

Faculty of Arts and Sciences (FAS) and John A. Paulson School of Engineering and Applied Sciences (SEAS)

Guidelines

Authorship and Acknowledgement

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| Policy Title: | Guidelines on Authorship and Acknowledgement |
| Responsible Executives: | Claudine Gay, Dean of Faculty, FAS; Frank Doyle, John A. Paulson SEAS Dean; <i>and</i> Patrick Fitzgerald, Associate Dean for Research Administration, FAS |
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Introduction

Determining authorship is an important component of upholding the integrity of the research and scholarly enterprise and serves as an explicit way of assigning responsibility and giving credit for intellectual work. Only by honestly reflecting the contribution of all members of the research team can there be sustained growth in the discipline and proper credit directed to scholars for their efforts. Fair and equitable determination of authorship is also important to the reputation, academic promotion, and funding support of the individuals involved, and to the strength and reputation of the authors’ respective institutions.

Disagreements may arise regarding who should be named as an author or contributor to intellectual work and the order in which individuals should be listed. These Guidelines are meant to serve as a set of standards that are shared by the academic community as a whole in order to help facilitate open communication through the adherence to common principles. These principles apply to all intellectual products, whether published or prepared for internal use or for broad dissemination.

Applicability

These Guidelines apply to all faculty, students, postdoctoral researchers, and staff. Ownership of research data and materials resulting from Harvard University (“University”) research activities rests with the University (see [Research Data Ownership Policy](#)).

Designing an ethical and transparent approach to authorship and publication of research, whether in a peer-reviewed journal or in an open access e-print or pre-print repository (e.g., arXiv, PsyArXiv), is a shared responsibility of all research team members but is primarily the responsibility of the Principal Investigator. The University recognizes that there are different standards across disciplines regarding authorship and the order in which authors are listed or acknowledged. Additionally, journals often specify their requirements in their guidance for authors and require attestations regarding individual authors intellectual contributions to the work. As a result,

each laboratory, department, and/or school should engage in conversations regarding their own discipline-specific standards of authorship and, if needed, are encouraged to supplement the Guidelines herein with a description of these respective discipline-specific processes for deciding who should be an author and the order in which authors will be listed.

Note that these Guidelines are not intended for allegations related to research misconduct, defined as *fabrication or falsification of data or plagiarism*, which are subject to the *Procedures for Responding to Allegations of Misconduct in Research* and reviewed by the Committee on Professional Conduct (CPC).

Criteria

Criteria for Authorship

FAS and SEAS recommend that authorship consider the following criteria¹;

- Each author is expected to have made substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data; or the creation of new software used in the work; or have drafted the work or substantively revised it; AND
- To have approved the submitted version (and any substantially modified version that involves the author's contribution to the study); AND
- To have agreed both to be personally accountable for the author's own contributions and to help ensure that questions related to the accuracy or integrity of any part of the work, even ones in which the author was not personally involved, are appropriately investigated and resolved..

Some diversity exists across academic disciplines regarding acceptable standards for substantive contributions that would lead to attribution of authorship. Many journals have adopted discipline-specific standards. The University expects that researchers will act in accordance with accepted practice of the relevant research community. This Guidance is intended to allow for such variation of best practices within a specific discipline, while ensuring authorship is not inappropriately assigned.

Acknowledgment Versus Authorship

Financial sponsorship or donation of gift funding does not constitute criteria for authorship. Individuals who do not meet the recommended requirements for authorship, but have provided a valuable contribution to the work, should be acknowledged for their contributing role as appropriate to the publication. Authorship should not be conferred on those who have not made intellectual contributions to the work, or whose intellectual contributions are limited.

Implementation

¹ As published in McNutt et al., Transparency in authors' contributions and responsibilities to promote integrity in scientific publication. Proceedings of the National Academy of Sciences of the United States of America (PNAS) March 13, 2018 115 (11) 2557-2560. These criteria were adapted from the International Committee for Medical Journal Editors (ICMJE) framework for broader applicability across scientific fields.

