



These are **five** things:  
How publishers can  
support research data  
publishing

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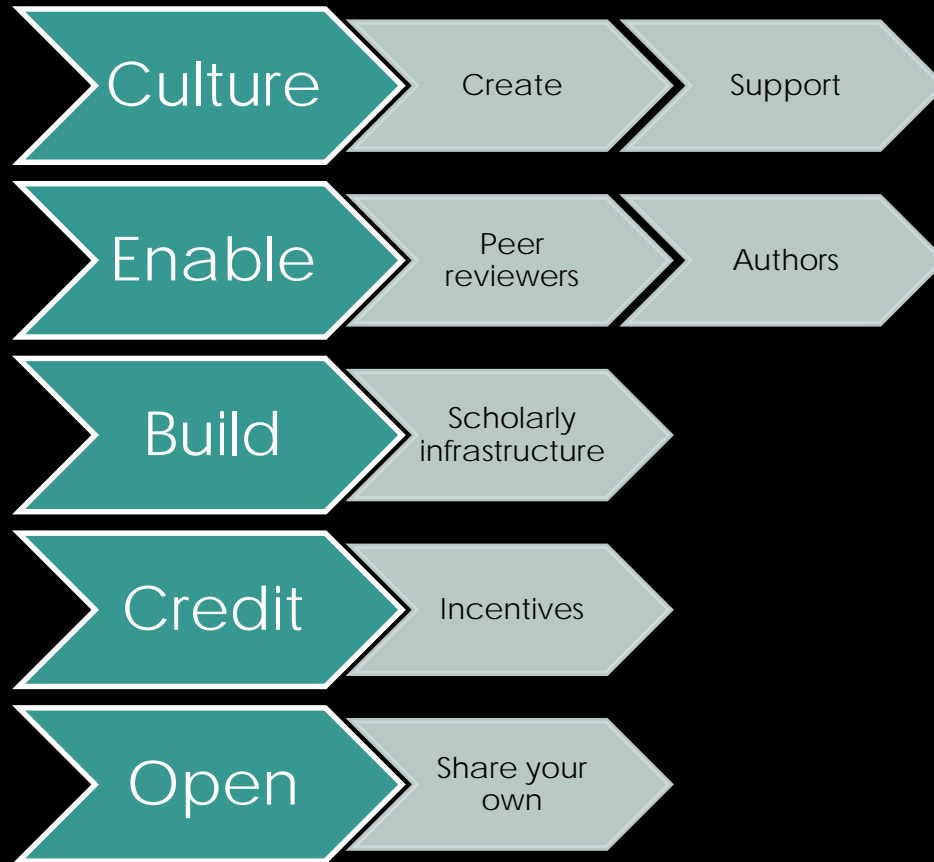
2019 RDM Conference, NYC



# Reality for researchers...

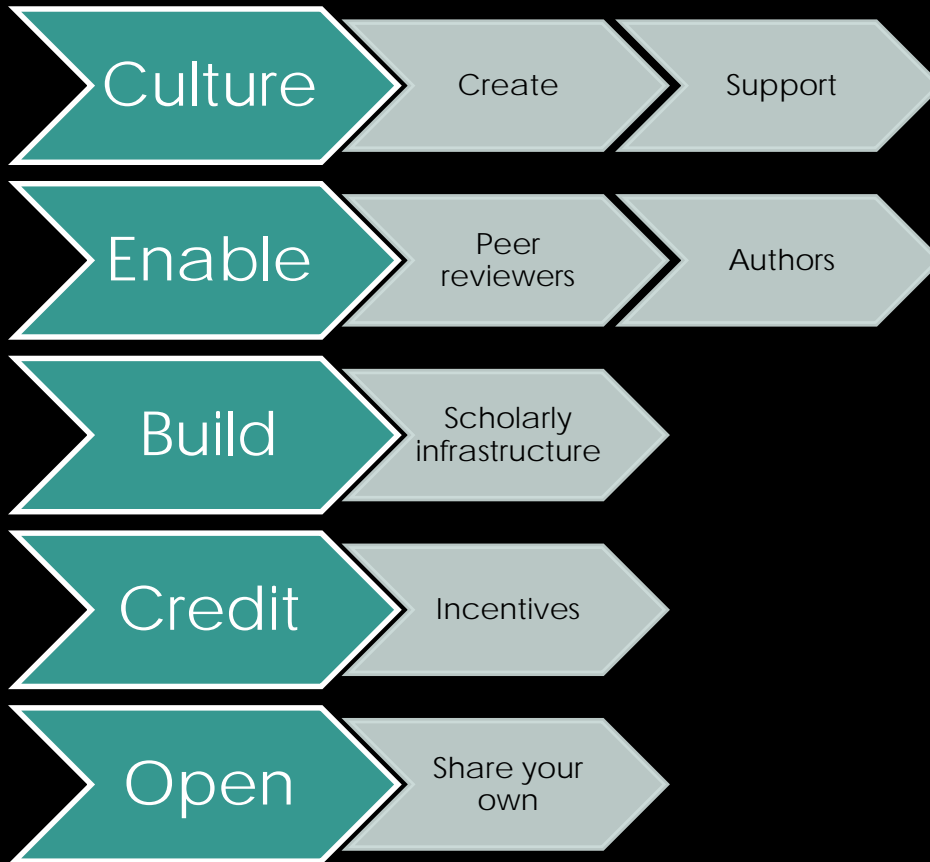
- "Misuse" / misunderstanding
- Copyright Licensing ??
- Where or how to share?
- No time/money/incentive
- Funder requirements?

# What can publishers do?



Adapted from Hrynaszkiewicz, PLOS Open Publisher paper: **Publishers' responsibilities in promoting data quality and reproducibility**. In: Good Research Practice in Experimental Pharmacology. Volume editors: Bespalov A, Michel MC, Steckler T 2019 *In press*

# What can publishers do?



[Acceptable Data-Sharing Methods](#)

[Unacceptable Data Access Restrictions](#)

[Explanatory Notes and Guidance](#)

[Recommended Repositories](#)

[Repository Inclusion Criteria](#)

[FAQs for Data Policy](#)

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[Give Feedback](#)

## Data Availability

**The following policy applies to a**

PLOS journals require authors to make data available without restriction at the time of publication. We provide information to indicate how researchers may obtain a

When submitting a manuscript, authors must indicate if their article is accepted for publication, the c

Refusal to share data and related metadata is not acceptable. Editors encourage researchers to contact their editors or journals. If restrictions on access to data are imposed by authors' institutions and funders, or in



# Create and support cultural change: *aka...mandates*

*Researchers consistently say that publisher policies drive their data sharing practices.*



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Since 2014-2016

- Numerous publishers have launched mandates
- *SpringerNature, Taylor & Francis, Wiley, Elsevier, BMJ, Sage, Hindawi*
- Tiered approach



# Create and support cultural change: *aka...mandates*

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Since 2014-2016

- Numerous publishers have launched mandates
- *SpringerNature, Taylor & Francis, Wiley, Elsevier, BMJ, Sage, Hindawi*
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PLOS policy launched in 2014

- All authors must make data underlying research findings
- Fully available
  - Without restriction
  - At time of publication



