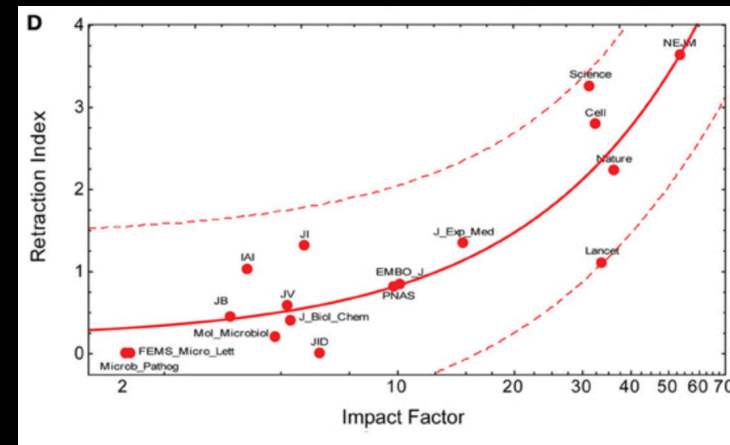
Alejandro Posada & George Chen, Inequality in Knowledge Production: The Integration of Academic Infrastructure by Big Publishers, in ELPUB 2018 (Leslie Chan & Pierre Mounier eds., 2018), <https://hal.archives-ouvertes.fr/hal-01816707> (last visited May 6, 2019).

The same commercial firms are now colonizing the entire scholarly workflow with products addressing the brainstorming phase all the way through post-publication archiving. These companies have been explicit about their goal: to apply the logic of surveillance capitalism to scholarship.

Diagram source: Alejandro Posada & George Chen, Inequality in Knowledge Production: The Integration of Academic Infrastructure by Big Publishers, in ELPUB 2018 (Leslie Chan & Pierre Mounier eds., 2018), <https://hal.archives-ouvertes.fr/hal-01816707> (last visited May 6, 2019).

Challenges

- Unsustainable subscription price increases
- Unsustainable OA fee (APC) growth
- Opaque, convoluted pricing
- Inequity and lack of (biblio)diversity
- Colonization of the scholarly workflow
- ***Scientific Integrity Crisis***



Björn Brembs et al., Deep Impact: Unintended consequences of journal rank, 7 arXiv preprint arXiv:1301.3748 291–291 (2013).

The journal prestige economy with its well-known bias toward glamorous positive results has contributed to the crisis in scientific integrity, as documented extensively by researchers here at UVA. The current model isn't just expensive and inequitable; it's bad for science.

Chart source: Björn Brembs et al., Deep Impact: Unintended consequences of journal rank, 7 arXiv preprint arXiv:1301.3748 291–291 (2013). <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3690355&tool=pmcentrez&rendertype=abstract%5Cnhttp://arxiv.org/abs/1301.3748>

Challenges

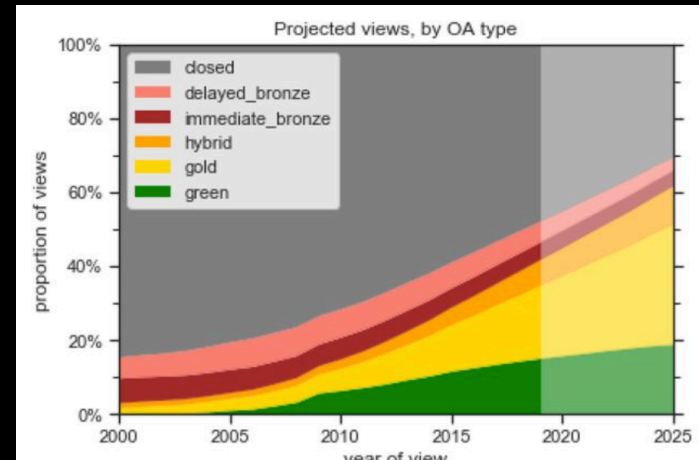
- Unsustainable subscription price increases
- Unsustainable OA fee (APC) growth
- Opaque, convoluted pricing
- Inequity and lack of (biblio)diversity
- Colonization of the scholarly workflow
- Replication Crisis
- ***Journal Prestige, P&T, and Lock-in***



Finally, the most important challenge of all: the journal prestige economy itself. Unless and until we break the link between journal placement and career advancement, the commercial publishers will continue to wield undue power over scholars.

