

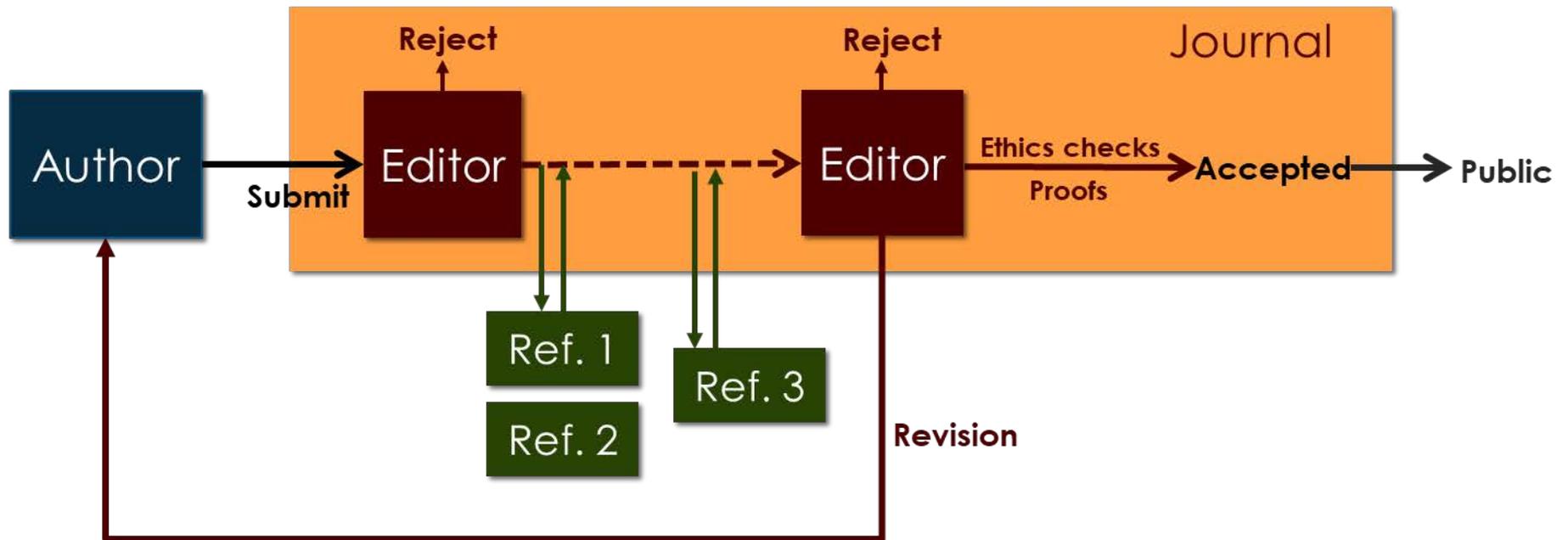
RESPONSIBLE STEWARDSHIP OF PREPRINTS

Richard Sever, PhD

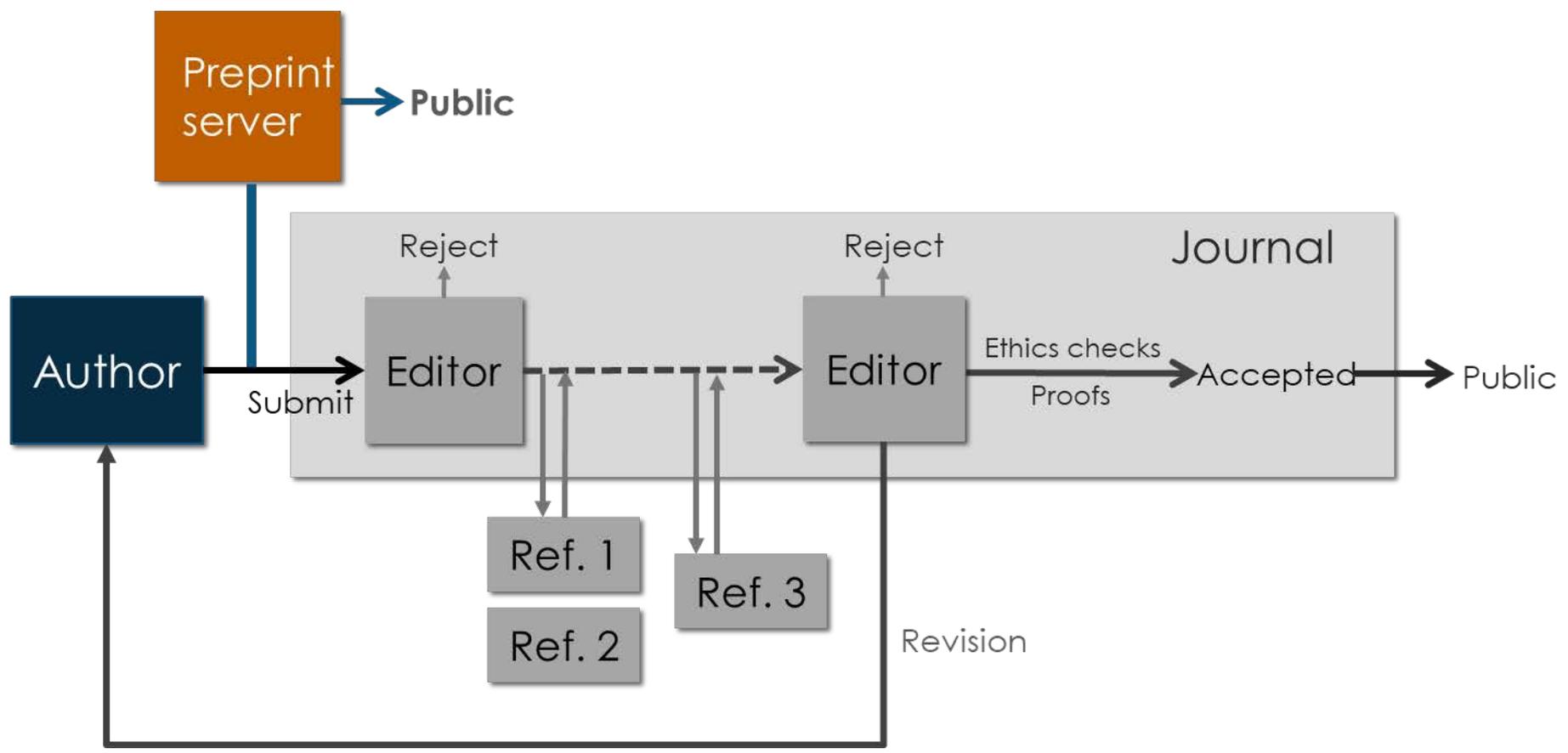
Assistant Director, Cold Spring Harbor Laboratory Press
Co-Founder, bioRxiv & medRxiv

Twitter: [@cshperspectives](https://twitter.com/cshperspectives)

Traditional publication (months-years)