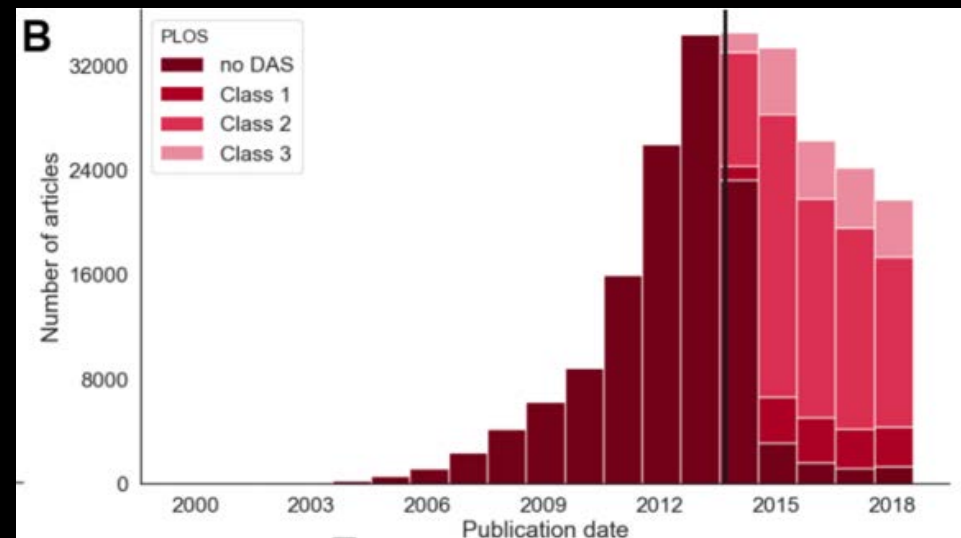
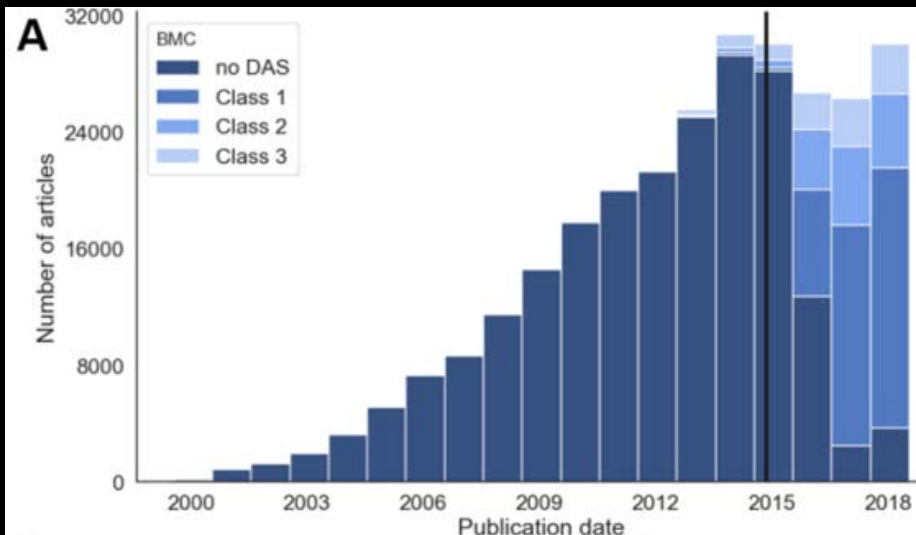
Create and support cultural change...  
*Getting beyond "encourages"*





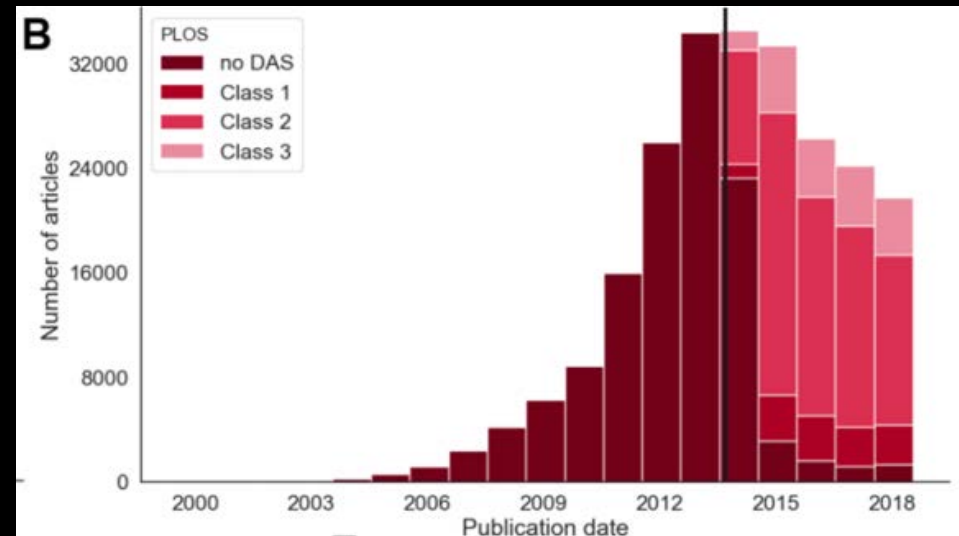
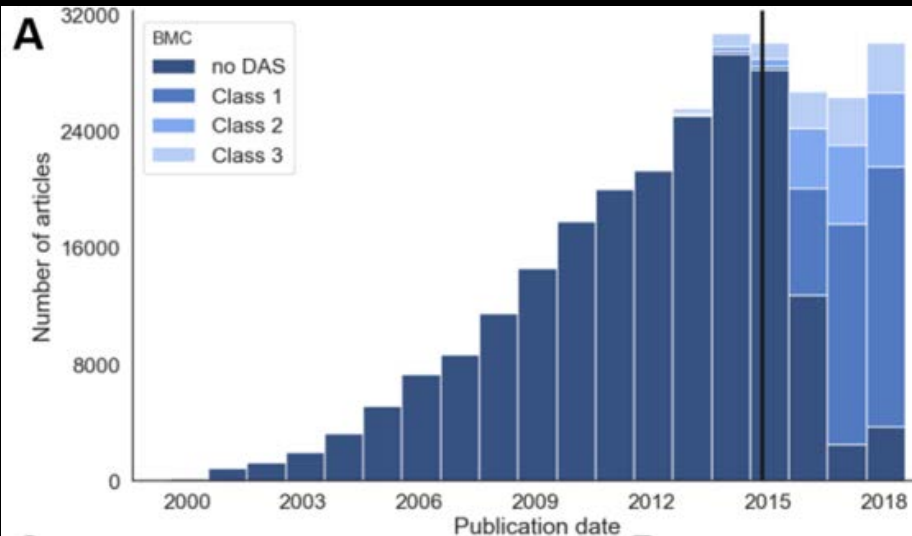
# Create and support cultural change...

