

The Future of Open Research: Policies, Platforms, and Priorities

October 22, 2020

Nick Shockey

Director of Programs & Engagement, SPARC

SPARC*

**What can global policies tell us
about the future of research?**



Agency for
Science, Technology
and Research

SINGAPORE



BRIEFING ROOM

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THE ADMINISTRATION

PARTICIPATE

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The White House

Office of the Press Secretary

For Immediate Release

June 21, 2016

IMPACT REPORT: 100 Examples of President Obama's Leadership in Science, Technology, and Innovation

13. **Opened up Federally funded scientific research.** The Administration has increased public access to the results of Federally funded scientific research, with more than 4 million full-text journal articles and growing volumes of scientific research data now free and accessible to the public via agency-designated repositories. [Read more](#) and [more](#).

Source: White House: <https://www.whitehouse.gov/the-press-office/2016/06/21/impact-report-100-examples-president-obamas-leadership-science>



FEDERAL REGISTER

The Daily Journal of the United States Government



 Notice

Request for Information: Public Access to Peer-Reviewed Scholarly Publications, Data and Code Resulting From Federally Funded Research

AGENCY:

Office of Science and Technology Policy (OSTP).

ACTION:

Notice of request for information (RFI).

DATES:

Interested persons are invited to submit comments on or before 11:59 p.m. ET on March 16, 2020.

SUMMARY:

OSTP, and the National Science and Technology Council's (NSTC) Subcommittee on Open Science (SOS), are engaged in ongoing efforts to facilitate implementation and compliance with the 2013 memorandum *Increasing Access to the Results of Federally Funded Scientific Research*^[1] and to address recommended actions made by the Government Accountability Office in a November 2019 report.^[2] OSTP and the SOS continue to explore opportunities to increase access to unclassified published research, digital scientific data, and code supported by the U.S. Government. This RFI aims to provide all interested individuals and organizations with the opportunity to provide recommendations on approaches for ensuring broad public access to the peer-reviewed scholarly publications, data, and code that result from federally funded scientific research.

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



“Taxpayers fund \$5 billion a year in cancer research every year, but once it’s published, nearly all of that taxpayer-funded research sits behind walls. Tell me how this is moving the process along more rapidly.”

- Former Vice President Joe Biden: April 21, 2016

Source: <https://medium.com/cancer-moonshot/here-s-what-the-vice-president-said-to-the-largest-convening-of-cancer-researchers-in-the-country-3007bb196dbd#.m1b0p3408>



Speech | 22 January 2020 | Davos

Keynote speech by President von der Leyen at the World Economic Forum



We are creating a European Open Science Cloud now. It is a trusted space for researchers to store their data and to access data from researchers from all other disciplines. We will create a pool of interlinked information, a 'web of research data'. Every researcher will be able to better use not only their own data, but also those of others. They will thus come to new insights, new findings and new solutions.

This is what we call the European Open Science Cloud and we are the first in the world to do that. It is being developed in Europe for Europe and for European researchers. The idea is that once we have the rules of the game ready, then we will open this up to the broader public sector and to business as well. So that companies can come in, store the data and use the data. And the idea is that it will also open up to international players.

Source: https://ec.europa.eu/commission/presscorner/detail/en/speech_20_102



Roadmap for Open Science to reduce barriers and speed up discovery

PRESS RELEASE PR Newswire

© Feb. 26, 2020, 06:45 PM

SHARE

Canada's Chief Science Advisor delivers recommendations to make Canadian science open and accessible

OTTAWA, Feb. 26, 2020 /CNW/ - Every day, Canadian researchers are coming up with new ideas with the potential to tackle some of the biggest challenges we face today. By freely sharing and collaborating on these innovations, we can ensure a dynamic and transparent research community. The Government of Canada can now bolster its efforts in making federal science open and accessible to all thanks to the Roadmap for Open Science -- a set of ten recommendations delivered by Canada's Chief Science Advisor, Dr. Mona Nemer.



ROADMAP FOR OPEN SCIENCE

FEBRUARY 2020



Office of the Chief
Science Advisor of Canada

Bureau du conseiller
scientifique en chef du Canada

Canada

SPARC*
sparcopen.org



**International
Science Council**

BLOG

**Open Access in China: Interview with Xiaolin Zhang of the
National Science Library**

**“We are expecting
to see an open
science
environment.”**

Source: <https://council.science/current/blog/open-access-in-china-interview-with-xiaolin-zhang-of-the-national-science-library>

Universities should end over-dependence on Science Citation Index: Guideline

For research in basic disciplines, evaluation should focus on the originality and scientific value of the research papers, not the number of SCI papers, the guideline said.

Application research and research in technological innovation should focus on the actual contribution of the research in real life, not the number of papers published, it said.

Universities and education authorities should improve peer-review in talent evaluation, not only focusing on SCI-related indexes, it said.

SCI-related indexes should not be used in school or discipline rankings, awarding professional titles, hiring teachers, evaluating a teacher's performance or resource allocation, the guideline said.

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Roundtable on Aligning Incentive for Open Science: First Meeting
Monday, February 25, 2019

National Academy of Sciences
Lecture Room
2101 Constitution Avenue NW
Washington, DC 20418

Meeting objectives: To achieve consensus on broad goals (e.g., an incentive structure for researchers that reflect institutional values and priorities, and that rewards rapid and broad dissemination of research), and a very high-level roadmap of how to achieve them.

India pushes bold ‘one nation, one subscription’ journal-access plan

Researchers will also recommend an open-access policy that promotes research being shared in online repositories.

Smriti Mallapaty

India is not proposing the same open-access terms for articles that its researchers publish. Instead, the researchers advising the government want authors to archive their accepted manuscripts in public online repositories. This is often described as ‘green’ open access, which differs from the ‘gold’ route of publishing in open-access journals.

