Publishing Ethics *for journals*

A guide for Editors-in-Chief, Associate Editors, and Managing Editors



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1 Introduction

Researchers should conduct their research - from research proposal to publication - in line with best practices and codes of conduct of relevant professional bodies and/or national and international regulatory bodies. In rare cases it is possible that ethical issues or misconduct could be encountered in your journal when research is submitted for publication.

This document will provide practical guidance to Journal Editors and Society & Publishing Partners and help manage the repercussions potentially arising from publishing work which could be in breach with the codes of conduct.

Important! We advise you to contact your Springer Publishing Editor if you are dealing with a (potential) case of publishing misconduct.

2 Springer and the Committee on Publication Ethics

Springer is a member of the Committee on Publication Ethics (COPE) and subscribes to its principles on how to deal with acts of misconduct. Springer strongly recommends journal editors to join COPE and thereby adhere to the principles of COPE, committing to investigate allegations of misconduct and to ensure the integrity of research.

For more information; see <u>The Code of Conduct and Best Practice Guidelines for Journal Editors</u> and/or visit the COPE website: <u>www.publicationethics.org</u>

For joining please contact your Springer Publishing Editor.

3 Developing a publishing ethics policy for your journal

Almost every step in the publishing process involves important ethical principles. Having clear statements on these issues can encourage responsible publication practices.

COPE has designed guidelines that can be used to audit your journal in order to define which of the processes and practices require attention; see Audit your journal.

A clear description of ethical principles will help manage author expectations and will help manage situations that may arise if these statements have not been adhered to by authors. Below you will find a few of the most important ethical principles

• Clear guidelines on submission of the work

- that the work has not been published before (except in the form of an abstract or as part of a published lecture, review or thesis)
- that the work is not under consideration elsewhere
- that copyright has not been breached in seeking its publication
- that the publication has been approved by all co-authors and responsible authorities at the institute or organization where the work has been carried out

What type of content is or is not acceptable for publication?

For example:

- are translations of previously published articles acceptable?
- are extended versions of conference proceedings acceptable?

In these cases the author is expected to give full disclosure for transparency reasons but it could also be necessary for the author to seek approval from the original publisher.

It should also be noted that different disciplines have different expectations. When authors cross over to other disciplines, make sure they are aware of the explicit policies of the journal in order to manage their expectations. Please note there are no universally agreed rules or regulations.

Guidelines on what constitutes authorship and how proposed changes to authorship are handled

Although there is no universal definition of what constitutes authorship it is generally believed that authors should be identified by the research group as having contributed sufficiently to the scientific work, who are accountable for their part of the work, and who critically reviewed and approved the final manuscript. Criteria: Authoring, Drafting, Reviewing, Approving.

Description of the peer review process

Peer review is fundamental in ensuring the integrity of the scientific publication process and can flag potential misconduct at an early stage.

COPE has developed ethical guidelines for peer reviewers which can be used as a reference for providing guidance to peer reviewers. For more information; see COPE Ethical Guidelines for Peer Reviewers.

• Inclusion of the necessary ethical statements if required

Certain Abstracting & Indexing services (notably PubMed) insist on compliance with the ethical requirements 'Conflict of Interest', 'Human and Animal Rights' and 'Informed Consent' and require authors to declare compliance in their articles.

Springer has designed instructions for authors to declare compliance in their articles; see http://www.springer.com/authors/journal+authors/helpdesk?SGWID=0-1723213-0-0-0

Note! Special issues handled by Guest Editors often form an important part of the content. Please make sure that Guest Editors adhere to the submission process, peer review process and ethical standards of your journal.

4 Ethical issues and what to do when you are encountering possible misconduct?

It should be noted there are two distinct situations: serious scientific fraud or errors. Errors could be due to negligence (for example statistical errors) or honest errors which are part of the normal course of doing research. It is therefore important to treat potential cases with care as academic careers could be at risk.

Five steps to follow when encountering possible misconduct:

- Remain a neutral player and treat all potential misconduct cases confidentially
- Keep records of written communication including the allegation and the evidence of the complainant
- Raise the issue with the accused (co-)author in a timely manner
- Assess what exactly has happened (fact finding) and be transparent and final about decisions
- In case of potential media attention (e.g. as soon as the media is aware) or legal questions please contact your Springer Publishing Editor who will liaise with Corporate Communications and/or Springer's Legal Department.

Ethical issues

Six fundamental ethical issues have been defined, and procedures for responding to misconduct have been outlined below. Please note that these guidelines are not intended to provide or substitute legal advice. Each ethical issue is followed by recommended actions as advised by COPE for Journal Editors and when available additional reading has been added. Clicking on the link will give you a flowchart with the actions stipulated. Please note that flowcharts are making a distinction between ethical issues in a *submitted* manuscript and *published* article.