*It works*



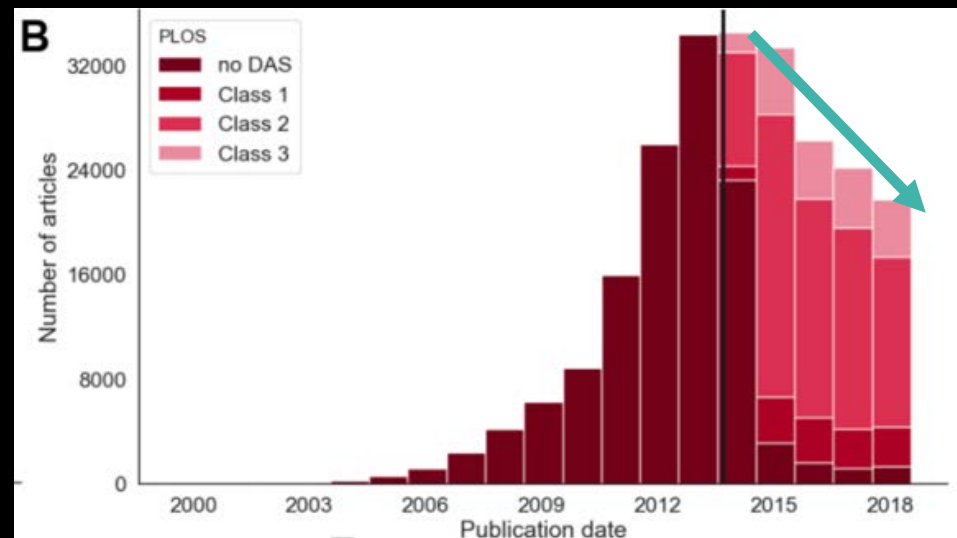
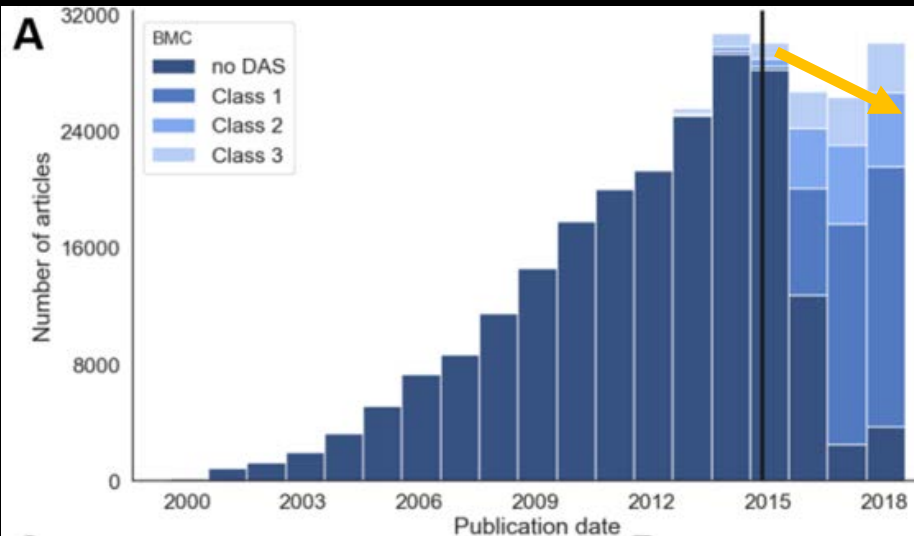
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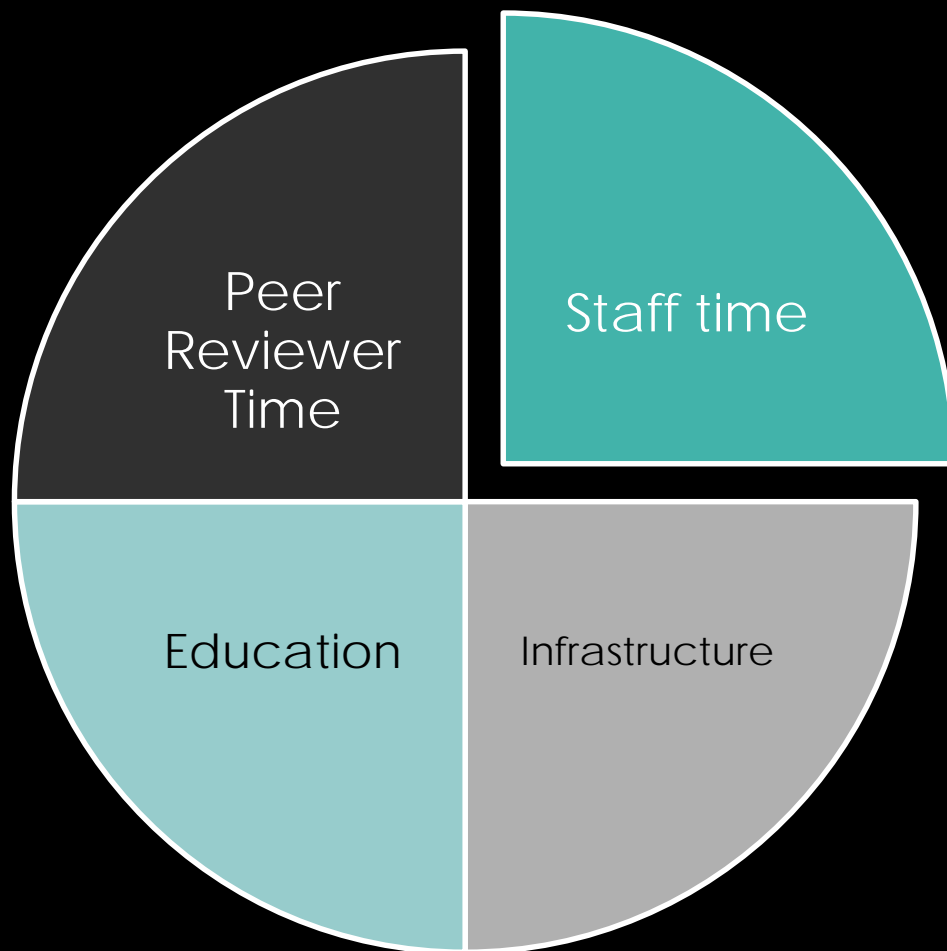


