Preprints, bioRxiv and PLOS

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PLOS is a non-profit publisher and advocacy organization with a mission to accelerate progress in science and medicine by leading a transformation in research communication.
What are preprints?

- Research that is:
  - Not peer reviewed
  - Immediately accessible
  - May be the preliminary version
- Allows for comments from the community
- Often done *simultaneously with journal submissions*
Preprints recent growth

- PubMed indexes more than 800,000 articles a year
- Since 2013, bioRxiv has published 8,000 preprints
- arXiv, launched in 1991, now publishes over 100,000 preprints a year
- Approximately 50% of preprints are eventually published in journals
- PLOS survey results indicate that 20% of today’s biomedical researchers would submit their paper to a preprint server
How preprints fit into existing publishing

CURRENT MODEL
• Slow
• Established primacy
• Known quality indicators

Time to Publication: 6-18 months
How preprints fit into existing publishing

**PREPRINT MODEL**
- Accelerates science
- Embeds tech shortcuts into the process
- Can co-exist with traditional journals
- Fosters community review

Time to Publication: hours/days
PLOS and Preprints

Accelerate Progress with Early Sharing of Work

- PLOS has long supported authors who wish to share their work early and receive feedback before formal peer review
- Posting a research article to a preprint server has never impacted consideration of the manuscript at any PLOS journal
PLOS and bioRxiv: The best of both worlds

- Zika outbreak, December 2015
  - WHO declares Zika a public health emergency
  - Calls to publish research as quickly as possible
  - *PLOS Neglected Tropical Diseases* directed all authors submitting Zika research to post their papers on bioRxiv or another preprint server
PLOS and bioRxiv: The best of both worlds

- PLOS partners with bioRxiv to allow submissions directly from bioRxiv, Sept 2016
  - bioRxiv DOI remains associated with PLOS paper
  - If published, PLOS deposits both DOIs to CrossRef so the papers can be linked

The queenslandensis and the type form of the dengue fever mosquito (Aedes aegypti L.) are genomically indistinguishable

Gordana Rašić, Igor Filipović, Ashley G Callahan, Darren Stanford, Abigail Chan, Sai Gek Lam-Phua, Cheong Huat Tan, Ary Anthony Hoffmann
doi: https://doi.org/10.1101/063792

Now published in PLOS Neglected Tropical Diseases doi: 10.1371/journal.pntd.0005096
PLOS and bioRxiv: The best of both worlds

Since partnering with bioRxiv, we’ve received over 100 transfers directly from bioRxiv!
The mechanics

• Authors can select to submit to a PLOS journal **directly from bioRxiv**

• Submissions come to PLOS’ **Editorial Manager** like a normal submission

• Editors are provided with **link to original preprint** and encouraged to take **community comments** into consideration
Preprint curation

- *PLOS Genetics* brings on Preprint editors, December 2016
  - Editors review papers on preprint servers
  - Possible candidates sent to Senior Editors for rapid consultation
  - If approved, editors contact authors and ask them to submit to *PLOS Genetics*
What’s next?

- Growth
- Improved technology
- More community review
- Journals co-existing
Thank you!

Questions? Contact me at

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