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Research Misconduct: Issues, implications, and strategies. (Contemporary Studies in Information Management, Policy, and Services.) Edited by Ellen Altman and Peter Hernon. 206 pp. Greenwich, Conn., Ablex, 1998. \$73.25. ISBN 1-56750-340-3

[Book Reviews]

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Everyone who engages in research, whether original scientific investigations or scholarly studies, knows how easily error creeps into the process. It takes just a momentary diversion, a hidden bias, a casual acceptance of unsubstantiated claims, or a neglect of proper controls for entropy to take its toll. Disorder, not orderly truth, is the default state. Although it should not be surprising that errors enter the production of knowledge, it is generally accepted that science, as distinguished from other forms of fixing belief, is self-correcting. But how much of published scientific results needs to be corrected, what percentage of the erroneous results is intentional, and how effective is the scientific community in publicizing corrections to the literature?

Research Misconduct examines these and other issues from the perspectives of those who work in the field of information management, or what used to be called library science. As one of the contributors to this book notes, librarians are faced with new challenges that were not anticipated a few years ago. One of these challenges is coming to terms with the Internet as the "virtual librarian," and another is defining the librarian's role with respect to the quality of information.

The explosion in the number of electronic resources means more information can be disseminated faster, more cheaply, and to a larger audience than ever before. It also means there will be more opportunities for fraud and error on the information highway. The compression of time, which has been emblematic of the computer age, enables both errors and corrections to move more rapidly to the end user. But in the anarchistic system of the Internet, we lack responsible gatekeepers. The peer-review system, which has served as one of the safeguards for reducing error in published work, has not been very effective in preventing fraudulent data from getting into print. More far-reaching for the vast majority of honest researchers is the trend in electronic publishing established by physicists who publish preprints on the World Wide Web without peer review. These preprints are then cited as credible sources in the peer-reviewed literature. If this practice is adopted by the biomedical sciences, the increased opportunities for sloppy research and misconduct will make the role of editors, reviewers, and information specialists even more difficult.

This book makes a convincing case that neither the journals nor the information specialists are effective enough in responding to scientific fraud, misconduct, and poor-quality data. Too many fraudulent and retracted results continue to be cited long after the problems with the data have been reported. Among the many informative surveys cited in the book was the report that only 16 percent of U.S. libraries serving medical schools have policies for managing retracted articles. Other surveys indicate that scientific misconduct is seriously underreported, and when it is reported, many retractions are not listed in the major indexes, such as the Index Medicus.

In one of the creative parts of this book (chapter 4), two of the contributing authors describe the results of their experiment involving focused interviews with people representing various subgroups of seven universities in New Zealand (students, deans, librarians, and faculty). These subjects had been asked to read and react to a fictional "fraudulent" study that included fabricated data and sources. The results reinforce the findings of other hoax experiments that we are very vulnerable to deception and far too forgiving of misconduct.

The book contains useful appendixes describing cases of scientific misconduct in the literature and an excellent bibliography, but the text is disjointed, repetitive, and poorly organized.

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