# Create and support cultural change...

*It works*

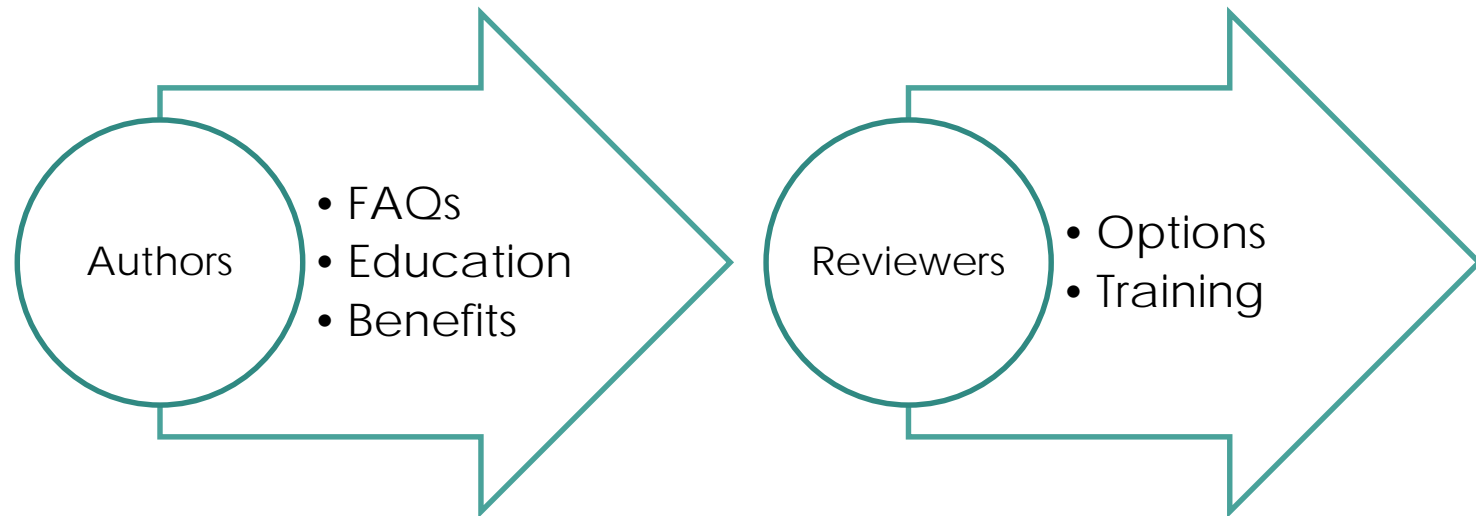


Create and support cultural change...  
*Requires investment*





# Enable peer-reviewer engagement with data



# Enable peer-reviewer engagement with data

Reviewers

- Options
- Training



## Peer Reviewing Data

### A Reviewer's Quick Guide to Assessing Open Datasets

There is a growing appreciation of the importance of data storage, maintenance and sharing among the scientific research community. Increasingly, government bodies, funding agencies, and journals are making data retention and availability part of their requirements for grants and publications—and reviewers are often

asked to evaluate author-supplied datasets as part of peer review. Peer reviewing data can sound like a big commitment, but doesn't have to be time consuming or difficult. When invited to review a manuscript with an associated dataset, perform these five quick checks to surface any potential issues.

#### 1 Is the data accessible?

Is the data underlying the manuscript you are reviewing available at the url listed, or other location described? In cases where there are restrictions on sharing the data, have the authors clearly explained the reasons why?

#### 2 Can you tell what you're looking at?

Have the authors used a logical naming convention? Are the files accompanied by a clear description of the content and format?

#### 3 Does the data you see match the data referenced in the manuscript?

Does the data relate to the study currently under review? Is each data set mentioned in the manuscript included?

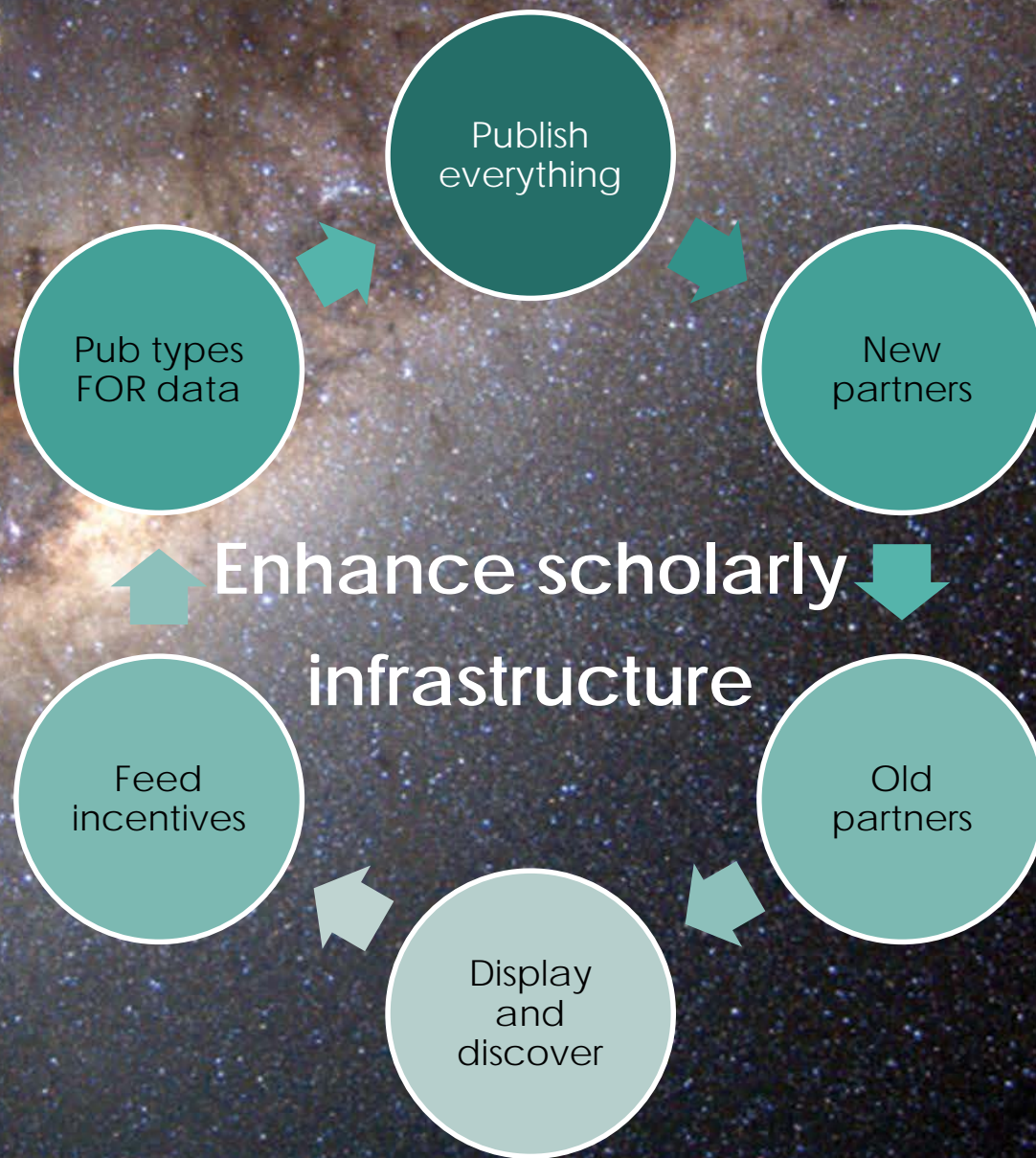
#### 4 Does the presentation of the data make sense?

Is the format, file type, and arrangement of the data clear, and appropriate for the type of study and the research that was conducted?

