nature cell biology

Declaration of financial interests

"There is suggestive evidence in the literature that publication practices in biomedical research have been influenced by the commercial interests of authors."

n the interests of transparency and to help readers to form their own judgements of possible bias, *Nature* and the Nature research journals will soon be encouraging authors to declare any competing financial interests in relation to research papers. For manuscripts with a received date on or after 1 October 2001, we will ask authors to fill out a form declaring any competing financial interests, shortly before final acceptance of the paper. We will publish a shortened version of this declaration as part of the paper, with a more detailed version, if appropriate, on our website. Authors may decline to disclose their financial interests, but we will publish the fact that they have declined to respond.

Hitherto, the policy of the Nature journals was that no declarations of competing interests were required from authors, and that potential referees should disqualify themselves from refereeing if they felt they had such a conflict (see *Nature* 385, 469; 1997). The new policy is not based on any assumption that commercial interests of researchers are likely to lead to a lack of research integrity. Rather, it is based on a recognition of potential problems. There are three main reasons for adopting the policy.

- There is suggestive evidence in the literature that publication practices in biomedical research have been influenced by the commercial interests of authors. Several related discussions that contain the relevant references can be found in the *Journal of the American Medical Association*, 1 November 2000 (for example, A. D. DeAngelis Conflict of interest and the public trust. *J. Am. Med. Assoc.* 284, 2237–2238; 2000; see also *Nature Neuroscience* 3, 299; 2000). This evidence is consistent with the truism that although, in principle, science may be objective and its findings independent of other interests, scientists can be imperfect and subjective. There are circumstances in which selection of evidence, interpretation of results or emphasis of presentation might be inadvertently or even deliberately biased by a researcher's other interests.
- There is a more general concern among researchers and others about the possible
 undermining of the integrity of scientific research by increasing commercial links and
 consequent influences. We believe that the best way to maintain readers' trust in the
 integrity of the research we publish is through a policy of transparency. If financial
 interests are disclosed, readers will be able to make an informed judgement about
 their significance or lack of significance. We believe this will benefit both readers and
 authors alike.
- Many institutions have introduced policies on competing interests that require authors to include descriptions of financial and other interests in publications. We are happy to support them.

We do not expect to police this policy ourselves; we believe that primary responsibility for ensuring that researchers' conduct is appropriate lies with their employers, rather than with journal editors. However, where we believe trust has been significantly compromised by an author's actions, we will seek to redress the matter by an appropriate combination of sanctions and communications to readers and employers.

editorial

Authors will be invited to disclose any competing financial interests, using a standard declaration form to be completed by the corresponding author. Alternatively, authors may declare that they have no competing financial interests. These declarations will be considered confidential before publication, and will not be disclosed to referees.

Authors who do not wish to make any financial disclosure will be asked to indicate as much on the form. This will in no way prejudice publication of their manuscript, but the fact that the authors have not made a declaration will be recorded, and will be distinguished from declarations of no competing financial interests.

For the purposes of this statement, competing interests are defined as those of a financial nature that, through their potential influence on behaviour or content or from perception of such potential influences, could undermine the objectivity, integrity or perceived value of a publication. They may include any of the following:

- Funding: Research support (including salaries, equipment, supplies, reimbursement for attending symposia, and other expenses) by organizations that may gain or lose financially through publication of the paper.
- Employment: Recent (that is, while engaged in the research project), present or anticipated employment by any organization that may gain or lose financially through publication of the paper.
- Personal financial interests: Stocks or shares in companies that may gain or lose financially through publication; consultation fees or other forms of remuneration from organizations that may gain or lose financially; patents or patent applications whose value may be affected by publication.

It is difficult to specify a threshold at which a financial interest becomes significant, although we note that many US universities require faculty members to disclose interests exceeding \$10,000 or 5% equity in a company (see, for example, B. Lo *et al. New Engl. J. Med.* 343, 1616–1620; 2000). Any such figure is necessarily arbitrary, however, so we offer as one possible practical alternative guideline: "Any undeclared competing financial interests that could embarrass you were they to become publicly known after your work was published." We do not consider diversified mutual funds or investment trusts to constitute a competing financial interest. We will not require authors to state the monetary value of their financial interests.

For papers with more than one author, the author responsible for communication with the journal should provide a declaration on behalf of all authors. If the number of authors is so large that itemized disclosure is unfeasible, authors may choose to use the standard wording indicating as much.

We will continue to ask referees to exclude themselves as referees in cases where there is a significant conflict of interest, financial or otherwise. However, just as financial interests need not invalidate the conclusions of a paper, nor do they automatically disqualify a referee from evaluating it. We will ask referees to inform the editors of any related interests, including financial interests as defined above, that might be perceived as relevant. Editors will consider these statements when weighing referees' recommendations.

We welcome comments and suggestions about this policy, which should be sent to nature@nature.com, marked "Competing interests policy". \Box

Philip Campbell PhD, Editor, *Nature*; Editor-in-Chief, Nature Publications.

This Editorial first appeared in Nature 421, 751 (2001).