For follow-up actions by Springer on how to correct the literature upon discovery of misconduct or changes to articles that affect the interpretation and conclusion of the article, but do not fully invalidate the article after publication; see How to correct the literature?

To help discover potential misconduct in the form of plagiarism or duplicate/redundant at submission stage, Springer is offering similarity ("plagiarism") detection software (CrossCheck/iThenticate). For more information; see <u>Using plagiarism detection software</u>

Note! Always contact your Springer Publishing Editor if you are confronted with an ethical issue.

4.1 Data fabrication/data falsification

Data fabrication: This concerns the making up of research findings.

Data falsification: Manipulating research data with the intention of giving a false impression. This includes manipulating images (e.g. micrographs, gels, radiological images), removing outliers or "inconvenient" results, changing, adding or omitting data points, etc.

With regard to *image manipulation* it is allowed to technically improve images for readability. Proper technical manipulation refers to adjusting the contrast and/or brightness or color balance if it is applied to the complete digital image (and not parts of the image). Any technical manipulation by the author should be notified in the cover letter to the Journal Editor upon submission. Improper technical manipulation refers to obscuring, enhancing, deleting and/or introducing new elements into an image. Generally, if an author's figures are questionable, it is suggested to request the original data from the authors.

Recommended action by COPE for Journal Editors:

- Suspected fabricated data in a submitted manuscript
- Suspected fabricated data in a published article

For more information on image manipulation see also the following useful links:

- <u>CSE's White Paper on Promoting Integrity in Scientific Journal Publications, 3.4 Digital Images and Misconduct</u>
- What's in a picture? The temptation of image manipulation
- ORI "Forensic Images Samples" for the quick examination of scientific images

4.2 Duplicate submission/publication and redundant publication

Duplicate submission/publication: This refers to the practice of submitting the same study to two journals or publishing more or less the same study in two journals. These submissions/publications can be nearly simultaneous or years later.

Redundant publication (also described as 'salami publishing'): this refers to the situation that one study is split into several parts and submitted to two or more journals. Or the findings have previously been published elsewhere without proper cross-referencing, permission or justification. "Self-plagiarism" is considered a form of redundant publication. It concerns recycling or borrowing content from previous work without citation. This practice is widespread and might be unintentional. Transparency by the author on the use of previously published work usually provides the necessary information to make an assessment on whether it is deliberate or unintentional.

Note! Translations of articles without proper permission or notification and resubmission of previously published Open Access articles are considered duplications.

Recommended action by COPE for Journal Editors:

- Suspected redundant (duplicate) publication in a submitted manuscript
- Suspected redundant (duplicate) publication in a published article

4.3 Duplication of text and/or figures (plagiarism)

Plagiarism occurs when someone presents the work of others (data, text, or theories) as if it were his/her own without proper acknowledgment. There are different degrees of plagiarism.

The severity is dependent on various factors: extent of copied material, originality of copied material, position/context/type of material and referencing/attribution of the material used.

Every case is different and therefore decisions will vary per case. Ask yourself the following question: Does it concern an honest mistake or is there an intentional deviation from the scientific norm? Please note there are many grey areas between honest, questionable and fraudulent practices.

Whilst reviewing the case consider the following factors:

- Author seniority. Junior authors may be asked to paraphrase the copied text if it is believed that they are genuinely not aware that copying phrases is inappropriate. It is expected that a senior author should know better
- Cultural background could be an indication for potentially different behaviors concerning the amount of copying which could be seen as plagiarism

The following listing is designed to make you aware of the various possibilities concerning plagiarism:

- Verbatim copying of another's work and submitting it as one's own.
- Verbatim copying of significant portions of text from a single source.
- Mixing verbatim copied material from multiple sources ("patchwork copying"). This could range from 1 or 2 paragraphs to significant portions consisting of several paragraphs.
- Changing key words and phrases but retaining the essential content of the source as a framework.
- Rephrasing of the text's original wording and/or structure and submitting it as one's own.
- Mixing slightly rephrased material from multiple sources and presenting what has been published already
 as new.
- The work is cited, but the cited portions are not clearly identified. This can be combined with copied parts
 of text without citation.

However for **review papers** the above is not directly applicable. Review papers are expected to give a summary of existing literature. Authors should use their own words with exception of properly quoted and/or cited texts and the work should include a new interpretation.

Recommended action by COPE for Journal Editors:

- Suspected plagiarism in a submitted manuscript
- Suspected plagiarism in a published article

For more information on this topic; see <u>Avoiding plagiarism</u>, <u>self-plagiarism</u>, and other <u>questionable writing practices</u>: A <u>guide to ethical writing</u> by M. Roig (guidelines developed with support from The Office of Research Integrity) and <u>Text Recycling Guidelines</u> from COPE.