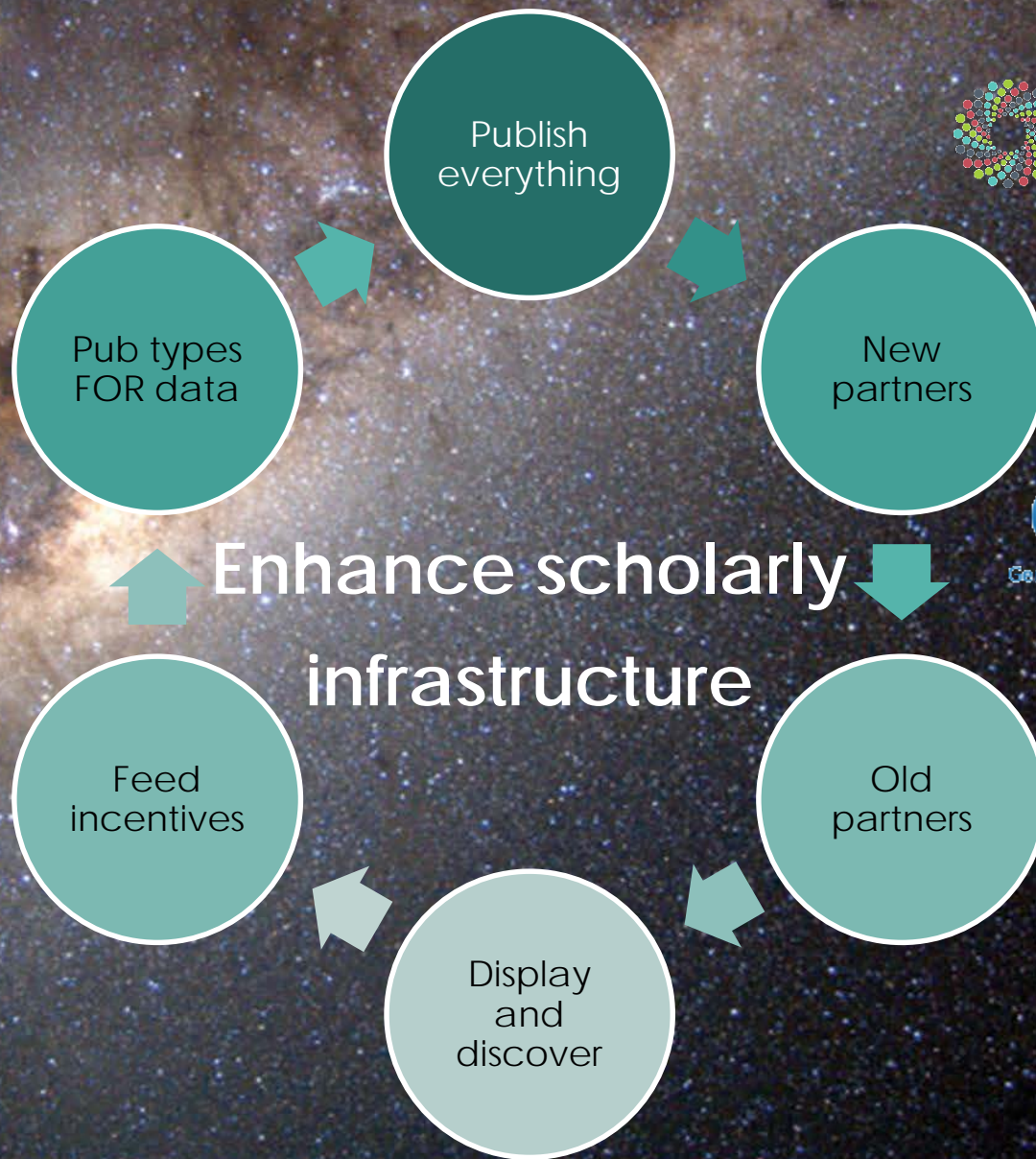
#### 5 Does the data itself make sense?

Are the values reported physically possible and plausible? Do results fall within the appropriate range for the phenomenon described? Are the data points internally consistent?

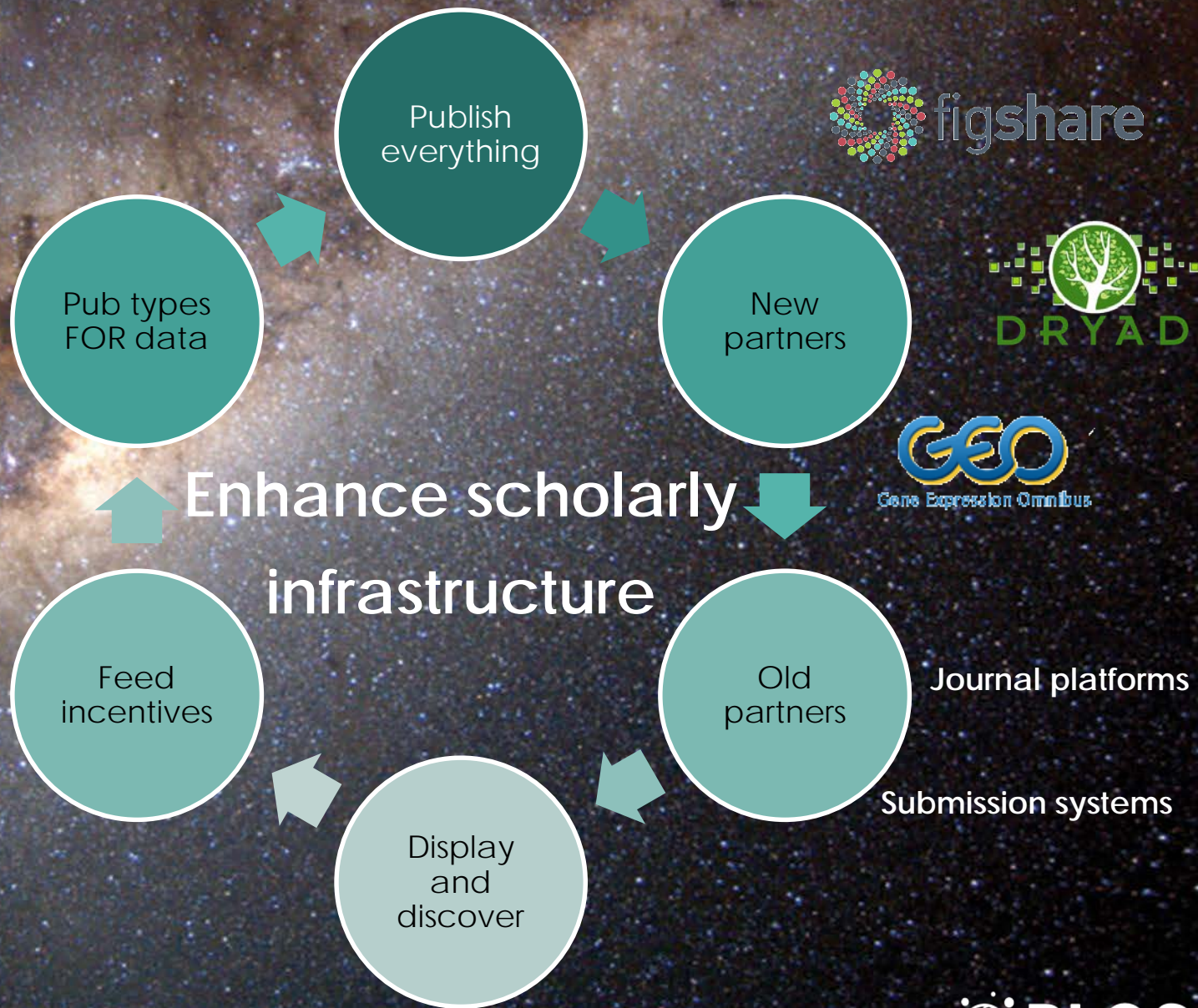














# Provide better credit/incentives

Data citations

Bibliographic support

Data cites = paper cites

Cross-industry collabs

# Provide better credit/incentives

**Citation:** Andrikou C, Thiel D, Ruiz-Santesteban JA, Hejnal A (2019) Active mode of excretion across digestive tissues predates the origin of excretory organs. PLoS Biol 17(7): e3000408. <https://doi.org/10.1371/journal.pbio.3000408>

**Academic Editor:** Claude Desplan, New York University, UNITED STATES

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**Data Availability:** All newly determined sequences have been deposited in GenBank under accession numbers MN101600—MN101702. The assembled xenacoelomorph transcriptomes used for the gene orthology assessment are deposited on Dryad Digital Depository: <https://doi.org/10.5061/dryad.bq068j> [72].



