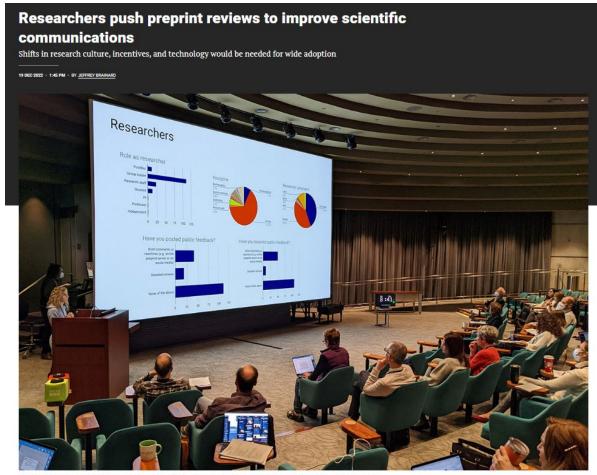
Preprinting and preprint peer review An opportunity to reshape scholarly publishing

Ludo Waltman

Centre for Science and Technology Studies (CWTS) Leiden University

Peer-Reviewed Preprints: Benefits and Limitations for Young Indian Researchers June 9, 2023



Few researchers have reviewed posted preprints before they receive peer review from journals, but numbers are increasing. JESSICA POLKA/ASAPBIO

What are the **key challenges** faced by the scholarly publishing system?

Four challenges faced by the scholarly publishing system

Challenge 1: Lack of openness





Challenge 2: Delays and inefficiencies



Challenge 3: *Excessive costs and inequities*

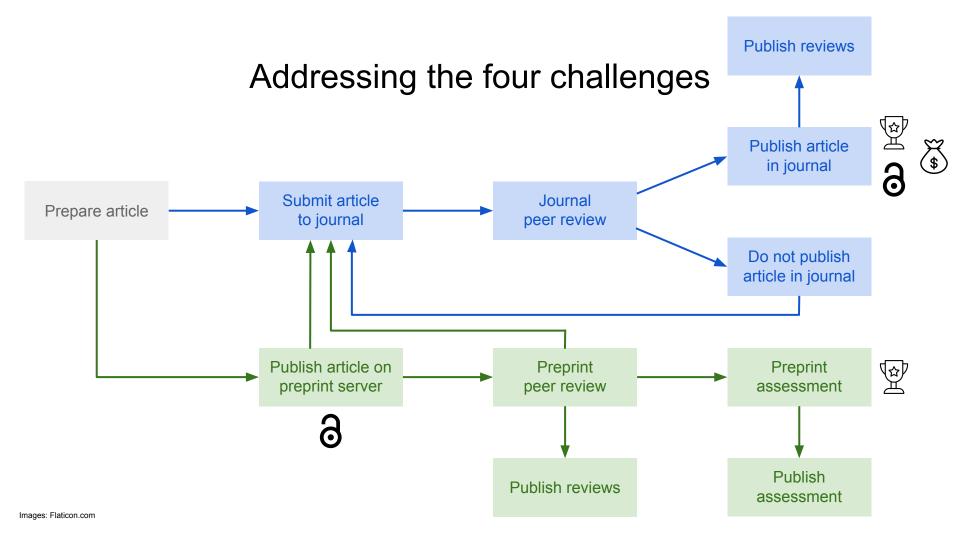




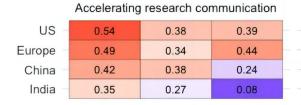
Challenge 4: Problematic incentives



How can **preprinting** address these challenges?

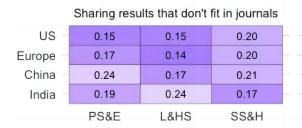


Global researcher survey - Benefits of preprinting



More citations

US	0.23	0.10	0.20
Europe	0.22	0.10	0.22
China	0.28	0.11	0.17
India	0.35	0.20	0.33



	Early feedback			
	0.25	0.15	0.14	
-	0.22	0.14	0.22	
	0.33	0.22	0.21	
	0.22	0.32	0_08	

...

Showing progress for grants/jobs

0.18	0.25	0.18
0.19	0.20	0.15
0.19	0.13	0.17
0.14	0.29	0.25

Additional exposure 0.43 0.28 0.32 0.44 0.28 0.36 0.43 0.27 0.21 0.32 0.24 0.50

Establishing priority

0.35	0.30	0.23
0.39	0.28	0.24
0.39	0.34	0.26
0.29	0.37	0.25

Free to read		Free to post			
0.32	0.38		0.62	0.40	0.53
0.29	0.38		0.63	0.38	0.49
0.30	0.33		0.48	0.32	0.43
0.41	0.33		0.49	0.54	0.25
L&HS	SS&H		PS&E	L&HS	SS&H

PS&E: physical sciences & engineering; L&HS: life & health sciences; SS&H: social sciences & humanities

0.44

0.47

0.40

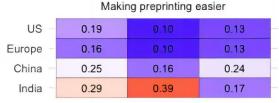
0.44

PS&E

Thanks to Rong Ni for preparing the survey results

How can the **culture change** needed for widespread adoption of preprinting be realized?