4.4 Authorship issues

COPE has written an article with advice on how to spot potential authorship problems. Most authorship problems have to do with authorship without the author's knowledge and unacknowledged authorship. The International Committee of Medical Journal Editors has excellent advice on what constitutes proper authorship. For more information; see http://www.icmje.org/ethical_lauthor.html

Recommended action by COPE for Journal Editors:

- Corresponding author requests addition of extra author before publication
- Corresponding author requests removal of author before publication
- Request for addition of extra author after publication
- Request for removal of author after publication
- Suspected guest, ghost or gift authorship

For more information on this topic see How to handle authorship disputes: a guide for new researchers

4.5 Undeclared conflict of interest (CoI)

A conflict of interest is a situation in which financial or other personal considerations from authors or reviewers have the potential to compromise or bias professional judgment and objectivity. Authors and reviewers should declare all conflicts of interest relevant to the work under consideration (i.e. relationships, both financial and personal, that might interfere with the interpretation of the work) to avoid the potential for bias.

Recommended action by COPE for Journal Editors:

- What to do if a reviewer suspects undisclosed CoI in a submitted manuscript
- What to do if you suspect a reviewer has appropriated an author's idea or data
- What to do if a reader suspects undisclosed CoI in a published article

4.6 Ethical problems

There are ethical issues that relate to patient consent or animal experimentation and the lack of ethical approval.

Recommended action by COPE for Journal Editors:

• What to do if you suspect an ethical problem with a submitted manuscript

5 How to correct the literature?

In some cases it might be necessary to correct the literature in order to maintain the integrity of the research literature. The COPE <u>Retraction Guidelines</u> describe exactly when and which option should be used.

Summary:

Erratum – Journal Editors should consider issuing an erratum if:

- a small portion of an otherwise reliable publication proves to be misleading (especially because of honest error)
- the author/contributor list is incorrect
- Retraction Note Journal Editors should consider retracting a publication if:
 - there is clear evidence that the findings are unreliable, either as a result of misconduct or honest error
 - the findings have previously been published elsewhere without proper cross-referencing, permission or justification
 - it constitutes plagiarism
 - it reports unethical research

The text for retraction notes can be submitted/written by the author(s), Journal editor, Society or jointly.

- Expression of Concern Journal Editors should consider issuing an expression of concern if:
 - there is inconclusive evidence of research or publication misconduct by the authors
 - there is evidence that the findings are unreliable but the authors' institution will not investigate the case
 - it is believed that an investigation into alleged misconduct related to the publication either has not been, or would not be, fair and impartial or conclusive
 - an investigation is under way but a judgment will not be available for a considerable time

Note! In all cases, please contact your Springer Publishing Editor first.

6 Should an author be banned and when?

Banning is not a policy endorsed by COPE. COPE advises that the matter of punishment should reside with the author's institute. Publishers are expected to correct the literature. It is however Springer's view that in exceptional cases (e.g. in cases of repeat offenders or authors using abusive language) the Editor-in-Chief/Editorial Board has the right to refuse to review/accept papers from these authors.

7 What to do when you are encountering a severe plagiarism case?

For severe plagiarism cases (for example plagiarism by the same group of authors affecting multiple Springer journals or journals from other publishers or cases that might attract the attention of the media) or other serious unethical practices, you are advised to inform your Springer Publishing Editor.

8 What to do when misconduct is beyond the means of Journal Editors to investigate?

If allegations of scientific misconduct cannot be resolved or if the response received from the parties involved is unsatisfactory or if the misconduct is beyond the means of the Journal Editor and Board to investigate (often occurring in cases of data fabrication/falsification, stolen data, and author disputes amongst others), you are advised to refer the case to the author's institution (or employer or other regulatory body) and request an investigation. For more information on the cooperation between research institutions and journals, see Cooperation between research institutions and journals on research integrity cases: guidance from the Committee on Publication Ethics (COPE)

9 Using plagiarism detection software

Springer is participant of CrossCheck. CrossCheck is an initiative from CrossRef to help scholarly publishers verify the originality of submitted manuscripts.

CrossCheck is two products, a database of scholarly publications (CrossCheck) and a web-based tool (iThenticate) to check an authored work against that database.

Springer is offering this screening software to Journal Editors of Springer journals and Society & Publishing Partners journals. The web-based tool can be used in the editorial process to identify matching text but it cannot, on its own, identify plagiarism. Manual examination of the matching text is still required and judgment used to identify if plagiarism has occurred or not.

Plagiarism detection at an early stage may be helpful to:

- educate authors who are less familiar with the ethics of publishing;
- reduce the workload for editors and reviewers if ethical issues are captured at an early stage.

