The Definition of Authorship in the European Code of Conduct for Research Integrity

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Agenda

• Introduction
  • Good research practice as defined by the European Code of Conduct for Research Integrity.

• Who is an author?
  • First recommendation

• Who is not an author but should be acknowledged?
  • Second recommendation

• Who shouldn’t be an author?
  • Third recommendation
European Code of Conduct for Research Integrity (ECCRI)

“Good research practices are based on fundamental principles of research integrity. They guide researchers in their work as well as in their engagement with the practical, ethical and intellectual challenges inherent in research. These principles are:

• Reliability
• Honesty
• Respect
• Accountability” (ALLEA 2017).
ECCRI mentions publication and dissemination among seven other contexts as an important aspect of good research practice.
Publication and dissemination in the ECCRI

1. “All authors are fully responsible for the content of a publication, unless otherwise specified.”

2. “All authors agree on the sequence of authorship, acknowledging that authorship itself is based on a **significant contribution** to the design of the research, relevant data collection, or the analysis or interpretation of the results.”

3. Authors ensure that their work is made available to colleagues in a timely, open, transparent, and accurate manner unless otherwise agreed, and are **honest in their communication** to the general public and in traditional and social media.”

4. “Authors **acknowledge** important work and intellectual contributions of others, including collaborators, assistants, and funders, who have influenced the reported research in appropriate form, and cite related work correctly.”
Publication and dissemination in the ECCRI

5. “All authors disclose any conflicts of interests and financial or other types of support for the research or for the publication of its results.”

6. “Authors and publishers issue corrections or retract work if necessary, the processes for which are clear, the reasons are stated, and authors are given credit for issuing prompt corrections post publication.”

7. “Authors and publishers consider negative results to be as valid as positive findings for publication and dissemination.”

8. “Researchers adhere to the same criteria as those detailed above whether they publish in a subscription journal, an open access journal or in any other alternative publication form.”
Approach

**Authorship attribution** is tightly linked with the reward system of science (Biagioli & Galison 2003), and is a **key element** of good publication practices.

Compare ECCRI and different components of its definition of authorship with two other important Codes of Conduct:

- World Association of Medical Editors (WAME)
- International Committee of Medical Journal Editors (ICMJE)
ECCRI - Who is an author?

“All authors agree on the sequence of authorship, acknowledging that authorship itself is based on a significant contribution to the design of the research, relevant data collection, or the analysis or interpretation of the results” (ALLEA 2017).
ICMJE – Who is an author? (2016)

• **Substantial contributions** to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND

• Drafting the work or revising it critically for important **intellectual content**; AND

• Final approval of the version to be published; AND

• 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.
Everyone who has made **substantial intellectual contributions** to the study on which the article is based (for example, to the research question, design, analysis, interpretation, and written description) should be an author.
Significant contribution VS Significant intellectual contribution to a qualitative survey, personal experience

Doing the Right Thing: A Qualitative Investigation of Retractions Due to Unintentional Error (2017)
- Mohammad Hosseini, Medard Hilhorst, Inez de Beaufort, Daniele Fanelli

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Confusion about the definition of authorship is likely to contribute to false/unrealistic expectations and further conflicts.
With or without writing?

ECCRI leaves participation to the act of writing the manuscript out of the criteria for authorship. This can cause confusion because others mention that.

- WAME=> substantial intellectual contribution to research question, design, analysis, interpretation, “and written description.”

- ICMJE=> “Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND drafting the work or revising it critically for important intellectual content.”

  - “All individuals who meet the first criterion should have the opportunity to participate in the review, drafting, and final approval of the manuscript.”
First Recommendation

All authors agree on the sequence of authorship, acknowledging that authorship itself is based on a significant intellectual contribution to the design of the research, relevant data collection, or the analysis or interpretation of the results, and critically drafting or revising the manuscript.
ECCRI - Who is not an author but should be acknowledged?

“Authors acknowledge important work and intellectual contributions of others, including collaborators, assistants, and funders, who have influenced the reported research in appropriate form, and cite related work correctly” (ALLEA 2017).
ICMJE - Who is not an author but should be acknowledged?

