

SSA statement on co-authorship when consulting with a statistician

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A good practice, when planning the design and analysis of a study, or when questions arise about the analysis or interpretation of a study, is to get advice from a statistician. This document reviews common issues to consider when deciding whether, having met with a statistician to discuss a study, their contributions warrant co-authorship.

The Vancouver protocol on co-authorship states that a co-author should satisfy the following criteria:

- 1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- 2. Drafting the work or revising it critically for important intellectual content; AND
- 3. Final approval of the version to be published; AND
- 4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Researchers planning to write a paper, who have benefited from a statistical consultation, should consider whether the statistician has met requirement 1 as listed above. Examples of ways they could meet this requirement include any of the following:

- o They made substantial contributions in the development of the design or analysis plan
- They recommended important changes to a previous design or analysis plan that were followed.
- They provided substantive material support in data acquisition or analysis, e.g. writing example code, interpretation of the results, or undertaking parts of the analysis.

As for any collaborator, whether or not the statistician was paid for their services should not be a consideration when assessing authorship, nor should the length of time they dedicated to the problem. The key point is whether there was a *substantial intellectual contribution* to design, analysis or interpretation. Providing feedback on pre-existing plans, or providing general suggestions without significant material support, would typically not warrant co-authorship, but should be acknowledged in publications (pending approval from the statistician).

Note that points 2-4 above require not only the agreement of co-authors to be involved, but it also requires their engagement in the write-up and publication process. Thus, if co-authorship is warranted, the consultant (as well as other co-authors) needs to be consulted in the write-up process, and should give final approval prior to submission.

All research institutions have a Research Code of Conduct - please ensure you abide by coauthorship policies listed there.

If you have any questions or feedback about this policy, feel free to discuss with the co-Chairs of the Statistical Consulting Network (david.warton@unsw.edu.au; sfinch@unimelb.edu.au)

Related resources

- International Committee of Medical Journal Editors statement on authorship ("the Vancouver protocol")
- o NHMRC 2007 Australian Code For The Responsible Conduct Of Research (Section 5.1)
- o American Psychological Association statement on responsible authorship
- Yale University guidelines on authorship