

Scientific Authorship Guidelines

Excerpted from:

- <http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>
- Sahu D R, Abraham P. Authorship: rules, rights, responsibilities and recommendations. J Postgrad Med [serial online] 2000 [cited 2014 Mar 10];46:205. Available from: <http://www.jpgmonline.com/text.asp?2000/46/3/205/276>

Who Is an Author?

Participation solely in the acquisition of funding or the collection of data or general supervision of the research group is not sufficient for authorship. Simply by virtue of being the head of the department or institute, one does not get an automatic right to be an author. Though excluding a non-contributing colleague or the head may at times be difficult, authorship cannot be granted for departmental peace and amity. Authorship cannot be gifted as a means for appreciation or encouragement. Providing help in literature search, technically editing the manuscript, or helping with statistical analysis themselves do not deserve byline listing. Technical help, without intellectual participation in writing and reviewing the manuscript, that otherwise would have been done as per the work schedule, too, is not worthy of credit as an author.

In addition to being accountable for the parts of the work he or she has done, an author should be able to identify which co-authors are responsible for specific other parts of the work. In addition, authors should have confidence in the integrity of the contributions of their co-authors.

The **ICMJE** (International Committee of Medical Journal Editors) recommends that authorship be based on the following 4 criteria:

1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
2. Drafting the work or revising it critically for important intellectual content; AND
3. Final approval of the version to be published; AND
4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

All those designated as authors should meet all four criteria for authorship, and all who meet the four criteria should be identified as authors. Those who do not meet all four criteria should be acknowledged—see below. These authorship criteria are intended to reserve the status of authorship for those who deserve credit and can take responsibility for the work. The criteria are not intended for use as a means to disqualify colleagues from authorship who otherwise meet authorship criteria by denying them the opportunity to meet criterion #s 2 or 3. Therefore, all individuals who meet the first criterion should have the opportunity to participate in the review, drafting, and final approval of the manuscript.

The individuals who conduct the work are responsible for identifying who meets these criteria and ideally should do so when planning the work, making modifications as appropriate as the work progresses. It is the collective responsibility of the authors, not the journal to which the work is submitted, to determine that all people named as authors meet all four criteria.

The corresponding author takes primary responsibility for communication with the journal during the manuscript submission, peer review, and publication process, and typically ensures that all the journal's administrative requirements, such as providing details of authorship, ethics committee approval, clinical trial registration documentation, and gathering conflict of interest forms and statements, are properly completed, although these duties may be delegated to one or more coauthors. The corresponding author should be available throughout the submission and peer review process to respond to editorial queries in a timely way, and should be available after publication to respond to critiques of the work and cooperate with any requests from the journal for data or additional information should questions about the paper arise after publication. Although the corresponding author has primary responsibility for correspondence with the journal, the ICMJE recommends that editors send copies of all correspondence to all listed authors.

When a large multi-author group has conducted the work, the group ideally should decide who will be an author before the work is started and confirm who is an author before submitting the manuscript for publication. All members of the group named as authors should meet all four criteria for authorship, including approval of the final manuscript, and they should be able to take public responsibility for the work and should have full confidence in the accuracy and integrity of the work of other group authors. They will also be expected as individuals to complete conflict-of-interest disclosure forms.

Non-Author Contributors

Contributors who meet fewer than all 4 of the above criteria for authorship should not be listed as authors, but they should be acknowledged. Examples of activities that alone, without other contributions, do not qualify a contributor for authorship are: acquisition of funding; general supervision of a research group or general administrative support; writing assistance, technical editing, language editing, and proofreading. Those whose contributions do not justify authorship may be acknowledged individually or together as a group under a single heading and their contributions should be specified (e.g., "served as scientific advisors," "critically reviewed the study proposal," "collected data," "provided and cared for study patients", "participated in writing or technical editing of the manuscript").

Because acknowledgment may imply endorsement by acknowledged individuals of a study's data and conclusions, editors are advised to require that the corresponding author obtain written permission to be acknowledged from all acknowledged individuals.

The Order of Authorship

The credit associated with a manuscript is usually judged by the order in the byline. Traditionally, the first author is the one who does the maximum work and the last name is reserved for the head or the most senior colleague. However, with the changes in literature indexing policies (listing only three, six, or twenty four names), and non-uniform policies of journals, even this aspect has been debated at length. The various suggestions have been to list authors by alphabet, by seniority and by importance of contribution. The most accepted and the logical one is that the order should be based on the relative contribution: the one with the maximum contribution should lead the list while the one with the least input should bring up the rear. The ICMJE guidelines state that 'the order of the authorship on the byline should be a joint decision of the co-authors. Authors should be prepared to explain the order in which authors are listed...' To avoid conflicts, institutions and departments should have a written policy in this matter.