

## Peer Review Under Scrutiny

By *Patricia Hausman*

Despite the attacks in New York and Washington on September 11, the Fourth Annual International Congress on Peer Review went forward in Barcelona, Spain a few days later. About two-thirds of registrants were able to arrive in Spain as planned, and all but four of 44 scheduled papers were presented.

That peer review has become the focus of a fourth international conference is due in part to the work of a small group of journal editors who convened in Vancouver, British Columbia, in 1978, and were known simply as The Vancouver Group. Their primary goal—to standardize the format of manuscript submissions—was realized with the development of the [Uniform Requirements for Manuscripts Submitted to Biomedical Journals](#). More than 500 journals have adopted the Uniform Requirements.

In time, the task force evolved into the International Committee of Medical Journal Editors (ICMJE), which expanded its work to include issues related to the quality of the peer review process. Nonetheless, concern about compliance with the Uniform Requirements continues, as demonstrated by a number of papers presented at the conference.

The authorship provisions of the Uniform Requirements specify that each named author must have made substantial contributions to designing the work—or analysis or interpretation of its data. In addition, every individual credited is required to have participated in the drafting of the paper or revising of its intellectual content, as well as to approving the final version prior to publication. Like previous investigations, those presented at the conference showed that submitters often violate these standards—sometimes out of

ignorance, in other cases out of a belief that the requirements are unrealistic and overly restrictive. Not surprisingly, evidence revealed that first authors were mostly likely to have met all three standards.

Publication bias and anonymity in the review process were also the focus of multiple papers presented at the conference. Suggestive evidence that journals favor studies with positive results was presented; this analysis showed that compared to those with negative results, trials with positive results had an odds ratio for publication of 1.30. An analysis of papers submitted to *JAMA* found no statistically significant difference in time to publication between those reporting positive and negative results.

Several studies examined the relative merits of single vs double-blind peer review. Little evidence of difference was found.

Other findings reported at the conference:

- Statistical errors continue to be common in peer reviewed biomedical journals.
- A majority of reviewers are indifferent to, or actually oppose, open acknowledgment of their contribution on specific manuscripts. However, more would favor it if carried some kind of institutional recognition.
- Despite the lack of peer review, papers published in so-called "throwaway" journals are more readable and rated as more relevant to clinical practice than those in journals with more rigorous publishing standards.
- Research findings presented at scientific meetings often receive considerable attention in the news media, yet are often flawed by small

sample sizes or lack of randomization. Almost half of 149 presentations covered by the most widely read newspapers during a two-month period in 1998 were not subsequently published in scientific journals.

[Conference abstracts](#) can be read on-line. A number of the papers presented will be published in a forthcoming issue of the *Journal of the American Medical Association*. Articles from the [Third International Congress](#), held in 1997, and the [Second International Conference](#), held in 1993, are currently available.

In a separate development, the [American Psychological Association](#) announced in September that it has created a special database designed to increase minority participation in the peer review process. The database is a subset of the organization's PsycInfo collection. It retrieves records of all published work keyed to a given search term, highlighting those authors known to be members of an ethnic-minority group. According to an [article about the database](#) in *The APA Monitor*, the database is available only to editors of journals published by the APA.

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