WHAT IS AUTHORSHIP?

An Introduction

Acknowledgment

This presentation is loosely based on a curriculum for medical students located in MedEdPORTAL.

Wolfson R, Arora V. Education on Authorship Criteria – A Curriculum for Medical Students. MedEdPORTAL; 2014. <u>https://doi.org/10.15766/mep_2374-8265.9689</u>

Why authorship matters?

Scientific research? Only when not at the cost of ethics – and first of all, those of the researchers themselves. Aleksandr Solzhenitsyn

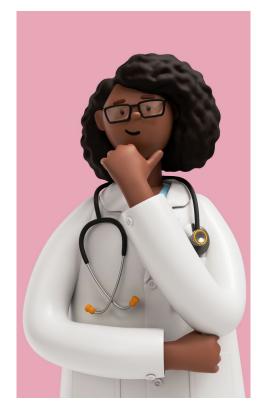
You want credit for your work, and authorship is an indicator or your productivity. Authorship can also have academic and financial benefits.

Objectives

After this presentation, you should:

- Know the criteria and guidelines for authorship
- Understand problems that can occur in determining authorship
- Access resources that address/support ethical authorship





Dr. Hart and her Writing Group have written a manuscript. Dr. Frost was a Writing Group member. She helped do the literature search, helped draft the introduction, and critically reviewed most of the manuscript drafts. However, Dr. Frost moved to a non-ISPCTN institution before the manuscript was submitted to the journal.

Should Dr. Frost be included as an author on Dr. Hart's manuscript?



Dr. Crawford was the PI at his site for the ISPCTN multicenter SCHOOL trial. His site enrolled and retained more patients than any other ISPCTN site. Plus, all the patients completed the study, and his site had no protocol deviations!

Does he qualify as an author on the primary manuscript?

Maxine Mills, a medical writer, worked with Dr. Quinn's Writing Group on a scoping review. She:

- Helped with the literature search
- Contacted authors for information
- Set up Writing Group meetings
- Took Writing Group meeting minutes
- Edited all drafts based on AMA style
- Reformatted final tables and noted errors

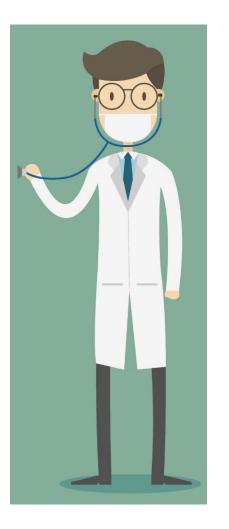
Does Maxine deserve authorship on this manuscript?



Dr. Holland, a Site Awardee PI, assumed the following responsibilities for the SCHOOL trial at their site:

- Reviewed the protocol before study start
- Trained site personnel on the protocol
- Consented all patients enrolled at the site
- Attended all study site teleconferences
- Supervised all study staff performing the study

Does Dr. Holland's role in the trial mean they should be an author on the resulting manuscript?



Ethical Authorship -Requires Education and Teamwork

- Know the criteria for authorship & their nuances
- Establish standards for authorship as early as possible
- Early and ongoing Writing Group discussions about authorship



- All authors agree on the authorship criteria used
- Be honest about your contributions to the manuscript
- Speak up, ask questions, & reach out if you need to

ICMJE: The Gold Standard

International Committee of Medical Journal Editors

Four criteria for authorship:

- 1. Substantial contributions to the conception or design of the work; or acquisition, analysis, or interpretation of the data for the work; AND
- 2. Drafting of the work or revising it critically for important intellectual content; AND
- 3. Final approval of the version to be published; AND
- 4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of the work are appropriately investigated and resolved.

Exploring Criteria 1 & 2

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

2. Drafting the work or revising it critically for important intellectual content



Substantial Contributions

Study Concept or Design

- Conceptualize or refine a research idea or study design
- Develop or modify a protocol or methodology
- Develop or modify a statistical analysis plan

Acquisition of Data

- Number of subjects enrolled, randomized, or retained relative to total number of participants
- Collect, manage, maintain data for 2nd or exploratory analysis

Substantial Contributions

Analysis

- Perform data or statistical analysis
- Interpret statistical analyses
- Evaluate data for interpretation, advice, insights, & conclusions.

Interpretation

- Interpret study, research, data, results, or key observations & derive conclusions
- Provide context for results based on published literature
- Identify knowledge gaps for further exploration

Critical Revision/Intellectual Content

Read the manuscript & keep these questions in mind:

- What is the goal: to summarize research, build on past research, etc?
- Are the data being presented facts or opinions?
- Does the paper seem well-researched?
- What are the main arguments/conclusions?
 - Are they clearly stated?
 - Does the evidence support them?
- Is the paper organized logically and easy to follow?

It is **NOT** editing for grammar, word choice, format, layout, etc.