“Examples of activities that alone (without other contributions) do not qualify a contributor for authorship are acquisition of funding; general supervision of a research group or general administrative support; and writing assistance, technical editing, language editing, and proofreading. Those whose contributions do not justify authorship may be acknowledged individually or together as a group under a single heading” (ICMJE 2016).
“Performing technical services, translating text, identifying patients for study, supplying materials, and providing funding or administrative oversight over facilities where the work was done are not, in themselves, sufficient for authorship, although these contributions may be acknowledged in the manuscript” (WAME 2007).

Why does this matter?
Technical contributions are becoming more prevalent

- Laboratory technicians occasionally rewarded middle author positions for their dedication (Lissoni et al. 2013).
- The rise of the middle author and growing importance of technical contributions (Mongeon et al. 2017).
- Common tasks leading to authorship across disciplines: analyzed the data, conceived and designed the experiments, contributed reagents/materials/tools, performed the experiments, wrote the paper (Larivière 2016).
Second Recommendation

“Authors **acknowledge** important work and intellectual contributions of others, including **collaborators**, assistants, and funders, **who have influenced** the reported research in appropriate form, and cite related work correctly” (ALLEA 2017).

The section about acknowledging important works needs **further specification** to clarify contribution types that only merit acknowledgment.
ECCRI - Forbidden authorship practices

• There are further violations of good research practice that damage the integrity of the research process or of researchers. In addition to direct violations of the good research practices set out in this Code of Conduct, examples of other unacceptable practices include, but are not confined to:

• **Manipulating authorship or denigrating** the role of other researchers in publications.

• No specific mention of **ghost/guest/honorary** authorships.
It is dishonest to omit mention of someone who has participated in writing the manuscript ("ghost authorship") and unfair to omit investigator who have had important engagement with other aspects of the work.

It is dishonest to include authors only because of their reputation, position of authority, or friendship ("guest authorship").

Why does this matter?
Growth rate of international collaborations

- The Research Ethics and Research Integrity community have had lengthy discussions as to what guest/ghost/honorary authorship means and have heavily promoted these terms and their definitions.

- Historical and regional differences in the meaning and implications of the act of authorship (Long 2001).
  - What is acceptable in one country might be called misconduct in another country.
  - In some countries, a senior scientist may feel entitled to take full credit for a junior colleague's work”, or in other cases “a senior researcher may decide that his collaborators need publications more than he does, so he allocates publication credit generously (or overly generously) to his collaborators” (Anderson et al. 2011).
ECCRI-

“respect for colleagues, research participants, society, ecosystems, cultural heritage and the environment”

- Given that honorary/gift/guest/ghost authorship practices are not specifically banned in the code, in some cultural contexts where “it may be deemed appropriate or even required to give authorship credit out of respect (e.g. to senior colleagues, or directors of institutes)” (Smith et al. 2014), the notion of ‘respect for colleagues’ is prone to cause serious problems in the context of international collaborations.
Third Recommendation

Specifically mention authorship malpractices that were being rejected for years: ghost/guest/honorary authorship:

• In addition to direct violations of the good research practices set out in this Code of Conduct, examples of other unacceptable practices include, but are not confined to:

  Manipulating authorship or denigrating the role of other researchers in publications via ghost/guest/honorary authorships.
Conclusion

• The ECCRI is one of the most compact and practical codes of conduct that is available today, but could be more comprehensive in relation to authorship and its definition.

• Expand and disambiguate the definition of authorship and acknowledgments, and explicitly reject malpractices through specifying them.
References


Thank you!

Pre-conference workshop at McGill University, Montreal.

- CRediT: Discussing next steps (10/Oct)
  - Mohammad Hosseini, Alison O'Connell (Coko fd.), Cory Craig (UC Davis)

- In press: Suggestions to Improve the Comprehensibility of Current Definitions of Scientific Authorship for International Authors.
  - Mohammad Hosseini, Luca Consoli, Hub Zwart, Mariette van den Hoven

- Other projects:
  - Equal co-authorship practices
  - Gender disparity in research output
  - Ethical issues and problems in scientific authorship
  - DCU Philosophy Society

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