Description

Scholarly manuscripts usually have several authors. New collaborations across scientific disciplines and geographical borders have led to an increase in the number of multi-authored papers in the last few years, making the proper attribution of contributor roles a major topic.

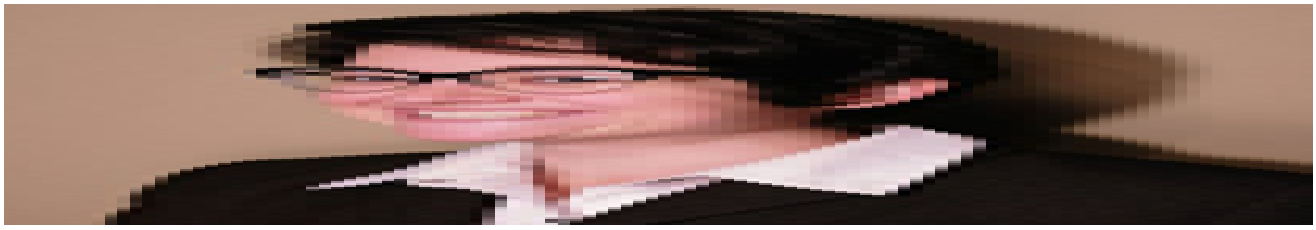
Who Did What?

There are many ways a researcher can contribute to a scientific publication starting from designing and carrying out the experiments to analyzing the data or writing the article. Traditionally, the first author contributes most—and also receives most of the credit—whereas the roles of subsequent authors are not that well defined. In many research areas, the last author receives as much credit as the first one, because he or she is assumed to be the driving force behind the research. However, this is only an informal practice and the assumption is not always true.

Actually, the sequence in which the author names appear on a manuscript can be decided in many ways, by contribution, alphabetical order, seniority, or other criteria, depending on the case. This makes it difficult for outsiders to properly interpret author lists, both in terms of reflecting actual contributions or for future assessments by evaluation committees. Colleagues, editors, academic institutions, and funding agencies are therefore increasingly interested in seeing more detailed information about individual contributions to research projects. Ranking the first or second author in a two-author manuscript is straightforward, but this gets more complicated as the number of authors increases. What are the solutions developed to address this issue?

Let's hear the opinion of some of our experts from the industry.

Our Experts' Giving Proper Credit in Multi-authored Publications



CRediT and OpenRIF are two solutions to these issues of author ambiguity
MA, Cognitive Science (7+ years of Academic Editing Experience, USA)

Although we usually think of the first author of a study as receiving most of the credit, that may not always be the case. The other authors listed may have contributed in significant ways to specific aspects of the project, but the current standard for listing authors doesn't have a way to acknowledge that. In the case that a journal lists authors alphabetically, then there's no way to tell from looking at the list of authors who was responsible for what.

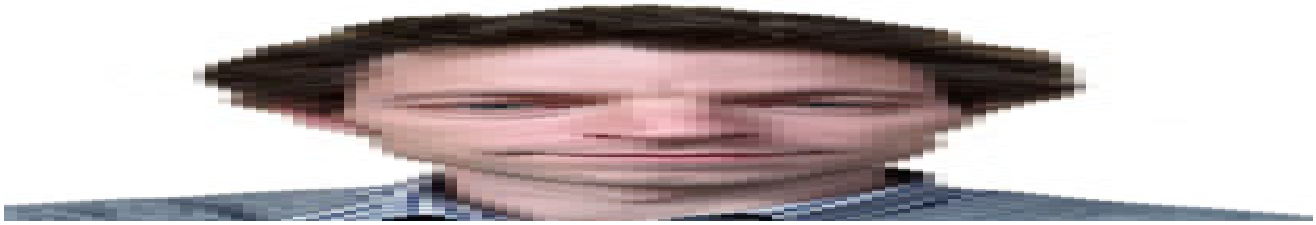
To most readers, it may not matter which researcher is responsible for what; but to someone whose

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job is to evaluate one of the researchers, it may be difficult to determine exactly what was contributed by which author. There are many cases in which it may be important to distinguish an author's particular contribution to a paper. If one author is applying for a grant, fellowship, or admission to a graduate program, they will want their work to stand out among the other authors who also contributed to a research study.

There are also cases in which an author may be listed who did not actually contribute to a paper, which can lead to further confusion. These "guest authors" can lend credibility to a paper, but make it less clear what the actual authors contributed.