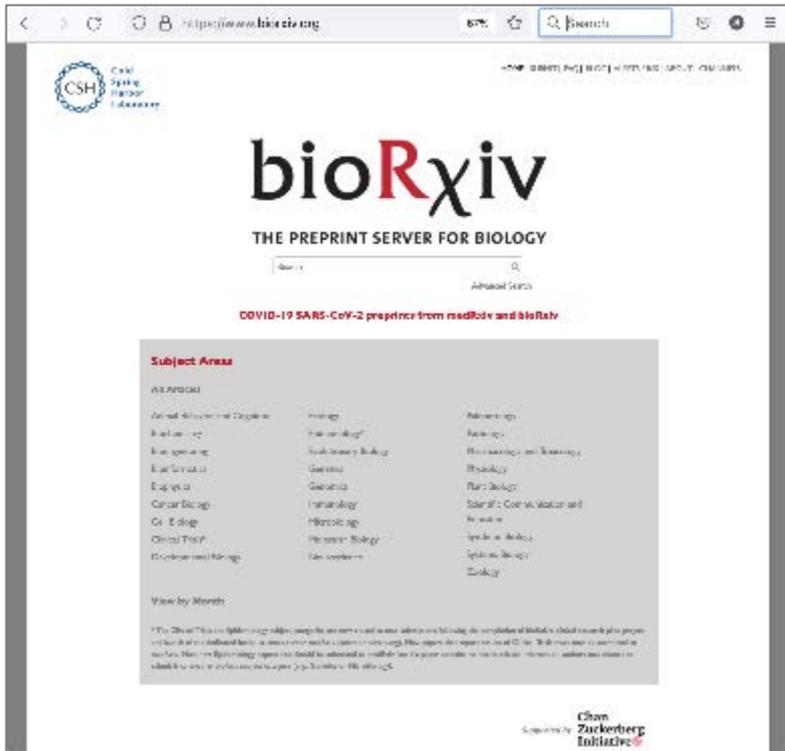
Preprint sharing (hours-days)



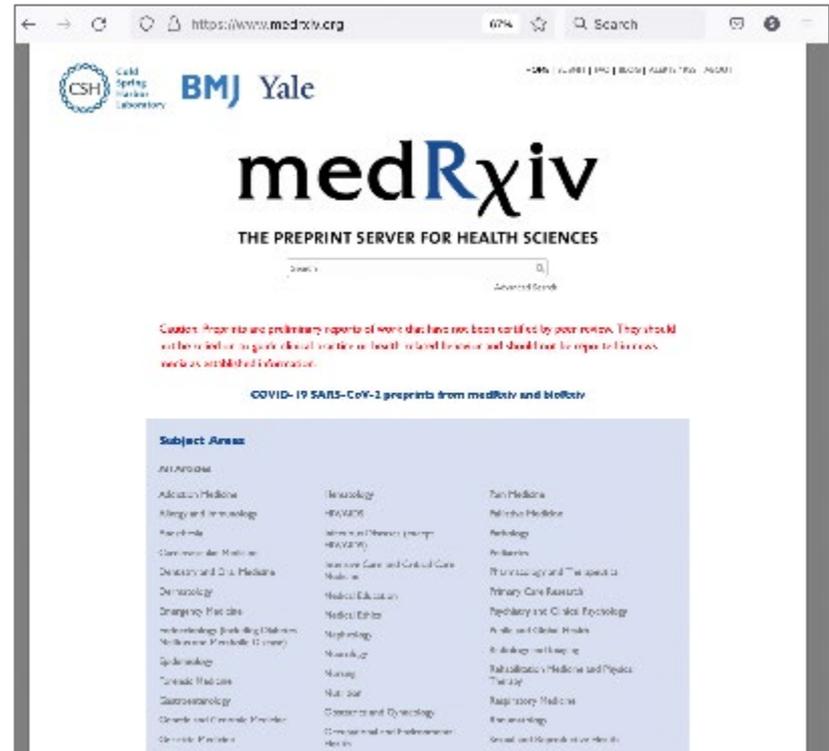
Benefits of preprints

- Pre-publication feedback/discussion
- Visibility, especially for early-career scientists
- Immediate availability to grant/hiring committees
- **Rapid transmission of results**

bioRxiv and medRxiv launched



2013



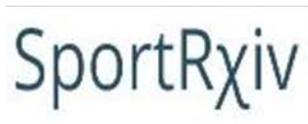
2019

Community resources operated by CSHL, Yale and BMJ

bioRxiv/medRxiv Progress

- >200,000 papers
- ~4,000 submissions/month
- ~8,000,000 views/month
- >70% of papers subsequently published in journals
- Integration with >300 journals

Proliferation of servers



The pandemic

- ~25,000 COVID papers
- Epidemiology/pathology
- Clinical Trials
- Variants
- Vaccines
- **Virology/cell biology**