But open-access advocates in India say Plan S doesn’t work for the nation because many open-access journals impose up-front article-processing charges (APCs). “Paying to publish is not good for countries like India, where resources for research are scarce,” says Madhan Muthu, a librarian at Azim Premji University in Bengaluru, who is part of the advisory group. Krishnaswamy VijayRaghavan, the principal scientific adviser to the government, has previously said that India will [not be joining Plan S](#).

Source:
<https://www.nature.com/articles/d41586-020-02708-4>

**Research is becoming open.
Is it becoming more equitable?**

OCTOBER 19-25

 OPEN ACCESS WEEK 2020

ABRIR CON PROPÓSITO

EMPRENDER ACCIONES PARA CONSTRUIR
EQUIDAD E INCLUSIÓN ESTRUCTURALES

उद्देश्यकासाथ खुला

समरचनागत समता र समावेशिता निर्माणको लागि कृत्यासिलता

OPEN WITH PURPOSE

TAKING ACTION TO BUILD STRUCTURAL EQUITY AND INCLUSION

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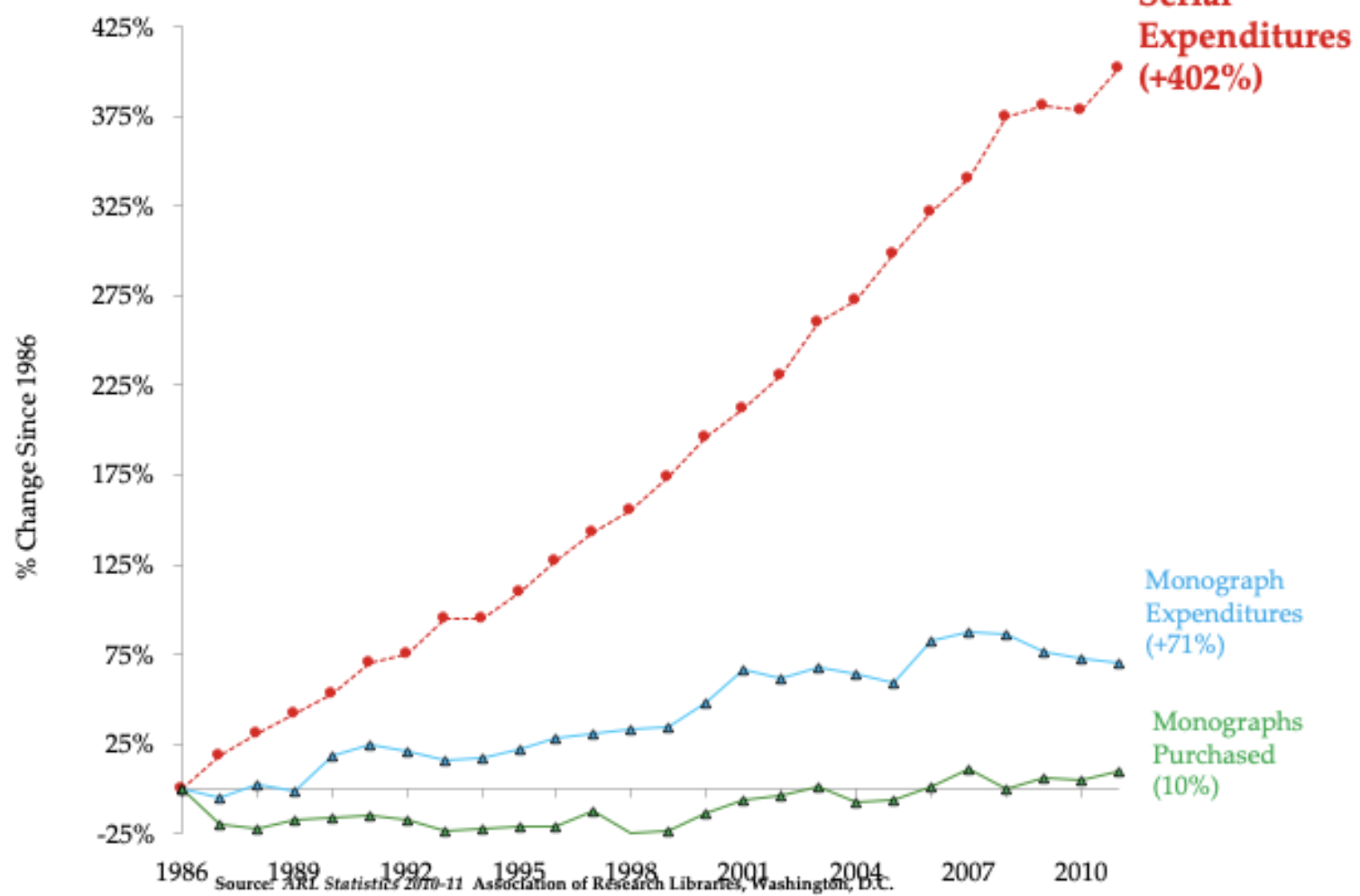
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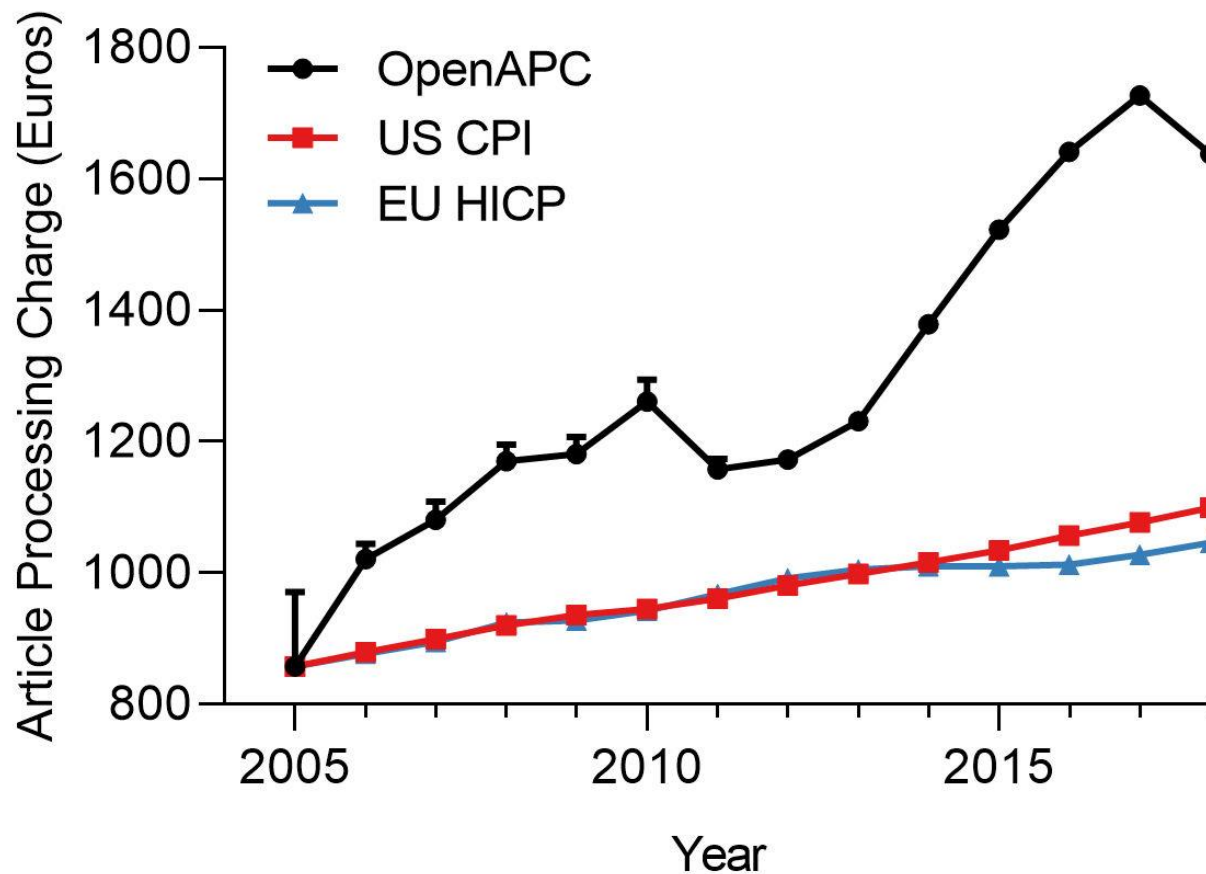
RENFORCER L'ÉQUITÉ ET L'INCLUSION DE MANIÈRE STRUCTURANTE