Global researcher survey - Encouraging preprinting



Recognition for preprints

US -	0.26	0.25	0.33
Еигоре	0.27	0.30	0.32
China –	0.28	0.37	0.45
India –	0.43	0.44	0.33

US 0.27 0.20 0.21

Europe -	0.24	0.22	0.25	-
China –	0.17	0.23	0.19	
India –	0.30	0.37	0.42	
	PS&E	L&HS	SS&H	

Integrating preprinting in journal workflows		
0.35	0.35	0.32
0.35	0.32	0.36
0.25	0.32	0.31
0.38	0.44	0.33
0.38	0.44	0.33

Funders encouraging/mandating preprinting

		5 5	51 1
-	0.26	0.20	0.22
	0.30	0.23	0.22
-	0.19	0.20	0.24
-	0.30	0.24	0.33
	PS&E	L&HS	SS&H

	Training	
0.12	0.17	0.26
0.16	0.19	0.20
0.12	0.15	0.19
0.33	0.37	0.33

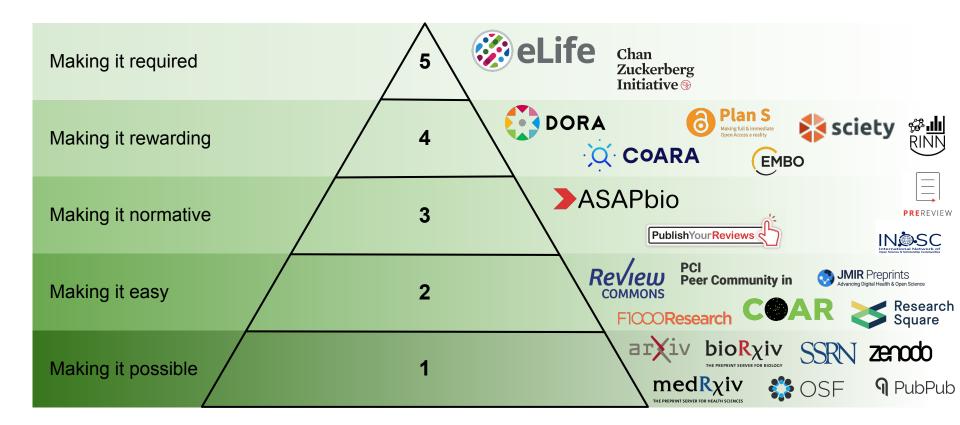
Institutions encouraging/mandating preprinting

0.25	0.17	0.19
0.29	0.21	0.20
0.17	0.17	0.17
0.29	0.27	0.25
PS&E	L&HS	SS&H

PS&E: physical sciences & engineering; L&HS: life & health sciences; SS&H: social sciences & humanities

Thanks to Rong Ni for preparing the survey results

Realizing culture change for preprinting



How can we move toward new approaches to peer review organized around preprints?

Leiden Madtrics

HOME CONTRIBUTORS ABOUT Q

Ludo Waltman Professor of Quantitative Science Studies



Making my peer review activity more useful

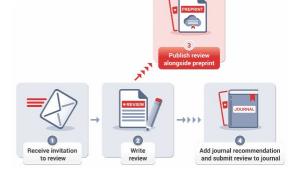
🖀 October 13, 2021 · 🚍 Opinion & Commentary · 🏷 5 min read

Ludo Waltman studies peer review in a project of the Research on Research Institute (RoRI). In this blog post he discusses how he wants to make his own peer review activity more useful.



An initiative encouraging peer reviewers to publish their reviews alongside the preprint of an article

Sign the pledge



http://publishyourreviews.org/



eLife ends accept/reject decisions following peer review

eLife will emphasise the public peer review of preprints, restoring author autonomy and promoting the assessment of scientists based on what, not where, they publish.



Peer Community in

PCI, a free recommendation process of scientific preprints based on peer reviews and a journal

We invite readers (including reviewers) to publicly post feedback and reviews of this article. Please leave a comment (signed or anonymous/pseudonymous) on the preprint with a link to (or the content of) your review to ensure it is easy to find for all readers.

