

Authorship: An academic currency?

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An author can broadly be defined as the person who originated or gave existence to anything and whose authorship determines the responsibility for what was created. Narrowly defined, an author is the originator of any written work. To state simply, an author is the “one that originates or creates.”¹

Authorship is a prized commodity in health sciences and academia because most of the tangible rewards of academic research are based on an individual's publication record.² It confers credit as well as responsibility and accountability for published work. Publication is an important part of the research. The recognition and credit to researchers who have contributed to the research is very crucial for the upliftment in their career. Oftentimes, a paper is the collaborative project of many researchers. So, the question is who should be regarded as an author?

To promote the integrity and accountability concerning authorship, scientific journals have developed authorship policies. Biomedical journals have to follow the authorship guidelines adopted by the International Committee of Medical Journal Editors (ICMJE) which has

revised its guidelines several times.³ The current version recommends that authorship be based on meeting the following four 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.⁴

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, and their specific contribution should be recognised.⁴

The number of multiple-authored journal articles has been increasing over recent years because of a surge in interdisciplinary investigations. No exact limitation has been acknowledged for the number of authors in a manuscript. For instance, the New England Journal of Medicine published an article with over 900 authors in 1993 and even thousands of authors — as in the case of the ATLAS experiment at the Large Hadron Collider at CERN, Europe's particle-physics laboratory near Geneva, Switzerland.⁵ The rise in multiple-authored papers however, can cause various unethical authorship practices in scientific research, which are challenging to control.⁶

Some forms of authorship abuse are summarised below:

Coercion authorship: Use of intimidation tactics to gain authorship. Arguably a serious form of scientific misconduct.

Honorary, guest, or gift authorship: Authorship awarded out of respect or friendship, in an attempt to curry favour and/or to give a paper a greater sense of legitimacy.

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Mutual support authorship: Agreement by two or more investigators to place their names on each other's papers to give the appearance of higher productivity.

Duplication authorship: Publication of the same work in multiple journals.

Ghost authorship: Papers written by individuals who are not included as authors or acknowledged.

Denial of authorship: Publication of work carried out by others without providing them credit for their work with authorship or formal acknowledgment. A form of plagiarism and therefore scientific misconduct.⁷

Not only the authorship abuse but also another ethical issue is the placing and order of authors in multiple-authored journal articles. Perhaps the responsibilities of authorship come into clearest focus when investigators decide on the order in which their names will be listed on their manuscript. The designation of first author and the sequence of listing are important for several reasons. Some landmark studies are known by the name of their first author, lending support to the impression that, being listed first, he or she played a pivotal role in performing the work and writing the article. Disagreements often happen when contributors put in similar amounts of effort on different aspects of a project, as stated by Kosslyn, a psychologist at Stanford University in California. For example, one person might have developed the idea for the project and the other performed most of the data analysis. "The force of the dispute usually revolves around the feeling that whatever they did was more important than what the other person did," says Kosslyn.⁸

People have used creative ways to spread the benefit of receiving key authorship credits. An increasingly common practice is to use author's notes to designate equal contributions. The record for greatest number of "equally contributing" authors is unknown, but a cursory search of recent issues of journals quickly found a paper with seven authors (out of 44) listed as having made equal contributions, and none were the first author. One article with four authors designated that all contributed equally (creating the linguistic puzzle of whether they should be called "co-first" authors or "co-senior" authors), and listed all as corresponding authors, making all three designations effectively meaningless. Journals have generally not adopted policies or guidelines for equal contribution statements, nor are there general practices for handling such notes in research evaluations.