Opportunities

- ***Growth in OA publications***



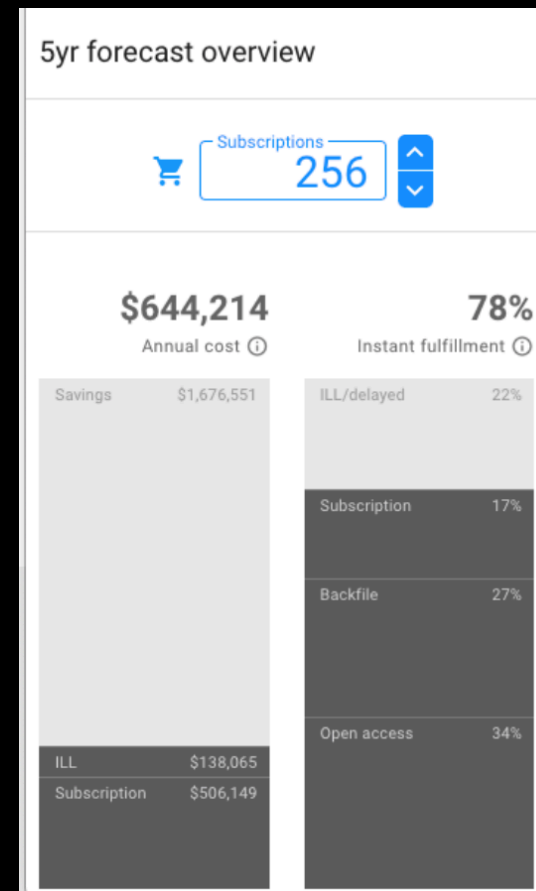
Heather Piwowar, Jason Priem & Richard Orr, The Future of OA: A large-scale analysis projecting Open Access publication and readership, bioRxiv (2019), <http://biorxiv.org/lookup/doi/10.1101/795310> (last visited Oct 15, 2019).

But not all the news is bad! There are several exciting opportunities we can leverage for change at UVA and globally. The first is the growth of open access. The majority of articles scholars actually read is expected to be available for free in the next few years, weakening the power of paywall monopolies.

Graph: Heather Piwowar, Jason Priem & Richard Orr, The Future of OA: A large-scale analysis projecting Open Access publication and readership, bioRxiv (2019), <http://biorxiv.org/lookup/doi/10.1101/795310> (last visited Oct 15, 2019).