Implementation of these Guidelines should include a commitment to collegiality, open communication, and expectation-setting throughout the research and scholarly process as well as the following considerations (see *Authorship Best Practices Guidance* (Addendum A) and *Authorship Discussion Tool* (Addendum B)):

- Research groups should discuss authorship credit/criteria, presentation of joint work, and future direction of the research as early as practical, frequently during the course of their work, and as research team members begin or end their involvement. The Principal Investigator should initiate these discussions; however, any collaborator should feel free to raise questions or seek clarity throughout the course of the collaboration. Each lab or group may consider having a written document in place as guidance.
- All members of the research team are expected to adhere to good laboratory practices including maintaining an accurate laboratory notebook and annotating electronic files, as these practices will aide in identifying and clarifying individuals' contributions to a project.
- Disposition of collaborative data and research materials should be mutually agreed upon among collaborators as early as practical and in accordance with any data-sharing and retention requirements.
- Laboratories, departments, centers, and programs supporting scholarly work should have available these Guidelines and a description of their discipline-specific processes of determining who should be an author, and the order in which authors are listed. These Guidelines should be included in the orientation of new research team members.

Authorship Disputes and Resolution

Disputes over authorship are best settled by the authors themselves; however, conflicts related to authorship may arise at any time during the research or scholarly process, resulting from differing perceptions of one's contributions and resulting attribution of credit. It is expected that the resolution of disputes among collaborators will occur through open and collegial discourse, and mutual agreement is strongly encouraged. To facilitate this process, any prior decisions or discussions among authors, including verbal or written agreements between coauthors, should be reviewed and considered. These Guidelines and any documented customary practices in the relevant discipline should be applied, as appropriate. The authors should utilize the *Authorship Discussion Tool* (see Addendum B) in order to guide authors through a robust series of questions that can be jointly discussed by the authors in an effort to resolve the dispute. Extending an invitation to a mutually agreed-upon party outside the group who is familiar with publication norms in the field to informally serve as a neutral facilitator may ensure that all viewpoints are considered and objectively applied. It is expected that most disputes will be resolved collegially among collaborators. Should an authorship dispute arise that includes a question of the veracity of underlying data supporting a manuscript or the misappropriation of the work of others, consultation with the Research Integrity Officer may be helpful to support resolution.

If the dispute cannot be resolved at the local level, it is the responsibility of the FAS Department Chair or SEAS Area Chair or their designee to take the lead in effecting a resolution of the dispute, assuming that the FAS Department Chair or SEAS Area Chair is not a direct party to the dispute and does not have a conflict of interest.

If strenuous, good faith efforts to resolve the dispute utilizing the *Authorship Discussion Tool* (see Addendum B) are unsuccessful, one or more of the parties may then contact their FAS Divisional Dean(s)/SEAS Area Dean, sharing the completed Addendum B, which records the nature of the dispute and the efforts undertaken, and

requesting further consideration. The FAS Divisional Dean(s)/SEAS Area Dean will review the submitted information and determine whether or not to appoint a committee to examine the case. As necessary, the Dean(s) will appoint a committee (and designate a committee chair), in consultation with the relevant FAS department(s)/SEAS area(s). The committee will consist of the following:

- A[n additional] faculty member from the field or fields relevant to the dispute
- Two faculty members from an adjacent field/department/area
- FAS/SEAS Research Integrity Officer
- If the case involves a graduate student, an appropriate (non-student) representative from the Graduate School of Arts and Sciences
- If the case involves a postdoctoral researcher, an appropriate (non-postdoctoral) representative from the FAS Office of Postdoctoral Affairs

The committee will review the case and develop a recommendation to make to the authors. The committee chair will first inform the FAS Divisional Dean(s)/SEAS Area Dean of this recommendation and then inform the authors.

Related Resources

[University Statement of Policy in Regard to Intellectual Property \(IP Policy\)](#)

[Graduate School of Arts and Sciences Office of Student Affairs](#)

[University Ombudsman Office](#)

[Committee on Publication Ethics \(COPE\) Authorship Resources](#)

[FAS/SEAS Procedures for Responding to Allegations of Research Misconduct](#)

[FAS/SEAS Research Integrity Officer](#)

[Harvard Medical School Authorship Guidelines](#)

Addendum A: Authorship Best Practices Guidance

This document provides best practices for research teams to consider at all stages of the project from conceptualization to post-publication.

Publications often represent the culmination of a scholarly endeavor and contribute original findings to a body of knowledge. It is important to discuss the dissemination and distribution of scholarly products with all members of the research team, to revisit these agreements throughout the process of performing the work and finally, prior to publication.

Many authorship disputes can be averted with frank and open conversations about the responsibilities of authorship and revisiting these conversations throughout the performance of the research.

