

Emergent models of scholarly publishing

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Presented for Symposium 2022 University of Canterbury

File Drawer Problem

‘Behind Closed Drawers’: The File Drawer Effect, see https://bit.ly/file_drawer



Non-availability of data



“more than half of the public datasets provided with scientific papers are incomplete”

Roche DG, Kruuk LEB, Lanfear R, Binning SA (2015) Public Data Archiving in Ecology and Evolution: How Well Are We Doing?.

PLOS Biology 13(11): e1002295.

<https://doi.org/10.1371/journal.pbio.1002295>

Average peer review time (scirev see <https://scirev.org/statistics/total-duration/>)

	Average (in weeks)	Within one month (in %)	Within three months (in %)	Within six months (in %)
All scientific fields	17	11	53	81
General	17	7	54	83
Natural sciences	14	13	63	87
Engineering (incl technology)	17	11	54	81
Mathematics and computer sciences	22	4	36	72
Medicine	12	16	71	92
Public health (incl health professions)	13	14	67	91
Psychology	20	7	46	76
Economics, business and law	25	7	37	67
Social sciences	23	3	33	68
Humanities	22	4	36	71

Some projects

Fiddle

<https://s-quest.bihealth.org/fiddle/>

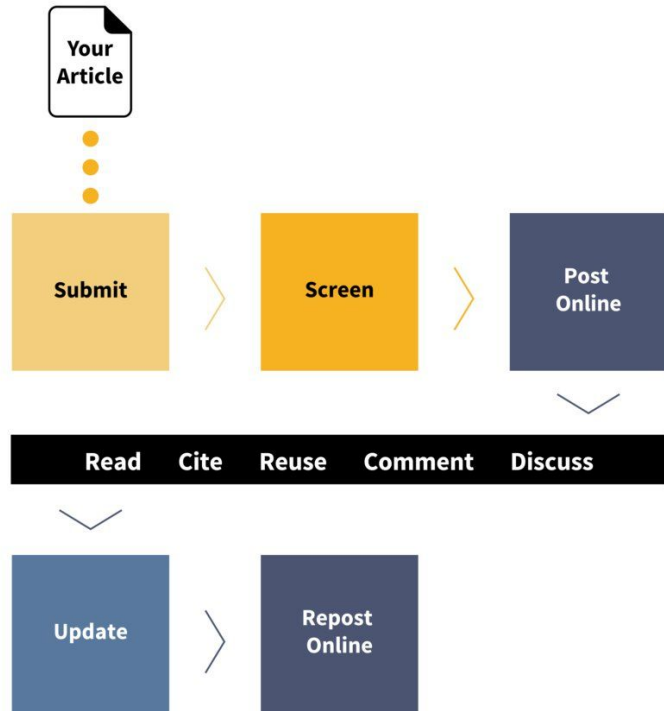
arXiv, MedrXiv, biorXiv, socrXiv

<https://arxiv.org/>

Emergent trends

- Preprints
- Micropublications
- Overlay Journals

What is a preprint?



A preprint is a piece of research that has not yet been peer reviewed and published in a journal. In most cases, they can be considered final drafts or working papers. *Preprints* is a multidisciplinary preprint platform that makes scientific manuscripts from all fields of research immediately available

(Verbatim: preprints.org, image courtesy: preprints.org)

Rise of Preprints

Interest over time ?



Surge during Covid Pandemic



Citation Impact of Journal Articles with and without Preprints

N = 69.4 Million Papers published between 1991-2020 Data

Domain	Paper with Preprint citations	Paper without Preprint Citations	Citation Ratio
Economics	220	28	7.857
Computer Science	116	21	5.524
Physics	50	18	2.778
Biology	68	31	2.194
Mathematics	43	22	1.955

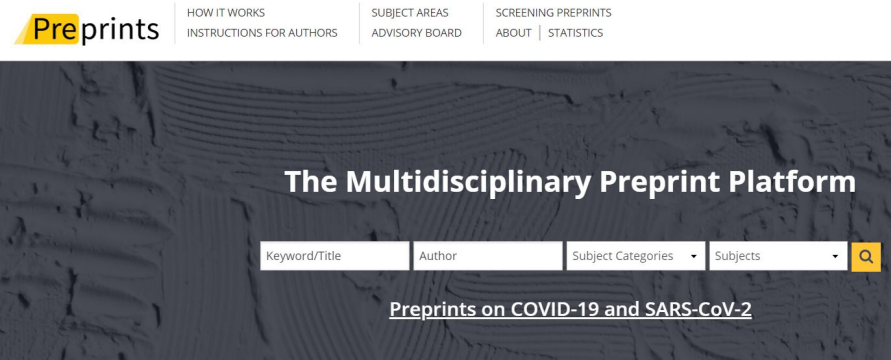
Is preprint the future of science? A thirty year journey of online preprint services

Boya Xie, Zhihong Shen, Kuansan Wang

<https://arxiv.org/abs/2102.09066>

Preprints.org

<https://www.preprints.org/>



Asapbio



Blog

Preprints

Preprint review

Preprint resource center

FAQs, policies, and materials

<https://asapbio.org/preprint-info>

The preprint contains data and methods, but has not yet been accepted by a journal. While some servers perform brief quality-control inspections (see [details on the practices of individual servers](#)), the author's manuscript is typically posted online within a day or so without peer review and can be viewed (and possibly translated, reposted, or used in other ways, depending on the [license](#)) without charge by anyone in the world.