To address these issues, programs have been developed to bring more clarity to author lists. CRediT and OpenRIF are two solutions to these issues of author ambiguity. CRediT lets journals use a list of contributor descriptions and acknowledges contributors who may have participated, whether or not they are formally listed as authors. OpenRIF also increases transparency for authors by classifying information about specific contributions to research. With tools like CRediT and OpenRIF, it's becoming more possible for researchers to receive credit for their work.

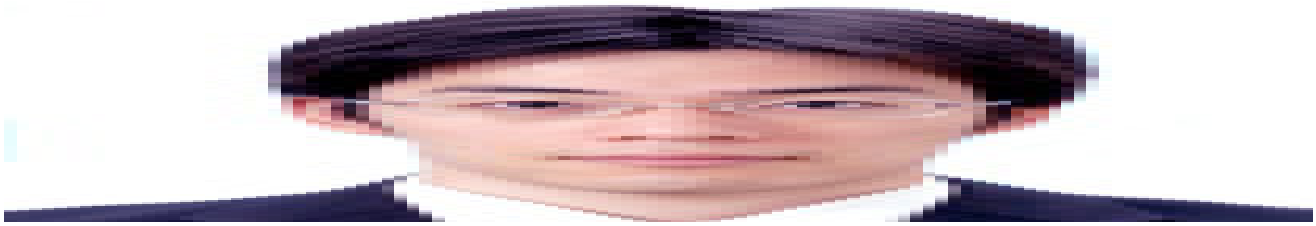


Authorship is central and the increase in multi-authored papers inflates this currency, leading to heightened pressure to gain authorship
PhD, Cancer (12+ years of Scientific and Medical writing Experience, AU)

Authorship is the currency of research careers, and is as subject to corruption as any other currency. Whether a senior academic is granted honorary authorship or a significant contributor is excluded, the list of names at the top of a paper doesn't tell you much about who did what. Author contributions sections may facilitate clarity in this regard, but ultimately it is assumed that first and last authors are primarily responsible for the research and are given most of the credit.

When science is considered a collaborative practice in which great ideas are generated through communication and conference, receiving credit as an author is only really important for securing funding. To this end, H factors have been introduced over past ten years as a measure of researcher output, and are calculated as the number of publications that have been cited that many times, irrespective of the position of the authors name in the author list. This metric encourages a balance between numbers of publications and numbers of citations. For junior researchers with few publications, a single high impact paper will be revered in the community but will not immediately improve the authors H factor. Conversely, for senior researchers with many publications, low impact studies will not register on the H-factor. However, a researcher with many more publications than citations may enjoy passive improvements in H factor as citations accumulate over time. Either way, authorship is central and the increase in multi-authored papers inflates this currency, leading to heightened pressure to gain authorship but no net change in research quality or quantity. Improved transparency of authorship may help to discourage exploitation of the formerly collegial process of gaining a position on a paper, although the criteria remains highly malleable.

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Multiauthored publications are also facing two other major problems; ‘ghost writers’ and ‘guest writers’

MS, Information Technology (11+ years of English-Japanese Translation experience, Japan)

To give credit or not to give credit? This is a question that is currently facing the scientific community. These days multiauthored publications are becoming more and more common. Many articles have collaborations not only by scientists in the same field but can have other scientists from multiple disciplines and locations throughout the world contributing to one article.

One of the first things that scientists need to look at is who did what. There are many different ways to contribute to an experiment and typically the first person listed on the manuscript is the person who was either in charge of the experiment or is the person who contributed the most. But there is a large gray zone after listing the first person and there are a number of different ways to list contributors after them; it can be done via the amount contributed, alphabetically, or by seniority to name a few. The more contributors you have the more difficult it becomes.

Multiauthored publications are also facing two other major problems; “ghost writers” and “guest writers”. A “ghost writer” is someone who contributes to a publication but for whatever reason decides not to be given credit. This can be due to a possible conflict of interest or many other reasons. A “guest writer” has almost the exact opposite problem, where someone who hasn’t contributed to the publication is listed as a contributor. This is often done by newer scientists because they think that by listing a more senior researcher they have a better chance of having their worked published by a major source.

Although this is a major problem facing publications, progress is being made to solve the issue. Organizations such as OpenRIF, ORCID, SHARE, and others are trying to create a more easily understandable system to give credit where credit is due and to make the process much more streamlined and efficient.

Category

1. Publishing Research
2. Understanding Ethics

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