

FAIRNESS OF AUTHORSHIP CREDIT IN COLLABORATIVE FACULTY-STUDENT PUBLICATIONS FOR PHD, AM, AND MS STUDENTS

The Graduate Council of the Faculties has unanimously approved a policy on authorship credit in collaborative faculty-student publications. The intent of the policy is to avoid situations in which graduate students or faculty feel that their contribution to published work has not been fairly recognized. Our intent in the distribution of this policy statement to faculty and graduate students is to make authorship discussions a routine part of conversations about intellectual collaboration.

Why is a policy needed?

1. For students who intend to pursue academic and/or research careers, scholarly publications that reflect the product of their research work are essential to being considered for a job and establishing a career.
2. Faculty members are almost always directly involved in the student's scholarly work as mentors, employers, collaborators, or consultants.
3. When publications emerge from collaborative faculty-student effort, it is not always clear who should be given authorship credit, and in what order the authors' names should appear on the published work.
4. The Vice Provost, the Council of Graduate Deans and the Graduate Council of the Faculties have been made aware over the years that there is widespread uncertainty among graduate students about what constitutes fair practices for the determination of authorship. Practices vary widely between and within departments at Penn.
5. Graduate students are understandably reluctant to raise issues of authorship at the beginning of projects, and skeptical about the efficacy of raising issues once the work has been completed. Students feel that authorship credit is a difficult issue to raise, because their questioning of the arrangements can be interpreted as a challenge to the mentor on whom the student depends for intellectual and/or financial support as well as future letters of recommendation.
6. The lack of clarity concerning fairness in authorship is evident not only among graduate students. Faculty members, too, are often uncertain about fair practices. Some feel that their intellectual and written contribution to a student's published work has not been sufficiently acknowledged.
7. As part of their appropriate professional education, young scholars need to learn about how questions of joint-authorship are decided. Guidelines can facilitate discussions between students and their faculty mentors which further such learning.

Diversity of Practices in Different Disciplines and Departments

In considering the task of formulating a university-wide policy on Fairness in Authorship Credit, the Graduate Council of the Faculties is aware that different traditions of joint authorship exist in different disciplines and departments.

- In some fields, the Principal Investigator of the lab is first author of all publications.
- In some fields, faculty members rarely or never receive authorship credit on student publications, no matter what their contribution to the project or the product.
- In some fields, authorship depends on intellectual leadership and actual contribution to the ideas for the project and the written product.
- In some fields, authorship rules are clear; in others they are subject to negotiation.
- In some fields, research assistants and research fellows are automatically included as authors when the outcome results from paid work. In other fields, these students are automatically excluded as authors when the outcome results from paid work.

A University-wide Process for Establishing Authorship Credit

In light of the variability, ambiguity, and uncertainty regarding faculty-student authorship of published work, there are no specific rules that can be enunciated by the Graduate Council of the Faculties that will address the situation in all departments and academic disciplines. Instead, the Graduate Council of the Faculties is mandating a set of processes within each graduate group that will clarify expectations concerning authorship for each student and faculty member.

A. Graduate Group, School, and University-wide Policies

Graduate groups must publish and publicize general guidelines concerning authorship and make them available to all graduate students. School-wide policies have been established for the programs in Biomedical Graduate Studies (https://webdev.med.upenn.edu/contribute/bgs/documents/BGSauthorshippolicy_May18_2012.pdf) and Wharton Doctoral Programs (https://provost.upenn.edu/uploads/media_items/2014-2015-final-wharton-doctoral-policies-procedures-original.original.pdf). For individual Graduate Group policies see the alphabetical listing. In the absence of School or individual policies, the University-wide policy applies:

University-wide Policy

Humanities

1. The graduate group expects students and faculty to produce individual scholarship and to cite all contributions to their work accordingly.
2. All student work for the fulfillment of degree requirements is student work and the property of the student, with due citation and acknowledgment of contributions from others.
3. Students have the right to publish their work.
4. Any joint project will be publicly presented as such from the outset and the collaborators will agree from the beginning that their joint efforts will be presented publicly under both names.
5. If there is any dispute as to propriety in joint work, the matter should be brought to the attention of the graduate chair and then handled within the graduate group with appropriate consultation with other members of the graduate faculty.