+521%¹

Graph 2
Monograph and Serial Costs
in ARL Libraries, 1986-2011*



Source: ARL Statistics 2010-11 Association of Research Libraries, Washington, D.C.
*Includes electronic resources from 1999-2000 onward.



Source: Khoo, S.Y.-S., 2019. Article Processing Charge Hyperinflation and Price Insensitivity: An Open Access Sequel to the Serials Crisis. *LIBER Quarterly*, 29(1), pp.1–18. DOI: <http://doi.org/10.18352/lq.10280>

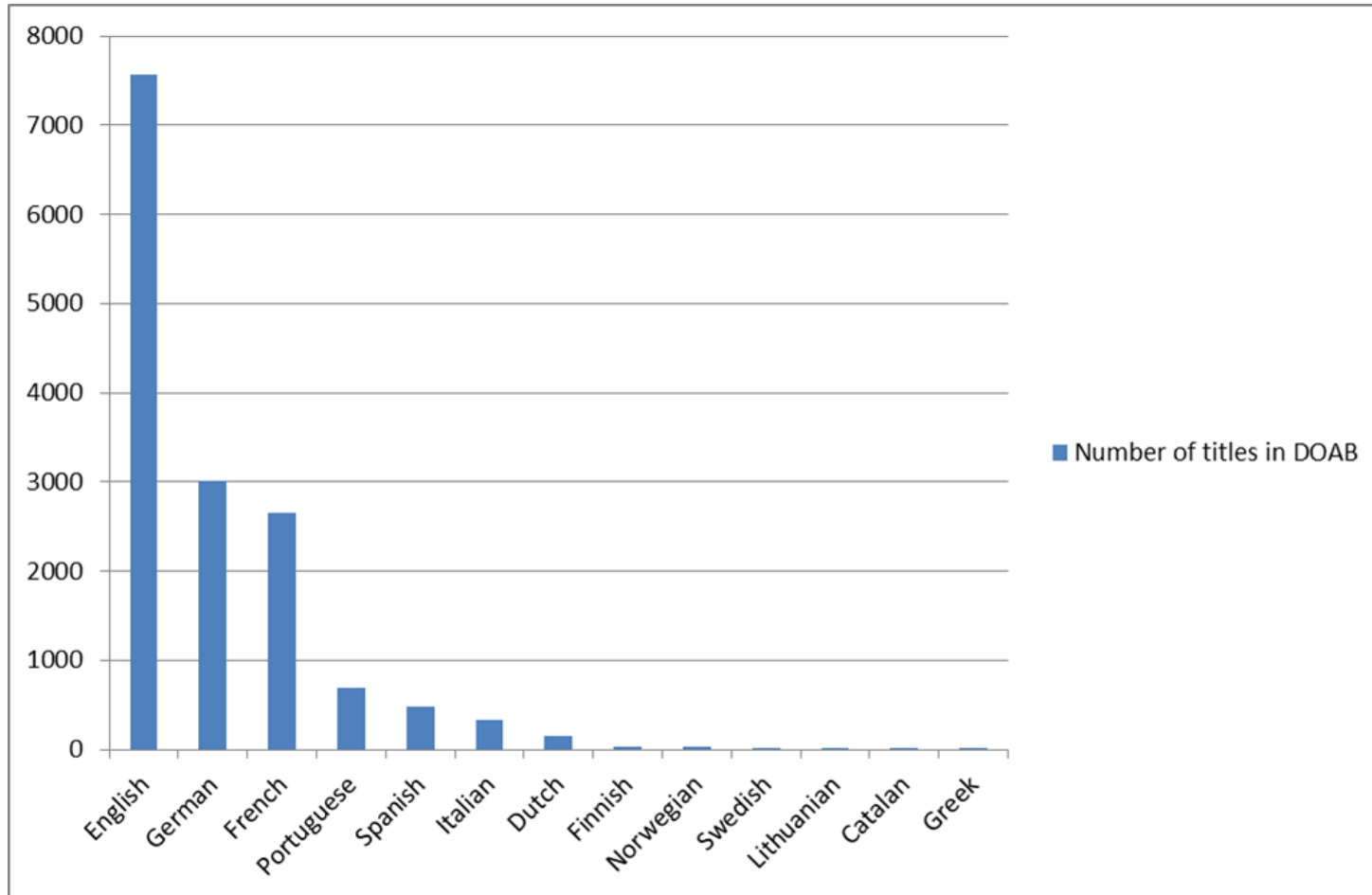
“In disciplines such as Environmental Biology, Marketing, and Geography, more than 50% of the Editorial Boards members are based in the US or UK.