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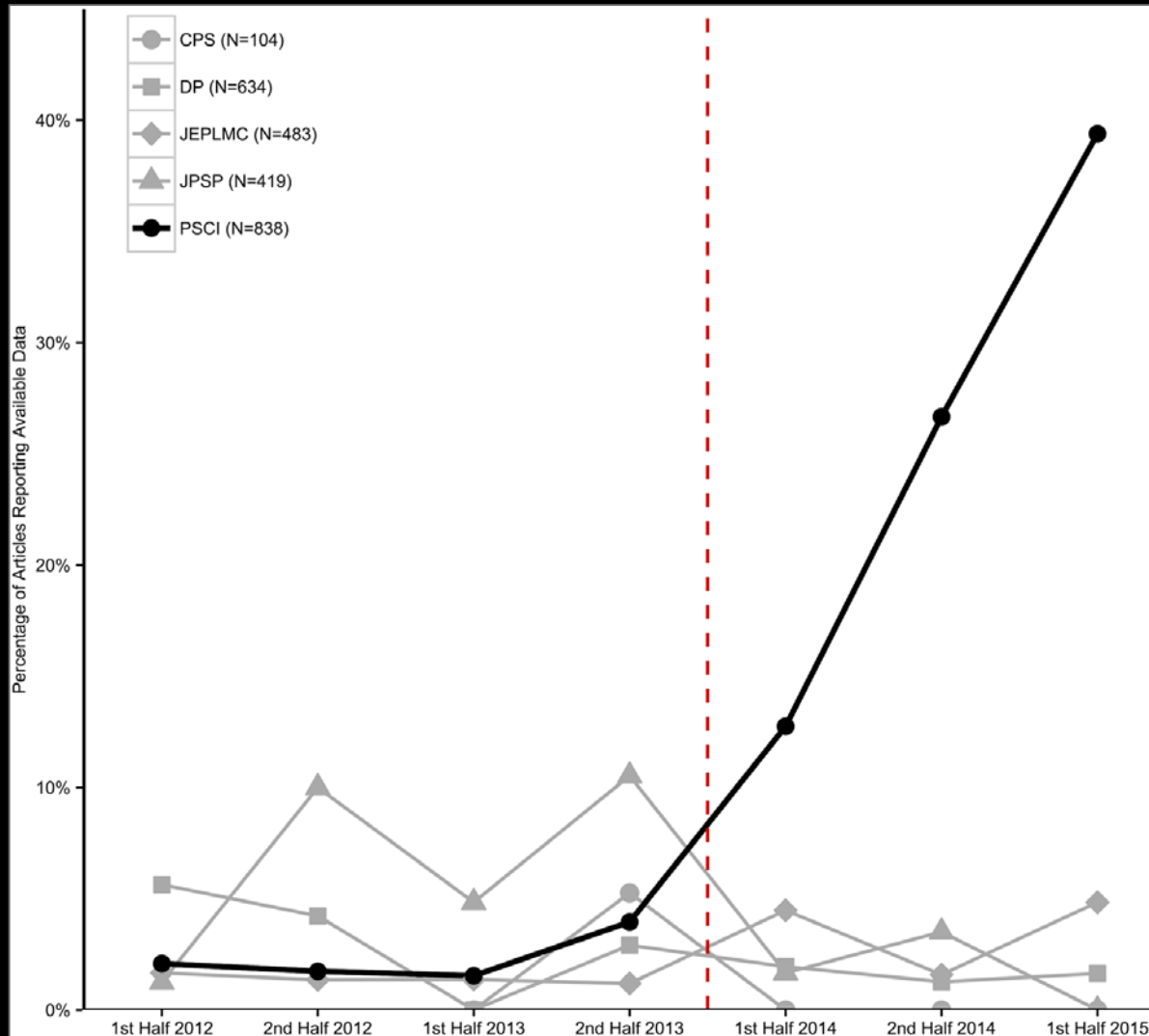
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**Data**  
unc

