

Responsible Authorship and Publication Practices

1 Criteria for Authorship – General

- "Authorship of original research papers is an important indicator of accomplishment, priority, and prestige within the scientific community."

Panel on Scientific Responsibility and the Conduct of Research: Responsible Science: Ensuring the Integrity of the Research Process, Vol. I, National Academy Press, Washington, 1992, p. 52

- Because of the complex nature of contemporary research, many researchers are often involved in the preparation of a single manuscript, and questions arise as to who is entitled to be listed as an author.
- The names listed as author or authors of a research publication should reflect both credit and responsibility for the manuscript.
- Some journal editors, professional associations, and research institutions have specified criteria for listing as an author.
- Traditions with respect to co-authorship are often discipline-specific. For example, in complex experiments in high-energy physics that require the use of national or international facilities such as accelerators or radiation sources and the cooperation of researchers from many institutions, it is not uncommon to list the names of several hundred co-authors for a single paper.
- Many journals limit the number of authors listed in the Table of Contents, and many of the computerized databases limit the number of authors included.
- There is a growing tendency to discourage "honorary authorship.," a term often used for the routine listing of an administrator, such as a laboratory head or department chair, as a co-author of all papers emanating from a given laboratory or department, regardless of whether that administrator has met the generally acknowledged criteria for authorship.
 - Attention must also be placed on the importance of including as co-authors everyone who has met all the criteria. Sometimes, the name of a student or postdoctoral fellow is improperly excluded. Improper exclusions should be examined also in the case of oral presentations.

2 Criteria for Authorship - Uniform Requirements for Biomedical Journals

- The International Committee of Medical Journal Editors has developed Uniform Requirements for Manuscripts Submitted to Biomedical Journals, updated in 2004 and accepted by over 500 journals, with the following criteria for listed authorship:

<http://www.icmje.org/index.html>

- Substantial contributions to conception and design or acquisition of data, or analysis and interpretation of data; and
- substantial contributions to drafting the article or revising it critically for important intellectual content; and
- final approval of the version to be published.
- The following explanatory notes to these criteria are given:
- A role solely in acquisition of funding or collection of data does not justify authorship.
- General supervision of the research group alone is not sufficient for authorship.
- Any part of the article critical to its main conclusions must be the responsibility of at least one author.
- Each author should have participated sufficiently to take public responsibility for appropriate parts of the content.
- Some journals require that at least one author takes responsibility for the integrity of the work as a whole.

3 Certification of Authorship

- One author should be designated as the corresponding author, who will conduct correspondence with the editor, inform all authors about the status of the manuscript through the review process to the scheduling of the publication date, and receive requests for reprints or technical queries.
- The corresponding author may be required to provide assurance that each author has read the submitted version of the manuscript and approves it.

- Some journals and some research institutions require that each author sign a certification statement indicating which of the criteria that author has met and/or what the specific role of that author was in the reported research and the manuscript.
- Some journals use the same certification document to disclose any financial or management connection with a company whose product is being evaluated in the manuscript. (See Sections [4.7](#) and [4.9](#).)

4 Alternate Forms of Acknowledgment

- The contributions to a research project of participants who do not qualify for co-authorship may be recognized in a number of alternate ways.
- Acknowledgements in a manuscript are sometimes made as footnotes to the title page, as part of a special paragraph at the end of the manuscript, or as an appendix.
- Technical help can be acknowledged in the manuscript.
- Sources of special materials used in the research, such as reagents or specialized instruments, can be acknowledged in the body of the manuscript.
- Intellectual contributions to the conceptualization or analysis of the research can be cited in the manuscript, either as a reference to a publication or as an acknowledgment in the manuscript.
- Any person acknowledged in the manuscript should be informed in advance and asked for written consent to being so recognized.
- Acknowledgment of general support, such as from a department chair, or for financial support, may be made in the manuscript.
- Recognition can always be given to staff members of the research organization through the regular personnel evaluation process.

