

# **Publication Ethics FAQs for Editorial Board Members**

Applies to:

<u>PLOS Climate</u> | <u>PLOS Complex Systems</u> | <u>PLOS Computational Biology</u> | <u>PLOS Digital</u> <u>Health</u> | <u>PLOS Genetics</u> | <u>PLOS Global Public Health</u> | <u>PLOS Mental Health</u> | <u>PLOS</u> <u>Neglected Tropical Diseases</u> | <u>PLOS ONE</u> | <u>PLOS Pathogens</u> | <u>PLOS Sustainability and</u> <u>Transformation | PLOS Water</u>

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# What are PLOS' responsibilities with regard to publication ethics?

PLOS and our journals are members of <u>COPE</u> (Committee on Publication Ethics). We comply with the <u>core practices</u> and <u>best practice guidelines</u> of COPE when our ethical guidelines are breached or appear to be so.

PLOS upholds publication ethics standards as outlined by COPE and by our own publication ethics policies, which are outlined in our <u>Ethical Publishing Practice</u> policy and our policies on Competing Interests and Authorship. Our internal staff on the journal teams and on our dedicated Publication Ethics team follow up on any concerns raised, whether during peer review or after an article is published.

# As an Academic Editor, what are my responsibilities with regard to publication ethics?

As our partners in the publication process, we expect that you are familiar with PLOS policies (including those mentioned above), that you will provide thorough and objective evaluations of your manuscript assignments, and that you will notify PLOS of any publication ethics concerns about submitted or published PLOS content, whether you identify those concerns or whether other parties (readers, reviewers) contact you to raise concerns.

You are not expected to follow up on publication ethics issues yourself - please leave the management of these cases to PLOS staff who have expertise in this specialized work. With that said, expert input from you - our Academic Editors and Section Editors - plays a critical role in the evaluation and resolution of publication ethics cases. Please contribute where possible if we ask for your help with this work.

# If I encounter a potential ethical problem what action should I take?

If you suspect a problem or a concern is raised by an author, reviewer or reader on a submitted manuscript (ie: pre-publication), please <u>report this directly to the journal</u> who will follow the matter up with support from the Publication Ethics Team as needed.

If you suspect an ethical problem or concern with a published manuscript (ie: postpublication), please report this directly to the Publication Ethics team (<u>pub-</u> <u>ethics@plos.org</u>) who will follow the matter up in accordance with COPE guidelines.

If you suspect a scientific problem or concern with a published manuscript (ie: postpublication), please report this directly to the journal, who will follow the matter up with support from the Publication Ethics Team as needed.

### What is the PLOS Publication Ethics team?

The Publication Ethics team is a group of staff editors with specialized expertise in ethics and integrity standards, policies, and procedures. The team supports and collaborates with all PLOS journals, develops policy and workflow solutions to integrity issues affecting PLOS journals, and follows up on concerns raised to PLOS about the integrity, validity, or reliability of submitted or published articles. They advise on

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suitable action in cases of suspected infringement of our ethical guidelines and lead investigations to resolve any allegations of research or publishing misconduct in PLOS journals, working in close collaboration with the editorial teams. When necessary the Publication Ethics Team will work with other journals or institutions to achieve a suitable resolution in accordance with COPE guidelines.

## What ethics checks are done by PLOS staff?

PLOS conducts a series of ethics checks before and after peer review. Details of prepublication and post-Accept checks depend on the specific journal but typically include the following:

- Checks for reporting of ethics approval information, for human subjects and animal research
- Text overlap checks (using iThenticate/Crosscheck)
- Checks for identifying information in human subjects datasets
- Checks for compliance with the journal's blot and gel policy, where relevant
- High level checks for compliance with the PLOS Data Policy
- Authorship checks, if author list changes were requested between submission and acceptance

### Does PLOS use plagiarism detection or image forensics software?

PLOS uses Crossref Similarity Check (powered by iThenticate) to screen manuscripts for text overlap with other published articles. Each journal screens a proportion of manuscripts. We will do a follow-up investigation if the software identifies any concerns.

The iThenticate score/similarity index alone may not accurately reflect the level of concerning text overlap in the manuscript. For example, extensive text overlap in the Results, Discussion and Conclusions, especially if this is from an article authored by a different group, would usually be more concerning than extensive overlap in the Methods, or even in the Introduction. Also, the similarity score is affected by the length of the article and whether or not references and metadata are included in the submission scan. Consequently, we do not recommend using the iThenticate score/similarity index to solely make your decision on a manuscript.

