

PREPRINT POLICIES

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

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ARGUMENTS FOR PREPRINT

- Engages the scientific community – way to quickly post and communicate about research
 - Enables further research and discoveries
- Times to publication and review process are unpredictable – allows rapid publishing of data and findings
- Dated storage platform for original research (pre-peer review and revisions)
 - Prioritization of discoveries
- Helps scientists obtain grants and other funding, as well as jobs
- Allows feedback from scientific community prior to peer review that can enhance the final manuscript
- Encourages collaboration among scientific groups

ARGUMENTS AGAINST PREPRINT

- Ideas being “scooped”
- Ideas becoming less “novel”
- Posting of premature data to establish priority
- Potential for poor quality and irreproducible data being posted
- Issues with embargoes and press releases
- Potential decline in submissions?
- Usefulness v harmfulness of commentary on preprints (bioRxiv)

WHAT IS AAAS POLICY

- Accepts manuscript submissions posted on any not-for-profit online repository or preprint
- Pipeline that enables direct submission from bioRxiv to AAAS journals (currently 233 direct submissions from bioRxiv)
- Revised versions of the manuscript benefiting from editorial or peer review cannot be posted on preprints
- Preprint manuscripts under review cannot be discussed with media prior to publication
- Allow preprints as citations
- Preprint policy can be found at: <https://www.sciencemag.org/authors/science-journals-editorial-policies>

AAAS POLICY FORUM ON PREPRINTS FOR LIFE SCIENCES

The screenshot shows the Science magazine website interface. At the top, there are navigation links for Home, News, Journals, Topics, and Careers. Below this is a red banner with the Science logo and the text 'AAAS 诚聘海内外杰出人才'. The main content area features the article title 'Preprints for the life sciences' by a group of authors including Jeremy M. Berg, Neelhi Bhalla, Philip E. Bourne, Martin Chaffie, David G. Drabini, James S. Fraser, and Carol W. Greider. The article is dated 20 May 2016 and is part of the AAAS Policy Forum. The article text discusses the role of preprints in disseminating ideas and results in the life sciences, mentioning the ASAPBio meeting held in February 2016. It highlights the benefits of preprints, such as providing a time stamp and allowing for constructive feedback from peers before submission to peer-reviewed journals.

Main points:

- Lead author AAAS EIC
- Need from community for archive of the life sciences
- Perspectives of Academics, Funders, and Journals – detailed benefits from all sides

Full Article:

<https://science.sciencemag.org/content/352/628/8/899.full>

ARGUMENTS FROM ACADEMICS, FUNDERS, AND JOURNALS

- **ACADEMICS**
 - Length of time between manuscript submission and publication is unpredictable
 - Published preprints become immediately and freely accessible to researchers and investigators all over the globe
 - Time stamp ensures priority of discoveries
 - Allows constructive feedback from peers prior to submission to peer-reviewed journals

ARGUMENTS FROM ACADEMICS, FUNDERS, AND JOURNALS

- FUNDERS

- “Preprints provide funding agencies (and those reviewing funding proposals) with a more current and complete view of a researcher’s ideas and progression of work than does a formal, peer-reviewed product of research.”
- “Preprints enable reviewers to assess an applicant’s ideas by scrutinizing the research findings, rather than using the journal name (or its impact factor) as a proxy for quality. Funders are keen to uphold the principle that funding decisions should be based on the merit of the research.”
- Ability to see real time reactions on the research from the community and additionally, how the researcher responds to these.
- Opportunity for early-career scientists to get peer feedback, especially if they lack the professional networks or funding.

ARGUMENTS FROM ACADEMICS, FUNDERS, AND JOURNALS

- JOURNALS

- Agree with the usefulness of preprint servers, but strongly feel that preprints and peer-reviewed publications should be used in tandem
- Comments on preprints may help subsequent peer-review process
- Community needs to monitor premature posting to gain priority

MOVING FORWARD/POSED QUESTIONS

- Continue to engage in the discussion within the scientific community
- Accepting preprints that have reviews with them
 - How will preprints with comments impact journals/the scientific community?
- Will the review process evolve and become public?
- How do we ensure and maintain that preprints are searchable and permanent?
- Will preprints change the way of editorial curated papers? Journals to reject papers on preprints or utilize them to find hot-topic papers?

MOVING FORWARD/POSED QUESTIONS

- How to ensure quality control of preprints so there is not a dilution of scientific literature?
- Specific areas/trends in life sciences to utilize preprints more?
- Are there any harmful examples of submitting to a preprint prior to or simultaneous to submitting to a peer reviewed journal?
- Will preprints replace peer-reviewed journals?

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- <https://www.sciencemag.org/news/2017/09/are-preprints-future-biology-survival-guide-scientists>

Thank you!