

Scientific misconduct and breach of publication ethics

Robert B. Daroff

Department of Neurology, University Hospitals Case Medical Center, Cleveland, OH, USA

Anatomy 2008; 2: 7-8, © 2008 TSACA

Scientific journals disseminate information that may impact the public's health. Editing a scientific journal is a high honor, but can be an awesome responsibility, since the editor is responsible for maintaining the scientific integrity of both the journal and the disciplines it covers. Authors, either unknowingly through ignorance or sloppiness, or by sociopathic design, may violate standards of scientific integrity and discredit a journal. Hugh Clegg, former editor of the *British Medical Journal* (1947-1965), wrote, "A medical editor has to be a keeper of the conscience of a profession, and if he tries to live up to this ideal, he will always be getting into trouble."¹ Editors will often irritate authors, some of whom may be their friends, but such is the fate of anyone with a major decision-making role. Indeed, the American author, Gene Fowler, suggested, "Every editor should have a pimp for a brother, so he can have someone to look up to."

Professor Çelik, Editor-in-Chief of *ANATOMY* asked me to acquaint authors with the basics of scientific integrity related to publications. My background consists of serving as Editor-in-Chief of *Neurology* for 10 years (1987-96), and its Scientific Integrity Advisor since 2004. I published on these experiences,²⁻⁵ and hold active memberships in the Council of Science Editors (CSE), Council of Publication Ethics (COPE), and World Association of Medical Editors (WAME).

The two broad categories authors must avoid are Scientific Misconduct and Breach of Publication Ethics. Scientific Misconduct includes "Fabrication, Falsification,

and Plagiarism" (FF&P). The *AMA Manual of Style*⁶ defines these terms as follows:

Fabrication is "Making up data or results, and recording or reporting them."

Falsification is "Manipulating research materials, equipment, or processes, or changing or omitting data or results."

Plagiarism is "The appropriation of another person's ideas, processes, results, or words without giving appropriate credit."

These three elements of Scientific Misconduct require an intent to deceive by the authors. Thus, honest errors are not misconduct.⁷

"Breach of Publication Ethics" is a much lesser indiscretion than "misconduct" and includes a variety of items² such as failure to reveal a financial conflict of interest; redundant publication (also referred to as "fragmented, prior, dual, double, duplicate, or repetitive publications"); adding a non-contributing author or omitting a deserving author; misrepresenting the status of a publication in the references, such as claiming that a paper is "in press"; and self-plagiarism without attribution. The self-plagiarism issue is controversial, but authors should realize that they may have transferred the copyright (ownership) of their previously published material to a publisher. I recommend putting more than a few sentences of your own previously published wording in quotation marks with an appropriate attribution and reference. To avoid the self-plagiarism pitfall, I suggest Professor Roig's website: <http://facpub.stjohns.edu/~roigm/plagiarism/>.

Journals are not investigative bodies and their editors must decide how to handle allegations of misconduct or ethical breaches. Most articles arise from academic institutions who usually have Ethics Committees that investigate such allegations. In the United States, any issue regarding research funded by the U.S. government must be reported to the Office of Research Integrity (ORI), whose website is <http://ori.dhhs.gov/>.

In addition to the Roig and ORI websites, three other websites contain useful material related to these issues: 1. The International Committee of Medical Journal Editors Uniform Requirements (ICMJE.org), 2. Committee on Publication Ethics (www.publicationethics.org.UK), and 3. World Association of Medical Editors (www.wame.org).

References

1. Smith R. Does the world need the BMJ? *BMJ* 1997; 314 (7073): 1-2.
2. Daroff RB, Griggs RC. Scientific misconduct and breach of publication ethics. *Neurology* 2004; 62: 352-3.
3. Daroff RB. Report from the neurology scientific integrity advisor: year 1. *Neurology* 2005; 64: 588-9.
4. Daroff RB. Report from the scientific integrity advisor: issues arising in 2005 and 2006. *Neurology* 2007; 68: 1841-2.
5. Daroff RB. Scientific misconduct and breach of publication ethics: one Editor's Experience. *Med Law* 2007; 26: 527-33.
6. Iverson C, Christiansen S, Flanagan A, et al. *AMA Manual of Style*, 10th ed. New York: Oxford University Press; 2007.
7. Mello MM, Brennan TA. Due process in investigations of research misconduct. *N Engl J Med* 2003; 349: 1280-6.

Correspondence to: Robert B. Daroff, MD
 Department of Neurology, University Hospitals
 Case Medical Center, 11100 Euclid Ave
 Cleveland, OH 44106, USA
 e-mail: rbd2@case.edu

Conflict of interest statement: No conflicts declared.