How to support peer reviewers?

Christna Chap
Senior Editor, Team Manager PLOS ONE
PEERE Training School on Peer Review – Split, May 2018
Why supporting peer reviewers?

- Improving consistency and quality of feedback
- Community development
- Support for innovation
Why supporting peer reviewers?

Demand for help

• 85% of PLOS reviewers report that they read existing guidelines

• 65% would be interested in additional reviewer resources

• What additional resources would be useful
  
  • 79% wanted tips for writing effective feedback
  
  • 49% reading the manuscripts
  
  • 49% organizing the review

PLOS survey Fall 2017 ~600 reviewers

Nick Youngson CC BY-SA
What’s out there—publishing landscape

- No reviewer-specific resources
- Reviewer guidelines
- Robust reviewer resources and outreach

Publicly available information from 38 publishers End 2017
Training and resources

- What types of training and/or resources are offered?
- What does the training look like? How is it accessed?
- What topics are covered? Is it journal-specific or general?
- Are there rewards and/or incentives for participating in training?

**e-Learning modules**
- Example reviews

**Tips from editors or experienced reviewers**
- Review templates

**Presentations**
- Videos

**Articles, readings, studies**
- In-person workshops
Reviewer recognition and credit

- How do publishers acknowledge reviewers?
- Are acknowledgments named or anonymous?
- How are reviewers given formal or informal credit for their reviews?
- What metadata is captured for reviewer recognition and/or credit?
- What strategies are used to certify reviewer performance and expertise?

Thank you acknowledgment
Review assigned a DOI
Review indexed
Metrics for report views

ORCID credit integration
Publons credit integration
Named review co-author (e.g., postdoc)
Badging/certification of expertise/experience
Rewards and incentives

- How do publishers reward reviewers for service?
- Are rewards contingent on quality or other criteria?
- What incentives are offered to encourage reviewer participation?

Certificate of performance
APC/membership discount
Discount on other product/service (e.g., published material or translation services)

Access to paywalled content
Continuing Medical Education (CME) credit
Building a reviewer community

• How do publishers engage reviewer communities?
• What are the virtual and in-person strategies for engagement?

Events & receptions
Workshops
Awareness campaigns
Newsletters
Blogs
Reviewer recruitment and targeting

- How easily can reviewers find information about reviewing?
- How do new reviewers sign up to be considered for reviews?
- To what extent do publishers encourage new reviewers to sign up?
Trends in/ types of reviewer programs

**Training and informational resources**
- Courses
- Exercises
- Presentations
- Webinars
- Videos
- Example reviews
- Tips from experts

**Recognition and credit**
- Public thank you
- Review DOI
- PubMed deposit
- Report metrics
- ORCID
- Publons
- Badging/profile

**Rewards and incentives**
- Certificates
- Access
- APC discount
- Content discount
- CME credit

**Community building**
- Newsletters
- In-person events
- In-person training
- Campaigns

**Recruitment and targeting**
- Sign-up options
- Locating editors
- Locating reviewers
How to support peer reviewers
train
recognize
certify
incentivize
reward
engage
Why supporting peer reviewers?

Demand for help

• 85% of PLOS reviewers report that they read existing guidelines

• 65% would be interested in additional reviewer resources

• What additional resources would be useful

  • 79% wanted tips for writing effective feedback

  • 49% reading the manuscripts

  • 49% organizing the review

PLOS survey Fall 2017 ~600 reviewers
What is the primary reason that motivates you to review submitted manuscripts?

- 67% I feel that it is my professional responsibility
- 17% I am able to see the latest research in my field
- 12% I want to give back to the research community
- 2% I know the editor and/or journal who has asked me to review
- 2% Other

PLOS survey Fall 2017 ~800 reviewers
Approximately how many reviews do you do every year (for any journal)?
With which of the following career stages do you identify?