We do not currently use dedicated image forensics software to conduct image integrity checks for all PLOS submissions. While we may pursue this in the future, for now we ask that our Editorial Board members consider image integrity issues when reviewing figures in PLOS submissions.



# What types of ethical issues should Academic Editors watch for during peer review?

**Duplicate Submission** 

- Upon submission authors are required to confirm that the manuscript submitted is not currently under consideration for any other journal.
- PLOS does not consider submissions that have been published previously or are currently under consideration for publication elsewhere.
- If you, or a reviewer on a manuscript you are handling, notice what could be a duplicate submission either from your work at PLOS journals or with other publishers, please pause peer review and notify the journal office as soon as possible.

#### Dual/Redundant Publication and closely related studies

- Submissions to PLOS should present original unpublished content. Dual publication
  refers to situations where a submitted or published article includes findings that have
  previously been published elsewhere. Exception: Prior publication of research as a
  thesis, presentation at medical or scientific conferences, or posting on preprint servers
  does not preclude consideration of the manuscript.
- Submitted/published articles that are partially or wholly redundant with previously
  published work usually need to be rejected or retracted to maintain the integrity of the
  academic record. (See <u>COPE's Retraction Guidelines</u> and <u>document on suspected</u>
  redundant publication in a published article.)
- Occasionally authors will include previously published content in a submission that also reports new content. The overlap/reuse can range from text in a Methods section to inclusion of one or more figures from a previous publication. PLOS journals are typically not concerned about reuse of Methods, although the original source(s) should ideally be cited. For other cases, if a submission includes new material in addition to content that has been reported previously, consider:
  - whether the original report of the reused material was by the same author group;
  - whether the new content alone is sufficient to meet the journal's publication criteria;
  - whether the submission includes clear attribution to & citation of the original source(s) for the previously reported material; and
  - whether there is adequate justification for republishing the content. I.e., is it essential for the interpretation of the new work to include the previously published content in the PLOS submission (e.g. as a reference/control to which new results are being compared), or would it suffice to refer readers to the original publication?



- Contact the journal office if you have questions or concerns about reused content. (Note, if a submission includes content that was originally published under a non-Open Access license, the authors would need permissions from the original copyright-holder to republish the material.)
- **Fragmentation or salami slicing** are terms used to describe the reporting of a research project in a series of closely related papers that could instead have been combined into one manuscript. Academic Editors can reject submitted articles on the grounds of fragmentation if there does not appear to be a clear scientific rationale for dividing the work into multiple manuscripts.
- If a submitted study **replicates or is very similar to previous work**, authors must provide a sound scientific rationale for the submitted work and clearly reference and discuss the existing literature.
  - According to our <u>Complementary Research policy</u>, PLOS offers scooping protection whereby primary research is protected from being considered scooped by closely related studies or preprints posted/published up to 6 months prior to the date when the manuscript was submitted to PLOS. The related article(s)/preprint(s) must be cited and discussed so that the PLOS submission is placed in context of the related work.
  - For work not covered by the Complementary Research policy, submissions that replicate or are derivative of existing work can be rejected if authors do not provide adequate justification, or if a duplicate submission is discovered.
- Authors should make the journal aware of any related papers that they have under consideration with other journals and provide copies of those manuscripts along with details of their submission status. If you see related work in Supporting Information files with a PLOS submission, consider the related work in the context of the publication ethics standards and policies discussed above. Contact the journal office if you have any questions or concerns.

Plagiarism and self-plagiarism/text recycling

- **Plagiarism** includes, but is not limited to: directly copying text from other sources without attribution, copying ideas, images or data from other sources without attribution, and using an idea from another source with slightly modified language without attribution.
  - COPE guidance: Suspected plagiarism in a submitted manuscript
  - PLOS Plagiarism policy
- Self-plagiarism, also known as text recycling, can include reusing text from the author's previous publications without attribution or agreement of the editor (with the exception of reusing text from the Methods section in the author's previous publications, with attribution to the source). For more information, see the <u>COPE guidelines on text</u> recycling and the <u>text recycling guidance</u> released by the Text Recycling Research Project.



If you suspect that a submitted manuscript or published PLOS article may contain
plagiarized or recycled material, please notify the editorial office and do not issue a
decision for the affected submission until being advised to do so by PLOS staff. We
will review the issues and how they align with PLOS standards and COPE guidance
for concerns about suspected plagiarism. If the concerns are verified by our internal
editorial team(s) then PLOS staff will follow up with the authors and/or advise you on
how to proceed with regard to any active submission involved in the case. The editorial
outcome will depend on the nature and extent of the issue(s).

