

The role of publishers in access to research data

Iratxe Puebla

Deputy Editor, *PLOS ONE*

[Data, data] every where..

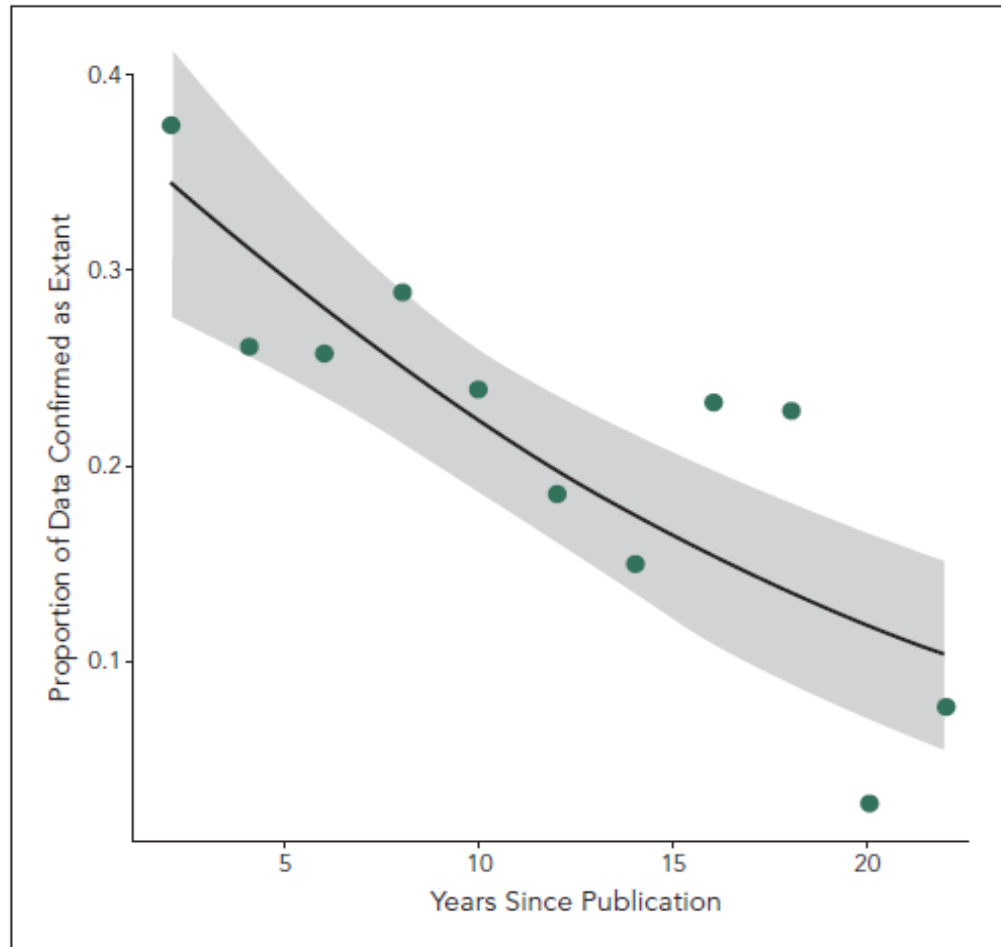
Nor any drop to drink

- Samuel Taylor Coleridge



Availability of research data – a situation that worsens over time

Figure 5. Proportion of Papers With Data Available, 1991-2011



From: How Does the Availability of Research Data Change With Time Since Publication? Timothy H. Vines and colleagues, Abstract (podium), Peer Review Congress, 2013



Data access might feel more like this

So what is the role of publishers?

- Publisher can facilitate *implementation & enforcement* of efforts towards access to research data
- Policies for data access and archiving vary among publishers



Role of Publishers - Community Recommendations

1. Establish and enforce a mandatory data availability policy.
2. Contribute to establishing community standards for data management → Enact and enforce as journal policies.
3. Contribute to establishing community standards for data preservation → Enact and enforce as journal policies.
4. Provide formal channels to share data.

[10.1371/journal.pbio.1001975](https://doi.org/10.1371/journal.pbio.1001975)

Meeting hosted by PLOS & CDL (IDCC 2014)

“What can publishers do to promote the work of libraries and institutions in advancing data access and availability?”