Springer has developed a guide on how to interpret the results returned by the iThenticate software which can be found www.springer.com

If you wish to use the iThenticate software for your journal, please contact your Springer Publishing Editor.

10 Further resources that are helpful in order to be able to deal with potential misconduct

Next to the flowcharts, COPE has a searchable database that contains over 400 cases with advice from the Committee and follow-up information. This database can provide helpful insights on how cases were handled in order to help solve your own case.

Sample letters for contacting relevant parties are available from:

- COPE: http://publicationethics.org/resources
- The Council on Science Editors: http://www.councilscienceeditors.org/i4a/pages/index.cfm?pageid=3335

If you have trouble resolving a case taking into account the COPE guidelines, flowcharts and database, please refer the case via the COPE website (http://publicationethics.org/cases/submit) for further advice. COPE has quarterly meetings where complex cases are discussed.

Also other editorial associations or policy-producing bodies provide excellent guidelines on dealing with suspected misconduct. For example:

- Council of Science Editors
- The Office of Research Integrity
- International Committee of Medical Journal Editors
- World Association of Medical Editors

Please note there are many more discipline-specific organizations that provide ethical guidelines.

Before taking any follow-up steps, always inform your Springer Publishing Editor.

11 Suggestions?

If you have any suggestions to improve the content of this document, please send those to ethics.reporting@springer.com and include Publishing Ethics Guide in the subject line.

References:

- Bosch X, Hernández C, Pericas, JM, Doti P, Maruŝić A, Misconduct Policies in High-Impact Biomedical Journals, PLoS One (2012), December 7(12): e51928
- COPE Committee on Publication Ethics, http://publicationethics.org/, http://publicationethics.org/resources/flowcharts, http://publicationethics.org/files/retraction%20guidelines.pdf, http://publicationethics.org/files/Research institutions guidelines final.pdf, http://publicationethics.org/files/Research institutions guidelines final.pdf, http://publicationethics.org/files/Research institutions guidelines final.pdf, http://publicationethics.org/files/Research institutions guidelines
- http://publicationethics.org/files/Ethical guidelines for peer reviewers 0.pdf
- Council of Science Editors, CSE's White Paper on Promoting Integrity in Scientific Journal Publications, 2012, http://www.councilscienceeditors.org/i4a/pages/index.cfm?pageid=3331
- Council of Science Editors, CSE's White Paper on Promoting Integrity in Scientific Journal Publications, 2012, 3.4 Digital Images and Misconduct, http://www.councilscienceeditors.org/i4a/pages/index.cfm?pageid=3646#343ref
- Fanelli D, How many scientists fabricate and falsify research? A systematic review and meta-analysis of survey data, PLoS ONE (2009), May 4(5): e5738
- Fang FC, Steen GR, Casadevall A, Misconduct accounts for the majority of retracted scientific publications, Proceedings of the National Academy of Sciences, October 1, 2012, doi: 10.1073/pnas.1212247109
- Rossner M, Yamada KM, What's in a picture? The temptation of image manipulation, The Journal of Cell Biology (2004), July 166(1): 11-15
- Springer guide on how to interpret results using iThenticate Software (including link)
- The Office of Research Integrity, Newsletter, Volume 21, No.1, December 2012, http://ori.hhs.gov
- The Office of Research Integrity, ORI "Forensic Images Samples" for the quick examination of scientific images, http://ori.hhs.gov/samples
- The Office of Research Integrity, Avoiding plagiarism, self-plagiarism, and other questionable writing practices: A guide to ethical writing, http://ori.hhs.gov/avoiding-plagiarism-self-plagiarism-and-other-questionable-writing-practices-guide-ethical-writing
- The Scientific Research Society, Inc, Honor in Science, 1986, USA, http://www.sigmaxi.org/programs/ethics/Honor-in-Science.pdf
- The Scientific Research Society, Inc, The Responsible Researcher: Paths and Pitfalls, 1999, USA, http://www.sigmaxi.org/programs/ethics/ResResearcher.pdf
- Van Noorden R, The trouble with retractions, Published online 5 October 2011, Nature 478, 26-28 (2011), doi:10.1038/478026a
- Wager E, How should editors respond to plagiarism? COPE discussion paper, 26th April 2011, http://publicationethics.org/files/COPE_plagiarism_discussion_w20doc_26%20Apr%2011.pdf
- Wager E, Barbour V, Yentis S, Kleinert S, Retractions: Guidance from the Committee on Publication Ethics, Croatian Medical Journal (2009), December 50(6): 532-535
- WAME World Association of Medical Editors, Publication Ethics Policies for Medical Journals, http://www.wame.org/resources/publication-ethics-policies-for-medical-journals