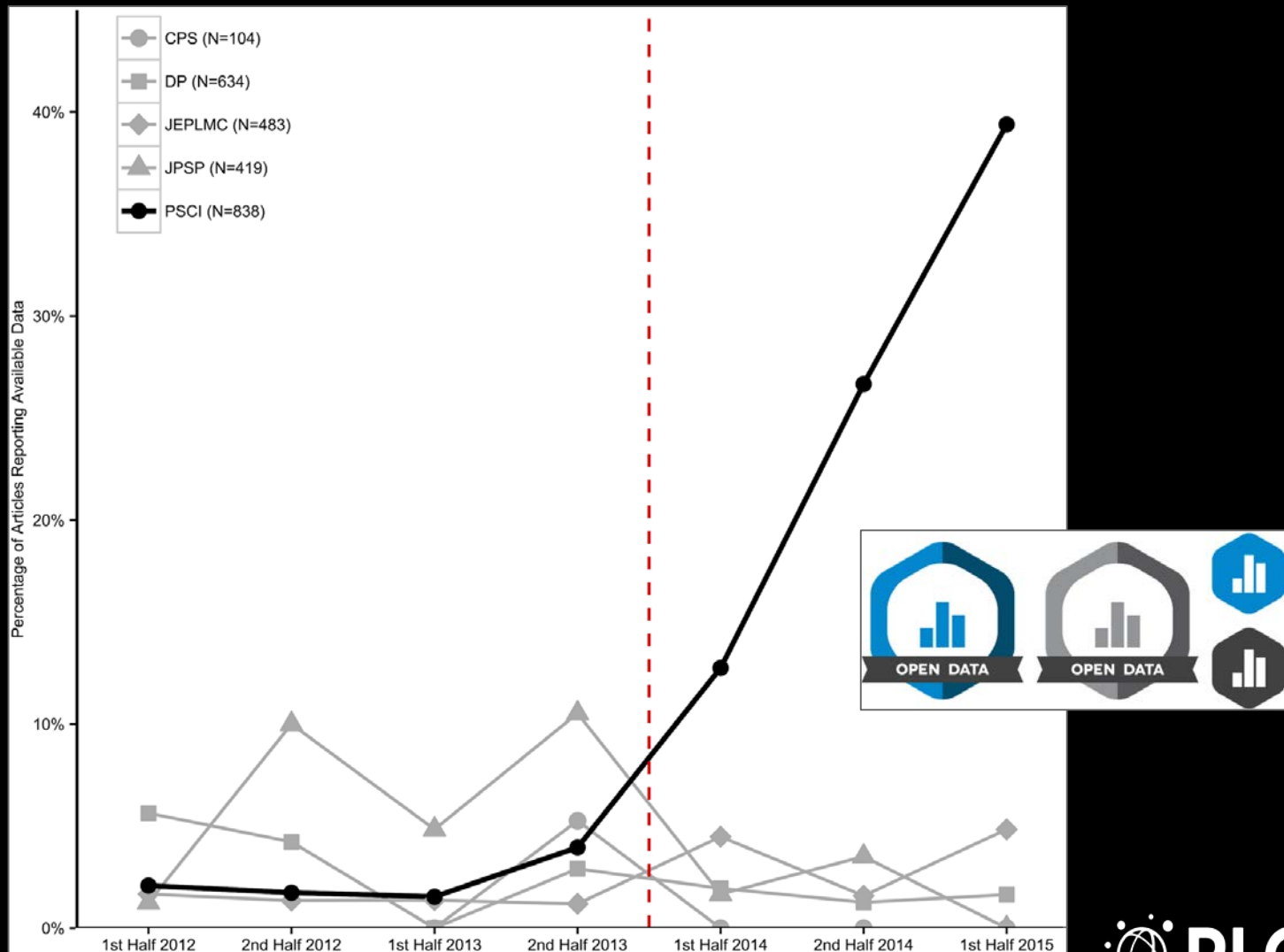
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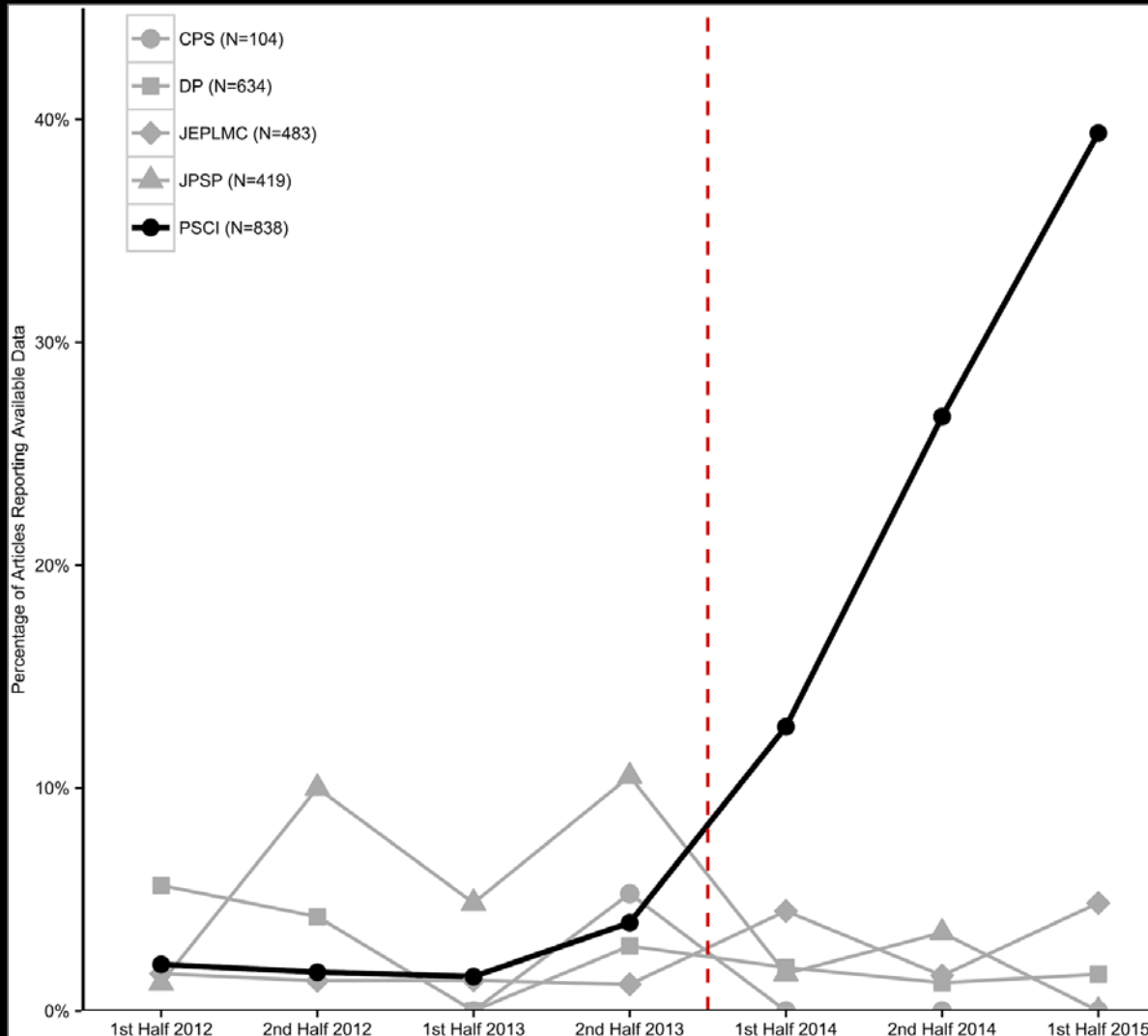
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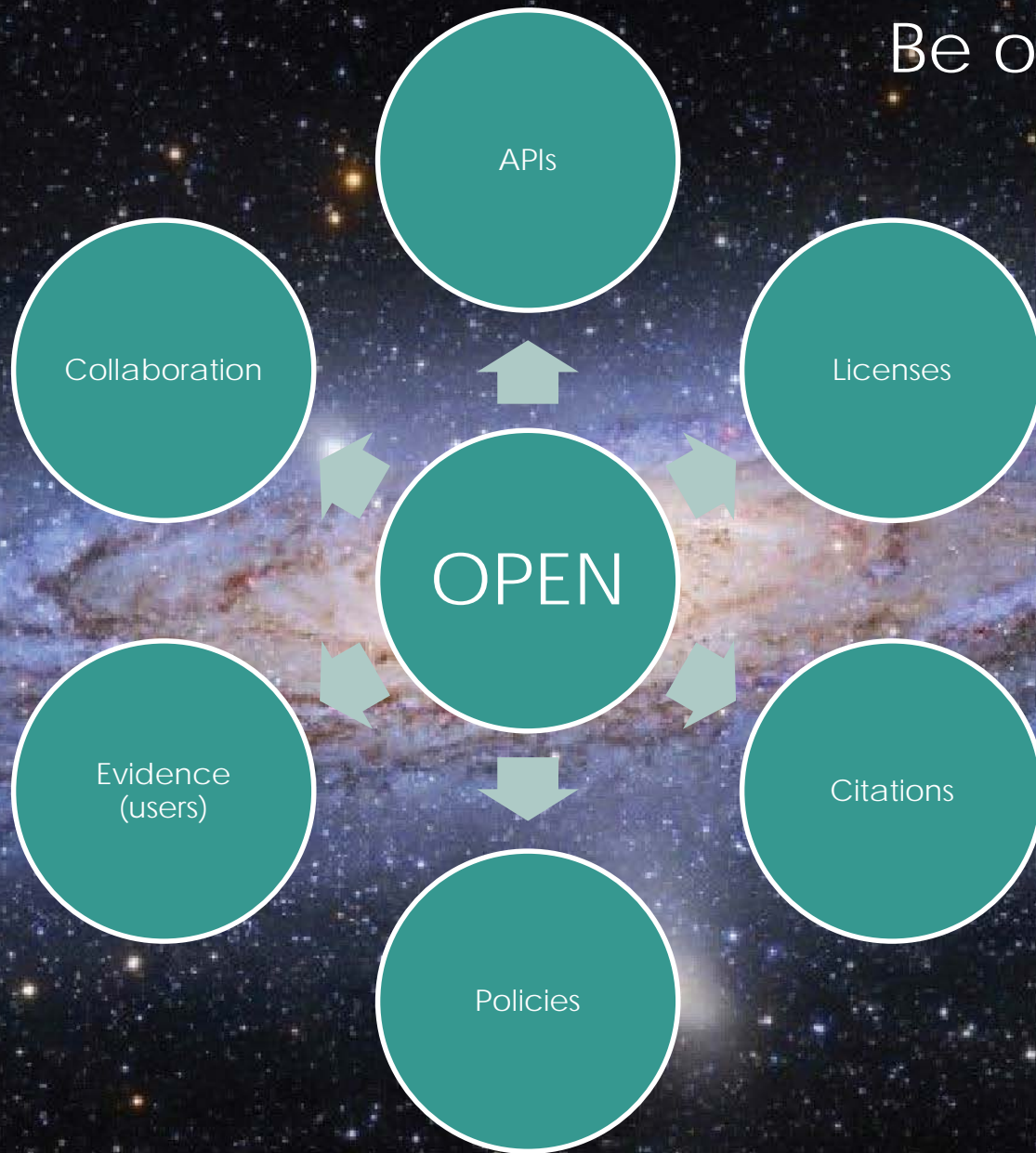
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Increase in papers that reported open data availability at *Psychological Science* journal after introduction of Open Data badges.

