

## Authorship agreements benefit researchers and research culture

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**A**cademic faculty and trainees do not need to be convinced of the importance of authorship for a successful career. Yet even experienced researchers can struggle to navigate authorship decision making. Based on our experience, prospective authorship agreements can facilitate healthy collaborations, reduce stress and conflict, aid in resolving disputes and level the conversational playing field among authors.

Authorship disagreements occur more often than we might think<sup>1</sup>. These disputes may stem from miscommunication, power imbalances or the complexity of collaborative research<sup>2</sup>. Conflicts and stress over authorship may disproportionately affect vulnerable parties such as women, individuals from minority groups, graduate students, post-doctoral researchers, and international trainees and faculty<sup>3,4</sup>. When disputes are raised, they are typically directed to journal editorial offices who then refer the authors back to their institutions for resolution. However, institutions are unprepared for this task because they lack appropriate policies. Our survey of US doctoral institutions with high or very high research activity (Carnegie R1 and R2 institutions) revealed that only about 25% have publicly available authorship policies, and even fewer (only 15%) include a dispute resolution process in their policies<sup>5</sup>.

A written authorship agreement, formulated as a living document (rather than a static contract) and discussed openly among collaborators early in a project, offers several benefits. Such agreements can foster open, transparent decision making about authorship by guiding collaborators in aligning expectations and goals at the beginning of a project. They can also prevent tension and misunderstanding, and help collaborators to avoid disputes. Finally, completed agreements can aid in resolving disputes that do arise<sup>6</sup>.

In recognition of these benefits, we created an authorship agreement for our institution. Our agreement uses a series of prompts to encourage and guide transparent authorship conversations among collaborators early in the research process. For example, one section



prompts collaborators to describe tentative author positions and tasks. These can then be revisited as each collaborator's contribution changes over the lifespan of a project. Another section prompts collaborators to agree on how they will move forward if a co-author becomes non-responsive.

At our institution, a larger initiative to foster a culture of research integrity is underway. As part of this initiative, we created an authorship policy and dispute resolution procedure, an open-access training course on authorship and other resources; our authorship agreement was designed to work in conjunction with these. To ensure that our authorship agreement is widely accessible, we have made it available in six other languages and in an R Shiny app format.

To date, we have seen 185 trainees and 118 faculty members from over a dozen disciplines across our campus complete an authorship agreement. On the basis of their feedback, we consider our authorship agreement to have made a positive difference. We have heard that many faculty members have adopted the agreement as part of their standard laboratory or research group practices, in international collaborations or even as a dissertation requirement. Students have shared that they feel more prepared for and comfortable about future authorship discussions after using the

agreement. Following this experience, we would encourage all scholars and institutions to consider using authorship agreements in their research (supported by an authorship policy), particularly in cases in which students and other vulnerable parties are involved.

This work offers several important lessons. For others who wish to develop or use authorship agreements, we would recommend that you:

1. Emphasize to all participants that the agreement is a series of prompts for discussion, rather than a formal contract. This forms the basis of a positive, open and transparent series of discussions that are tailored to the appropriate context.
2. Acknowledge that early-career students may need the most support in establishing healthy authorship practices, given their relative unfamiliarity with authorship determination.
3. Recognize that faculty members may be more willing to take on the extra task of completing the agreement because it benefits both them and their students. We recommend highlighting to them that agreements can make the faculty-trainee relationship more successful and prevent future conflict over authorship.

# Correspondence

4. Consider the possibility of future authorship disputes. Agreements may be of substantial help in such situations, for co-authors, adjudicators and institutions alike.
5. Ensure that you have the support of your academic leaders who are responsible for overseeing graduate education to facilitate adoption of authorship agreements. For us, this included the Graduate School and leaders such as deans, associate deans, chairs and graduate programme directors.
6. Sustain the use of authorship agreements at your institution by (1) including agreement resources in new research faculty and trainee orientations and (2) requiring thesis and dissertation committees to complete authorship agreements for relevant future publications.
7. Expect to see a reduction in inappropriate, hidden authorship decisions, as well as a reduction in misunderstandings about how decisions were made. We believe this is one of the key outcomes of having transparent conversations about authorship decisions.

Authorship agreements alone are not sufficient to ensure positive practices in authorship. Mentor–mentee training is another excellent vehicle for fostering positive authorship practices, especially given the focus of mentoring on aligning expectations. Finally, training in positive authorship practices contributes to new federal funding regulations from the National Science Foundation (section IX.B) and the National Institutes of Health that require instruction in the responsible conduct of research for faculty members and trainees.

Based on our own positive experiences, we strongly encourage the broad adoption of authorship agreements in academic institutions. We believe these can help to facilitate positive and open conversations around the determination and reporting of authorship, and ultimately improve our research culture.

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## References

1. Smith, E. et al. *Sci. Eng. Ethics* **26**, 1967–1993 (2020).
2. Ross, M. B. et al. *Nature* **608**, 135–145 (2022).
3. Ni, C., Smith, E., Yuan, H., Larivière, V. & Sugimoto, C. R. *Sci. Adv.* **7**, eabe4639 (2021).
4. Chander, S. et al. *Ann. Intensive Care* **13**, 56 (2023).
5. Rasmussen, L. M., Williams, C. E., Hausfeld, M. M., Banks, G. C. & Davis, B. C. *Sci. Eng. Ethics* **26**, 3393–3413 (2020).
6. Norman, M. K., Proulx, C. N., Rubio, D. M. & Mayowski, C. A. *Account. Res.* **30**, 379–392 (2023).

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## Competing interests

The authors declare no competing interests.