Broadly ‘author’ is a person who originated or gave existence to anything and takes responsibility for that’, as defined in the ‘medical-dictionary.thefreedictionary.com’.

Science relies on new developments. Validation and accurate documentation of scientific research findings is important. Author has the responsibility of integrity of research, the findings and its publication. Clear guidelines for ‘author and authorship’ are necessary to distinguish among authors, coauthors and guarantor in order to be responsible for the integrity of the research publication. The publication in the peer reviewed scientific journal serves to communicate and validate such findings and so author needs to have substantive intellectual contributions for the work.

There is important and significant credit attached to author and authorship. Being listed as author in research publication has advantages of ‘respect from the peers, progress in career and status’ in all aspects of ‘academic, social, and financial’ issues. Sharing authorship bounds us to take responsibility of all published information. All listed authors are accountable in case of fraud or misconduct. Authorship is the ‘collective’ responsibility of research and its publication. Authors need to take responsibility for their own specific contribution plus overall work and be familiar with all listed authors to minimize the possible misconduct of plagiarism, fabrication and falsification.

The question arises just how much one has to contribute in order to qualify to be listed as an author! Also there is a question of ‘amount’ and ‘quality’ of work to distinguish authors from other contributors involved in the work and its publication. Acquiring funds, general supervision or tedious secretarial work is not sufficient for authorship. Only those who have sufficient participation and can take responsibility of the work and its publication can qualify for authorship. International Committee of Medical Journal Editors (ICMJE)’ recommendation is now accepted by most biomedical journals and editors. ICMJE guidelines include, 1) Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work, 2) Drafting the work or revising it critically for important intellectual content, 3) Final approval of the version to be published, 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.

In case of multi-authored work it is further complicated and difficult to judge ‘how much’ responsibility is needed to justify the listing and order...
of the authorship. There is lack of appropriate rule to list multiple authors in a particular order. Style of listing order varies between fields of research, the organization and the journals. The degree of involvement is the most straightforward with significant and active contributors listed first. However, placing principal investigator in last is seen in science and engineering publications and also there is listing in alphabetical order. The electronic indexing systems usually ‘cite’ first (primary) and secondary (co-authors) as searchable. The tradition of important place of ‘first author’ remains important because of demand from most of the ‘academic’ and ‘funding’ organization.

Listing and order of authorship should be discussed well before the research begins and not at the time of writing, certainly not at the time of manuscript submission. All listed authors are required to sign authorship agreement letter to journal for their contribution. All authors are required to agree in writing for any change in the order and to add or remove author from the list. In case of conflict, the institution is responsible to investigate and provide information to the journal about the work and involvement. Instead of 1st, 2nd and so on, simply listing authors by their specific work may reduce this confusion of ‘listing and order’ and importantly avoid the misconduct of ‘guest, gift, honorary or ghost’ authorship.

Gift authorship, guest authorship or honorary authorship refers to misconduct when co-authorship is granted to someone without significant contribution to the work. Senior co-workers or head of the department or institution with power over junior researcher or influence in securing fund or publication in journal are some of the reasons for gift, guest, or honorary authorship. Number of publications is often seen as reputation and important motivation behind practice of such misconduct. Most journals now demand ‘authorship letter’ with details of specific contribution and responsibility of authors to reduce such misconduct and also to identify such author in a case of fraud. The competition to secure fund and publication as a measure of performance provide space for ‘influential’ persons to get listed as (honorary) author to increase citation and obtain more funds; and the vicious cycle of misconduct continues.

Ghost authors are individuals who meet authorship criteria but are not listed as an author. This is seen in partnerships between industry and higher education. Pharmaceutical industries pay medical writing companies to prepare manuscripts, and then recruit academically affiliated researchers to pose as the authors.

All listed authors need to understand and support the published findings as all are responsible and liable to be accused in case of fraud or fake research. All authors should be able to identify co-authors responsibility for their portions of the content to ensure integrity of the work. Journals take measures to minimize misconduct and require authors to provide ‘ethical approval’ for the work and declare ‘conflict of interest’. This is author’s responsibility to get consent before acknowledging persons or group for their important contributions who do not qualify for authorship. Acknowledgement should explain clearly, for e.g., ‘helped in acquisition of fund, provided general supervision, language editing, proofreading, data collection’ etc.

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Appropriate authorship is important to maintain the value and integrity of science. There is no alternative to honest, transparent and fair authorship. We all need to work together to improve ‘authorship’ by adhering to the guidelines for authors, institutions, editors, reviewers and publishers.

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