

# nature neuroscience

## A new policy on financial disclosure

Starting in October, the *Nature* titles, including *Nature Neuroscience*, will ask authors of primary research papers to disclose any competing financial interests that might be affected by publication. The policy was summarized in a recent editorial in *Nature* (vol. 412, p751) and further details will soon be published on our web site. What follows is a brief explanation of the thinking behind the new policy.

The policy is a response not to any particular incident, but rather to a more general concern about the potential biasing effects of financial interests in supposedly 'pure' academic research. Commercial interests have been suggested to compromise many different aspects of the academic mission, including (for example) speed of publication, freedom of access to research materials, mentoring of students, objectivity of academic testimony in regulatory hearings, and patient safety. These are all important, but from our point of view the most important concern is to maintain the credibility of the research we publish.

Ties between academic researchers and industry are becoming more prevalent, and include not only industry funding for academic research but also personal financial rewards for the authors, including speaking and consulting fees, patent rights, and equity in companies with a stake in the research. For example, a 1999 survey<sup>1</sup> at University of California, San Francisco found that 7.6% of principle investigators have a personal financial relationship with the sponsor of their research, a three-fold increase since 1985. Another recent study<sup>2</sup> of biomedical papers from Massachusetts found that one in three come from authors with a financial interest in the research.

Academic researchers are modestly paid, and the rewards for commercializing one's research can be substantial, in some cases more than a lifetime-worth of academic salary. It would be naive to think that such incentives have no effect on what gets published, and indeed several studies of the clinical literature have demonstrated associations between the conclusions of a study and the source of its funding.

Financial interests are of course not the only source of bias in scientific papers; limitations of the experimental design or prior allegiance to a particular theoretical position may be equally important. These factors, however, are generally transparent, whereas financial interests are unique in that they are often invisible, meaning that readers have no way to judge their potential significance. Although some clinical journals require authors to disclose their financial interests, this is rare in the basic sciences, and even among journals that claim to have such policies, enforcement appears to be lax; only about 0.5% of papers carry a declaration<sup>3</sup>, suggesting that financial interests are under-reported by a factor of 50 or more.

The *Nature* titles intend to address this by adopting a more

systematic approach than most basic science journals have done to date. We will ask corresponding authors to declare, on behalf of all authors, any financial interests that might be affected by publication, and these statements will appear in the published paper, with details on our web site. (The policy will apply to any paper received after 1 October, so disclosure statements should start to appear around the end of this year.) The disclosure requirements should not be too onerous; authors will not be asked to state the sums involved, and in cases where multiple authors have financial interests that are too numerous to itemize, they will be permitted to state this. We recognize that some researchers may be bound by confidentiality agreements, while others may simply disagree with the principle of financial disclosure. They will be given the option of not responding, and this will not prejudice publication of their papers. We will, however, publish the fact that they declined to respond, so that readers can distinguish such cases from declarations of no competing interests.

Potential bias is not the same as actual bias, and effects that can be detected in the aggregate (through meta-studies) may be difficult or impossible to recognize in individual cases. In particular, editors and referees cannot be expected to identify cases of actual bias with any degree of certainty, and in fairness to the authors the contents of each paper must be taken at face value when deciding whether it should be published. Therefore, we do not intend to consider financial disclosures during the review process, nor will we forward them to referees; instead, we will ask for them only after a paper has been accepted for publication, leaving it up to readers to evaluate their possible significance.

It should hardly be necessary to say that in adopting this policy, we are not suggesting that commercial research is a bad thing *per se*, or that financial conflicts of interest are leading to a widespread undermining of research integrity. In general, we believe that good business goes hand-in-hand with good science, and the basic research community has clearly benefited greatly from the academic-industrial links that have grown so rapidly over the past few years. We believe that a policy of transparency will be healthy for both sides of this partnership. Readers will have access to potentially relevant information that may help them evaluate the claims of a paper, while authors will benefit from a perception of transparency that will strengthen the credibility of their work. If financial disclosure in scientific publication becomes the norm, this will increase public confidence in the integrity of the research enterprise—a result that will be to everyone's benefit.

1. Boyd, E. A. & Bero, L. A. *J. Am. Med. Assoc.* 284, 2209–2214 (2000).
2. Krimsky, S. *et al.* *Science and Engineering Ethics* 2, 395–410 (1996).
3. Krimsky, S. & Rothenberg, L. S. *Science and Engineering Ethics* 7, 205–218 (2001).