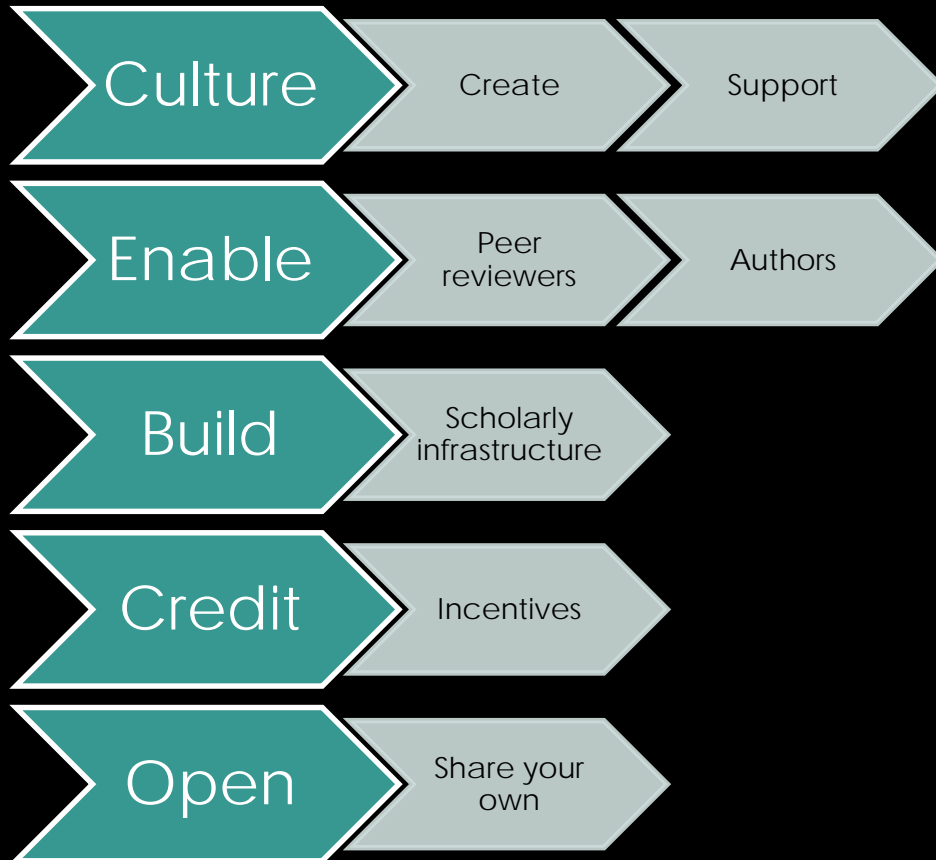


Be open with our  
own data





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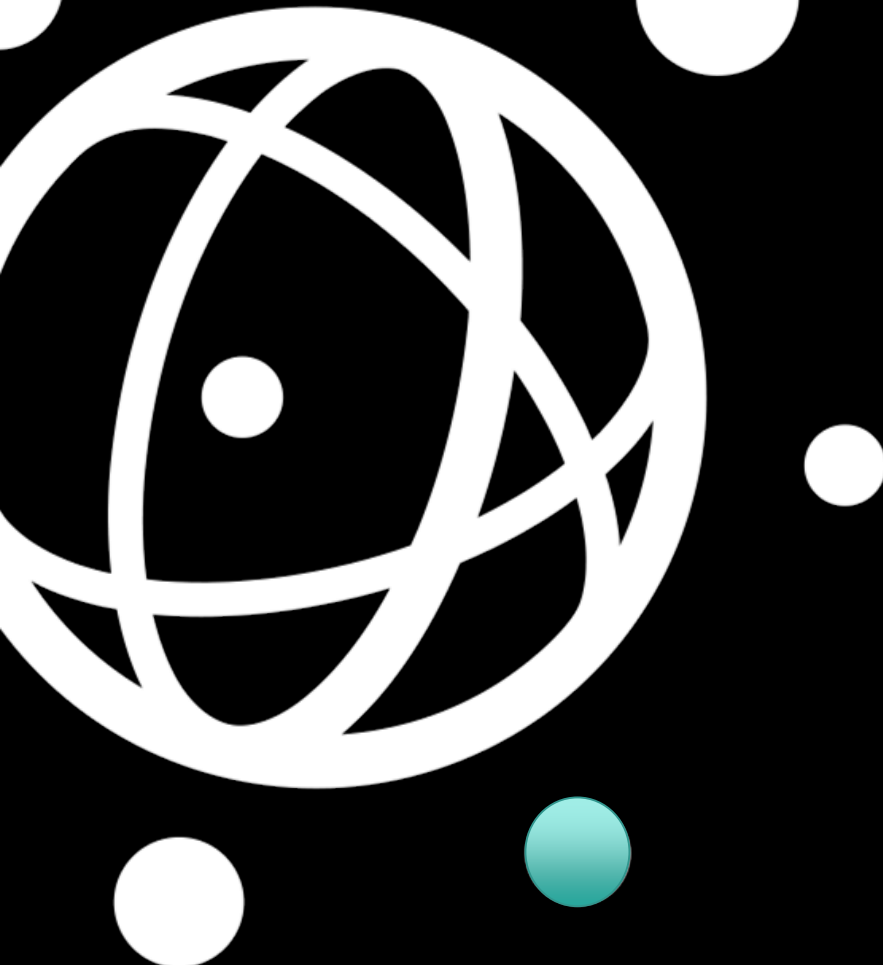
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When submitting a manuscript, authors must indicate how their data will be made available. If an article is accepted for publication, the data must be made available to the public.

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Thanks for listening

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