ETHICAL EDITING HANDBOOK FOR ACADEMIC EDITORS

Ethics in academic publishing covers but is not limited to issues such as:

PLAGIARISM

Plagiarism is the act of claiming the words or ideas of another as their own (APA, 6th ed.). Researchers can be charged with plagiarism if they borrow words, images or ideas from other sources without giving credit to the original sources. Just as researchers are not supposed to present the work of others as their own, they are not supposed to publish their own previously published work as a new paper (APA, 6th ed.).

UNETHICAL RESEARCH

Studies involving humans or animals generally require approval by a research ethics committee or an independent review board to ensure that they are ethical and that the risk of harm to participants is minimized. Medical and psychological research also usually requires participants to give informed consent to take part. Both aspects (ethical review and consent, as appropriate) should be documented in the publication. Any special ethical issues (e.g. research with vulnerable groups) should be highlighted.

IMAGE MANIPULATION

Image manipulation refers to the practice of editing an image beyond acceptable limits. This practice could involve enhancement, obfuscation, introduction, and elimination of data in or from the original image.

NON-COMPLIANCE WITH REPORTING GUIDELINES

Depending on the nature of research conducted, a study could come under the purview of any of several sets of standards for reporting research. Adherence to such standards is not mandatory across board in that not all journals specifically demand that reporting guidelines be followed. However, it is generally considered good practice to follow reporting guidelines.

DUPLICATE AND PIECEMEAL PUBLICATION

Duplicate (or redundant) publication is publication of a paper that overlaps substantially with one already published, without clear, visible reference to the previous publication (ICJME).

A piecemeal publication is defined as the unnecessary submission of findings from the same study piece by piece as opposed to a more integrative single (or fewer) manuscript(s) (APA, 6th ed.). It is sometimes called salami slicing.

PLAGIARISM

1. Assign manuscripts to subject-expert editors. A subject expert should be familiar with the literature in the field and hence has the best chance of identifying material that has been copied from published works.

2. If you spot well-written text in an otherwise poorly written paper, there is a possibility that the author has copied the text from elsewhere. If you notice that the tone and grammar of the paper has changed (for the better), you may want to dig deeper.

3. If you feel that the writing style is inconsistent (e.g. mixed use of American and British spelling), it is possible that parts have been plagiarized from different sources.

4. Plagiarized material may contain unexplained technical jargon or acronyms, or mis-numbered (or missing) references. It is possible that the jargon/acronyms have been explained in an earlier part of the source from where the material has been taken or a reference has been left in the text but not included in the reference list, or not updated to follow the order of the new publication.

5. If you suspect textual borrowing as described above, you might want to run a few checks to be sure:

   a. Copy and paste some of the well-written phrases into a search engine such as Google (which accepts up to 32 words). Go through the search results carefully. If the text has been plagiarized, you should be able to find an exact or similar match.

   b. Run the document through a plagiarism detector like iThenticate. Most plagiarism detectors currently available can identify and isolate instances of academic plagiarism. There are several free detectors available online, with varying levels of effectiveness and, unlike Google, they can screen whole documents rather than single sections.

DUPLICATE PUBLICATION & SALAMI SLICING

6. If you are aware that the author has published parts of the dataset before, you should advise the author to disclose this in their covering letter so that the editor can judge whether the new publication contains sufficiently novel information.

7. While editing an article that has been previously published in the author's native language and subsequently translated, do let the author know as a cautionary step that he/she needs to have appropriate permission from the native-language journal to publish a translation. In such cases, it is also necessary that authors indicate the original source of the material and mention that the material has been previously published when submitting to another journal.

8. Fragmenting the results of a single study and reporting them in multiple papers is an unethical practice commonly known as salami slicing. Researchers sometimes resort to this practice to boost their scholarly output. Where you come across salami slicing, you should inform the author that journal editors take strong objection to multiple reports of the same group of observations. Such overlapping publications may be identified if the journal uses a text matching software since sections of the methods or introduction are often repeated.

IMAGE MANIPULATION

9. With the emergence of imaging software, there is increasing need for publishing standards for image editing. It is advisable that you are aware of the basic principles for acceptable preparation of images. For example, the author is expected to report the subject of the image, the software used to acquire the image, and any enhancements or alterations made to the original image.

10. It is unethical to introduce or eliminate information in an image. As long as figures are adjusted overall for clarity, it is acceptable. The rule of thumb for acceptable image manipulation is: the less processing the better.

11. Widely used techniques such as Western blots, used to separate proteins by their structure and size, are particularly susceptible to manipulation. You can spot suspected cases of manipulation by fuzzily marked bands, overexposed bands, lack of proper loading controls, etc. The US Office of Research Integrity makes available forensic tools to assess the integrity of images.

NON-COMPLIANCE WITH REPORTING GUIDELINES & INDUSTRY STANDARDS

12. Be aware of the relevant reporting guidelines for the research in question:

    a. Studies involving human participants (medicine, psychology, education, sociology, etc.) need to have a statement indicating that the study was approved by an institutional review board or independent research ethics committee. Further, the authors need to explicitly state that informed consent has been obtained from the participants (or their guardians).

    b. Animal studies need to conform to standards for animal research reporting, such as those outlined in the ARRIVE guidelines.

    c. For health research, the EQUATOR Network is a good source of information on reporting tools. Similarly, FORCE11 suggests appropriate guidelines for life sciences research.

    d. Research involving hazardous substances should conform to guidelines to minimize harm to researchers and the environment.

13. It is crucial that you are familiar with the ethical practices and guidelines of scholarly publishing, as outlined by bodies such as the Committee on Publication Ethics (COPE), International Committee of Medical Journal Editors (ICMJE), European Association of Science Editors (EASE), Council of Science Editors (CSE), and the American Psychological Association (APA). A good source for general guidelines (applicable to all academic fields) is Responsible Research Publication: International Standards for Authors.