5 Order of Listing Co-Authors

- The order of listing co-authors should be determined by the authors well in advance of submission of the manuscript.
- The meaning of the listed order of authors is not the same for all fields or for all research groups. For example, the principal author is listed first in

some fields and last in others. A suggestion has been made that the significance of the order of listing be explained by a brief note or footnote, if the journal allows this.

- The problem of ordering the names is avoided in some disciplines by listing the co-authors in alphabetical order.

6 Agreements Concerning Authorship

- Discussions about listing of co-authors and ordering the names of co-authors should be held within the research group as soon as possible as the research project and conceptualization of the manuscript develop.
- Controversies about listing and ordering the names of co-authors can be bitter. If the issues cannot be resolved amicably within the research group, it is sometimes helpful to ask an objective party, such as a division chief, department chair or dean, to mediate the dispute.

7 Competing Manuscripts

- If different collaborating researchers have different interpretations of the data, they should make every effort to resolve their differences before submitting a manuscript.
- If they cannot resolve their differences, they may consider including both sets of interpretations in the manuscript.
- In the case of competing submitted manuscripts from the same institution, the editor sometimes refers the matter to a senior administrator of the originating institution, such as a dean, for guidance as to which interpretation to accept. The administrator, in such a case, may invoke some internal review procedure to resolve the controversy.
- The editor may print one manuscript and invite the disagreeing author to submit a letter to the editor following the publication of that manuscript.
- If the disagreement is over facts to be reported, an editor will normally not accept any manuscript until the matter is resolved at the institutional level, since the disagreement might imply an allegation by one group of researchers of misconduct on the part of another group.

8 Redundant Publication

- A manuscript should not be submitted to a journal if it substantially repeats a paper of the author(s) previously published.

- An exception may be made if the author and editor both knowingly want to repeat a publication, and if the fact of republication is clearly stated in the manuscript.
- One basis for such an exception might be that the readerships of the two journals are different.
- It is not inappropriate to submit a complete report that follows a preliminary presentation, such as an abstract or poster presented at a professional meeting. If the abstracts of the meeting are published, a citation to that publication should be given in the complete report.
- A manuscript should not be submitted to one journal while it is under consideration elsewhere, unless both editors are made aware of and are in agreement with the simultaneous submissions.
- If a submitted paper contains data that had been printed previously, particularly data about human subjects, reference should be made to the previous publication and an appropriate citation should be made.
- It is improper to divide what is essentially one study into two or more fragmented or overlapping publications for the sake of expanding an author's bibliography.

Angell M and Relman AS. Editorial. N Engl J Med 1989;320:1212-3

9 Pre-publication Release of Findings

- It is unethical to release to the media scientific information contained in an accepted paper prior to the publication.
- An exception to the above rule may be made if there is a public health issue involved and if the editor agrees to an advance release.
- A press release may be circulated with an embargo date coinciding with the date of publication.
- Press conferences or press releases of oral or poster presentations at open meetings are permitted, but the material disclosed to the media should not go beyond what was presented at the meeting.
- Circulation of pre-publication manuscripts among colleagues in either print or electronic mode is permitted if it is made clear that the manuscript has not yet been published and is not to be publicly disseminated.

- Universal rules governing electronic publication of non-refereed papers have yet to be worked out, as of the date (2005) of the most recent revision of this module.

10 Correction of Errors

- An author who discovers an error in his or her published paper should inform the editor and, depending on the traditions of the particular journal, submit a correction in the form of an erratum or a letter to the editor.
- The correction should include the full reference to the paper being corrected, including authors, title, and journal citation.
- The communication should indicate the reasons for the correction.
- Many journals arrange to have the reference to the correcting erratum included with the reference to the original paper in bibliographic searching tools.
- Development of new information in the course of further research that may change the interpretations contained in a paper should not be submitted as an erratum. This is an example of the self-correcting nature of research. The new information should be reported in a separate publication.
- If a reported result is erroneous because of research misconduct, it is the obligation of the institution (i.e., the University of Pittsburgh) to arrange for the submission of the necessary correction or disclaimer, either by the author or by a University administrator.
- If an error is discovered prior to publication, the paper should be withdrawn if at all possible to allow for necessary corrections.