Advancing the culture of peer review with preprints

Michele Avissar-Whiting, Frédérique Belliard, Stefano M. Bertozzi, Amy Brand, Katherine Brown, Géraldine Clément-Stoneham, Stephanie Dawson, Gautam Dey, Daniel Ecer, Scott Edmunds, Ashley Farley, Tara D. Fischer, Maryrose Franko, James S. Fraser, Kathryn Funk, Clarisse Ganier, Melissa Harrison, Anna Hatch, Haley Hazlett, Samantha Hindle, Daniel W. Hook, Phil Hurst, Sophien Kamoun, Robert Kiley, Michael M Lacy, Marcel LaFlamme, Rebecca Lawrence, Thomas Lemberger, Maria Leptin, Elliott Lumb, Catriona J MacCallum, Christopher Steven Marcum, Gabriele Marinello, Alex Mendonça, Sara Monaco, Kleber Neves, Damian Pattinson, Jessica K. Polka*, Iratxe Puebla, Martyn Rittman, Stephen J. Royle, Daniela Saderi, Richard Sever, Kathleen Shearer, John E. Spiro, Bodo Stern, Dario Taraborelli, Ron Vale, Claudia Vasquez, Ludo Waltman, Fiona M. Watt, Zara Y. Weinberg, Mark Williams

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How can preprinting and preprint review be **recognized and rewarded** in an appropriate way?



Coalition for Advancing Research Assessment

Our vision is that the assessment of research, researchers and research organisations recognises the diverse outputs, practices and activities that maximise the quality and impact of research. This requires basing assessment primarily on qualitative judgement, for which peer review is central, supported by responsible use of quantitative indicators.

The Commitments

1. Recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research

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2. Base research assessment primarily on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators

3. Abandon inappropriate uses in research assessment of journal- and publication-based metrics, in particular inappropriate uses of Journal Impact Factor (JIF) and h-index



Statement on peer reviewed publications

06/07/2022

The key principle of Plan S states that *"from 2021, scientific publications that result from research funded by public grants must be published in compliant Open Access journals or platforms."* The <u>Guidance document</u> defines "scientific publications" further as "peer-reviewed scholarly publications". These are generally interpreted as peer reviewed articles published in scholarly journals or on platforms (see <u>FAQs</u> for the current description of a platform). As a result, particular prominence is given to journals and platforms as privileged venues for research outputs.

Scientific publishing is evolving rapidly. A number of initiatives have moved away from the notion that peer-reviewed articles must be published in traditional Open Access journals or platforms. They provide peer review services that are entirely independent from such journals or platforms. These include <u>Peer Community in</u> (PCI), <u>Sciety</u>, <u>Next Generation Repositories</u>, <u>Notify Project</u>, <u>PREreview</u>, and <u>Review Commons</u>, to name a few. These initiatives give the author the freedom to decide how and when to disseminate their peer-reviewed article.

In light of the accelerating development of these journal-independent peer-review services, cOAlition S would like to explicitly state that 'peer reviewed publications' – defined here as scholarly papers that have been subject to a journal-independent standard peer review process with an implicit or explicit validation^[1] – are considered by most cOAlition S organisations to be of equivalent merit and status as peer-reviewed publications that are published in a recognised journal or on a platform.

These innovative developments turn attention away from the prestige of the journal or platform to focus on the intrinsic value of the peerreviewed article itself, in line with <u>Plan S Principle 10</u>. High-quality peer review services that are separate and distinct from publication services provide independence from the traditional journal format. They allow for more equitable access to research results by offering a solution to openness for all researchers. cOAlition S therefore explicitly endorses such innovations. How can I contribute to these developments myself?

How to contribute yourself - Four actions

Action 1 Preprint all your papers

Action 2 Publish your reviews

Action 3 Support preprint review initiatives

Action 4 Ask for recognition

Interested in further discussion about preprinting? Join next Friday's talk by Rong Ni

Seminars » Announcements

» To Preprint or Not to Preprint: Experience and Attitudes of Researchers Worldwide

To Preprint or Not to Preprint: Experience and Attitudes of Researchers Worldwide

Rong Ni

§ Fri 16 Jun 2023 | 15:00 - 16:15 (CEST)
 § CWTS and Online

Join Webinar Online

The pandemic has underlined the significance of open science and spurred further growth of preprinting. Nevertheless, preprinting has been adopted at varying rates across different countries/regions. What is the level of adoption of preprinting and how does this differ across countries/regions? What do researchers see as benefits of preprinting and what are their concerns? What do researchers see as ways to encourage preprinting?

To investigate researchers' experience with and attitudes toward preprinting, we conducted a survey of authors of research papers published in 2021 or



https://www.cwts.nl/seminars/announcements?article=n-s2y294

And consider joining the activities of ASAPbio



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Walking the walk: open communication and review

in a congress on open

W-14-10-10-1-

Sharing negative results via a preprint: A conversation with Livia

https://asapbio.org

Upcoming Events

There are no upcoming events.

News from around the web

Review Commons partners with 4 new journals

Biophysics Colab adopts 'Publish, Review, Curate' model

Thank you for your attention!