Author's Commentary on "When in Rome: Conventions in Assignment of Authorship"

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When in Rome: Conventions in Assignment of Authorship

This case study raises some of the ethical questions surrounding one of the "housekeeping" details of research, the assignment of authorship of a journal article. The issue is of enormous importance to researchers since decisions about promotion, tenure and the funding of grants are very often based upon the number of articles one has published. Researchers facing pressure to "publish or perish" undeniably have a vested interest in having authorship credit on as many articles as possible, and this pressure may lead to the inclusion of their names even where inclusion is not warranted by their contributions to the research project - a practice known as "unjustified" authorship. (Epstein 1993) Research demonstrates that the average number of authors listed on articles in various prestigious scientific journals has increased over the years (de Villiers 1984, Huth 1986) lending some support to the notion that unjustified authorship is widespread.

In an effort to curb this and other ethically questionable authorship practices, the International Council of Medical Journal Editors (ICJME) revised their "Uniform requirements for manuscripts submitted to biomedical journals" in 1988 and included stringent guidelines to be followed in assigning authorship to journal articles. These criteria, also known as the Vancouver Convention (since the ICJME met in the city of Vancouver), are the most widely referenced criteria for authorship in scientific journals; currently, more than 500 journals require adherence by their contributors. (International Committee of Medical Journal Editors 1997) The Vancouver Convention is currently in its fifth edition.

Despite the prevalence and importance of the Vancouver Convention, many junior researchers are unaware or only dimly aware of their existence, and few have given much thought to their limitations and problems. The questions posed in this case

attempt to provide the reader with experience in applying the Vancouver Convention as well as in examining the issue of whether these criteria are a culturally neutral expression of widely shared beliefs about what should constitute authorship, or whether they may be inappropriate in some circumstances.

An analysis of these questions might best begin with an inquiry into whether the other members of Williams' lab can legitimately be included as authors on Charles' manuscript (and he on theirs) under the Vancouver Convention, as the proposed journal requires. Evaluating questions of authorship begins with a determination of the specific contributions of each researcher on a project, including both the type and extent of contribution. Next, the governing body of rules must be consulted and the meaning of its various provisions determined. Finally, the contributions made by each member must be evaluated with respect to the rules in order to determine whether the individual deserves to be listed as an author.

In this case, the determination of authorship is somewhat hampered by a lack of detail. Nevertheless, some conclusions may be drawn. None of the other lab members, it would seem, contributed to either the conception of the research project or to its original design. They were not involved in any data collection or in any of the routine work involved in the project. Their contributions primarily consist of making suggestions on how to overcome problems associated with the research and on how to improve it. This effort may have involved some participation in the analysis or interpretation of data. Unfortunately, neither the quality nor quantity of these suggestions can be determined. They probably contributed little to the writing since they did not help draft the article, although they may have contributed helpful comments when the draft was circulated. Given their limited involvement in the project, one doubts they would have felt comfortable doing much editing or revising. They each did receive a copy of the draft and presumably are expected to participate in the final approval of the version to be published.

The criteria of the Vancouver Convention require "substantial" contributions to each of the three specified areas, yet precisely what constitutes a "substantial" contribution is not specified. Accordingly, whether or not a contribution is enough to satisfy this requirement becomes a question to be resolved by each research group on each research project. While the Convention does not say why it does not define the term "substantial" (probably due to practical considerations), this silence would seem to allow for one of two interpretations: 1) The Convention implicitly presumes the existence of some sort of objective and universally applicable standard of what

is "substantial," which any assignor of authorship could use in making the determination, or 2) the Convention intentionally makes allowance for cultural variation, since individuals from different societies may assign a different value to any given contribution when determining whether it is adequate for authorship.