Contribution notes notwithstanding, the first author's name becomes the most associated with the paper because many journals' citations in the body of the text list only the first author when there are three or more, and "et al." sweeps away whatever information is conveyed by fine print about equal contribution.⁸

According to Biagioli, a science historian at the University of California, Davis, who has studied authorship, observes that what authorship means varies by scientific discipline. For example, in particle physics, hundreds of researchers may contribute to the development and maintenance of a single piece of equipment, such as an accelerator. At big physics labs such as CERN, everyone who was working at the lab when the discovery was made gets a slot on the author list — even if they have not seen the paper, says Biagioli. The authors are usually listed alphabetically, regardless of how much they contributed. Whereas in biological sciences, the author list is often strictly ranked. The top spot is at the end of the list, where the principal investigator gets credit for running the lab. The student or postdoctoral fellow who actually did the work goes first. As for the authors in the middle, it is hard to tell whether they participated a lot or a little, says Biagioli.⁸

Discussions about authorship allocation might lead to serious conflicts and disputes among coworkers which could even endanger cooperation and successful completion of a research project.⁹ Issues around this subject can be complex and sensitive. Hence, ethical practice should begin early in research. In fact, it is important for all authors to be clear about their role in the research process and should take responsibility for their individual part.¹⁰ Committee on Publication Ethics (COPE) recommends that researchers decide who will be an author and what order they will be listed in before they even conduct experiments, and that the group revisits the author list as a project evolves. A handshake is not enough to seal the deal — researchers should keep authorship agreements in writing.⁸

It is necessary to work for raising awareness about the importance and need for education about principles of scientific communication and fair allocation of authorship, ethics of research, and publication of results.¹¹ The use of various forms of education in the scientific community, especially young researchers and students, in order to create an ethical environment, is one of the most effective ways to prevent the emergence of scientific and publication dishonesty and fraud, including pathology of authorship.^{3,11}

The unethical practice of hovering around credit or discredit of authorship cannot be simply solved by setting of guidelines. The current call for publications being used to ladder up or down an individual's rank/promotion needs to be addressed.^{11,12}

"Authorship is not a trade, it is an inspiration; authorship does not keep an office, its habitation is all out under the sky and everywhere the winds are blowing and the sun is shining and the creatures of God are free." -Mark Twain

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REFERENCES

- Jawad F. Research ethics: Authorship and publication. *J Pak Med Assoc.* 2013;63(12):1560-2. [[PubMed](#) | [Full Text](#)]
- Shamoo AE, Resnik DB. Authorship. In: *Responsible conduct of research*. 4th ed. London: Oxford University Press; 2022. [[Full Text](#)]
- Donev D. New developments in publishing related to authorship. *Prilozi.* 2020 Feb 27 [Online ahead of print]. [[PubMed](#) | [Full Text](#) | [DOI](#)]
- International Committee of Medical Journal Editors (ICMJE). Defining the role of authors and contributors [internet]. *ICMJE*; 2022. Available from: [[Full Text](#)]
- Collaboration A, Aad G, Abat E, Abdallah J, Abdelalim A, Abdesselam A, et al. The ATLAS experiment at the CERN large hadron collider. *J Inst.* 2008;3:1-407. [[Full Text](#) | [DOI](#)]
- Ebrahimi S, Ebrahimi A. Ethical challenges around multiple authorship in journal articles. *J Arch Mil Med.* 2020;8(4):e111263. [[Full Text](#) | [DOI](#)]
- Strange K. Authorship: Why not just toss a coin? *Am J Physiol Cell Physiol.* 2008;295(3):C567-75. [[PubMed](#) | [Full Text](#) | [DOI](#)]
- Dance A. Authorship: Who's on first? *Nature.* 2012;489(7417):591-3. [[PubMed](#) | [Full Text](#) | [DOI](#)]
- Wager E. Do medical journals provide clear and consistent guidelines on authorship? *Med Gen Med.* 2007;9(3):16. [[PubMed](#) | [Full Text](#)]
- Gupta S, Rajak A. How to avoid the violation of ethics in research and publication? *J Kathmandu Med Coll.* 2020;9(1):1-4. [[Full Text](#) | [DOI](#)]
- Gupta S. Responsible authorship: A herculean task. *J Nepal Soc Perio Oral Implantol.* 2021 Jul-Dec;5(10):65. [[Full Text](#)]
- Mandal J, Parija SC. Ethics of authorship in scientific publications. *Trop Parasitol.* 2013;3(2):104-5. [[PubMed](#) | [Full Text](#) | [DOI](#)]