

Authorship Guidelines

INTRODUCTION

Authorship is an explicit way of assigning responsibility and giving credit for intellectual work. The two are linked. Authorship practices should be judged by how honestly they reflect actual contributions to the final product. Authorship is important to the reputation, academic promotion, and grant support of the individuals involved as well as to the strength and reputation of their institution.

Many institutions, including medical schools and peer-reviewed journals, have established standards for authorship. These standards are similar on basic issues but are changing over time, mainly to take into account the growing proportion of research that is done by teams whose members have highly specialized roles.

In practice, various inducements have fostered authorship practices that fall short of these standards. Junior investigators may believe that including senior colleagues as authors will improve the credibility of their work and its chances of publication, whether or not those colleagues have made substantial intellectual contributions to the work. They may not want to offend their chiefs, who hold substantial power over their employment, research opportunities, and recommendations for jobs and promotion. Senior faculty might wish to be seen as productive researchers even though their other responsibilities prevent them from making direct contributions to their colleagues' work. They may have developed their views of authorship when senior investigators were listed as authors because of their logistic, financial, and administrative support alone.

Disputes sometimes arise about who should be listed as authors of an intellectual product and the order in which they should be listed. When disagreements over authorship arise, they can take a substantial toll on the good will, effectiveness, and reputation of the individuals involved and their academic community. Many such disagreements result from misunderstanding and failed communication among colleagues and might have been prevented by a clear, early understanding of standards for authorship that are shared by the academic community as a whole.

Discussions of authorship in academic medical centers usually concern published reports of original, scientific research. However, the same principles apply to all intellectual products: words or images; in paper or electronic media; whether published or prepared for local use; in scientific disciplines or the humanities; and whether intended for the dissemination of new discoveries and ideas, for published reviews of existing knowledge, or for educational programs.

The Faculty Council of Harvard Medical School has endorsed the following statement. Although authorship practices differ from one setting to another, and individual situations often require judgment, variation in practices should be within these basic guidelines.

AUTHORSHIP

1. Everyone who is listed as an author should have made a substantial, direct, intellectual contribution to the work. For example (in the case of a research report) they should have contributed to the conception, design, analysis and/or interpretation of data. Honorary or guest authorship is not acceptable. Acquisition of funding and provision of technical services, patients, or materials, while they may be essential to the work, are not in themselves sufficient contributions to justify authorship.

2. Everyone who has made substantial intellectual contributions to the work should be an author. Everyone who has made other substantial contributions should be acknowledged.
3. When research is done by teams whose members are highly specialized, individuals' contributions and responsibility may be limited to specific aspects of the work.
4. All authors should participate in writing the manuscript by reviewing drafts and approving the final version.
5. One author should take primary responsibility for the work as a whole even if he or she does not have an in-depth understanding of every part of the work.
6. This primary author should assure that all authors meet basic standards for authorship and should prepare a concise, written description of their contributions to the work, which has been approved by all authors. This record should remain with the sponsoring department.

ORDER OF AUTHORSHIP

Many different ways of determining order of authorship exist across disciplines, research groups, and countries. Examples of authorship policies include descending order of contribution, placing the person who took the lead in writing the manuscript or doing the research first and the most experienced contributor last, and alphabetical or random order. While the significance of a particular order may be understood in a given setting, order of authorship has no generally agreed upon meaning.

As a result, it is not possible to interpret from order of authorship the respective contributions of individual authors. Promotion committees, granting agencies, readers, and others who seek to understand how individual authors have contributed to the work should not read into order of authorship their own meaning, which may not be shared by the authors themselves.

1. The authors should decide the order of authorship together.
2. Authors should specify in their manuscript a description of the contributions of each author and how they have assigned the order in which they are listed so that readers can interpret their roles correctly.
3. The primary author should prepare a concise, written description of how order of authorship was decided.

IMPLEMENTATION

1. Research teams should discuss authorship issues frankly early in the course of their work together.
2. Disputes over authorship are best settled at the local level by the authors themselves or the laboratory chief. If local efforts fail, the Faculty of Medicine can assist in resolving grievances through its Ombuds Office.
3. Laboratories, departments, educational programs, and other organizations sponsoring scholarly work should post, and also include in their procedure manuals, both this statement and a description of their own customary ways of deciding who should be an author and the order in which they are listed. They should include authorship policies in their orientation of new members.

Authorship Guidelines

- 4.** Authorship should be a component of the research ethics course that is required for all research fellows at Harvard Medical School.
- 5.** These policies should be reviewed periodically because both scientific investigation and authorship practices are changing.

Adopted on December 17, 1999.