Authorship Guidelines

Scholarly integrity and the responsible conduct and reporting of research are essential for maintaining public trust in the research enterprise and for community benefit from research discovery. These guidelines are meant to clarify and specify the University's principles on scientific and scholarly publications to enhance the scholarly environment and promote a coherent approach to authorship across the University.[1][2]

I.   INTRODUCTION

Scientific and scholarly publications, such as books, articles, abstracts, presentations at professional meetings, and grant applications, provide the main vehicle to disseminate findings, thoughts, and analysis to the scientific, academic, and lay communities. For academic activities to contribute to the advancement of knowledge, they must be published in sufficient detail and accuracy to enable others to understand and elaborate the results. For the authors of such work, successful publication is an important means by which scholarly work can lead to significant impact within their field and to the larger society and improves opportunities for academic funding and promotion while enhancing scientific and scholarly achievement and repute. At the same time, the benefits of authorship are accompanied by a number of responsibilities for the proper planning, conducting, analysis, and reporting of research, and acknowledging the content and conclusions of other scholarly work. As members of the academic community, it is the responsibility of Northwestern faculty, staff and students to help protect these fundamental elements of the scientific and scholarly process.

II.   AUTHORSHIP STANDARDS

Authorship of a scientific or scholarly paper should be limited to those individuals who have contributed in a meaningful and substantive way to its intellectual content. All authors are re-

---

[1] Northwestern acknowledges the Policy of Washington University as providing an example for this policy. Policy for Authorship on Scientific and Scholarly Publications. Washington University (St. Louis, Mo.). Referenced March 7, 2012. `http://wustl.edu/policies/authorship.html`.

[2] Northwestern acknowledges Yale University's Guidance on Authorship in Scholarly or Scientific Publications as providing an example for this policy, `http://provost.yale.edu/policies/academic-integrity/guidance-authorship-scholarly-or-scientific-publications`.

sponsible for fairly evaluating their roles in the project as well as the roles of their co-authors to ensure that authorship is attributed according to these standards in all publications for which they will be listed as an author.

An author is generally considered to be an individual who has made substantial intellectual contributions to a scientific or scholarly publication. All authors should meet the following three criteria, and all those who meet the criteria should be authors:

1. Scholarship: Contribute significantly to the conception, design, execution, and/or analysis and interpretation of data.

2. Authorship: Participate in drafting, reviewing, and/or revising the manuscript for intellectual content.

3. Approval: Approve the manuscript to be published.

Significant diversity exists across academic disciplines regarding acceptable standards for substantive contributions that would lead to attribution of authorship. These guidelines are intended to allow for such variation in disciplinary best practices while ensuring authorship is not inappropriately assigned.

Broad common sense best practices regarding authorship, applicable to almost all disciplines, are expected. These include clearly discussing, early in the scholarly process, potential sources of ambiguity and disagreement, including the ordering of authors. Principal investigators are encourage to discuss, early and unambiguously, authorship related questions with all members of their research groups, including undergraduate and graduate students, and research assistants.

A. Lead Author(s)

As a practical matter in the case of publications with multiple authors, one author is often designated as the lead author. The lead author assumes overall responsibility for the manuscript and may also serve as the managerial and corresponding author. A lead author is, however, not necessarily the principal investigator or project leader. The lead author is ultimately responsible for ensuring that all other authors meet the requirements for authorship as well as ensuring the integrity of the work itself. The lead author is also responsible for ensuring at all authors have read and approved the manuscript in its entirety.

There are occasions when multiple, equal contributions lead to more than one co-contributing lead author. In cases where there are co-contributing lead authors, all assume the lead author

responsibilities. In some disciplines, the concept of a lead author is absent. In these cases, all authors share the lead author responsibilities.

If the lead author has concerns or questions regarding any of his or her responsibilities, he or she should seek guidance from his or her research or scholarly supervisor, department chair, or research dean.

B. Co-Author(s)

Each co-author is responsible for considering his or her role in the project and whether that role merits attribution of authorship. Co-authors should review and approve the manuscript. Every co-author is responsible for the content of the manuscript, including the integrity of any applicable research.

C. Unacceptable Authorship

Northwestern University, as a leading academic institution and training environment for future researchers and academic leaders, wishes to encourage only proper forms of authorship to serve as role models for our many students, post-doctoral fellows, and faculty. Guest, gift and ghost authorship are inconsistent with the definition of authorship.

1. Guest authorship (i.e., honorary, courtesy or prestige authorship) is granting authorship to an individual who does not meet the definition of author out of appreciation or respect for the individual, or in the belief that the expert standing of the guest will increase the likelihood of publication, credibility, or status of the work.

2. Gift authorship is credit, offered from a sense of obligation, tribute, or dependence, within the context of an anticipated benefit, to an individual who has not contributed to the work.

3. Ghost authorship is the failure to identify as an author someone who made substantial contributions (i.e., meeting the definition of authorship) to the research or writing of a manuscript.

D. Acknowledgements

Individuals who do not meet the requirements for authorship but who have provided a valuable contribution to the work should be acknowledged for their contributing role as appropriate to the

publication.

E.   Research Funding

All authors, in manuscripts submitted for review and publication, should acknowledge/disclose the source(s) of support for the work. Support includes research and educational grants, salary or other support, contracts, gifts, and departmental, institutional and hospital support.

F.   Financial Conflicts of Interest

Authors should fully disclose related financial interests and outside activities in publications (including articles, abstracts, manuscripts submitted for publication), presentations at professional meetings, and applications for funding.

In addition, authors should comply with the disclosure requirements of the University's Policy on Conflict of Interest and Conflict of Commitment and Policy on Conflict of Interest in Research.

III.   AUTHORSHIP DISPUTES

Determinations of authorship roles are often complex, delicate and potentially controversial. To avoid confusion and conflict, discussion of attribution should be initiated early in the development of any collaborative publication. For disputes that cannot be resolved amicably, including disagreements regarding the ordering of the authors in the publication, individuals may seek the guidance of the relevant department chair(s), or the research dean of their school.

Authorship disputes, including disagreement about authorship order, do not constitute research misconduct.