Fraudulent, fabricated or manipulated presentation of data

- Misrepresentation of experimental data or findings poses a significant danger to the integrity of the academic record. Such issues may result from honest data analysis or reporting errors or from intentionally fraudulent research reporting.
- PLOS has a responsibility to follow up any concerns that are raised and where necessary report these concerns to the relevant institution for investigation.
- If you or a reviewer have concerns about data integrity in a PLOS article or submission, please contact the journal office and the Publication Ethics team (<u>pub-ethics@plos.org</u>).

Image concerns and integrity

- Image concerns can include, but are not limited to:
  - Apparent splice lines, or differences in background patterns between different areas of the same image.
  - Partial or full overlap across panels.
  - Repetitive elements within a panel or between panels.
  - When contrast is adjusted (eg: using Photoshop or GIMP), boxes may be evident within the image suggesting that different images having been compiled to generate a single panel, or that boxes have been overlaid on the image (e.g. to obscure background or signal).
  - Smudges, smears, unusual image features that you would not expect given the data type and/or how the image data were captured.
  - Different textures in the image background.
  - Similarities in background patterns for panels reporting different data.
  - No background noise in fluorescent microscopy panels including control panels (i.e. uniform color across entire panel).
- If you, or a reviewer on a manuscript you are handling, notice any image concerns during the course of your assessment, please pause peer review and notify the journal office as soon as possible.



- In many cases, image issues are not the result of deliberate manipulation, and the provision of underlying data will clear up any concerns.
- Several PLOS journals, including **PLOS ONE**, have a specific <u>policy for blot and gel</u> <u>reporting</u>. Authors must provide the original, uncropped and minimally adjusted images supporting all blot and gel results reported in an article's figures and supporting information files. The image data may be requested by PLOS in the first decision letter or at Accept, depending on the journal. When the image data become available, please review them to ensure that all blot and gel image data have been provided, that the underlying image data align with the results reported in the manuscript, and that there are no image integrity concerns. Email the journal office if you have any questions or concerns.

#### Authorship disputes

- We define our criteria for authorship in <u>our authorship guidelines</u> and expect authors to use these as a basis for attributing the authorship of their papers. These policies apply to all PLOS journals, unless otherwise noted.
- If authorship is disputed, PLOS follows up in accordance with COPE guidance. If we are unable to resolve the issue in discussion with the involved parties, we are unable to adjudicate and may choose to refer the authors to their institution.
- If you are contacted about an authorship dispute, please notify the journal office and PLOS staff will follow up according to our policies.

Systematic manipulation of the publication process

- Systematic manipulation of the publication process is where an individual or a group of individuals repeatedly use dishonest or fraudulent practices to prevent or inappropriately influence the independent assessment of a piece of scholarly work, inappropriately attribute authorship of a piece of scholarly work, or publish fabricated or plagiarized research. Some types of systematic manipulation have been referred to in the media as 'paper mill' activity. For more information, see COPE's document on dealing with systematic manipulation of the publication process, and the PLOS policy on systematic manipulation of the publication process.
- Systematic manipulation typically involves more than one manuscript and often more than one journal.
- Any concerns about systematic manipulation of the publication process should be directed to the PLOS Publication Ethics team at <u>pub-ethics@plos.org</u>.
- To avoid concerns about the integrity of your own editorial work, be sure to abide by the <u>PLOS Competing Interests policy</u> (further details on COIs can be found below); ensure all of your editorial decisions are rooted in the journal's publication criteria and/or editorial policies; take care to invite reviewers who are on-topic and who do not have potential competing interests with regard to the authors or submission content; and report any potential conflicts or concerning reviewer or author behavior to the journal office. When inviting reviewers, use the candidate's institution-hosted email



address if possible instead of using a user-generated account. See also the *Citation stacking* section below.

- **Paper mills** are profit oriented individuals or organizations that produce and sell fraudulent manuscripts that seem to resemble genuine research. They may also handle the administration of submitting the article to journals for review and sell authorship to researchers once the article is accepted for publication, or may attempt to infiltrate a journal's peer review system as reviewers or editors in order to deliver Accept decisions for paper mill customers.
- Indications that manuscripts may be produced by a paper mill, or that a paper mill is involved in peer review, typically requires the identification of trends across a series of submissions. They can be difficult to detect on the basis of individual articles.
- If you notice a concerning pattern or similarities between different submissions or articles from different author groups, please pause peer review and notify the editorial office as soon as possible. See this <u>COPE discussion</u> and the <u>COPE guidance on</u> <u>systematic manipulation of the publication process</u> for more information.

