

Ethics of authorship and publication

“An ethical code for scientists”

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Scientists, unlike other professional groups, have not formalized their ethical traditions. The authors use issues related to authorship and publication to underscore the need for a formal code of professional ethics for scientists.

General obligations, many of which are often disregarded:

1. quality
2. originality
3. reproducibility
4. proper referencing of prior work (eg in naming methods). The principle is to avoid wasteful repetition of work, instead to integrate one's own work into the larger body of knowledge
5. availability for criticism – errors should be publicly acknowledged, dissenting theories should not be suppressed, in order to help the work progress and not perpetuate “erroneous work.” Economic motivations may be behind some of these ie companies may keep their research locked down to stay ahead
6. property rights of the individual scientist – does the fund provider decide whether or not to publish? On the other hand, should a thesis whose completion was significantly contributed to by the PI be only in the name of the student?

Multiple author issues – the current prevalence of group research requires reevaluation of authorship etiquette:

1. Name order and “senior authors” – should the significance attached to where one's name lies on the author list be maintained and clarified, or is it unnecessary? Who should be senior/first author? Does it depend on rank, technical work, writing the manuscript, having the original idea?
2. Administrators and financial supporters – should they be authors? Consensus seems to be yes if contribution was continuous and of a high level. Seniority and only appropriating the funds for the research are insufficient.
3. Grad students/techs – the latter need more than routine work to qualify, but students should be encouraged to do more anyway.
4. Manuscript revision – this alone is insufficient for authorship, but actually preparing the manuscript may take a lot of work and skill and should be a factor

The authors reemphasize that given all these examples of violations of professional ethics and ambiguity in appropriate practices, a formal code should be created, and scientists should be responsible for doing so now, rather than wait for others to gain more control over their work conditions. They suggest a “mere statement of principles,” as well as more extensive “codification and attempt to discipline or expose” violators would be helpful. These can be obtained by serious discussion.