Vivian Weil's Commentary on "Authorship"

Commentary On
Authorship

Conflicts about authorship generate many of the cases in scientific research ethics. These problems often arise in a lab or research group where there are no announced policies regarding authorship. The cases do not often deal with questions of authorship regarding contributions of graduate students rotating in a lab and even less frequently address authorship issues regarding the contributions of technicians.

This case features a lab director who discusses his authorship policy with each new member of the lab. Because a technician and a rotating graduate student contribute to the research under consideration, the question arises whether they should be included among the authors, and, if so, in what order.

Dr. Messelman Killinger, the lab director, has fulfilled the responsibility to devise and announce his authorship policy for lab members, and he permits discussion of authorship assignments. He allows all the interested parties to participate in, or be present at, the discussion. These policies contribute to predictability and fairness in authorship assignments. Whether Killinger encourages or allows discussion of the policy itself we cannot tell. Discussion of local policies is another aid to creating a research environment that supports responsible conduct.

David tries to apply Killinger's stated policy in circumstances that raise questions about what counts as a significant intellectual contribution to an experiment and who counts as a member of the lab. Presumably, the technician and the rotating student have to rank as members of the lab to be included as authors.

The instance depicted in this case is the kind of concrete example that can be used in Killinger's lab, and in other research groups, to clarify what counts as a contribution meriting authorship. It may not be possible to cite necessary and sufficient conditions for authorship, but Killinger and other research group leaders can use particular instances, such as the authorship discussion in this case, to

explain minimum requirements for authorship. For instance, it may be worthwhile to discuss whether and why a researcher's important contribution to an experiment should justify authorship when the researcher makes no contribution to writing the paper. Killinger is entitled to make the final determination of the criteria and to decide when they are satisfied. By explaining those decisions with reasons, he may head off disappointment and dissatisfaction.

We do not know whether Killinger discusses his authorship policy with technicians and rotating students when they join the lab. If he does, he treats them appropriately as regular members of the lab, as far as authorship is concerned. They could then expect to be included among the authors when their contributions warrant it. If he does not make it a practice to discuss his authorship policy with rotators and technicians when they join the lab, he should. This case shows that he must be prepared for the possibility that a rotating student or a technician will make a contribution important enough to merit authorship.

Without knowing more about the criteria for a significant contribution, we cannot be sure whether David's recommendation to list Haruko but not Benson is justifiable. Clarification of the criteria for authorship would help to settle any question about whether Benson is denied authorship on the basis of having made a minor contribution or rather on the basis of being a very temporary and therefore lower-status participant in the research. Such clarity might also assure that Haruko is included because she has made an appropriate intellectual contribution and not merely because David feels indebted to her. Clarification is important because it allows students and technicians to form appropriate expectations, reduces the chances that they will feel unfairly treated, and thus eliminates opportunities for friction and conflict to arise in the lab.

The final decision about what counts as a significant intellectual contribution to an experiment rests with Killinger; he is the lab director and presumably the Principal Investigator for the funded research. A final authority is required, and the lab director is the appropriate person. At the same time his policy of making himself the last author on any paper resulting from research done in his lab is open to question.

Killinger might answer that by virtue of having acquired the funding for the research, he automatically makes the required contribution. That response adds a criterion for authorship that applies only to him and rules out the possibility of differentiating instances when he contributes significantly to the research from instances when he

contributes little or is not involved at all. These considerations may matter enough to members of the lab to lead to friction and conflict.

Moreover, the practice of listing the lab director last in order to send a coded message to those outside the lab is problematic. It uses authorship to provide other information in an uncertain "system" of informal understandings. It conflates credit for winning funding and directing a lab with credit for research findings. It allows a question to arise about who takes responsibility for data provided and claims made in the paper. To announce who takes responsibility is one of the fundamental purposes of listing authors. In addition, Killinger's policy, as stated, has a very wide reach. It seems to apply to any paper resulting from research in the lab without qualification, paying no attention to how much the research in this lab contributed, whether the researcher has left the lab, and how long a time after completion of the research the policy applies.

In light of all these considerations, Killinger's policy of automatically listing the lab director as last author is not easy to defend. If particular circumstances justify the practice in this lab, he should explain them, and he should make clear how far the policy extends. It is not easy, practically speaking, to devise a situation that invites or prompts the lab director to explain the practice. To question this practice is to challenge the lab director on a policy he devised that gives him recognition. Even if he would defend his policy on the ground that it gives good visibility to his students and post-docs, credit to him remains an issue.

The practice of awarding automatic or honorary authorship needs full discussion in labs, departments, professional societies and other venues. Journal editors have spoken out on this issue and have proposed arrangements for authorship, or "contributorship," that rule out honorary authorship and make it unnecessary to decode what a place in the list of authors signifies. A leading recommendation is to provide a byline consisting of a very short list of those who made substantial contributions, to make clear who of them guarantees the paper, to list at the end the names of all other contributors and their contributions, and to include other sources of funding in acknowledgments.The Council of Science Editors has created an online bibliography,Selected References on Authorship, at http://www.councilscienceeditors.org/services_ATFReferences.shtml. For an example of a set of guidelines, see the International Committee of Medical Journal Editors' Uniform requirements for Manuscripts Submitted to Biomedical Journals, updated October 2001 at http://www.icmje.org/index.html. Veronica Yank and Drummond

Rennie are co-authors of "Academia and Clinic," Annals of Internal Medicine 130 (1999): 661-670, which discusses the recommendations summarized above. Perhaps by bringing up such proposals for discussion in their labs, lab members can begin to refine their local policies regarding authorship.