Revisiting the Stories

ICMJE's 4 Criteria for Authorship:

- Substantial contributions to the conception or design of the work; or acquisition, analysis, or interpretation of the data for the work; AND
- 2. Drafting of the work or revising it critically for important intellectual content; AND
- 3. Final approval of the version to be published; AND
- 4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of the work are appropriately investigated and resolved.

Story 1 Recap

Dr. Hart's Writing Group

Dr. Frost (a member of the Writing Group):

- helped with the literature search,
- helped draft the introduction,
- critically reviewed most of the drafts
- moved to a non-ISPCTN institution before the manuscript was finalized

Does Dr. Frost qualify for authorship based on ICMJE criteria?



Story 2 Recap



- Dr. Crawford was the site PI for the ISPCTN SCHOOL trial:
 - His site had the highest enrollment & retention rates of all sites
 - All patients at his site completed the study
 - His site had no protocol deviations

Has Dr. Crawford qualified for authorship per the ICMJE criteria?

Story 3 Recap

Maxine the medical writer worked with Dr. Quinn's Writing Group. She:

- Helped with the literature search
- Contacted authors for more information
- Set up & hosted Writing Group meetings
- Recorded/shared meeting minutes
- Editing all drafts per AMA style
- Reformatted tables and noted inaccuracies

Has Maxine met the ICMJE criteria for authorship?



Story 4 Recap



Dr. Holland, a Site Awardee PI, managed the SCHOOL trial at their site. They:

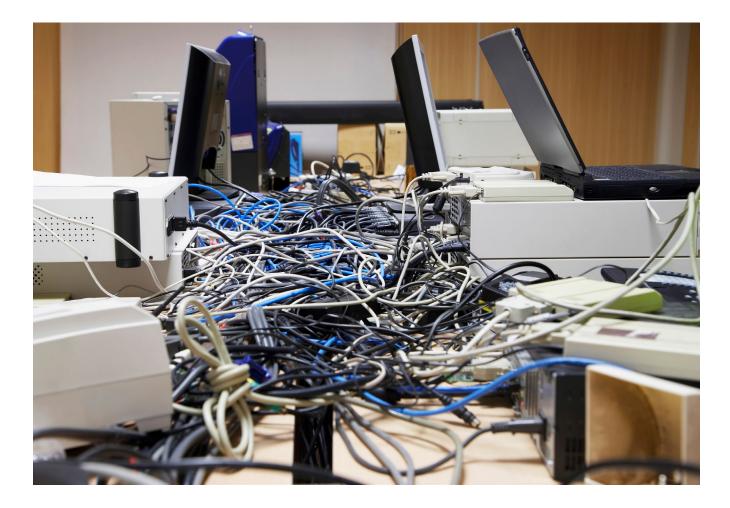
- Reviewed the protocol before study start
- Trained site personnel on the protocol
- Consented all patients enrolled at the site
- Attended all study site teleconferences
- Supervised all site study staff

Do Dr. Holland's contributions qualify them for authorship?

ALL Four Criteria Must Be Met

- 1. Substantial contributions to the conception or design of the work; or acquisition, analysis, or interpretation of the data for the work; <u>AND</u>
- Drafting of the work or revising it critically for important intellectual content;
 <u>AND</u>
- 3. Final approval of the version to be published; \underline{AND}
- 4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of the work are appropriately investigated and resolved.

Authorship is Simple, Right?



Unethical Authorships

Guest authors: <u>Listed</u> as authors, but <u>did</u> <u>not</u> meet authorship criteria.

Types:

- Well-known researcher paid for using their name or to influence journal acceptance
- Co-author is returning a favor
- Seniority and/or departmental tradition

The harm:

- May give the paper unfair credibility/ influence
- Dilutes contributions of the other authors

Ghost authors: <u>Met</u> authorship criteria, but <u>not listed</u> as authors.

Types:

- Direct employee of a pharmaceutical or device maker
- Contracted employee of a device or pharmaceutical company, such as a medical writer or communications company

The harm:

 Uses authors' reputations to influence readers without the readers' knowledge

Different Interpretations of ICMJE

- Some journals don't require authors to meet all 4 ICMJE criteria.
- Some journals ask for each author's contribution to the manuscript:
 - Contributions may be pre-defined by the journal
 - Contributions may or may not be published with the article
- Read the target journal's Information for Authors pages **carefully** for the specific authorship criteria. If no criteria are listed, use the ICMJE criteria.

Publication Guidelines

- ICMJE Recommendations/Publication (<u>http://icmje.org/</u>)
- International Society for Medical Publication Professionals (ISMPP). Good Publication Practice (GPP) (<u>http://ismpp.org/</u>)
- Committee on Publication Ethics (COPE) (<u>http://publicationethics.org</u>)
- Medical Publishing Insights and Practices (MPIP) Initiative (<u>http://www.mpip-</u> initiative.org/)



Questions?

If you have questions or topics you would like to see addressed, email Phyllis Nader at <u>pnader@uams.edu</u>.

A copy of these slides and recording of the presentation will be posted on the ECHO ISPCTN Research Portal under Professional Development.