Moreover, there is a perceived editorial bias against authors based in the Global South regarding the use of academic-level English and the selection of local research topics -they are considered exotic or too parochial-, among other examples.”

Bárbara Rivera López

“Journal Editorial Boards: Is There Space for Geographic Diversity?” for Open Access Week 2019

Publication Languages in the Directory of Open Access Books



Source: "Bibliodiversity – What it is and why it is essential to creating situated knowledge," LSE Impact Blog
<https://blogs.lse.ac.uk/impactofsocialsciences/2019/12/05/bibliodiversity-what-it-is-and-why-it-is-essential-to-creating-situated-knowledge/>

AI peer reviewers unleashed to ease publishing grind

A suite of automated tools is now available to assist with peer review but humans are still in the driver's seat.

Douglas Heaven

There are potential pitfalls to AI in peer review in general. One concern is that machine-learning tools trained on previously published papers could reinforce existing biases in peer review. “If you build a decision-making system based on the articles which your journal has accepted in the past, it will have in-built biases,” says Worlock.

And if an algorithm provides a single overall score after evaluating a paper, as StatReviewer does, there might be temptation for editors to cut corners and simply rely on that score in deciding to reject a paper, says DeVoss.

On whose terms is research becoming open?

Whose priorities do the current system reflect?

SPARC*

Landscape Analysis

The Changing Academic Publishing Industry –
Implications for Academic Institutions