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Perspective

Recommendations for the Role of Publishers in Access to Data

Jennifer Lin^{1*}, Carly Strasser²

¹ PLOS, San Francisco, California, United States of America, ² California Digital Library, University of California, Oakland, California, United States of America

Abstract: As appeals for public access of research data continue to proliferate, many scholarly publishers—alongside funders, institutions, and libraries—are expanding their role to address this need. Here we outline eight recommendations and a set of suggested action items for publishers to promote and contribute to increasing access to

13-1257_en.htm) that will require data sharing of grantees.

These new policies have significant repercussions: stakeholders such as institutions and funders will need to provide researchers with the means to preserve and provide access to their research outputs. At the same time, librarians, information technologists, preservation

present only in the capacity of hosts and facilitators).

The outcomes of this summit were then submitted to the community for comment. The public solicitation for input was detailed in two blog posts by PLOS (<http://blogs.plos.org/tech/feedback-wanted-publishers-data-access/>) and the California Digital Library (CDL) (<http://datapub.cdlib.org/2014/03/04/feedback-wanted-publishers-and-data-access/>).

Role of Publishers - Community Recommendations

5. Work with repositories to streamline data submission.
6. Require appropriate citation to all data associated with a publication - both produced and used.
7. Develop and report indicators that will support data as a first-class scholarly output.
8. Incentivize data sharing by promoting the value of data sharing.

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PLOS Data policy

- Development of new Data Access policy > 1 year
- Consultation with key stakeholders

PLOS Policy Effective March 1, 2014:

- All data underlying the findings must be deposited in field-standard repository upon submission.
- Must be available without restriction, with rare exception.
Ethical or legal restrictions
- Data Availability Statement is published with accepted article

- ▶ Abstract
 - Introduction
 - Materials and Methods
 - Results
 - Discussion
 - Conclusions
 - Supporting Information
 - Acknowledgments
 - Author Contributions
 - References
-
- Reader Comments (0)
 - Figures

Citation: Fernández R, Kvist S, Lenihan J, Giribet G, Ziegler A (2014) *Sine Systemate Chaos? A Versatile Tool for Earthworm Taxonomy: Non-Destructive Imaging of Freshly Fixed and Museum Specimens Using Micro-Computed Tomography*. PLoS ONE 9(5): e96617. doi:10.1371/journal.pone.0096617

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Competing interests: The authors have declared that no competing interests exist.

Data Availability: The authors confirm that all data underlying the findings are freely available without restriction. Specimen data may be accessed through the Museum of Comparative Zoology at Harvard University's MCZbase (<http://mczbase.mcz.harvard.edu/>) under the sample IDs <http://mczbase.mcz.harvard.edu/guid/MCZ:IZ:24804>, <http://mczbase.mcz.harvard.edu/guid/MCZ:IZ:24805>, <http://mczbase.mcz.harvard.edu/guid/MCZ:IZ:95557>, <http://mczbase.mcz.harvard.edu/guid/MCZ:IZ:95901>. MicroCT scans are available through GigaScience's GigaDB (<http://gigadb.org/site/index>) at <http://dx.doi.org/10.5524/100092>.

systems through
space and time

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 **Archived Tweets**



17h

Diana Winslow MSW
@Cultiv8Hope
RT @OGdukeneurosurg:
#Earthworms taking #selfies
in #ct #scanner
<http://t.co/yU7g6xrRCt>
<http://t.co/cbwTxpsyZe>



17 May

Nick Waterfield
@Nick_Waterfield

PLOS Data Access Policy Update

*No barriers to enter.
All welcome.*



All data underlying the published results should be *fully available without restriction with rare exception* and described in the article publication.

Aims of Update

- Establish **clarity** with respect to authors' obligations
- Highlight author's responsibility to **determine and describe a data sharing plan, to be published with the article**
- Enhanced **enforcement** mechanism
- Ensure **transparency**, so that compliance with the policy is externally visible to readers (and to editors and referees during peer review)
- Ensure policy is **workable across scientific fields**, and take account of special considerations (in relation to privacy of human subjects, and other issues)
- **Not change WHAT data need to be shared** – rather, focus on **WHERE** the dataset is housed, **WHEN** it is shared, and **HOW** authors provide access

