EDITORIAL

A Conflict of Interest Disclosure Policy for Science and Engineering Ethics

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In June 2007 a number of scientific and medical journal editors gathered to discuss the possibility of developing a common standard with regard to the disclosure of conflicts of interest .¹ The meeting was a response to the widespread concern among members of the research community, policy makers, and the general public that failure to disclose conflicts of interest in research publications reflected in large measure inconsistencies among journals in the definition of a conflict of interest as well as in disclosure policies themselves. It is expected that one product of this discussion will be continued efforts to develop a shared standard of conflict of interest and a common disclosure policy. For this reason, we are revisiting this topic, although under various guises conflicting and competing interests and inappropriate bias have been the focus of previous editorials as well as articles in *Science and Engineering Ethics* (e.g. [1-5, 7-10]).

The fundamental concern within and beyond the research community that is implied by the label 'conflict of interest' is that inappropriate factors may be allowed to influence research design, the collection, selection, analysis, or interpretation of data, and/or the presentation or dissemination of research results. This concern is rooted in the expectations of others, including (but not limited to) collaborators, competitors, other members of the research community, policy makers, and the public. If a competing interest is allowed to bias any element of the

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¹ The meeting referred to in this editorial was "Setting Standards for Conflict-of-Interest Disclosure in the Medical and Scientific Literature", held on June 27, 2007 in Washington, DC and organized by Merrill Goozner, Arthur Caplan, and Jonathan Moreno.

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research process, then the reliability and trustworthiness of the research itself on which others are depending, and the public trust in the scientific enterprise in general, are undermined. It is worth noting that expectations of researchers are not necessarily congruent, and indeed, to a greater or lesser degree, may not be overlapping, even among members of the same group of stakeholders. Colleagues, whether collaborators or competitors, have expectations based on their professional relationship both because they know each other, and because their professional futures are intertwined. Collaborators usually have in common both the conscious or unconscious desire for success, and the potential "black-eye" of failure, and competitors may be building on each other's work and also experience the potential negative impacts of an unsuccessful study in a shared area of research. Other researchers may have limited expectations because they tend to be relatively skeptical of claims of complete disinterestedness and recognize the vagaries of the research process [6]. Policy makers, consumers, and the general public are likely to have high expectations based on an idealized view of the pristine objectivity of the research process. Everyone brings a perception of the professional responsibilities inherent in the role of the researcher, that may not be recognized let alone acknowledged, shared or attainable by the individual researcher him or herself. Nevertheless, it is the conscious or unconscious perception of this role responsibility of researchers that underlies the trust that is afforded research findings: the notion that researchers seek to obtain objective and accurate information about the real world and can be relied upon to do so.

There is a balance and a tension between the idealized expectation, and an awareness of the reality of myriad sources of bias and competing interests that can come into conflict and may consciously or unconsciously override the research professional's experience and exercise of role responsibility. At the same time, not all interests that on first blush seem to be in conflict actually are. That is, some interests converge which results in a confluence of interests.

We might envisage a 'confluence of interests' when the interests of the researcher coincide with the interests of the contractor of the research. Indeed this situation is commonplace as when people apply for grants, the grant givers would choose to devolve their emoluments to those applicants who seem to be most likely to carry forward the agenda of the grant giving agency. Similarly, pharmaceutical companies who provide a significant portion of the externally funded work at research organizations (that accounts for about 10% of the total funds expended on research) are most likely to work with researchers whose views are known and seem to be generally supportive of the work they are going to be contracted to effect. So much research is of this nature that conflicts of interest are rare.

When conflicts exist they tend to occur when a research group is asked to do some research that is likely to be used to support what is widely believed to be a questionable claim. Such a research contract has potential problems. Do the researchers accept the contract benefiting themselves and their institution financially and enabling them to provide continuing employment for members of their research team that they have been at pains to build over several years of endeavor? When they do the research do they bias their program to optimize the chances of getting results in line with what the contractor anticipates? Do they falsify or fabricate results to please their contractors? Do they do the research with the intention of 'discovering the truth' in the matter of the claims made by the contractor? If they do the latter, do they publish with or without the consent of the contractor or do they bury the results if they are inconvenient to the contractor of the research? For each of these contingencies the research group might make a statement of their position with regard to a particular publication. Stating the source of their funds would be something but not enough. Can the scientific community require such a group to confess to exactly what they did and what they sought to achieve as statements of intentionality or motivation?