March 28 2019

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SPARC*

A Roadmap for Action

Academic Community Control of Data Infrastructure

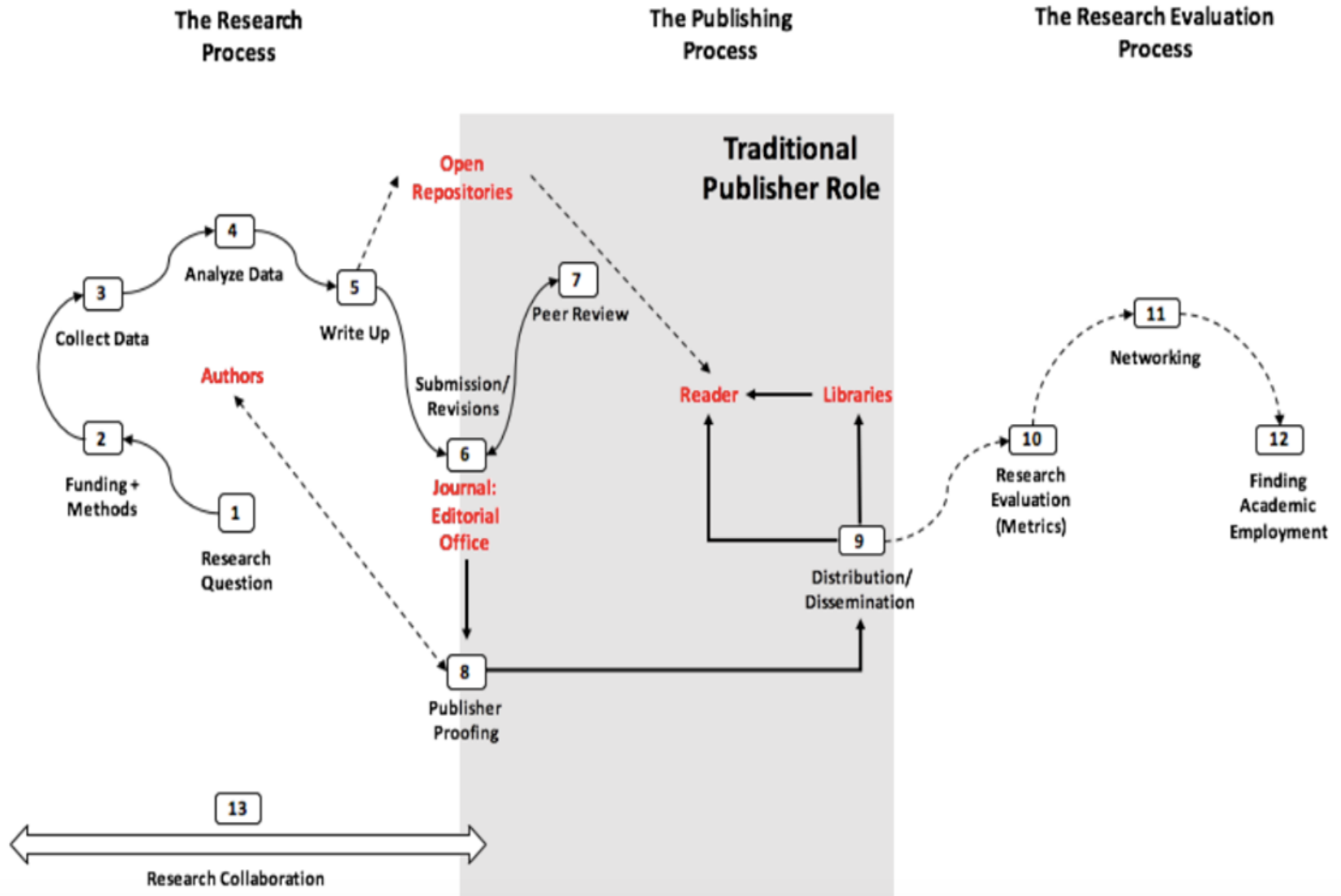
November 2019

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[Infrastructure.sparcopen.org](https://infrastructure.sparcopen.org)

The Academic Knowledge Production Process



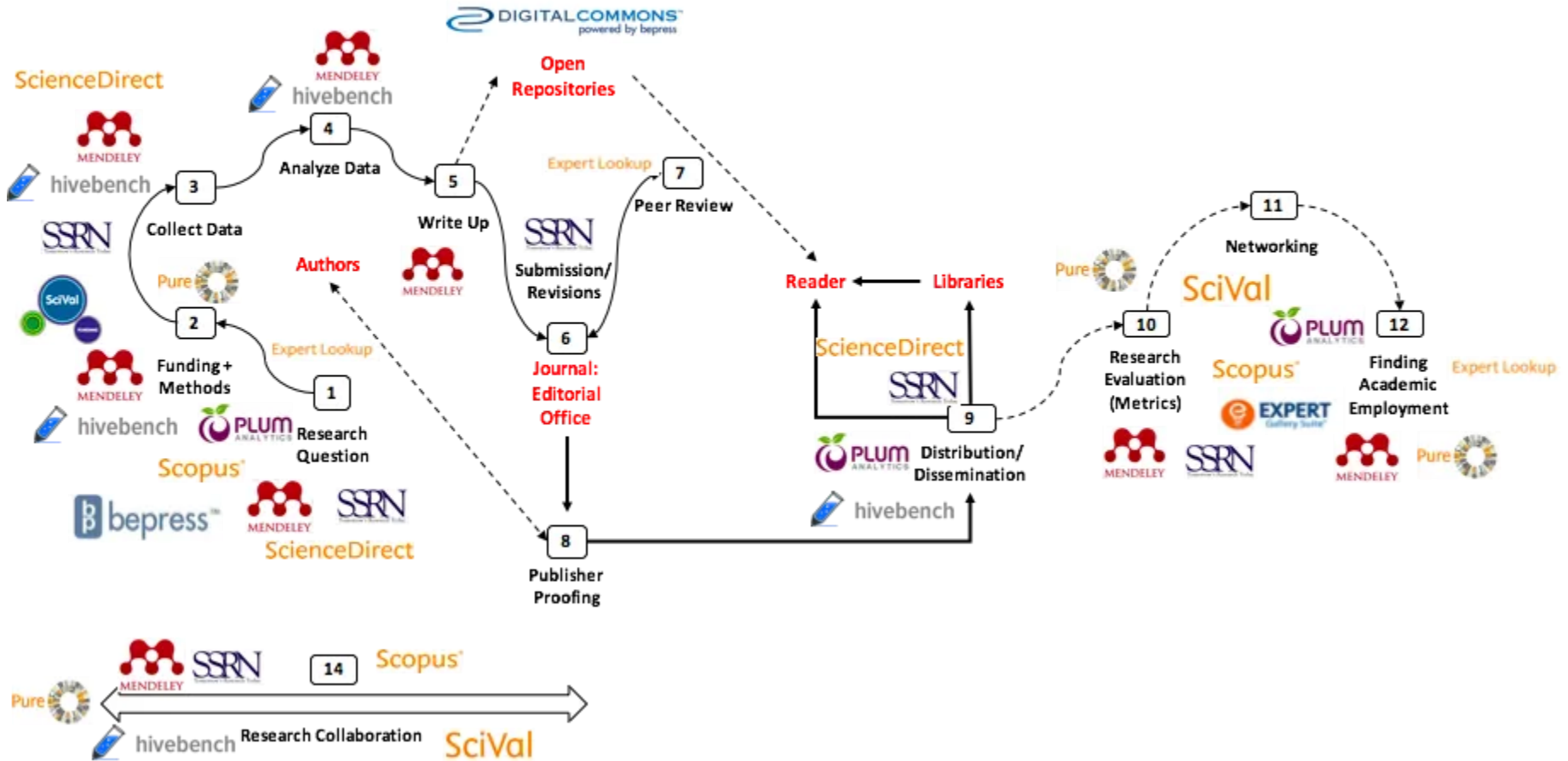
Source: Alejandro Posada, George Chen. Inequality in Knowledge Production: The Integration of Academic Infrastructure by Big Publishers. Leslie Chan; Pierre Mounier. ELPUB 2018, Jun 2018, Toronto, Canada. <10.4000/proceedings.elpub.2018.30> . <hal-01816707> er publishers strategies (Wiley and Taylor & Francis)