Challenges

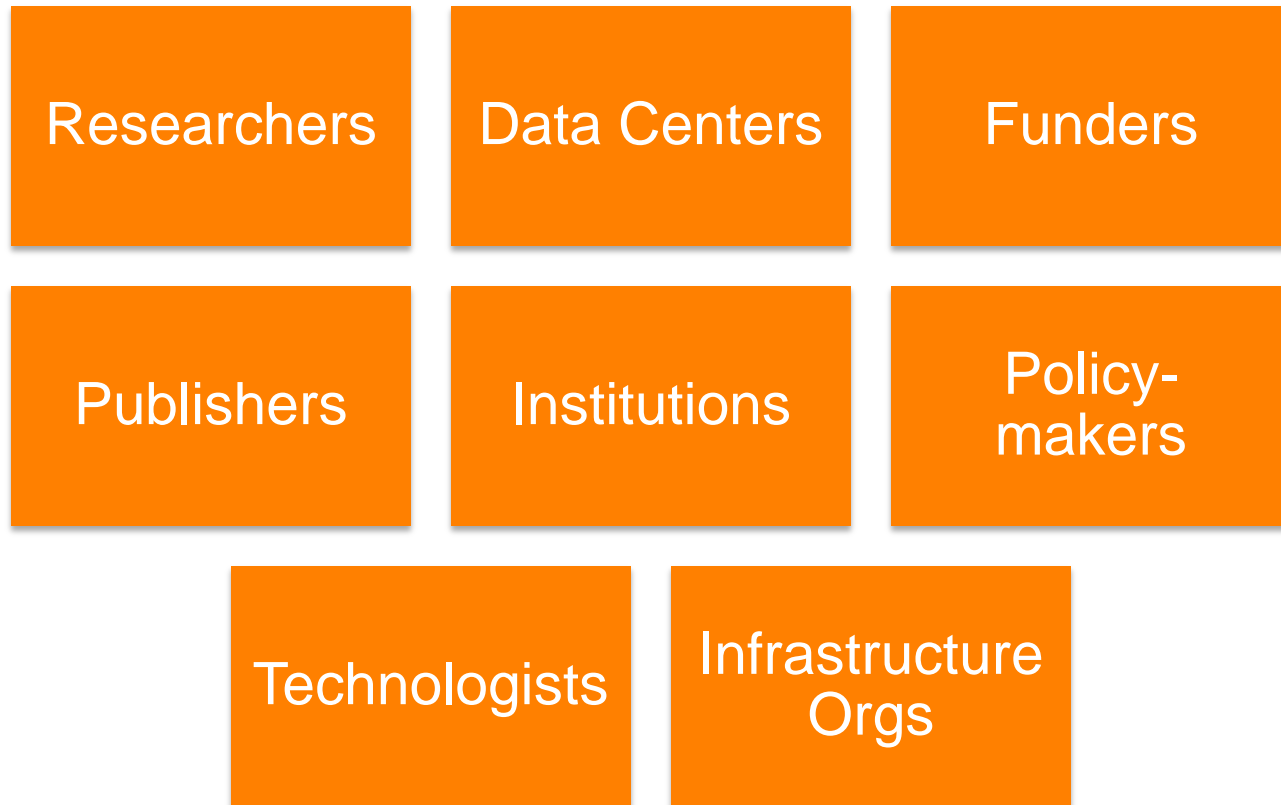


- Logistical challenges – e.g. very large datasets
- Ethical/legal challenges – e.g. not all institutions have Data Access Committees
- What does ‘underlying data’ mean?
- How to make it easier for authors to share data: data formats, repositories
- Incentives for data sharing - credit

Currently monitoring compliance

Work in progress

Community engagement and coordination continues



Data Repository Integration Partner Program

Repository program to integrate data deposition and article submission to better support data sharing and author compliance of the PLOS data policy

Launched with 1st partner: Dryad



Actively soliciting additional partner repositories

Contact: data@plos.org

Make Data Count

PLOS, California Digital Libraries, DataONE

- 1 year NSF funded project:
<http://articlemetrics.github.io/MDC/>
- Sharing data is time consuming and researchers need incentives for undertaking the extra work.
- We will design and develop metrics that track and measure data use, i.e. “data-level metrics” (DLMs). Metrics on the reach and use of data will help encourage researchers to share their data.

Thank you!

Please join us:

data@plos.org