Is this what the concerned community of scientists is really angling for? Would it not be better served were it to inculcate members of the community with notions of trust, respect and the need to treasure personal and institutional reputation above all else?

Researchers in a particular area are not a homogeneous group. Views on how best to solve a research problem may legitimately diverge from each other, and converge on strategies and results that have a potential for commercialization, for example. Moreover, while some may see a particular set of results as a glass half full and pursue them, others may see the same results as a glass half empty and move on to something else. Even a strongly held, widely-known opinion can be perceived as, or actually count as, a potential conflict of interest. A simplistic and arbitrary financial line to determine a conflict of interest is unreliable: an honorarium of \$5,000 may be a significant amount of money to some and not to others depending on an individual's financial circumstances.

The concept of an *appearance* of a conflict of interest is even more problematic. Depending on the observer, almost any circumstance or relationship can be perceived as harboring a conflict of interest. Perceptions themselves can be right or wrong and are burdened with their own biases.

Because of the nature of *Science and Engineering Ethics* and the work published here, we choose to assume the integrity of our contributors and to adopt the view that authors, reviewers and editors can and should disclose what is not apparent and *needs to be revealed* in order to assess the credibility of their work. Just as underlying assumptions that are the foundation for an interpretation should be shared with the reader, so any relationship or circumstance that, if it came to light would call into question the integrity of the work, should be made clear and merits disclosure. The strategy we favor in recognizing conflicts of interest and inappropriate bias, and in addressing their insidious impact is to

- (1) remind authors, reviewers and editors both of their role responsibilities in maintaining efforts to achieve objectivity throughout the research and publication process, and of the many sources of competing and conflicting interests, and
- (2) remind readers that it is always reasonable to maintain a certain level of healthy skepticism with regard to publications because of the uncertainty of research findings, their interpretation and presentation, and of scholarly work in general.

That said, we invite our readers to share with us what kind of information they would like authors to disclose and why. The notion of competing and conflicting interests, and their effect on the interpretation and comprehension of a publication, continue to evolve and merit on-going consideration.

References

- 1. Bird, S. J. (1996). Assessing conflict of interest: sources of bias. *Science and Engineering Ethics*, 2(4), 386–388.
- Bird, S. J., & Spier, R. E. (2005). The complexity of competing and conflicting interests. *Science and Engineering Ethics*, 11(4), 515–517.
- Boyd, E. A., & Bero, L. A. (2007). Defining financial conflicts and managing research relationships: an analysis of university conflict of interest committee decisions. *Science and Engineering Ethics*, 13(4), 415–435.
- 4. Dunbar, W. S. (2005). Emotional engagement in professional ethics. *Science and Engineering Ethics*, *11*(4), 535–552.
- Glaser, B. E., & Bero, L. A. (2005). Attitudes of academic and clinical researchers toward financial ties in research: a systematic review. *Science and Engineering Ethics*, 11(4), 553–574.
- Guertin, R. (1995). Commentary on "how are scientific corrections made?" (by N. Kiang). Science and Engineering Ethics, 1(4), 357–360.
- Krimsky, S., Rothenberg, L. S., Stott, P., & Kyle, G. (1996). Financial interests of authors in scientific journals: a pilot study of 14 publications. *Science and Engineering Ethics*, 2(4), 395–410.
- Krimsky, S., & Rothenberg, L. S. (2001). Conflict of interest policies in science and medical journals: editorial practices and author disclosures. *Science and Engineering Ethics*, 7(2), 203–218.
- 9. Spier, R. E. (2002). On dealing with bias. Science and Engineering Ethics, 8(4), 483-484.
- 10. Steiner, D. (1996). Competing interests: the need to control conflict of interests in biomedical research. *Science and Engineering Ethics*, 2(4), 457–468.