Opportunities

- Growth in OA publications
- ***Better usage and value data***

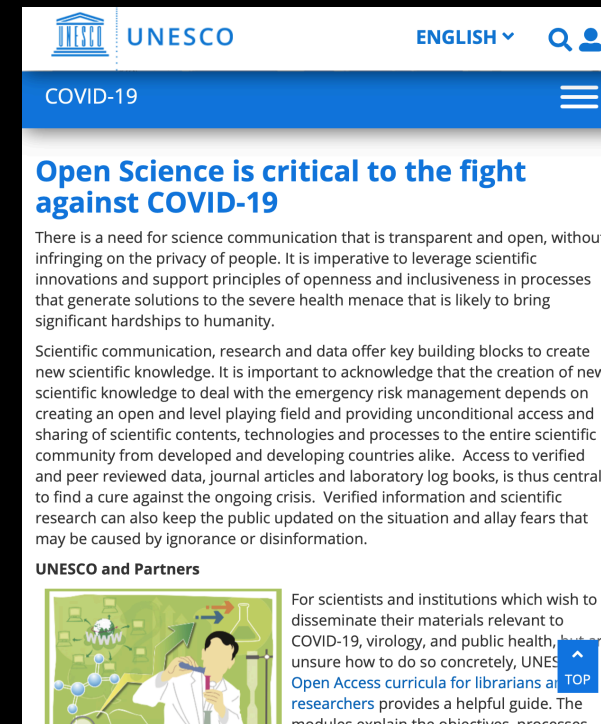


The Library has never had better data about the value of journal subscriptions or the cost of alternative modes of access. Using this data was the key to our breaking the Elsevier Big Deal this year with confidence that we were retaining the subscriptions that UVA scholars actually needed, and that we could afford alternative access for rarely-used titles, saving ~\$1mil in the process.

Screenshot: unsub.org

Opportunities

- Growth in OA publications
- Better usage and value data
- ***COVID as test case/ proving ground***

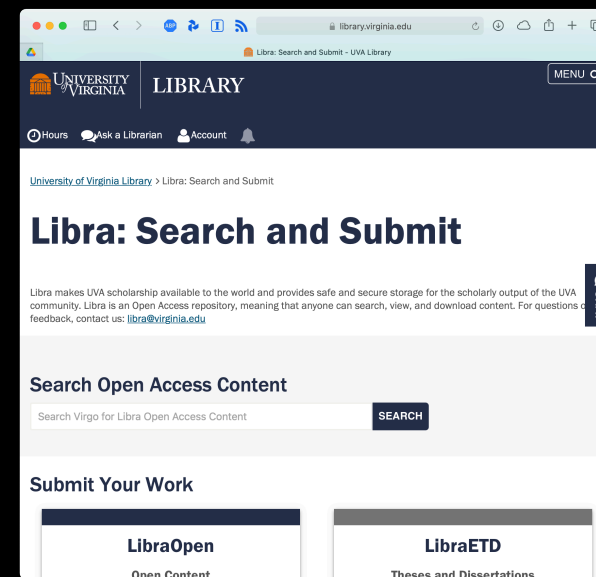


The COVID pandemic proved the power of open science in a crisis—the rapid, open sharing of data and results drove unprecedented success in confronting the pandemic. Why not leverage that power all the time, against the full panoply of challenges we face?

Screenshot: <https://en.unesco.org/covid19/communicationinformationresponse/opensolutions>

Opportunities

- Growth in OA publications
- Better usage and value data
- COVID as test case/ proving ground
- ***Better tech/ infrastructure for OA***

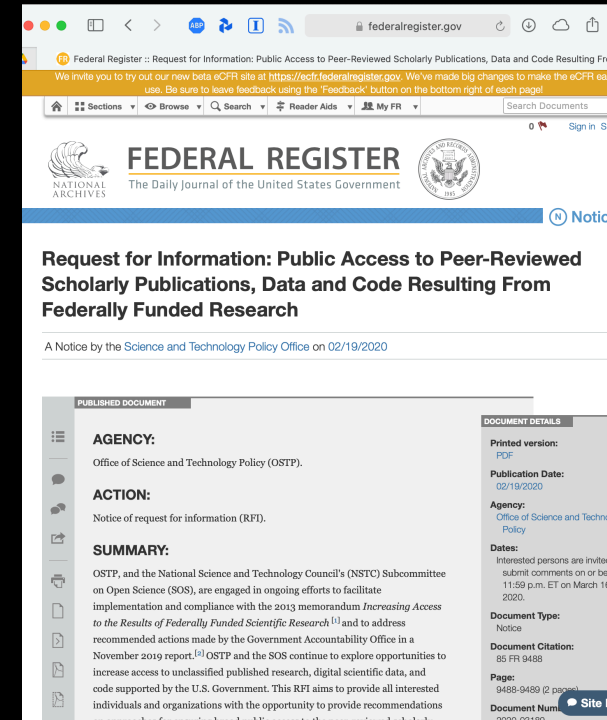


There is growing interest in building and supporting scholar-owned, scholar-led, mission-driven technology and infrastructure for open science. Our Libra repository is an example, as is the Center for Open Science and its Open Science Framework, based right here in Charlottesville.