The pandemic

"I welcome the huge increase in the use of preprints by researchers to rapidly share emerging evidence from the many studies on COVID-19"

Dr Soumya Swaminathan, Chief Scientist WHO

"We have this new phenomenon...a preprint server...you have to pay attention...it gives you good information quickly"

Dr Anthony Fauci, Chief Medical Advisor to the President

"Where there is a significant public health benefit to preprints being shared widely and rapidly, [these] must be published"

Responsible stewardship

The screenshot shows the medRxiv website interface. At the top left is the medRxiv logo with the tagline 'THE PREPRINT SERVER FOR HEALTH SCIENCES'. To its right are logos for CSH Cold Spring Harbor Laboratory, BMJ, and YODA Project. On the top right, there are navigation links: HOME | ABOUT | SUBMIT | ALERTS / RSS, and a search bar. The main article title is 'Increasing the Mobility of EEG Data Collection Using a Latte Panda Computer'. Below the title, the authors 'Linda Sussman, Kevin-John Black' and the DOI 'https://doi.org/10.1101/01000448' are listed. A prominent warning states: 'This article is a preprint and has not been peer-reviewed [what does this mean?]. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice.' Below this, there are tabs for 'Abstract', 'Info/History', and 'Metrics', and a 'Preview PDF' button. The 'Abstract' tab is selected, showing a section titled 'Abstract' with a text box for an article summary. On the right side, there are social media and utility buttons: 'Previous', 'Posted February 23, 2018.', 'Download PDF', 'Email', 'Tweet', and 'Like 0'. At the bottom right, there is a 'Subject Area' section with a button for 'Addiction Medicine' and a larger 'Subject Areas' button.

medRxiv
THE PREPRINT SERVER FOR HEALTH SCIENCES

CSH Cold Spring Harbor Laboratory | BMJ | YODA PROJECT

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Increasing the Mobility of EEG Data Collection Using a Latte Panda Computer

Linda Sussman, Kevin-John Black
doi: <https://doi.org/10.1101/01000448>

This article is a preprint and has not been peer-reviewed [what does this mean?]. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice.

Abstract | Info/History | Metrics | Preview PDF

Abstract

Article Summary: In fewer than 100 words, summarize the significance of your article for the general readership of Genetics. This summary may be modified and used in the Issue Highlights section of the Journal and the GSA Newsletter. See

Previous
Posted February 23, 2018.

