Introducing PCI
a free recommendation process of scientific preprints based on peer-reviews

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Is the traditional peer-review system broken?

The peer-review system for academic papers is badly in need of repair

February 26, 2017 4.59pm GMT

The scientific refereeing process can be tedious, time-consuming and isn’t very rewarding.

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Is Peer Review Broken?

Peter Lawrence, a developmental biologist who is also an editor at the journal Development and former editorial board member at Cell, has been publishing papers in academic journals for 40 years. His first 70 or so papers were "never rejected," he says, but that’s all changed. Now, he has significantly more trouble getting articles into the first journal he submits them to.

"The rising [rejections] means an increase in angry authors."

-Drummond Rennie

Peer review: a flawed process at the heart of science and journals

Richard Smith

Traditional peer-review’s problems

**Asymmetrical**: often, reviewers know the authors’ identity but the reverse is not true

**Not transparent**: the review process is not publicly available, and details of it are not communicated to the authors

**Slow**: it can take months or even years for the review process to reach a decision

**Costly**: usually either authors and/or readers have to pay to access traditional peer-reviewed journals

**Wasteful**: results not deemed sensational or significant enough have trouble getting published, leading to a waste of resources

**Undemocratic**: especially in prestigious journals, the persons in charge of handling the review process and making final decisions are less and less often practising scientists
A possible solution

Preprint servers alleviate most of the problems mentioned above, but are not peer-reviewed.

How to plug an open, transparent and unbiased peer-review system into the preprint ecosystem?

Peer Community in ...

A free recommendation process of scientific preprints (and published articles) based on peer-reviews (photo credit: Martin Grandjean: A force-based network visualization)

Our solution: the PCI (Peer Community In) system
How does it work?

1. You're proud of your manuscript. Instead of, or before, submitting it to a journal, you first deposit it in a preprint server.

2. You then submit it to a PCI.

3. Your preprint is not considered for peer-review.

4. Your preprint is recommended and published by the PCI.

https://peercommunityin.org/how-does-it-work-2/

Jean-François Flot (jflot@ulb.ac.be)
Open science is at the core of the system

Submitted articles must contain a link to
- raw data
- scripts
- codes

+ pre-registration of studies is accepted and even recommended!

https://peercommunityin.org/how-does-it-work-2/
https://peercommunityin.org/2020/01/15/submit-your-preregistration-to-peer-community-in-for-peer-review/

Jean-François Flot (jflot@ulb.ac.be)
For preprints, bioRxiv currently displays a sentence stating that “This article is a preprint and has not been certified by peer review”. This also applies to preprints recommended by PCI, unfortunately.

Discussions are underway with bioRxiv to address this issue, but in the mean time if this bothers you please select another open repository in which to deposit your article (arXiv, OSF-preprints, zenodo, hal, university repositories,...).

https://peercommunityin.org/how-does-it-work-2/

Jean-François Flot (jflot@ulb.ac.be)
Fourteen existing PCIs

- PCI Evolutionary Biology
  Peer Community in Evolutionary Biology

- PCI Ecology
  Peer Community in Ecology

- PCI Paleontology
  Peer Community in Paleontology

- PCI Animal Science
  Peer Community in Animal Science

- PCI Ecotoxicology and Environmental Chemistry
  Peer Community in Ecotoxicology and Environmental Chemistry

- PCI Zoology
  Peer Community in Zoology

- PCI Circuit Neuroscience
  Peer Community in Circuit Neuroscience

- PCI Genomics
  Peer Community in Genomics

- PCI Mathematical & Computational Biology
  Peer Community in Mathematical & Computational Biology

- PCI Infections
  Peer Community in Infections

- PCI Forest & Wood Sciences
  Peer Community in Forest & Wood Sciences

- PCI Archaeology
  Peer Community in Archaeology

- PCI Network Science
  Peer Community in Network Science in start-up phase

- PCI Registered Reports
  Peer Community in Registered Reports
# Recommendations to date

<table>
<thead>
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<th>Category</th>
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<tr>
<td>Evol</td>
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<td>Zool</td>
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<tr>
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<td>Forest &amp; Wood Sci</td>
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<td>Archaeology</td>
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Jean-François Flot (jflot@ulb.ac.be)
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6th May 2020

PCI in figures

- **11** Peer Communities
- **154** Recommended Articles
- **>2600** Registered Users
- **>1000** Registered Recommenders
- **>12000** Visitors to PCI Websites
- **>4300** Twitter Followers
- **32** Friendly Journals
- **50** Supporting Organisations

https://peercommunityin.org/how-does-it-work-2/

Jean-François Flot (jflot@ulb.ac.be)
A template for formatting recommended articles is available to authors (after acceptance):

https://peercommunityin.org/how-does-it-work-2/

Jean-François Flot (jflot@ulb.ac.be)
Latest news

PCI-recommended article

Final, citable article hosted by preprint server

Author's choice to submit to

Peer Community Journal
Direct publication in diamond open access
Starting fall 2021

OR

PCI-friendly journals
- accept with no further peer review
- fast response (≤ 5 days) to presubmission enquiry
- use of PCI evaluation if appropriate

OR

Other journals

If not satisfied by the decision
How can you help?

Ask your university/graduate school/research institute to officially support the PCI system.

This means that peer-reviewed preprints will have the same weight as papers in peer-reviewed journals for e.g. PhD defenses and evaluation committees.

Keep informed! Check the newsletter and/or follow @PCIGenomics

Join one or several PCIs as a Recommender, or create your own. Don’t be shy!

And of course... submit your preprints for recommendation!
That's all Folks!