

## Do we need a research police?

This issue of the *Journal* includes the manuscript of a paper Stephen Lock delivered at a College meeting last summer [1]. He concludes that research fraud has become more frequent and visible over the past two decades and is closely related to the urge for publication among scientists. He is concerned at the paucity of intrinsic controls in institutions and the serious rebuttals that the whistle blowers may face. His preferred remedy is prevention, but he holds that serious allegations of fraud have to be managed properly. He is a proponent of a system already established by some of the Nordic countries.

Lock raises the possibility that he is too preoccupied with scientific fraudulent behaviour, that there really is no problem and that his estimate of undisclosed research fraud is a 'personal distortion'. He has no reason to apologise or to reduce his own involvement as the overwhelming and convincing documentation he has provided over the years speaks for itself. Rather, it is a question of the kind and magnitude of the problem and how best to deal with it.

My own awareness of scientific fraud took a new turn in 1991 when I had the doubtful fortune to follow the Theresa Imanishi-Kari/David Baltimore incident as it was unveiled like a criminal *feuilleton* in the columns of the *New York Times*. In the eyes of the newspaper, Dr Margot O'Toole, who blew the whistle, was without doubt the heroine of the day. Five years down the road the roles seem to be totally reversed: the alleged fraudsters who used their names and positions in order to silence a stubborn Irish girl, have been freed from accusations, while she no longer appears in full name, only as the 'whistle blower' who was even purportedly jealous of her female superior (*New Yorker*, 27 May 1996).

It may be worth noting that in the USA the definition of fraud is quite narrow and includes only the most serious kinds of dishonesty, ie fabrication, falsification and plagiarism. There it is regarded as a criminal offence and alleged cases of fraud are handled by an official agency, the Office for Research Integrity (ORI) under the US Department of Health and Social Affairs. In contrast, the Nordic scene is quite different. In Denmark and Norway, where national committees on scientific fraud have been established, the definition of dishonesty is far more comprehensive and includes most aspects of the research process. Based on empirical evidence so far, the most widespread form of alleged dishonesty is authorship violation. In fact, 60% of the cases handled by the Danish Committee on Scientific Dishonesty since it was

established in 1992, have been in this area [2,3]. In Norway, a similar committee was set up by the National Research Council in 1994. Our experience points in the same direction, ie most reported cases concern disagreement and disputes among researchers, rather than outright tampering or theft of data.

The causes of fraud are well described by Lock and, not surprisingly, his primary emphasis is on the pressure for publication among scientists as a means of obtaining promotion, tenure, and research funds [1]. His claims are supported by two recent papers [4,5] in which misrepresentations in their cited publications were in the order of 20–35% among applicants for residency programmes and fellowships. Also, the number of misrepresentations increased significantly as the number of citations increased [5].

The resistance to establishing independent bodies to handle allegations of fraud in medical research may have to do with whether one prefers a narrow or a wide definition of research dishonesty. On the one hand, if fraud is restricted to fabrication, falsification and theft, the incidence apparently is so small and anecdotal that it does not warrant a separate body to manage the few cases that occur. Also, such cases should be handled efficiently and vigorously within the individual institution. However, if one acknowledges that most reported cases stem from previous cooperations that have turned into dispute or even open hostility, it may be important to have a committee with its attention on some of the interpersonal undercurrents and concerns within the medical research community. Naturally, it should also have the mandate to suggest necessary remedies and preventive measures. One such measure is continuously to underscore the importance of good publication practice which includes a written agreement between participants at the outset of the research process. Following an initiative of the national committee, research fraud has been brought into the structured doctoral training programmes in medicine in Denmark and Norway. In the introduction to research ethics for the students, fraud is given the same weight as the role of medical research ethics committees. The issues of internal monitoring and external audit of the study and the potential consequences if irregularities are found during data collection, do stimulate vigorous discussion!

In light of this, it seems less relevant to continue the discussion about the 'true' prevalence of dishonesty. The few case histories of falsification and fabrication speak for themselves and may be frequent and serious enough to conclude that the issue must be seriously dealt with by an independent body. On the other hand, if a majority of members of the scientific community

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know of one or more cases of fraudulent behaviour, why is the number of cases brought to the committees still relatively small [2,3]? There are several possible explanations. The most disillusioned one is that, as long as the rogues do not disagree and stay friends, they continue their fraudulent activity unnoticed. Another is the probably high acceptance among scientists of gift and/or ghost authorship, with its impact on publication list inflation [4,5]. Yet another is the way committees are organised in Denmark and Norway, and how they work. Their members are appointed by the national research councils with professionals in medicine, dentistry and psychology, a judge and a representative from the pharmaceutical industry. But foremost, the committee has only an advisory role and no case is brought to it unless there is a charge, the institution where the alleged fraud took place has failed to resolve the issue, and all parties agree that the committee should take over. Hence, it is likely that many cases have been settled before someone finds it necessary to address the committee.

During the process, the committee first decides whether the charge falls within its mandate with its fairly wide definition of scientific dishonesty [2]. Then an *ad hoc* committee explores the details of the case, which may include personal interviews with the parties. Before the committee reaches its final verdict, the parties are given the opportunity to comment on the conclusions of the *ad hoc* committee. The verdict and recommendation always consider the *intentional* nature of an alleged fraud.

Dishonesty in medical science exists in various forms and degrees of severity. The serious ones are rare, while the frequent ones mainly concern our medical publication practice. To manage the frequent ones, there seems no better way than to teach, and try to live

as best we can by the 'uniform requirements' [6,7]. Like democracy, they are imperfect, but we have little else to lean on. Thus, for the time being we will have to accept journal editors—subjective and bias prone as they too may be—as gatekeepers to a decent, responsible and trustworthy publication practice.

As for the serious allegations, the case history from the Danish committee about how the dean of Copenhagen university was *cleared* of an accusation of fraud alleged to have taken place in the USA some 20 years before his appointment, may illustrate another important aspect of the role of the committee. In the Imanishi-Kari/Baltimore case, it seems that at the end of the day it was the ORI who 'lost face'. One reason may be that the agency took the role of investigator, prosecutor, jury and judge at the same time. In hindsight, it may well be asked if an independent committee on scientific dishonesty could have prevented that bruising, protracted process.

#### References

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- 3 Danish Committee on Scientific Dishonesty. Annual Report 1995. Copenhagen: Danish Research Councils, 1996.
- 4 *ORI Newsletter* 1995;**4**(1).
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