

◆ CBE Forum on the NIH E-Biomed Proposal

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After introductions, the session began with a brief summary of the National Institutes of Health (NIH) E-biomed proposal. The proposal suggests that biomedical reports be made available online in a centralized repository with 2 levels. The first level would make studies available immediately after the usual peer review; the second level would bypass traditional peer review but require sponsorship by 2 scientists to ensure suitability. The proposal aims to make research results widely and quickly available at no cost to readers, while reducing the need for the current plethora of scientific journals (many of them very expensive). The proposal suggests that NIH would provide financial and technical assistance to set up the online site but would not assume control of content. (The proposal itself is available at www.nih.gov/welcome/director/ebiomed/ebi.htm.)

People attending the CBE annual meeting had been invited to submit questions related to the E-biomed proposal a day or two before the discussion. As a starting point for discussion, Blaire Mossman introduced one of those questions, asking what risks were envisioned if the proposal were implemented. One editor of a small-to-mid-size journal asked why advertisers would pay for space or readers would continue to subscribe to the journal if the material were available

free online. Other editors expressed related concerns, noting that the proposal could well reduce publication costs substantially but would reduce revenues even more. Would the journals survive? What about those who are currently readers of journals, but who are not online? If journals ceased publishing, what would such readers do?

Several members of the audience noted that the current diversity of scientific journals is good for science, just as biodiversity is good for the global ecosystem. Current journals offer more to their readers than individual scientific reports: They also provide centers of focus within disciplines and subspecialties, and they make research reports available in many languages to a wide variety of audiences. The E-biomed proposal threatens the current structure of published journals by providing a single site, widely accessible via a common search engine. Most editors think the proposal could be useful in establishing a mechanism for digitizing and archiving research reports. However, creating a single monolithic site that attempts to be all things to all people might not be a good idea if it supplants the existing diversity of journals.

Another major theme of the discussion was the potential threat to the quality of the scientific literature as a result of publishing work that had not been peer-reviewed. As one editor expressed it, "Peer review is not perfect, but, like democracy, it is the best system we have found so far." In particular, some were concerned that unrefereed reports would be available to the public. Others pointed out that, compared with the material already available both in print and online, unrefereed scientific articles might be "a positive antidote". Several people stressed the need for reports to be clearly labeled to avoid confusion between the 2 levels, refereed and unrefereed. As one editor pointed out, the 2 levels are separate and distinct; they do not represent a continuum.

Others voiced practical concerns. Would such a site be manageable? If so, who should manage it? Can the current quality of scientific reporting be maintained on such a scale? Where will the funding come

from to maintain the site and to ensure its quality? Might NIH's proposed investment to fund such a venture—estimated at \$100 million—be more helpfully spent in ways more directly related to the primary mission of NIH, namely, improving the health of the nation? Will authors be as willing to submit their work for online dissemination as they are now to submit reports to high-prestige journals? How will the site be used, and by whom?

Many in the audience saw this proposal as a revolutionary idea and one that should therefore be considered carefully and cautiously before steps are taken to implement it. Although several aspects of the plan sound promising, there is potential for unforeseen consequences. It is also possible that the creation of a large, central online site would end up adding to the plethora of information rather than replacing some or all of what is now available.

A few journal editors acknowledged that the current system has its flaws. It was noted that some organizations use their journals as so-called cash cows, and for-profit publishers have markups as high as 40%. In some cases, little of the profit generated by journals makes its way back into the mechanisms that ensure quality, such as peer review and a paid, full-time editorial staff. As one editor pointed out, editors and publishers must apply the same rigorous standards to their own practices as they do to those of the authors whose papers they publish. The same speaker went on to say that editors and publishers should ask themselves what they and their journals actually give back to science—the answer, he suggested, is not always so clear. Agreeing that the diversity of journals is a benefit to science, the speaker went on to say that the demise of some journals might not be a bad thing.

On a personal note, this was a lively and wide-ranging discussion that could have continued far beyond its allotted time. Just as the discussion strained its time limits, so has this attempt to summarize it strained the word limits specified for these reports. In some respects, I found the discussion fairly

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predictable—perhaps analogous to asking a gathering of emperors what they thought of this new idea called democracy. Many editors, for example, were critical of the E-biomed proposal for emphasizing speed and free access at the possible expense of quality.

Those priorities are probably appropriate, even laudable, for editors. However, all of us—even editors and physicians—are also potential patients, and as patients we might find our priorities rearranged. On one thing we may all agree: The E-biomed proposal is

intriguing. In my view, it deserves not only the cautious and careful deliberation urged by editors, but also wider discussion among all potential users and constituencies, including practicing clinicians and their patients. ■