The Academic Knowledge Production Process

The Research Process

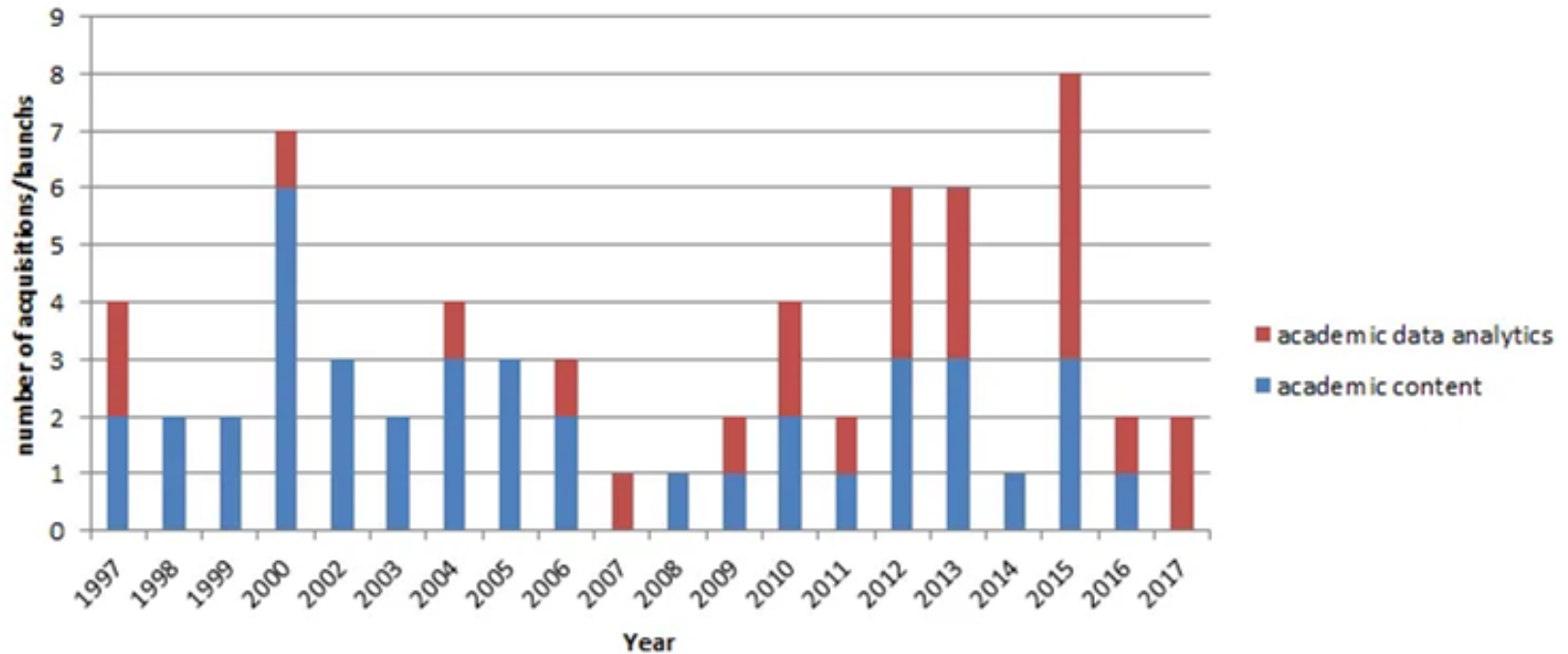
The Publishing Process

The Research Evaluation Process



Source: Alejandro Posada, George Chen. Inequality in Knowledge Production: The Integration of Academic Infrastructure by Big Publishers. Leslie Chan; Pierre Mounier. ELPUB 2018, Jun 2018, Toronto, Canada. <10.4000/proceedings.elpub.2018.30> . <hal-01816707> er publishers strategies (Wiley and Taylor & Francis)

RELX Mergers and Acquisitions



Source: Alejandro Posada, George Chen. Inequality in Knowledge Production: The Integration of Academic Infrastructure by Big Publishers. Leslie Chan; Pierre Mounier. ELPUB 2018, Jun 2018, Toronto, Canada. <10.4000/proceedings.elpub.2018.30> . <hal-01816707> er publishers strategies (Wiley and Taylor & Francis)



A Big Open-Access Deal for Germany

By [Lindsay McKenzie](#) // January 10, 2020

Publisher Springer Nature and Projekt DEAL -- a consortium of university and research libraries in Germany -- have signed a "transformative" open-access deal.

The so-called read-and-publish agreement will enable authors affiliated with more than 700 German institutions to make their work immediately accessible to the public for a fee of 2,750 euros (\$3,050) per article.

The agreement is expected to result in the publication of more than 13,000 open-access articles a year from authors in Germany. Springer described the deal as the "largest of its kind" in [a news release](#).

The complete text of the agreement, which will come into full effect in August this year, will be published on the Projekt DEAL website toward the end of January.

nature > news > article

NEWS · 20 OCTOBER 2020

Nature journals announce first open-access agreement

The arrangement will allow some researchers in Germany to publish openly – but critics say it comes with a high price.

Richard Van Noorden

In building new systems for research that are open by default, we have a unique opportunity to finally put equity at the core.

**But to do so,
we must be intentional.**

**We need open,
community-owned,
community-governed
infrastructure.**

Being Earnest with Collections — Voting with our Dollars: Making a New Home for the Collections Budget in the MIT Libraries

by **Ellen Finnie** (Head, Scholarly Communications and Collections Strategy, MIT Libraries) <efinnie@mit.edu>

Source:

<https://dspace.mit.edu/bitstream/handle/1721.1/105123/ATG%20on%20SCCS%20final%20proofs%20%20sept%202016%20for%20deposit.pdf?sequence=1>

MIT News

ON CAMPUS AND AROUND THE WORLD

MIT, guided by open access principles, ends Elsevier negotiations

Institute ends negotiations for a new journals contract in the absence of a proposal aligning with the MIT Framework for Publisher Contracts.

MIT Libraries

June 11, 2020



Source: <https://news.mit.edu/2020/guided-by-open-access-principles-mit-ends-elsevier-negotiations-0611>

Non-Negotiable: Mapping the Standards-Driven License Agreement

A library's values are not only located in public facing organizational statements. Values are animated in the rights, responsibilities, and privileges codified in license agreements.

