

The dilemma of the honest researcher

Nicholas H. Steneck

he honesty and trustworthiness of researchers is increasingly scrutinized as high-profile stories of research misconduct become public. Researchers, politicians and funders agree that dishonest and untrustworthy research has no value. However, the standards for judging integrity and the core values to which researchers should adhere are less clear.

To help efforts to promote research integrity around the world, the second World Conference on Research Integrity in Singapore developed a statement as a checklist for researchers to assess their own behaviour, and to provide a framework for developing national and organizational guides, codes of conduct and research-integrity policies (World Conferences on Research Integrity, 2010).

Yet standards for responsible behaviour in research pose a dilemma for the honest researcher, because many commonly accepted practices are at odds with 'ideal' behaviour. Although outright dishonesty is not the norm and for the most part not tolerated, less-than-honest behaviour is, and might even be necessary in today's competitive research environment.

To be funded, research must be innovative and important. The need to 'sell' a grant proposal can encourage overselling of the significance of data or the importance of likely outcomes. Support for basic research to decode the human genome was gained on the basis of claims of benefits to human health that many now regard as overly optimistic and unrealistic (Marshall, 2011). Clinical trials are often inconclusive, owing to overestimation of the effects of treatment (Djulbegovic et al, 2010). However, an honest researcher who makes modest claims or honestly describes likely obstacles might not be as competitive as one who provides the most-generous estimates of long-term benefits.

The many rules that define best practice can seem to be counter-productive and

burdensome. Securing funding requires the provision of compelling preliminary data, but research agencies often do not fund mere data collection. Is it therefore acceptable to collect preliminary data for the next project with funds awarded for the current project? If an institutional review board or research ethics committee places seemingly burdensome requirements on research with human subjects, is it acceptable to bend the rules to complete the project? Studies have shown that a significant number of researchers use this excuse for minor violations of requirements for human subjects (Keith-Spiegel & Koocher, 2005).

Ideally, research should be collaborative. Public interest should take precedence over self interest, once intellectual and property interests have been protected. Nonetheless, researchers sometimes do not share information—a practice that has been shown to slow progress (Blumenthal, 2006). It is also alleged, but has not been confirmed empirically, that researchers sometimes provide insufficient or misleading information to slow the work of competitors. On the receiving end, researchers have been known to take unfair advantage of privileged information from peer review.

Honesty in research is particularly strained during formal publication. Less-than-honest practices include adding honorary names to the author list; failing to include the names of individuals who made significant contributions, such as industry ghostwriters; misrepresenting findings in abstracts; dividing one project into several publications to enhance a resume; failing to list conflicts of interest; and publishing the same work more than once without adequate notification. Research publications are sliced, diced and wrapped in many ways. When these practices come to be common, it is difficult for the honest researcher not to fall in line.

However, before falling into line too quickly, there are two consequences that

scientists ought to consider. All questionable practices could, under particular circumstances, be classed as misconduct, particularly if they are engaged in widely and often. One small compromise might not be important, but several larger ones could be. Moreover, acting less than honestly can be a first step down a slippery slope towards misconduct. When researchers engage in common, but not necessarily proper, practices, they need to be aware of what they are doing and the possible consequences. Right and wrong can be too easily confused.

Misconduct in research was not new when it first received public attention in the 1970s and 1980s. The fact that it had been either ignored or tolerated by researchers and research institutions led governments around the world to implement regulations. Much the same scenario has followed in relation to conflicts of interest, dual-use research, and other areas in which integrity and the professional conduct of researchers have been guestioned. Researchers need to face up to the conflict between professed commitments to high standards for research integrity and widespread tolerance of practices that fall short of these standards. Doing so is essential to preserving public confidence in research and to reducing, if not eliminating, the dilemma faced by the honest researcher.

REFERENCES

Blumenthal D (2006) Acad Med 81: 137–145 Djulbegovic B et al (2010) J Clin Epidemiol 64: 583–593 Keith-Spiegel P, Koocher GP (2005) Ethics Behav 15: 339–349

Marshall E (2011) Science **331:** 526–529 World Conferences on Research Integrity (2010) Singapore Statement on Research Integrity. www.singaporestatement.org

Nicholas H. Steneck is Director of the Research Ethics and Integrity Program of the Michigan Institute for Clinical and Health Research, Ann Arbor, Michigan, USA. E-mail: nsteneck@umich.edu

EMBO reports (2011) **12,** 745. doi:10.1038/embor.2011.134