- a. Discuss plans and criteria for authorship during the planning of any collaboration.
 - i. Utilize discipline specific guidance from journals and academic societies to inform these conversations.
 - ii. The ICMJE or similar discipline specific guidance can help inform each team members understanding of the *criteria for authorship*.
 - iii. The CRediT Taxonomy can inform the *roles and contributions of each author*.
- b. The outcome of these conversations should include an agreement upon initial plans for publication, including;
 - i. The provisional list of authors for each planned publication
 - ii. The provisional order of authorship for each planned publication
 - iii. The understanding that as the scholarly work evolves, these plans will need to be revisited and potentially modified to conform with authorship guidance
- c. It is good practice to briefly summarize this discussion and circulate to all research team members via an email.
- d. The senior author, first author, or corresponding author should ensure these authorship responsibilities are described with each member of the team. Though one author takes the lead on initiating these conversations, authorship is a shared responsibility and all members of the team are encouraged to discuss responsibilities openly and collegially.
- e. As the research project progresses, changes in roles of responsibilities may take place. Revisiting the original authorship agreement about relative credit and responsibilities is often required. Disputes can be averted if everyone is included in all the discussions.

Each laboratory, center or research group should consider developing authorship guidelines and can be shared as part of on boarding new members of the research group. Consistent application of these best practices can reduce the potential for authorship disputes.

Additional Resources

- What constitutes authorship? Authorship and Contributorship; The Committee on Publication Ethics (COPE): <http://publicationethics.org/>
- Defining the Role of Authors and Contributors; International Committee of Medical Journal Editors (ICMJE) <http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>
- Contributor Roles (CRediT) Taxonomy <https://www.casrai.org/credit.html>

- Responsibilities of Authorship in the Life Sciences (2003); National Academies Press;
<https://www.ncbi.nlm.nih.gov/books/NBK97153/>
- Chapter 4. Authorship and Peer Review; Scientific Integrity, 4th Ed. (2014); F. L. Macrina.. American Society for Microbiology (ASM) Press.
<http://www.scientificintegrity.net/>
- Supplementary Guidelines on Responsibilities of Coauthors and Collaborators; The American Physical Society (APS)
https://www.aps.org/policy/statements/02_2.cfm#supplementary_guidelines1
- Authorship and Authorship Responsibilities; The Council of Science Editors (CSE)
<https://www.councilscienceeditors.org/resource-library/editorial-policies/white-paper-on-publication-ethics/2-2-authorship-and-authorship-responsibilities/>
- Publication Practices & Responsible Authorship; American Psychological Association (APA)
<http://www.apa.org/research/responsible/publication/>
- Guidelines for Responsible Conduct Regarding Scientific Communication; society for Neuroscience
<https://www.sfn.org/member-center/professional-conduct/guidelines-for-responsible-conduct-regarding-scientific-communication>
- Authorship; PLOS ONE
<http://journals.plos.org/plosone/s/authorship>
- Topic: Authorship Credit; American Sociological Association (ASA)
<http://www.asanet.org/teaching-learning/faculty/teaching-ethics-throughout-curriculum/topic-authorship-credit>
- Author Guidelines; The American Society of Mechanical Engineers (ASME)
<https://www.asme.org/shop/proceedings/conference-publications/author-guidelines>
- General Guidelines for Authorship Contributions, NIH
https://oir.nih.gov/sites/default/files/uploads/sourcebook/documents/ethical_conduct/guidelines-authorship_contributions.pdf

Addendum B: Authorship Discussion Tool

This tool is intended to provide questions that will help facilitate dispute discussions amongst the research team members to ensure the right information is documented and considered prior to proceeding to an ad hoc committee.

Who should be involved in the conversation?

What is the nature of the authorship dispute?

At what stage of the research/scholarly work is the project at currently? (e.g., protocol design, data collection, data analysis, preparing the manuscript, manuscript has been submitted)

What agreements/discussions have occurred to date on the assignment of authorship and attribution of credit on this project?

What are the roles of those who worked on this project (whether or not they are currently described as an author)? (refer to the CRediT Taxonomy² for specifying roles)

Who among this list meets the following criteria for authorship:

- Have made substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data; or the creation of new software used in the work; or have drafted the work or substantively revised it
- Have approved the submitted version (and any substantially modified version that involves the author's contribution to the study)
- Have agreed both to be personally accountable for the author's own contributions and to help ensure that questions related to the accuracy or integrity of any part of the work, even ones in which the author was not personally involved, are appropriately investigated and resolved

What efforts have been undertaken to resolve this matter?

² Contributor Roles (CRediT) Taxonomy <https://www.casrai.org/credit.html>