

Blue color is used for response to comments

“Maroon color is used to quote text in manuscript”

Referee: 1

We want to thank you for your time in reviewing this manuscript and for the overall positive comments.

This paper describes a process - and the context in which it was carried out - to define a form to support transparency in authorship decisions. The nuance of the host and center dynamics is particularly well-articulated, showing the importance of a trusted body (in this case, the EWWG) in hosting difficult conversations. Also of general interest is the commentary on the impact of virtual workspaces on mediating open discussions and iterating toward a solution, particularly on enabling interactions among people located throughout power structures.

The workflow diagram clearly illustrates the iterative, reflective process and the interactions between the EWWG and the center-wide group. The authorship form is clear, as are the consistent and intentional use of terms: main authors and potential co-authors.

I would have liked to see a pilot of the form at the center, to demonstrate its utility in application. I'd like to learn how it is being adopted: are center researchers using the form because it works? Has the center decided to require or strongly encourage use of the form? The authors mention the broad research topics carried out in the center - how does this impact use of the form?

We agree that it would be useful to follow up on how the INAR community adopts the authorship form. We plan to conduct such a follow-up study and report on it in a future communication. However, we decided not to include such an analysis in the current manuscript due to three main reasons:

1) Timeline of the manuscript: the authorship form is designed to be used at an early stage of the manuscript preparation process (even though it can still be useful at a later stage as we have observed for some of our other in-prep manuscripts) and most manuscripts in our center take at least a year from conceptualization to submission. The inclusion of a meaningful pilot study in the current manuscript would therefore delay its publication by 1-2 years. Given the importance and timeliness of the issue of authorship conflicts, we gave preference to sharing our authorship guidelines (and the process of coming up with them) with the wider community before such a pilot can be completed.

2) Peer-review for improvements to the authorship form: We had planned to incorporate the external feedback (outside the center) through the peer-review as well as from other potential users. We wanted to harness this feedback (as we now have) and update the authorship form before we start pushing more strongly for widespread use within our center (version control can be a challenge once the authorship form is initiated for a manuscript). For example, while we had used version 1.2 of the authorship form for the

initial submitted draft of this manuscript, we will update it to version 1.3 (incorporating the mostly minor comments we have received) in the published version of this manuscript.

3) A peer-reviewed manuscript provides more (perceived) legitimacy to the entire process and enables us to illustrate the process and the thinking behind it to users in a more transparent and clear way.

All of that said, we know that INAR researchers have already started to use the form. We know this both anecdotally and based on some of us being main/potential co-authors in some of these manuscripts. The center strongly encourages the use of the authorship form in center-wide communications. To quote from the document itself: “This form is part of the INAR authorship guidelines and is recommended for manuscripts where all or some of the main author(s) are from INAR.” We plan to assess the adoption and potential improvements to the form in an year or so.

The authorship form is specifically designed for broad research topics (even beyond science, as mentioned by the second referee). This means that researchers need to negotiate authorship across disciplinary traditions, which heightens the potential for conflict and requires that our guidelines allow for a relatively large degree of flexibility. Understanding the adoption of the authorship form across research themes is another area to assess in the coming time. Additionally, we are also keen on understanding how the authorship form will work in cases when some or most of the potential co-authors are from outside our center (most of the manuscripts from our center have one or more external co-authors).

Overall, your comments clearly indicate the next steps for the Authorship Working Group. These will require systematic surveys with the goal of understanding the adoption of the form (by research topic, career stage of main author(s), nature of collaborations, etc.) and potential improvements to it. We envision some INAR Authorship Working Group members performing this analysis and publishing a short piece on the findings in the coming year or two. Finally, we are also hopeful that other groups will experiment with/use the authorship form and share their own findings and experiences.

[Section 3.2 last paragraph] “It is important that the authorship form be read in the context of and as a part of the authorship guidelines (Appendix B and Section S1). Furthermore, while receptive to all inputs from the community, the AWG prioritized keeping the process simple, tangible, practical, and focused on center-wide consensus building. We wrote these guidelines to keep them applicable across a center that publishes hundreds of manuscripts in and across different disciplines with different authorship practices. The authorship form and the guidelines discussed here focus on improving communication and clarity around issues of authorship and do not provide all answers related to authorship by themselves. For example, we could not define the exact criteria for being a main author or even a potential co-author, and how first, last, and corresponding authors should be decided. We leave these decisions to the main authors and hope that the emphasis on early communication helps avoid late-stage conflict. While most suggestions from the community made their way into the authorship guidelines, some were clearly recorded for future iterations of authorship or other center-wide guidelines.”

I would also have liked to see more guidance on contribution guidance. While it is important to be flexible to accommodate the broad research purview of the center, it would be helpful for adoption purposes to imbue more substance in the definitions of main and potential authors. The authors mention the CRediT taxonomy, but why not integrate this more deeply into the authorship definition process? Did the iterative process find opportunities to improve the taxonomy?

We realized early in the process of hearing from the community that it would be extremely difficult to build consensus on and clearly define what constitutes main authors and potential co-authors. Especially since, to our knowledge, the idea of “potential” itself has not been used formally and intentionally in authorship discussions. By focusing on clear, timely, and transparent communication, we are trying to help the main authors think carefully, intentionally, and in a timely way about other potential co-authors, including who would be the main authors. That said, the main authors define past and present responsibilities for each potential co-author in the authorship form. Furthermore, completing the authorship form checklist requires each potential co-author to read the manuscript and agree with the key conclusions. While what we have right now is the bare minimum requirement for authorship, it may be possible for us (and/or other groups) to define clear criteria for main and potential co-authors in the future.

We used the CRediT taxonomy as an established tool pertaining to authorship and one that journals have increasingly started to formally require. We had not even considered improving on CRediT taxonomy in our surveys/discussions and at this stage, we do not have any suggestions on improving the CRediT taxonomy itself. In the “Contribution to manuscript” section of the authorship form, we do have a section for “Other” (in addition to the 14 current CRediT taxonomy categories). We/others can observe how the community uses this section to inform suggestions for improving the CRediT taxonomy in the future.

Overall, the paper is clearly written, describes a well-carried out research project, and shares a product that has the potential to advance and improve how the research community manages authorship. I can't wait to see how the authorship form is used.

We would like to thank you once again for your comments and feedback. We hope to incorporate many of your ideas in the future work of the Authorship Working Group.