RESEARCHERS.ONE — A new system for author-driven peer review[1][2][3]

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[1] This is a joint effort with Harry Crane at Rutgers
[2] Soon will be available at www.researchers.one
[3] Follow us at www.twitter.com/@ResearchersOne

Introduction

- Peer review plays an important role in science, aimed to improve quality of research
- However, in this "publish or perish" environment, the *accept/reject decisions* give journals too much authority
- Larry Wasserman[4] compares system to a "priesthood or guild"
- Consequences:
  - incentivizes incremental work
  - effectively censors new ideas
- End result is actually lower-quality research
- Cause: *accept/reject decisions*

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[4] http://www.stat.cmu.edu/~larry/Peer-Review.pdf

Intro, cont.

- A better system would provide the benefits of peer review, but let authors keep their authority and autonomy
- How?
- Give the authors control over the peer review process
    - select their own reviewers (several ways)
    - choose what feedback to incorporate
    - decide what and when to publish
- Our new perspective requires a new platform
- Hence RESEARCHERS.ONE[5] was born

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[5]Will soon be accessible at `www.researchers.one`

- RESEARCHERS.ONE mission
- New technology
- Live demo
- Conclusion

Mission

- Present system is unsuccessful because the author is at the mercy of the reviewers — "publish or perish"
- Since the work is the author's, our goal is to put more control (and responsibility) in the author's hands
- What do authors need?
    - *Autonomy* to pursue interests/passions
    - *Authority* to be the judge of their work's quality
    - *Access* to the work and feedback of experts
- Our mission is to provide these "3As" to authors
- Of course, this is not just for statistics!

RESEARCHERS.ONE empowers researchers with the
Autonomy to pursue their passions,
Authority to improve and disseminate their work and
Access to engage with the international community of scholars.

Implementation

- A new peer review model requires a new implementation
- Specifically, new features are required to give authors control
    - authors pick reviewers (one of two ways)
    - authors get reviewer feedback, incorporate as they please in a revision, and repeat (as often as necessary)
    - authors decide when paper is published
- Similar to the current peer review feedback, except that it is entirely in the authors' rather than editorial board's hands
- Individual steps aren't new — the technological challenge was to bring these in the author's control

Two peer review options

- RESEARCHERS.ONE offers two peer review options
  - *private/traditional peer review*
  - *public peer review*
- The first is similar to the current system
  - author identifies and contacts reviewers
  - paper is only made available to selected reviewers
  - reviewers provide feedback, author revises, etc
- The second is more modern
  - paper is made available to the public
  - any registered user can provide feedback, author revises, etc
  - in line with recent pushes toward open and post-publication peer review

TO THE WEB!!

- System layout: viewing articles, comments, etc
- Two peer review options
- User-recommended content
- ...

- Every paper is a discussion paper
- User-recommended content acts like individual overlay journal
- 100% open access — both for readers and authors
- Those concerned about reproducibility have been pushing for study pre-registration, easily handled in our system
- Moves focus away from the reputation of a journal or a researcher, to the quality of the work

Why this might work

- There are lots of reason why this might fail:
    - "we need standard journals to judge tenure cases"
    - "without journals we won't know what to read"
    - ...
- Only a reflection of how dependent we are on the "guild"
- But there are also reasons why it might work
- My experience is that (almost) everyone in academia is frustrated with the current system:
    - very little correlation between the the quality/importance of a paper and the journal it appears in
    - lots of time wasted on submissions, revisions, etc
- Right time for a new idea?
- Better for researchers to spend time/energy on what really matters — the research!

Conclusion

- Our goal is to develop a system that can deliver the "3As"
  - Autonomy
  - Authority
  - Access
- RESEARCHERS.ONE is the first attempt at a system where the authors completely control the peer review process
- New technology is needed to bring this vision to life and what we've been able to implement is probably not ideal
- We very much welcome new ideas moving forward
- Follow us: `www.twitter.com/@ResearchersOne`

Thanks!

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