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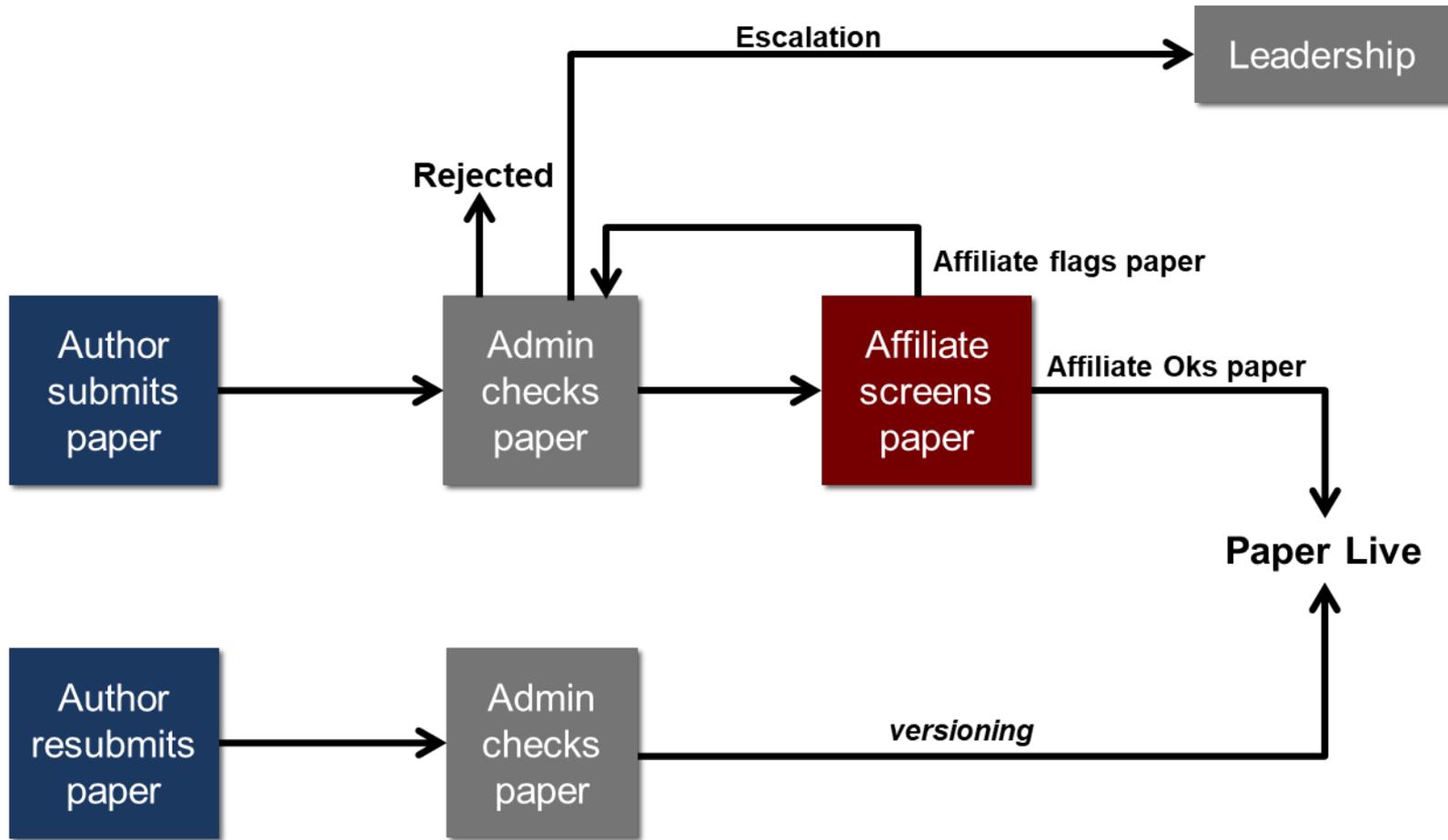
Subject Area
Addiction Medicine

Subject Areas

Author declarations

- Competing interests
- Patient/participant consent
- Plagiarism
- Clinical trial registration
- IRB/ethics committee approval

Preprint screening



Screening criteria

- Is it nonsense?
- Is it non-science?
- Is it a paper?
- Is it research?
- Is it plagiarized?
- **Is it dangerous?**

Responsible stewardship: “do no harm”

- Vaccine safety
- Infectious disease transmission
- Drug regimens
- Toxicity/carcinogenicity
- **GOF/DURC/PPP**

Withdrawals/Takedowns

Withdrawals

- Author request
- Ethical breach
- Fraud

Takedowns

- Copyright infringement
- Risk to individual
- **Biosecurity**

“bioRxiv reserves the right to identify and remove any articles that contain plagiarized material or describe experimental work that is not performed in accordance with the relevant ethical standards for research using animals or human subjects”

Perils of preprints?

- Dangers addressed by screening
- Errors addressed post-hoc by commenting/withdrawal
- But everything can get published somewhere...

Unvetted outlets



WWW.labwebsite.edu

WWW.anywebsite.com

Questionable effectiveness of journals at a systemic level

- Hydroxychloroquine
- COVID from 5G
- COVID from comets
- DURC?

Recommendations

- Educate researchers
- Develop guidelines/global moratoria
- Perform grant oversight
- Encourage institutional oversight
- **Endorse responsible outlets for dissemination**
(preprint servers and journals)