- Early career researcher: 34%
- Mid-career researcher: 43%
- Advanced career researcher: 19%
- Other: 4%
How to train reviewers - Reviewer centre

reviewers.plos.org
Reviewer centre

How to peer review

- 10 tips for getting started as a reviewer (est. read time 1:30 min.)
- You've been invited to review. Now what? (est. read time 3:45 min.)
- How to read a manuscript as a peer reviewer (est. read time 6:00 min.)
- How to write a peer review (est. read time 6:00 min.)

Peer review toolbox

- How to review a manuscript (video, 5:16 min.)
- Peer review checklist (toolbox activity)
- Peer review template (toolbox activity)
- Competing interests for peer reviewers (est. read time 4:00 min.)
- Ethics for reviewers (est. read time 1:30 min.)
Reviewer centre

Peer Review Checklist
Tips for new reviewers

When you're invited to review a manuscript
- Confirm the manuscript is in your area of expertise
- Make sure you have enough time
- Check for competing interests

When you're reading the manuscript
- Identify the research question and key claims
- Think about context and related literature
- Look at the figures and tables. Are they clear? Do they represent what the study is about?
- Examine the results. Are they supported by the data?
- Read the conclusions. Do they make sense?
- Check the methods. Are they appropriate and reproducible?
- Review the journal guidelines and publication criteria
- Keep everything confidential!

When you're writing the review
- Start with a summary of the research
- State your overall impression
- Number your comments and separate them into “major” and “minor” issues
- Give concrete examples
- Refer to specific sections and page numbers
- Don’t focus on spelling and grammar
- Be professional and respectful
- Indicate if you’re available to look at the revised version
- Include positive feedback too!
- Finish on time

Peer Review Template
A quick guide for new reviewers

Organizational structure

Sample outline

1. Summary of the research
   In your own words, summarize the main research questions, claims, and conclusions of the study. Provide context for how this research fits within the existing literature.
   Discuss the manuscript’s strengths and weaknesses and your overall recommendation.

2. Examples and evidence
   - Major issues
     Major issues must be addressed in order for the manuscript to proceed. Focus on what is essential for the current study, not the next step in the research. Put these items in list and be as specific as possible.
   - Minor issues
     Mention additional things the authors should do to improve the manuscript. Typically these will be changes that would not affect the overall conclusions.

3. Other points (optional)
   - If applicable, add confidential comments for editors. Raise any concerns about the manuscript that the editors may need to consider further, such as concerns about others. Do not use this section for your overall critique. Also mention whether you might be available to look at a revised version.

Want more reviewing tips? Visit reviewers.plos.org

Content is licensed under a Creative Commons Attribution 4.0 International License.
Reviewer centre

Read more about peer review

reviewers.plos.org
http://blogs.plos.org/thestudentblog/about-this-blog/
Ten Simple Rules for Reviewers

Rule 1: Do Not Accept a Review Assignment unless You Can Accomplish the Task in the Requested Timeframe—Learn to Say No

Rule 2: Avoid Conflict of Interest

Rule 3: Write Reviews You Would Be Satisfied with as an Author

Rule 4: As a Reviewer You Are Part of the Authoring Process

Rule 5: Be Sure to Enjoy and to Learn from the Reviewing Process

Rule 6: Develop a Method of Reviewing That Works for You...
How to recognize reviewers- Thank you article
Thank you article
How to support peer reviewers?

A PLOS ONE perspective

It’s complicated
Challenges: how to support consistency

Size of journal
Scope of journal
Journal editorial structure
Field differences
Journal Differences
Human factor
Challenges: how to support consistency and quality

Defined publication criteria

1. Study presents primary research that contributes knowledge to the field
2. Results have not been published elsewhere
3. Experiments are performed to a high technical standard and described in sufficient detail
4. Conclusions are supported by the data
5. Article is intelligibly written in standard English
6. Meets all applicable standards of research and publication ethics
7. Adheres to reporting guidelines and meets data availability requirements
Challenges: how to support consistency and quality