(From Asapbio site)

μP microPublication Biology

get your data out, be cited

As part of our long-term sustainability plan, we will institute article processing charges (APCs) starting April 2nd, 2022. We will charge \$250 per article, which should cover costs but not new initiatives. No article will be refused because of an author's inability to pay page charges.

- Combine data
- With Narratives
- Add metadata
- Short papers
- Peer reviewed
- Quick turn-around time
- Data + Story with fast publication
- Biology is the best known (perhaps is the only one)

Octopus micropublication



- New kid on the block
- Very few papers
- Promising
- <https://www.octopus.ac/about>
-

Research Equals

Publish each step

You produce vital outputs at every research step.
Why let them go unpublished?

Publish your text, data, code, or anything else you struggle to publish in articles.

Each step gets a DOI. Link them all together to document a journey.

<https://www.researchequals.com/>

- If you are working on an idea
- Publish it and get a citation
- As you incrementally build your knowledge base,
- Publish!
- You can publish anything from presentation to full paper

Do research and publish at the same time! (micropub)

<https://covidistress.github.io/>

How is Coronavirus affecting your life?

Research Questions Data & Registration Reports Contributors

Researchers from around the world have come together to create this survey. It contains questions related to your experience during the global outbreak of the COVID-19 pandemic. We would like to hear from people all over the world to help governments and scientists develop solutions.

Please [CLICK HERE](#) to go to survey

The researchers researched covid distress among people across the world and at the same time published the results.

Our own research group with consciousness studies is also setting up a micropublication where participants and researcher will collaborate in publishing data and results

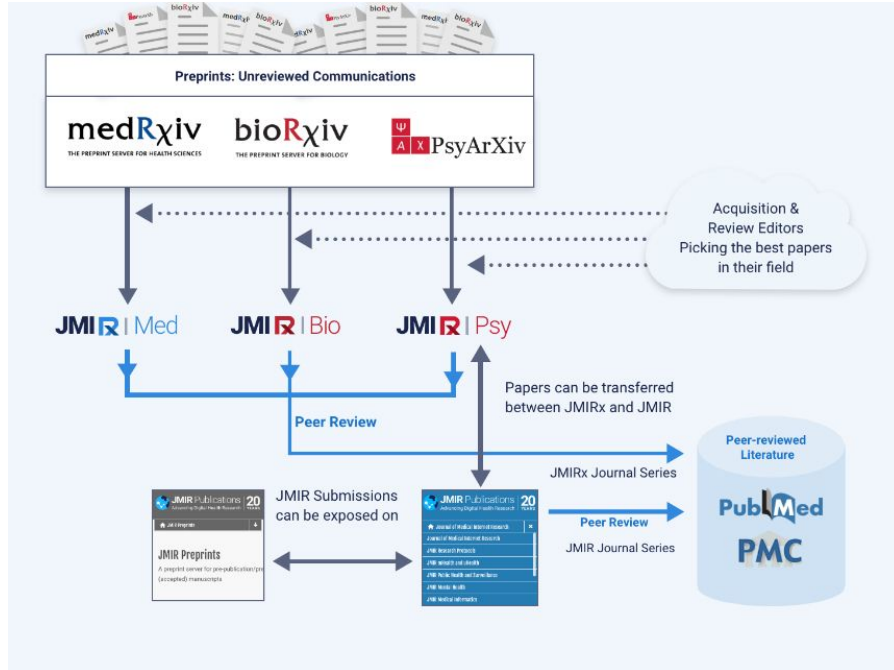
Overlay Journals



- Does NOT produce its own content
- Editors assess candidate articles retrieved from
 - open access content on
 - preprint servers,
 - repositories
 - public domain sources
- Published in a journal issue with either an editor or a special editor
- Can be then shared widely

<https://qut.pressbooks.pub/23scholarlycommunicationthings/chapter/preprints-and-overlay-journals/>

JMIRx (Medicine | Biology | Psychology)



- Superjournal
- **Welcome to JMIRx | Med, a new type of journal which we call a “Superjournal”**
- <https://med.jmirx.org/>

Overlay Journal Platform

<https://www.episciences.org/>

Episciences, an overlay journal platform, hosts and disseminates open access publications from all disciplines.

Summary



- The current journal publishing system is the 'gold standard' yet
- The process is slow
- Data sharing is not always encouraged
- Peer review process can be speeded up or be improved
- Three alternative systems provide promises:
 - Preprints are useful for rapid dissemination of results picked up during and after COVID-19
 - Preprints are not peer reviewed so there are issues around quality control
 - Micropublications offer new opportunities of innovative weaving of research and publishing
 - Overlay journals provide a pathway of best of both worlds
- The Road Ahead is exciting!

This presentation is also published in Research Equals