## 9 Authorship



Tip 9 - Authorship: discuss it within the team!

## What you should know

Being an author of a scientific paper – and having a key role as an author (first, second, last, corresponding, guarantor) – can help your career. It is therefore unsurprising that authorship is a highly debated issue in meeting rooms and around coffee machines at academic departments. The International Committee of Medical Journal Editors (ICMJE) describes an author as someone who "must take responsibility for at least one component of the work, should be able to identify who is responsible for each other component, and should ideally be confident in their co-authors' ability and integrity" (www.icmje.org). Authors must be distinguished from contributors based on three explicit criteria (see checklist); an author should meet all three conditions. Contributing to only one component of the study, such as the acquisition of funding or data collection alone, is regarded as insufficient for authorship. Persons who do not qualify for authorship can be listed as contributors in the acknowledgements, preferably accompanied by a statement of their contribution, such as "collected data" or "provided critical feedback on the study design". Contributors must give permission to be acknowledged and some journals may ask for the written permissions.

Likewise, authors are usually asked to complete and sign both authorship and conflict-of- interest forms. In large multicenter studies, group authorship may be chosen, where the key researchers are listed as the leading authors, followed by "on behalf of the xyz group". The members of that group are listed in the acknowledgements, but mostly identified as authors in search engines such as PubMed.

For biomedical journals in most countries, first author is the most important position, followed by last author (supervisor), and second author. Some journals allow joint first authorship; this is usually indicated by a note in the author affiliation section. Many journals will also ask for one author to be identified as guarantor and another as corresponding author. The guarantor "takes responsibility for the integrity of the work as a whole, from inception to published article". The corresponding author is the primary contact person for questions related to the underlying work, during the editorial process as well as after publication. Often, both the corresponding author and/or the guarantor will either be the (junior) first author who ran the project or the (senior) last author who supervised it. Some groups want these roles to be allocated to persons with permanent positions at the institution where the intellectual property of the work was developed.

## What you should do

Discuss contributions and authorship at the outset of a project and evaluate this from time to time. Most projects will produce multiple papers, and author roles can be different for each paper. The author team should preferably be unambiguous about who will act as lead author for specific papers before the manuscript is initially drafted (see part 1: how to get started). Contributorship and authorship based on the ICMJE criteria may fluctuate and change over time. People may shift careers, move to different places or lose interest. It helps to have a core team of at most 2-3 people who typically make the day-to-day decisions in a project and who discuss authorship order as well. Consider preparing a written document describing the authors' roles, circulating it, and making sure it is clear that these agreements may be subject to change and renegotiation throughout the project. Preparing a written agreement forces a team to discuss what constitutes authorship, and also explicitly sets out what the team thinks about factors that would change authorship or the order of authors throughout the project. Authorship gives credit where credit is due, but also assigns responsibility to co-authors.

As a lead author, be aware that working with multiple co-authors requires planning. Prepare the primary draft with one other author. (S)he can also act as a back-up when it comes to deciding on conflicting suggestions from other coauthors. Make this explicit when circulating the draft for critical review by all co-authors and preferably state what you expect from them: e.g., general feedback on the draft or more specific comments on subsections.

Be explicit in your communication, as these expectations may differ between co-authors. Provide your co-authors with a deadline to respond and ask them to notify you when this is not feasible. Once a paper is off your desk, you can't work on it. Hence, the planning of your project as a whole, and individual papers in particular, may be heavily affected by a non-responding co-author. On the final draft, ask co-authors to meticulously check their names, including initials and titles, and affiliations. Misspelled names will appear in search engines like PubMed. Consider using an author identifier from the onset of your carreer. Researcher identication, such as Orcid (www.orcid.org) help to uniquely identify those who participate in research and connect them to their contributions and affiliations, across disciplines, borders, and time.

Following these steps can help ensure that you get the author position you deserve, help you manage multiple-author teams, and ensure that everyone (including you!) does the work required to merit authorship.

## Checklist for authorship

- Discuss authorship (including lead authorship) at an early stage during a project
- Check and follow ICMJE criteria on contributorship and authorship: authors should have ...
  - contributed substantially to the conception and design, acquisition of data, or analysis and interpretation of data;
  - contributed to writing the paper or revising it critically for important intellectual content; and
  - given final approval of the version to be published.
- Develop a written authorship document stating the intended authors, criteria for authorship, and factors that may change authorship (or the authorship order) over time
- Ask co-authors to critically review and provide feedback with targeted questions and set deadlines to respond
- Ask contributors for permission to be mentioned in the acknowledgements.
- Ask co-authors to meticulously check their names, initials and affiliations before submitting.
- Consider using a researcher identifier, and ask co-autors to provide one as well, e.g., via www.orcid.org