Author's Commentary on "To Publish Alone"

Commentary On
To Publish Alone

This case raises many issues. One may start with the accepted practice of listing only senior members of a laboratory as authors of an abstract if they are presenting data generated by members of their laboratories. Although this practice is generally considered appropriate, many scientists do not use this convention, instead listing all contributing researchers as authors.

A second issue concerns mentioning the contributions of undergraduate laboratory assistants. Many principal investigators (PIs, analogous to laboratory directors or senior members of a laboratory -- the persons who secure funding for the research) do not acknowledge the contributions of undergraduates unless they are considered significant. If the contribution consisted mainly of technical assistance, and no development of experiments was involved, the supervisor of that "technician" is the only one mentioned. This convention sets the standard in authorship. Although it may not seem fair or appropriate, and therefore may appear worthy of discussion, this issue is not considered to be the main issue raised by this case.

The second stage of development of the case is the original publication. Review articles often have only a single author, especially if they are written as an overview of recent advances in a particular field. They normally include only published data , but unpublished facts may be included with permission of the experimenter and listed as "personal communication." If the author of the review article is the experimenter who has generated the new data, it will be listed as "unpublished data." The fact that Gump is the only author on the review is accepted in the field, therefore, provided that he has permission to publish any new findings and includes the appropriate references.

Later in the case, however, we learn that permission was not obtained. The question now is, does a PI require permission to publish or discuss the data generated by

researchers in his or her laboratory? That is a difficult issue to resolve. Strictly in terms of maintaining good communication in the laboratory and as a matter of etiquette, the answer is probably yes. In this case the students and post-docs conducting the research will probably hesitate before sharing their findings with Gump. In research there is always a chance that someone else will complete the important experiments and publish their data first. This experience is commonly referred to as being "scooped." If it is acceptable for the PI to publish any data generated in his/her laboratory, then the conditions are set for a race between the researchers (students or post-docs) and the PI to publish first. If the students lose this race and are not included in the authorship, have they been "scooped" by the PI? If the student were writing the review for publication, used an appropriate and considerate manner of referencing and obtained permission to include unpublished results from each researcher, should the PI be included as an author? Convention in the biological sciences says that a student does not publish research without including the PI as an author. The theory is that the PI has helped to shape and direct the research and therefore has made a significant contribution even if he/she hasn't performed any experiments.

Another question arises when one considers that Gump is writing a research article without any new data. Although he does include a couple of new figures that haven't been published previously, most of the results presented have been published in abstracts or other publications. It is standard to develop a full-length manuscript out of work that has already been presented at meetings and included in abstracts. If every bit of the research is referenced to an abstract or previous publication, however, is this considered double publishing? What is and is not publishable? How much new information does one need in order to write a manuscript? This standard will vary by discipline, but the question could stimulate discussion.

This section also implies that the students intend to publish their findings under their own names and in a journal more appropriate to their field. Has Gump lessened their chances of publication by publishing his manuscript? Should the obscure status of the journal be an issue?

Gump's obvious insensitivity to his students and post-docs is demonstrated when he ignores his students' concerns about his "creative" manuscript. If he were a responsible mentor, he would be helping to further their budding careers as scientists. By submitting the research paper as he did, he actually undermined their future publications and did not give appropriate credit.

The main issues of this case are:

1. lack of "good mentoring" by the PI and insensitivity to the needs and concerns of his students
2. failure to give proper credit to the people making the discoveries, in this case graduate and undergraduate students and post-docs
3. concerns about authorship
4. "ownership" or proprietary of use of data or discoveries made in a laboratory.