#### Fake reviewers

- The nature of the peer review process means that it can be subject to misuse, for example, as a result of impersonation of reviewers by authors, their colleagues or third parties *via* fake reviewer accounts.
- If you have any concerns over the identity of a reviewer, suggested reviewers, or the integrity of the peer review process for a paper you are handling please consult with the editorial office as a matter of priority.

#### Competing interests

- PLOS policy requires that the journal should be informed of any significant conflict of interest that editors, reviewers or authors may have. See the full <u>Competing Interests</u> <u>Policy</u> for more information, including about what types of interest should be declared. Note that the policy applies to financial as well as non-financial competing interests.
- In evaluating whether a potential interest should be declared under PLOS' policy, consider whether
  - an Academic Editor's or reviewer's interest may lead an author or reader to question the objectivity of the review process, and/or
  - there is an indication that the article's objectives, results, or conclusions appear biased toward advancing an author's interest. See the full <u>Competing Interests</u> <u>Policy</u> for more information.
- Editorial Board members should recuse themselves from handling (i.e. decline to handle) any submission for which you *may be perceived as* having a potential competing interest, even if you do not think the issue presents a true conflict that impacts your ability to objectively evaluate the manuscript. Examples of potential



competing interests include if you:

- Work at the same institution or organization as an author, currently or recently.
- Have collaborated with an author, currently or recently.
- Have published with an author during the past 5 years.
- Have held grants with an author, currently or recently.
- Have a financial relationship with the company who funded the research.
- Have a personal relationship with an author that does not allow you to evaluate the manuscript objectively.
- May be perceived as a competitor or colleague of the authors given the nature of your own work and/or other shared experiences/interests.
- Ideally and in the majority of cases you should not invite reviewers who have any
  potential competing interests.
  - If you learn during peer review about a potential conflict, or if you feel an individual's input is needed in spite of a known/potential conflict, the reviewer's competing interests must be disclosed on the reviewer report, and you should carefully consider any potential conflicts when evaluating the reviewer's comments. Reviewers with potential conflicts may provide high quality and valid feedback, and, provided they are transparent about the potential conflict(s), their participation in peer review may not raise major publication ethics concerns. However, please be sure to always obtain at least one review from a referee who does not have any known potential conflicts of interest.
  - If you are concerned that a reviewer's comments overall are biased, inappropriate, and/or should not be relied upon for other reasons, or if you are aware of a reviewer COI that is not disclosed on the reviewer form, please contact the journal office and we will follow up accordingly.
- If you submit to a PLOS journal you should declare in the Competing Interest disclosure that you currently serve on the editorial board of a PLOS journal.

#### Animal research

- If a study involves vertebrate animals it must be conducted according to internationally-accepted standards. The authors must obtain prior approval from their Institutional Animal Care and Use Committee (IACUC) or equivalent ethics committee(s). The name of the IACUC or equivalent ethics committee, as well as relevant permit numbers, in addition to any other pertinent experimental details, must be provided at submission. More information on PLOS' <u>Animal Research Policy</u>.
- Editorial Board members and/or the journals' staff editors may request additional information in relation to experiments on vertebrates or higher invertebrates as necessary for the evaluation of the manuscript. If you have concerns about animal welfare considerations or about the ethical conduct of animal research, you may ask



authors for additional information in a decision letter, or you can seek help from a member of staff by emailing the journal office.

• If you identify a clear breach in animal ethics, this can be used as grounds for rejection under the PLOS Animal Research Policy.

