

# AUTHORSHIP IN SCIENCE: PRACTICES ACROSS FIELDS AND BORDERS

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### Abstract

Authorship standards are recognized in widely disseminated guidelines. However, authorship's use as a proxy of the quality of researchers can prompt misrepresentations of authorship and author disagreements, increasing the risk of unethical authorship. This workshop will offer a valuable opportunity for participants to share and reflect upon their views and practices regarding ethics in research authorship and discuss strategies that can be used in different research contexts to foster best practices and avoid misconduct risk.

In the modern system of science, authorship is a proxy of productivity and determines financial grants, recognition, professional advancement and salary. The quality of scientists is usually measured by the number of papers, citations or by the Hirsch index (Hirsch, 2005).

According to Papatheodorou et al. (2008), the increasing complexity of modern research, collaborative needs, research visibility and the pressures involving the "publish or perish" principle can lead to the inflation of authors. Others point out that some researchers dishonestly claim authorship to obtain a better academic ranking (Kwok, 2005). This hinders authorship standards which, although

widespread, do not seem to prevent unethical authorship from remaining common practice.

According to the European Network for Academic Integrity (ENAI) glossary (Tauginienė et al., 2018), unethical authorship involves

including a person who has not contributed to the research as an author of the study; excluding a genuine contributor to the research from the list of authors of the study; changing the sequence of authors in an unjustified and improper way; removing names of contributors in later publications; using one's power to add his/her name as the author of the study without any contribution; including an author without his/her permission. (p. 44)

Among these, the most common practices are honorary authorship (appointing people who have not contributed to the research), or ghost authorship (not appointing those who actively contributed to the research).

In 1985, the International Committee of Medical Journal Editors (ICMJE) introduced for the first-time authorship criteria that were adopted by various journals, societies and disciplines (Smith, 1997; Vartiovaara, 1985). These criteria, last updated in 2021, include:

(i) substantial contributions to the conception or design of the work, or the acquisition, analysis, or interpretation of data for the work; and (ii) drafting of the work or revising it critically for important intellectual content; and (iii) final approval of the version to be published; and (iv) 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. (International Committee of Medical Journal Editors, 2021, p.2)

Also, the Committee on Publication Ethics (COPE, 1999) has established their own criteria for authorship.

Despite having widely established criteria, authorship norms and practices differ across fields, research teams and cultures, and many authors ignore guidelines. The first author usually occupies the most important position in a publication, but the last author represents distinct credits depending on the discipline. For example, in the medical field, the bottom of the list is distinctively reserved for the principal investigator, while in the social sciences it reflects a minor contribution. The places in-between are for minor contributions in both cases (Tscharrntke et al., 2007).

Some studies have been discussing the prevalence of authorship disagreements, their underlying factors, as well as the subsequent misbehavior (Smith et al., 2020) and others the best way to solve them (Faulkes, 2018). Authorship disagreements can be minimized by adopting responsible research practices such as to decide the list of authors and how they are ranked before initiating the research and correcting it throughout the project if needed. A comprehensive understanding about guidelines

and usual practices for a certain field, as well as a thoughtful discussion about this can certainly help to mitigate these disputes (Faulkes, 2018). Workshops are intensive educational programs that create valuable opportunities for participants to discuss different views of a topic, its challenges and solutions, to better understand it. Additionally, they can actively engage in learning activities that can then use in their research and academic activities (Sufi et al., 2018).

In this workshop, a three-part structure will be followed: 1) a diagnostic test, based on recent literature, where participants will be asked to individually complete a short multiple-choice questionnaire on their knowledge, perceptions and practices regarding ethics in research authorship; then 2) a small group discussion by splitting the participants in two breakout rooms, with a moderator, where they will be encouraged to discuss their responses and elaborate a collaborative best practices document; and 3) a final overview addressing the main issues raised during the session, complemented with information from recent literature and take-home messages.

Workshop participants will be asked for their informed consent so their contributions during the session can be used for publication. Quantitative data (questionnaire) and qualitative data (group discussions) collected during this workshop will have the ethical approval of the Ethics Committee of the University of Porto and it will be published as a full paper after the conference.

Overall, both the collaborative activities developed during this workshop and the expertise of the authors will offer insights to students, researchers and editors on strategies to promote best practices and combat malpractices in research authorship.

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