14. If the author plans on submitting to a journal or conference, check the journal/conference website for specific guidelines on ethics and best practices.

ETHICAL CONDUCT EXPECTED OF AUTHORS

MANUSCRIPT PREPARATION

- Do a thorough literature review of the research topic to check if the same ideas have been published before and cite any studies relevant to your research topic appropriately in your manuscript.
- If you are quoting more than a few words from another publication, even if it is your own, make sure you cite the source AND either paraphrase the quoted text or include the text within quotation marks.

AUTHORSHIP

- An individual qualifies to be an author if he/she:
  - ✓ Contributes substantially to study conception, study design, data collection, data analysis, or data interpretation
  - ✓ Drafts the article or revises it critically for important intellectual content
  - ✓ Agrees to be accountable for all aspects of the work
  - ✓ Is prepared to takes public responsibility for the work
  - ✓ Approves the final version to be submitted to the journal and agrees to be listed as an author on the manuscript
- Anybody who meets these criteria should be listed as an author . Not doing so is considered unethical. Similarly, including people who do not meet the criteria (sometimes termed guest or gift authors) is unethical.

DUPLICATE PUBLICATION

- Respect copyright and seek permission if you want to re-use published material (even your own) in another publication
- In certain circumstances (e.g. to make an article available to a wider audience), publication of an article in more than one journal may be acceptable, provided the following conditions are met:
  - ✓ The journal that published the original article and the journal that will publish the duplicate article have approved this.
  - ✓ The nature of the second article and the source of the original publication are clearly stated (it is not enough simply to cite the original article) (e.g. complete/abridged republication from Journal ABC).

PRIMARY AND SECONDARY PUBLICATIONS

You can publish primary and secondary articles from a single study, provided the following conditions are met:

- Both primary and secondary publications should address unique and important research questions.
- The primary article should always be cited in all secondary articles.

It is good practice to supply a copy of the primary publication when submitting a secondary publication so the journal can judge the degree of overlap and novelty.

REPORTING STANDARDS	■ Your manuscript should follow established reporting guidelines (e.g. CONSORT, STROBE, and PRISMA for medical studies).
FIGURES AND TABLES	■ If you want to reproduce or adapt figures or tables from another publication, even from your own previous publication, you need to obtain permission from the copyright owner. ■ Cite the original source in your manuscript and use the permission wording requested by the copyright holder. ■ Ensure that images are not manipulated, that is, they accurately represent original data (e.g. do not blur out parts by excessively using contrast).
ACKNOWLEDGMENTS & CONFLICTS OF INTEREST	■ Acknowledge all sources of funding and support. ■ Declare any competing interests (financial, personal, or other) that might be considered relevant to your work (e.g. employment, consultancies, contractual relations, paid testimony, honoraria, advisory board membership, stock ownership, funding or benefitting from the study; patents or patent applications; and travel grants). ■ List all author contributions if required by the journal. ■ Acknowledge people who contributed to the study but who are not listed as authors (e.g. those providing medical writing, supervision, minor laboratory support, or administrative support). It is a good idea to get written permission before acknowledging somebody.

HOW TO FLAG ISSUES WITH THE AUTHOR

1. Handle author communication with sensitivity. Use a neutral tone when flagging issues with the author and do not accuse them of misconduct but simply ask for an explanation. (For e.g. if you spot text that is similar to wording in another document, point out the similarity but do not immediately accuse the author of plagiarism).

2. It is always advisable to check with the author and ascertain the cause before deeming something as evidence of unethical practice. For example, in a population-based study where the original dataset is extremely large and can take years to collect and analyze, the authors could have genuine reason to report the research in multiple papers.

3. Where you have established reasonable evidence for an unethical practice, clearly mention the issues spotted—plagiarism, salami slicing, etc.—and dwell on the repercussions of these issues. For example, if you notice that the author has liberally borrowed material from another paper without giving due credit to the original source, advise the author that many journals now routinely use text-matching software to screen submissions for plagiarism and warn the author that the journal may reject the paper and bar future publications from the author if this issue is not addressed. Or, if there are signs of image manipulation, the author should be made aware of the possibility of the journal editor asking for original data.

4. Direct the author to journal policies and guidelines on the issue in question, for example, to the relevant webpage stating journal policy for reporting misconduct or the International Standards for Authors.

5. Flagging the issue is the job half done. Often researchers, especially early-career scientists, are unaware of what constitutes unethical practice and, having unwittingly engaged in some form of misconduct, of what corrective steps they can take. In such cases, it is your duty to educate the author. Suggest clear next steps—for example, advise the author to cite the sources he has borrowed content from or advise about what comprises acceptable image processing.

Further Reading:

1. Nature Policies on Image Integrity. Available at: http://www.nature.com/authors/policies/image.html Accessed: April 20, 2014.
2. RLang TA, Talerico C, Siontis GCM. Documenting Clinical and Laboratory Images in Publications: The CLIP Principles. Chest 2012; 41:1626-1632.
3. Elsevier Editors' Update: The Art of Detecting Data and Image Manipulation. Available at: http://editorsupdate.elsevier.com/issue-41-november-2013/the-art-of-detecting-data-and-image-manipulation/ Accessed: April 20, 2014.
4. Rossner M, Yamada K. What's In a Picture: The Temptation of Image Manipulation. Journal Cell Biology 2004;166:11-15.
5. Instructions for Authors, Journal of Cell Biology. Available at: http://jcb.rupress.org/site/misc/print.xhtml#digim Accessed: April 20, 2014.