

Recognize, respond to, and prevent the publication of research misconduct

Remya Nambiar

Managing Editor, Molecular Biology & Biochemistry
Editage, Cactus Communications
RemyaN@cactusglobal.com

Moderator:

Christine Casey, Deputy Editor, Morbidity and Mortality Weekly Report, Centers for Disease Control and Prevention, Atlanta, Georgia

Speakers:

Susan Garfinkel, Acting Director, Division of Investigative Oversight (DIO), Office of Research Integrity (ORI), Rockville, Maryland

Thomas Gerber, Associate Editor, Mayo Clinic Proceedings, Rochester, Minnesota

Christina Bennett, Publications Ethics Manager, American Physiological Society, Bethesda, Maryland

Reporter:

Remya Nambiar, Managing Editor, Molecular Biology & Biochemistry, Editage, Cactus Communications, Mumbai, India

As editors influence many fields through careful selection, review, and timely publication of quality journal articles, they must be able to recognize, respond to, and prevent research misconduct (RM). In this session, the speakers shared views, findings, and useful resources to achieve this goal.

At Office of Research Integrity (ORI), Dr. Garfinkel participates in responding to and investigating RM allegations. She presented an overview of ORI responsibilities and discussed its role in retractions, as well as the tools ORI uses to detect manipulated images. RM is defined as fabrication, falsification, and plagiarism (FFP).

ORI's authority is limited to FFP allegations related to Public Health Service-funded research. The administrative action depends on the seriousness of the RM and is often imposed for 3 years, but can range from 1 year to lifetime. ORI relies on the host institution for implementing administrative actions.

The time to verdict can be long, as allegations need to be verified before the findings are published. ORI cannot disclose details of an allegation/ongoing investigation. Once RM is confirmed, an expression of concern,

correction notice, or retraction can be published. However, retractions do not necessarily mean RM. ORI publishes its findings in the Federal Register and links them with the retractions in PubMed.

Dr. Gerber focused on the roles of editors in identifying and preventing publication of RM. He outlined the consequences of RM, including waste/misallocation of resources (intellectual and financial), unfair career advancement, and ineffective/harmful responses to RM. RM can be prevented or recognized before submission, before publication, and before and after peer review.

Ithenticate® is a detection software that produces similarity reports for manuscripts; however, it is not foolproof and cannot supplant editor judgment in detecting plagiarism. He discussed certain methods used by authors to circumvent automated plagiarism-detection software.

Dr. Bennett, Publication Ethics Manager for the American Physiological Society (APS), addresses ethical concerns for journals published by the Society. Her responsibilities span the entire publication lifecycle. During submission and production, she facilitates the query process, updates and revises ethics policies, and promotes best practices in publication ethics. After publication, she addresses concerns raised by readers, authors, whistle-blowers, or anonymous persons.

Before publication, APS conducts incorporated reviews of all digital images in accepted manuscripts. Images that seem edited or have extreme contrast adjustment are returned for correction. APS runs plagiarism checks on submitted review articles. When self-plagiarism is detected, authors are encouraged to revise their articles. Dr. Bennett assesses the ethical issues, recommends next steps, seeks clarification from authors, and evaluates their responses to reach a resolution. Her experience substantiates the findings of ORI that image manipulation is the most common type of RM. However, most image manipulations identified do not constitute RM, which can be easily corrected. Some useful forensic tools to detect image manipulation are available at <http://www.ori.dhhs.gov/actions>.

To reduce the number of publications with ethical errors, Dr. Bennett recommends the following: increase interaction with associations like COPE, determine necessity of pre-publication ethical reviews, update ethical policies in journal guidelines, and set standard processes to assess and address ethical concerns.

The responsibility to avoid RM lies with the entire scientific community, from the laboratory staff, mentors, and institutions to the journals and ORI. Journals should promote author awareness regarding RM. This awareness can be heightened by explicitly stating the journal's policy about RM in author guidelines; this policy can be included in the guidelines published by CSE/COPE.