Libra: <http://libra.virginia.edu>

Opportunities

- Growth in OA publications
- Better usage and value data
- COVID as test case/ proving ground
- Better tech/infrastructure for OA
- ***Federal buy-in***

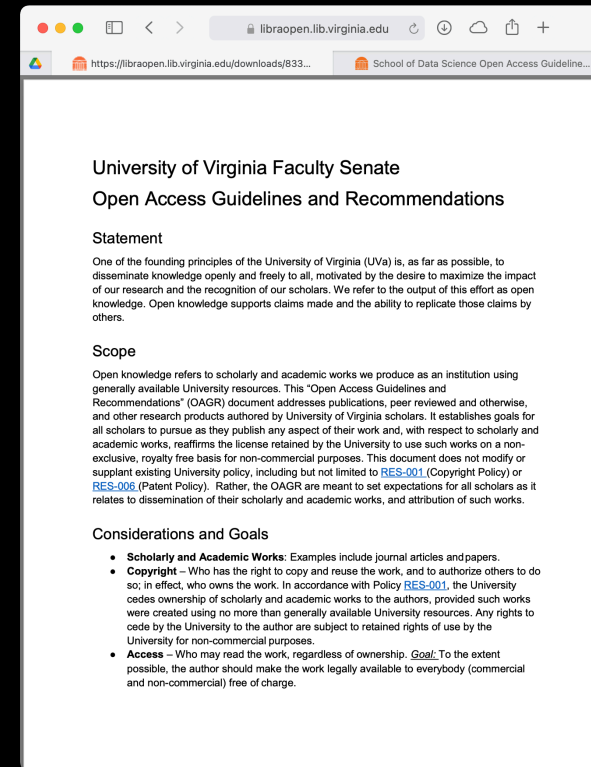


The Federal government has shown more and more interest in these issues, requiring open publishing of federally-funded research data and results. The success of the NIH open access policy has led to its expansion to other agencies by executive order, and exploring more aggressive measures like removing the 12-month embargo.

Federal Register Notice: <https://www.federalregister.gov/documents/2020/02/19/2020-03189/request-for-information-public-access-to-peer-reviewed-scholarly-publications-data-and-code>

Opportunities

- Growth in OA publications
- Better usage and value data
- COVID as test case/proving ground
- Better tech/infrastructure for OA
- Federal buy-in
- ***Local buy-in***



Finally, we have seen a significant increase in local interest in open science and open access at the policy level. The new School of Data Science includes “Openness” as a criterion for promotion and tenure, and created open access guidelines to help folks understand what “open” really means. Most recently, the Faculty Senate endorsed a lightly-modified version of the Data Science Guidelines as best practice for all faculty. Next steps could include something more robust - a true university policy for open access, with resources to support it, for example. We hope y’all will help us understand what opportunities and challenges you see in your own context, and we can think together about how the Library can help you, and vice versa, as we work toward a mission-driven scholarly publishing system.

SDS OA Guidelines: https://libraopen.lib.virginia.edu/public_view/sj139201n

Faculty Senate OA Guidelines: https://libraopen.lib.virginia.edu/public_view/c821gj89d

Let's talk

- What challenges and opportunities do you see for changing/reforming scholarly publishing...
 - In your own practices?
 - In your department?
 - In your school?
 - In your field?
 - At UVA?
- What excites you about making change? What concerns you?

So I've given kind of the global state of play from where we sit in the Library, but we'd love to hear the view from where y'all are. What opportunities and challenges do you see from your perspectives? What seems promising or exciting about reforming publishing? What seems frightening or worrying? What parts of the status quo most concern you? What parts are you anxious to preserve?