**Structured reviewer form/template**
- Technical soundness of the work
- Rigor of the analysis
- Adherence to our data availability policy
- Clear use of English language
- Publications ethics
- Research ethics
- COI
Challenges: specific publication criteria
1. Study presents primary research that contributes knowledge to the field

PLOS ONE publication criteria focus on rigor rather than subjective significance

“The results are negative”

“The work is not significant enough/ has limited impact”

“I have problems with the PLOS ONE policy that the interest of the paper, scientifically or other, should not be taken into account”

“It’s not a priority area/ space is limited”

“I suggest to submit to a more specialized journal”
Challenges: specific publication criteria

2. Results have not been published elsewhere

- pre-prints, institutional site, conference abstracts, blogs
- publishing systems/platforms
Challenges: specific publication criteria
6. Meets all applicable standards of research and publication ethics

*PLOS ONE upholds the highest international standards...*

**Animal and field studies:**
- IACUC approval required for all vertebrate animal studies, including collection of tissues and cells
- Assess use of humane endpoints for survival experiments
- Ensure appropriate methods of anesthesia and euthanasia
- Require applicable permissions and permits for field studies

**Human studies:**
- IRB approval required for all studies involving human subjects and information, including collection of tissues and cells
- Ensure participants provide informed consent
- Protection of participant privacy and vulnerable groups
- We reserve the right to reject any study which does not adhere to the highest ethical standards

**But:**
- **heterogeneity between countries/fields**
- **Possible exclusion of countries because of limited resources/ lack of framework**
### Challenges: specific publication criteria

7. Adheres to reporting guidelines and meets data availability requirements

**Reporting Guidelines for Specific Study Types**

Authors are expected to comply with standard reporting guidelines for study designs. Check the EQUATOR Network for reporting instructions and supporting documentation. Documentation for specific studies should be uploaded as supporting information during manuscript submission. Read the submission guidelines.

#### Clinical trials

Clinical trial reports must adhere to the relevant reporting guidelines for their study design, such as CONSORT for randomized controlled trials, TREND for non-randomized trials, and other specialized guidelines as appropriate.

Read more about our policy on clinical trials.

#### Systematic reviews and meta-analyses

Reports of systematic reviews and meta-analyses must adhere to the PRISMA statement as a guide, and include a completed PRISMA checklist and flow diagram to accompany the main text. Blank templates of the checklist and flow diagram can be downloaded from the PRISMA website.

Authors must also state within their Methods section whether a protocol exists for their systematic review, and if so, provide a copy of the protocol as Supporting Information.

We support the prospective registration of systematic reviews. Authors whose systematic review was prospectively registered (e.g., in a registry such as PROSPERO) should also provide the registry number in their abstract. Registry details and protocols will be made available to editors and reviewers, and included alongside the paper for readers if the report is ultimately published.

#### Diagnostic studies

Reports of studies of diagnostic accuracy should conform to the STARD requirements.

#### Observational studies in epidemiology

For reports of epidemiological studies, authors should consult the STROBE initiative.

#### Microarray experiments

Reports of microarray experiments should conform to the MIAME guidelines published by the Functional Genomics Data Society (FGED), and the data from the experiments must be deposited in a publicly accessible database.

Challenges: specific publication criteria
7. Adheres to reporting guidelines and meets data availability requirements

The PLOS Data policy requires authors to make all data underlying the findings described in their manuscript fully available without restriction, with rare exception (e.g. ethical restrictions). The data should be provided as part of the manuscript or its supporting information, or deposited to a public repository. For example, in addition to summary statistics, the data points behind means, medians and variance measures should be available. If there are restrictions on publicly sharing data—e.g. participant privacy or use of data from a third party—those must be specified.
Challenges: specific publication criteria

7. Adheres to reporting guidelines and meets data availability requirements

Challenges: specific publication criteria
7. Adheres to reporting guidelines and meets data availability requirements
Support peer reviewers
train
recognize
certify
incentivize
reward
engage

Thank you

cchap@plos.org
@ChVChap
@PLOSONE