By aligning contracts with our standards, the library makes a powerful move toward better vendor relationships, more equitable teaching and learning, and drives institutional innovation.

Scarlet Galvan | Collection Strategist
Grand Valley State University Libraries
June, 2020



Source: Scarlet Galvan, "Mapping the Standards-Driven License Agreement"
<https://asgalvan.com/2020/04/13/draft-mapping-the-values-driven-license-agreement/>

POPULAR RESOURCES

Big Deal Cancellation Tracking

Open Access

BIG DEAL TRACKER

CONTRACTS LIBRARY

FURTHER GUIDANCE

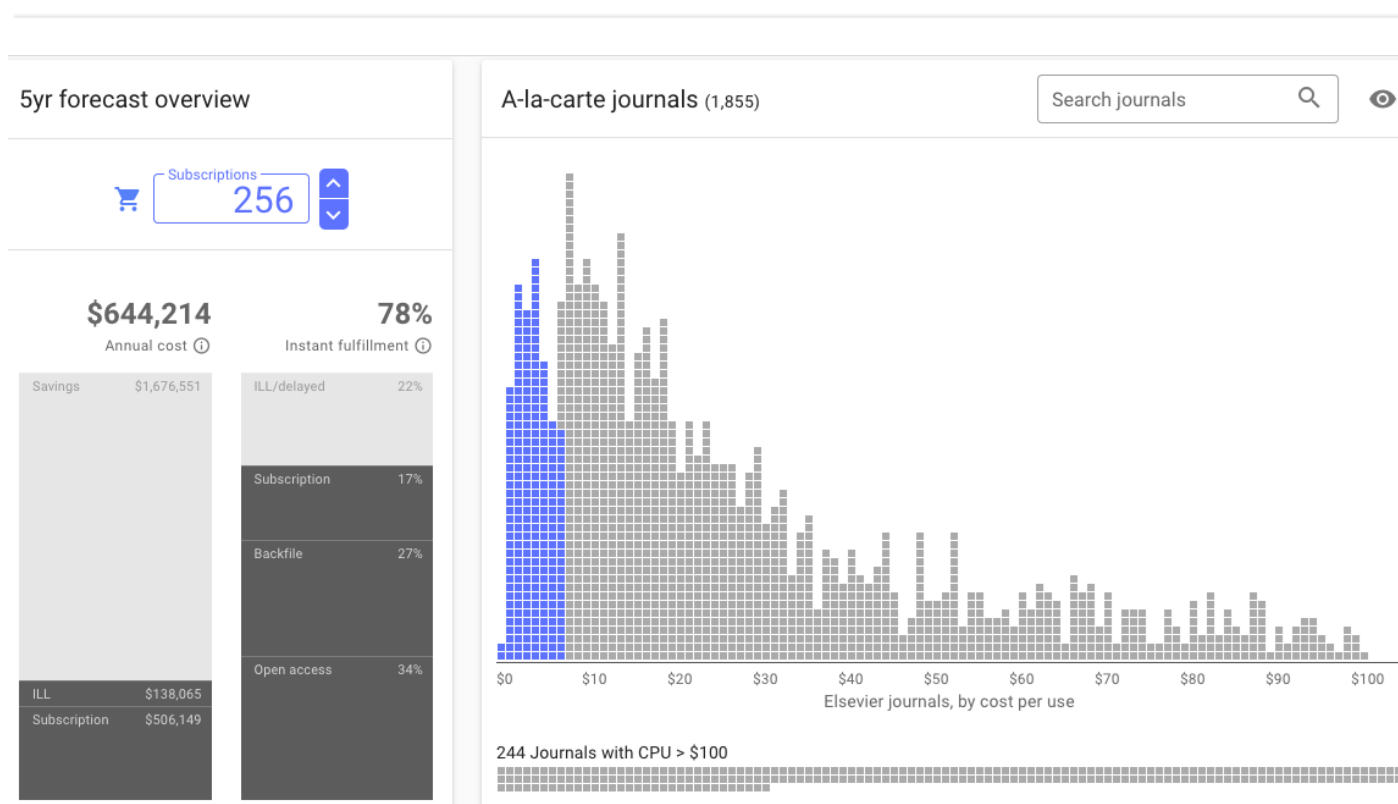
CANCELLATION TRACKING

Institution	Year	Publisher(s)
Illinois Institute of Technology	2020	Elsevier
Iowa State University	2020	Elsevier
Massachusetts Institute of Technology (MIT)	2020	Elsevier
SUNY (State University of New York System)	2020	Elsevier
University of Idaho	2020	Elsevier
University of North Carolina Chapel Hill	2020	Elsevier
Florida State University	2019	Elsevier
Louisiana State University	2019	Elsevier

Institution	Year	Publisher(s)
Northeastern Illinois University	2019	SAGE, Wiley
Temple University	2019	Elsevier
University of California System	2019	Elsevier
University of Oklahoma-Norman	2019	Springer
University of Oregon	2019	Springer Nature (including Palgrave), Wiley
Wayne State University	2019	Elsevier
West Virginia University	2019	Elsevier, Springer

This tool is saving universities millions of dollars in journal subscriptions

By Dalmeet Singh Chawla | Jul. 9, 2020 , 2:55 PM



The logo for unpaywall, featuring a white padlock icon inside a white circle on a green background, followed by the text "unpaywall" in white lowercase letters.

unpaywall

The logo for InstantILL, featuring the text "InstantILL" in white uppercase letters on a green background.

InstantILL

« Back to News • Print This



Language of Protest

The six editors and 31 editorial board members of *Lingua*, a top linguistics journal, have all resigned to protest Elsevier pricing. They plan a new open-access journal.