Science

1. Qualifications for Authorship. Authorship should be based on any of the following:

- Initiating the scientific ideals addressed in the paper. qualify that person for authorship.
- Significant contribution to building the experimental apparatus.
- Significant contribution to the data taking.
- Major contribution to the data analysis.
- Important role in writing the paper and reviewing its scientific content.

Authorship should not be based on the following:

- Participation in obtaining funding or general supervision of the group but not participating in the general intellectual activity of the group does not qualify that person for authorship.
 - Simply being a member of a group does not qualify that person for authorship.
2. Authorship Order. The person making the greatest scientific contribution is the first author. It is usually clear who has done this. Subsequent authors are listed in order of decreasing scientific contribution.
 3. When Conflicts Arise. Sometimes, even when the rules have been followed, a student may feel unfairly treated. The best possible solution is for the faculty advisor and the student to discuss and hopefully resolve the conflict. If that does not work, a student and faculty advisor may ask the graduate chair to arbitrate. The graduate chair may ask the department chair for assistance.

Social Science

1. It is to everyone's benefit if there is a clear understanding about potential joint authorship roles whenever there is research collaboration among faculty and students, whether the latter are assigned as apprentices, students in a class, hired assistants, or any other role. Initial arrangements can always be discussed again should circumstances change, for example if the student contributes more to the project than originally anticipated.
2. Authorship is not presumed to be a right obtained by association with a research project. Hence the need for prior understandings, as stated above.
3. In general authorship implies that the person made a major substantive contribution to the research being reported.
4. Data gathered for a research project or program of research under a Principal Investigator [under a grant or otherwise] are the property of that Investigator. It is an academic tradition that such data are not used without the PI's permission, unless they have been made part of a public archive. In either case, proper acknowledgements are expected.
5. It is the presumption that the person who conceptualized the project, secured the funding, developed the research instruments, etc., should review any publications or other public presentations from the project and give his or her permission if something from the project is to be published without his or her name on it.
6. A student is presumed to have authorship of his or her masters thesis and/or doctoral dissertation and is encouraged to publish any parts or all of the approved thesis or dissertation unless there have been some prior restrictions to which the student has agreed, e.g. that authorship must be shared with others contributing to the project or to wait for a jointly authored or edited book combining several theses.
7. Authorship Order. The order of names should be mutually agreed, preferably at the outset. The person making the greatest scientific

contribution is the first author. Subsequent authors are listed in order of decreasing scientific contribution. If contributions are spread equally, the order of authors is usually alphabetical.

8. It is impossible to anticipate all potential problems. We believe that mutual respect, trust and clear communication will forestall difficulties. However, if disagreements about authorship do arise and cannot be resolved by the people involved, it is recommended that the matter be referred to the Chair of the Graduate Group for prompt consideration and suggested resolution.

B. Faculty-Student Level

Individual mentors should conform to the graduate group policy on authorship credit. Mentors are responsible for anticipating possible disagreements concerning authorship credit regarding specific collaborative projects and should initiate clarifying discussions before students have invested substantial time on such projects. These discussions should be reopened if relative contributions change.

C. Appeals Process

No policy can prevent the occurrence of all instances of actual or perceived unfair treatment. Although inequities can occur to either faculty or graduate students, we believe that graduate students are usually more vulnerable to faculty practices and less able to act when they feel that fairness has been violated.

In cases of disagreements about authorship, the following steps should be taken:

1. Students who feel that they have been mistreated should raise the issue with their mentor and their graduate chair.
2. If the disagreement is not resolved to all participants' satisfaction, an appeal can be made to the Dean of the School, who should convene a committee of faculty and graduate students to hear the disagreement and attempt to resolve it. Cases will be decided in the context of the published norms and guidelines of the graduate group.