Research involving human participants or human subjects data

- Researchers submitting studies involving human participants must obtain prior approval for human subjects research by an institutional review board (IRB) or equivalent ethics committee(s).
- For PLOS ONE, PLOS Climate, PLOS Global Public Health, PLOS Mental Health and PLOS Water researchers must:
  - Submit documentation from the review board or ethics committee confirming approval of the research.
  - Redact identifying information about study participants from the approval document before it is submitted to the journal.
  - Declare compliance with ethical practices upon submission of their manuscript.
  - Report details on how informed consent for the research was obtained (or explain why consent was not obtained).
  - Confirm that any identified individual has provided written consent for the use of that information.
- For studies involving data from human subjects (e.g. retrospective studies or studies using third party data sets), ethics approval or data protection oversight may be needed if researchers had access to identifying or sensitive information.
- Personally identifying information about research participants should never be included in a research publication. If you see personal or identifying information (e.g. name, phone number, address, medical record number, date of birth) in a dataset, figure, or manuscript text, ask the authors to redact the information of concern or contact the journal office if you would like support.
- For clinical trials, researchers must provide trial registration details, the study protocol, and CONSORT documentation. Please check to ensure that the protocol, trial registry, and manuscript report consistent information about the study.
- PLOS' Human Subjects Research Policy

#### Citation stacking

• Citation stacking refers to when a reviewer or editor asks authors to cite their (the reviewer's or editor's) publications, or work by a colleague, during the peer review process.



- This may include requests for citation of work relevant or not relevant to the manuscript under consideration. In either case, citation stacking requests may be perceived as using the peer review system to advance one's interests. Editors and reviewers should avoid requesting citations of their own work where possible.
  - If you see citation stacking requests in a peer review report, check to see if the reviewer is a listed author on the requested articles, and advise the authors in the decision letter if the citation requests should be addressed, dismissed, or considered as optional. Please also notify the journal office of your concerns.
  - If you or a reviewer feel that your/their own work is highly relevant and needs to be cited, balance any requests to cite your or the reviewer's work with requests to cite relevant work by other researchers.
  - If you are concerned about a reviewer that repeatedly requests citations of their own work, please do not invite them to review in future.
- Citation stacking can be an indicator of concerns involving systematic manipulation of the publication process: a network of journals, authors, editors or reviewers may work together to cite each other and thus raise the number of citations their work receives, their h-index and their impact factors. If you notice a concerning pattern of repeated citations or recommended citations between a small group of authors and/or reviewers for submissions you are handling, please pause peer review and notify the editorial office as soon as possible.

#### Self-citations

- Self-citation occurs in an article when an author references another of their own publications. This can be a legitimate way to reference earlier findings; but self-citations can also be used inappropriately to inflate an individual's citation count.
- If you see a high amount of self-citation in a submission or its reference list, consider whether the citations are needed, and whether the appropriate reference is cited in each case (vs. a previous article by a different research group).
- If self-citations appear to be unnecessary and/or self-promotional, notify the journal office and we will follow-up with the authors and/or the institution as needed.
- See the COPE discussion on citation manipulation

# What should I do if I suspect AI tools (e.g. ChatGPT) were used to generate submission content or reviewer reports?

PLOS has a policy on use of AI tools and technologies. While we do not prohibit use of AI tools, we require that any use of AI tools must be fully declared and described; authors remain responsible for the accuracy and validity of any text; authors are responsible for ensuring that all relevant sources are cited; and article contents pertaining to hypotheses, interpretations, results, and conclusions should represent the authors' own ideas. Please see https://journals.plos.org/plosone/s/ethical-publishing-practice#loc-artificial-intelligence-tools-and-technologies for full details. If



you suspect undeclared AI tools were used to generate submission content, inform the journal office as soon as possible. Also include this issue in the decision letter in such a way that reflects journal policy. The journal office will be able to assist with this.

PLOS does not approve or condone the use of generative AI tools (such as chatbots, LLM tools) in peer review. Their usage is a violation of confidentiality of the review process. The use of other AI tools (e.g. for data assessment, translation, or language editing) in peer review must be clearly disclosed in the "Comments to Authors" section of the review form (reviewers), or in the decision letter comments (editors). Any concerns about AI-generated peer review content or undisclosed use of other AI tools in peer review should be reported to <u>pub-ethics@plos.org</u>. If there are concerns about a review, invite an additional reviewer.

### What are reviewers' responsibilities?

Reviewers have a responsibility to maintain the confidentiality of unpublished manuscripts and not to use their privileged access to the information therein to progress their own research.

Reviewers are expected to provide timely input during peer review. If a reviewer does not meet the specified deadline, consider inviting different referees so as to avoid unnecessary delays to the submission. Inform the journal office if you are concerned about an individual attempting to obstruct the submission's review process or publication.

Reviewers should also declare potential competing interests and recuse themselves from the peer review process if they feel they will be unable to provide a rigorous or objective review (e.g. due to a potential conflict or insufficient expertise in the research area).

The usage of generative AI tools for reviewer reports is a violation of confidentiality of the review process.