November 2, 2015

By **Scott Jaschik**

All six editors and all 31 editorial board members of *Lingua*, one of the top journals in linguistics, last week resigned to protest Elsevier's policies on pricing and its refusal to convert the journal to an open-access publication that would be free online. As soon as January, when the departing editors' noncompete contracts expire, they plan to start a new open-access journal to be called *Glossa*.





Duke University Press
@DukePress

It's the first day of #OAWeek! We are thrilled to flip Demography, the flagship journal of @PopAssocAmerica, to #OpenAccess in 2021. Learn more about how your library or institution can support: ow.ly/v05x50BWjkE

DEMOGRAPHY

Vol. 57 • No. 4 • August 2020

A publication of
The Population
Association of America

Source:
<https://twitter.com/DukePress/status/1318255609259741184>

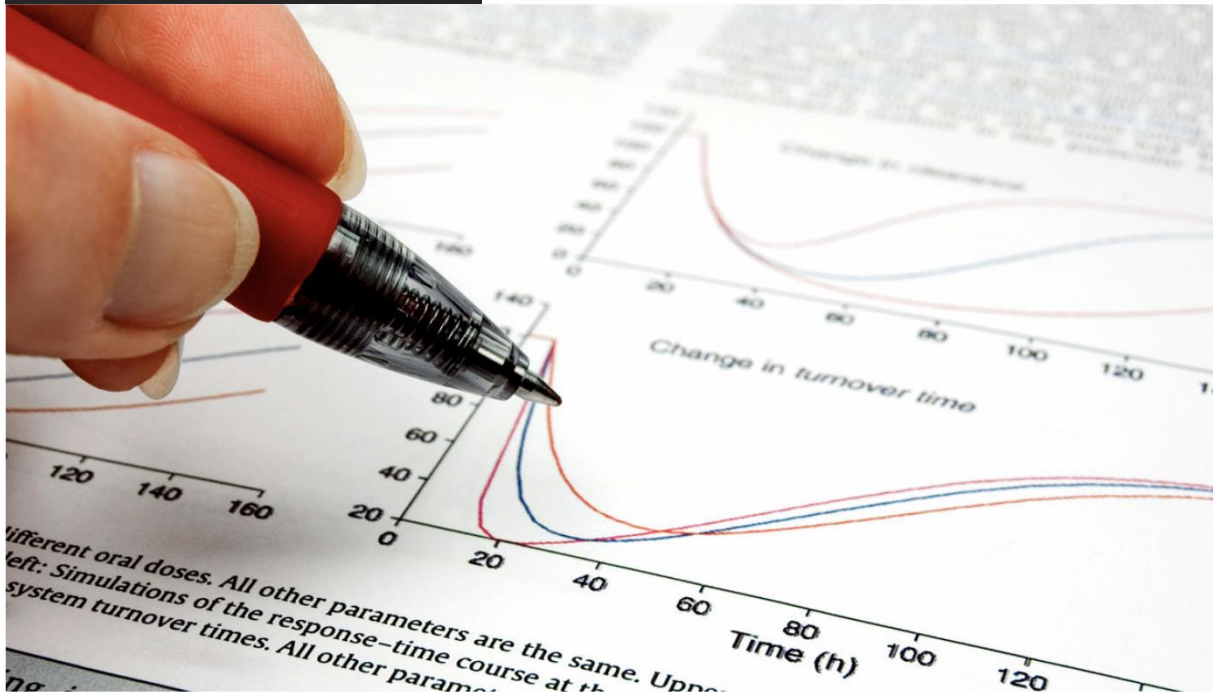


Open Library of Humanities aims to 'flip' journals to open access

New publishing model aims to make research accessible to all without charging authors

December 3, 2015

Science



PLOS will offer institutions a sliding scale of fees to publish in its selective journals, based on their past publishing volume. SPINKA/ISTOCK

New PLOS pricing test could signal end of scientists paying to publish free papers

By Jeffrey Brainard | Oct. 15, 2020, 2:55 PM

Source:
<https://www.sciencemag.org/news/2020/10/new-plos-pricing-test-could-signal-end-scientists-paying-publish-free-papers>



Carla Hayden ✓

@LibnOfCongress

Following

It is an amazing honor to be here today at the United Nations to speak with UN officials and librarians from around the globe.

#OpenConUN #OAWEEK @UNLibrary
@SPARC_NA



4:25 PM - 23 Oct 2018



“Equity of access
is a human right
in the digital age.”



UNITED NATIONS

Roundtable Discussion on a Global Science Commons

Outcome Document

United Nations Headquarters, Monday, 18 November 2019

The participants reached a consensus on the following views

- I. Open Science is an accelerator of the Sustainable Development Goals (SDGs).
- II. Publicly funded science should be Open Science.
- III. We are not on track to achieve the SDGs. We must work collaboratively toward the goals of humanity laid out in the SDGs.
- IV. The importance of Open Access (OA) is key takeaway from the 2019 Global Sustainable Development Report.
- V. Open Science must be inclusive. Important relevant research is not the same as popular highly-cited research.
- VI. Incentives for research should be aligned with openness in service of the SDGs and for the good of humanity.
- VII. Open Science requires the opening of barriers to a set of inter-related scientific research processes. Libraries are natural information/data brokers and curators in the Open Science suite of processes, and their role is essential.



China

Will the coronavirus kill off the ‘dinosaur’ world of academic publishing?

- The deadly pandemic has brought back a long-running debate about companies profiting from the publication of research often freely supplied by the author
- As the biggest names in the business respond to academics' demands to bring down paywalls, new platforms are getting fresh studies out to the public

Topic | Coronavirus pandemic



Linda Lew

Published: 11:00pm, 16 Mar, 2020

Why you can trust SCMP

Source:
<https://www.scmp.com/news/china/article/3075431/will-coronavirus-kill-dinosaur-world-academic-publishing>

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