Dual-Use Research of Concern (DURC) Review at American Society for Microbiology Journals and Its Effect on Other Organizations

Stuart Nightingale

Consultant (Contractor), National Institutes of Health, Bethesda, Maryland, USA

The recent editorial by A. Casadevall, T. S. Dermody, M. J. Imperiale, R. M. Sandri-Goldin, and T. Shenk, "Dual-use research of concern (DURC) review at American Society for Microbiology Journals" (1), provided valuable practical information on the formal process that the American Society for Microbiology (ASM) family of journals uses to review manuscripts for dual-use research of concern (DURC). The information should be of use to other journal editors and publishers and their organizations, as well as to investigators and academic institutions. Sharing such information among these groups has been suggested previously (2).

ASM played a leadership role in convening editors and investigators at a National Academy of Sciences (NAS) meeting in 2003. The policy statement that emanated from that meeting has been an important influence on the field (3).

Observations by journal editors, summarized in the proceedings of the 2008 International Roundtable cosponsored by the World Health Organization and the National Institutes of Health and hosted by the National Science Advisory Board for Biosecurity (NSABB), relate to points made in the editorial by Casadevall and colleagues. At that 2008 meeting, journal editors presented information on their experience reviewing manuscripts for DURC and shared views on the kind of assistance they wanted (4).

In their editorial, Casadevall et al. cited the findings of a recent study of 127 Editors in Chief that found that none had refused to publish a manuscript on biosecurity grounds alone. The experience of one editor at the 2008 International Roundtable was different. She reported that her journal rejected two DURC manuscripts when their concerns could not be resolved. One manuscript described how powdered substances could be mixed with smallpox virus to confound the usual tests for detection. After the author refused to modify the manuscript to the satisfaction of the editor, the manuscript was rejected but subsequently published elsewhere. Another manuscript, focused on modeling airborne anthrax attacks, discussed ideal weather conditions and how to release anthrax in buildings. The concerns were explained to the author and the manuscript was rejected (2).

The recent editorial also raised concerns similar to those voiced by journal editors at the International Roundtable. Editors were not comfortable being the only gatekeepers for DURC publications. They wanted upstream review, a process that vets the work from inception to funding through all stages of the research, similar to much of what Casadevall et al. proposed in their editorial (4).

Much has changed since 2008. There is now substantial upstream government review when 15 high-consequence pathogens are involved and, beginning in September 2015, institutions screen research proposals for DURC involving those same agents (5–7). Thus, the upstream review that journal editors requested has been substantially strengthened, and it remains under evaluation.

Perspectives from journal editors and publishers will continue to inform the development of DURC policy. Major international organizations, such as the International Committee of Medical Journal Editors, the Committee on Publication Ethics, the World Association of Medical Editors, and the Council of Science Editors, have an unappreciated powerful role in establishing an international harmonized approach for journals through setting voluntary guidelines and standards.

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Address correspondence to nightins@od.nih.gov.