If we follow the former interpretation and view the facts from the perspective of a reasonable person in the United States, the contributions of the lab members would likely be judged insufficient. The third prong of the criteria, which requires would-be authors to approve of the final version of the manuscript, would seem to be satisfied here. However, the first two prongs probably are not satisfied. Few people would regard periodically offering suggestions at lab meetings and supplying a few comments to a manuscript as enough to qualify for authorship. (The reader is encouraged to conceive of scenarios in which such contributions might arguably be deemed "substantial". For example, if a suggestion resolved a problem that prevented the research from progressing, would that be enough to qualify for authorship?) While we do not know the specific contributions of each lab member -- and so we cannot determine whether some individuals might deserve authorship -- it would seem that none have made "substantial" contributions to conception and design or analysis and interpretation of data, or important contributions to the intellectual content of the manuscript.

The second interpretation of the Vancouver Convention, that it was meant to allow for variation by country and culture of origin of the researcher, is most certainly not correct, although it would permit the lab members to be included as authors. Williams' conduct indicates that he clearly feels the other researchers have contributed enough to be included as authors on the paper, and they apparently agree. Since we have no reason to believe this approach does not represent the local standard of Wonkaland, we must presume authorship would be appropriate here. Indeed, if such an interpretation of the Vancouver Convention were correct, one could not easily accuse it of cultural bias. However, since the chaos resulting from each country applying its own standard would subvert the standardization that the Convention clearly attempts to achieve, such an interpretation would not be permissible. Moreover, a local interpretation of "substantial" might render the criteria meaningless if it dictated that nearly any contribution qualifies one for authorship. There would be little need for elaborate rules defining who is entitled to it.

By failing to allow for cultural diversity, the Vancouver Convention risks criticism that it amounts to a kind of unethical cultural imperialism by the ICJME, just as Williams argues. One might well ask, however, how guidelines on authorship might be fashioned so as to be culturally sensitive and yet still reward scientists for their effort and assign public responsibility for what is published, the two main goals of authorship. As suggested above, in this case the reader might speculate that the strong emphasis on the group in Wonkaland results in a nearly automatic authorship credit to any group member. Among the positive benefits of such a system might be that vesting the other lab members with an interest in the success of the other lab projects would stimulate their contributions. This system would also minimize legalistic squabbling about whether someone qualified for authorship under the Convention and thus preserve group harmony. Obviously, however, it would reduce the amount of credit awarded to those who actually did the bulk of the work by diffusing it over a greater number of persons. It also would detract from the public responsibility function since many researchers might not know enough about the research it to defend it effectively.

Returning to the case, we see that the lab members might be included as authors is only through the use of a local definition of the criteria. This goal would be most easily accomplished if Charles can persuade Williams to select a journal that does not require adherence to the Vancouver Convention. If Williams insists on submitting the manuscript to the proposed journal, Charles will be placed in a difficult position. As a graduate student who requires Williams' continued patronage to finish his research -- and, indeed, the good will of the entire lab team -- he may have no choice but to add the names. His future professional contacts may be jeopardized if he refuses. However, submitting the manuscript with the lab members' names added will amount to lying. Charles may have to make a difficult decision.

Williams might try to claim that lying should be allowed in these circumstances. If most or all of the reputable journals follow the Vancouver Convention, he may argue that one has little choice but to lie if he wants to be published. Still, one might respond that he ought to focus his efforts on modifying the Convention to allow for local interpretations or otherwise work to resolve the problem but follow it in its present form until that time. This approach would mean submitting the paper to the proposed journal with his and Charles's names attached but crediting the contributions of the other lab members in the acknowledgments.

The issues raised in this case illustrate some of the difficulties involved in trying to establish authorship criteria that are culturally neutral and fair to all parties and still achieve the goals of giving appropriate credit and assigning responsibility. One recent proposal suggests replacing the notion of "authorship" with one of "contributorship" in which each contributor (defined as one who has added usefully to the work) spells out his or her contribution in the paper. At least one person would be required to take public responsibility for the work, and this role would be indicated in the article. (Rennie, Yank and Emanuel 1997) This approach might be one useful way of resolving many of the problems of the Vancouver Convention.

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