Integrity in Scientific Journal Publications

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CSE’s White Paper on Promoting Integrity in Scientific Journal Publications
http://www.councilscienceeditors.org/

CSE Survey
An institutional official writes to you indicating that a published paper should be withdrawn, but none of the co-authors indicates it should be withdrawn. The institution’s investigation is ongoing.

What do you do?
- Do not take action unless the institutional official provides evidence of research misconduct or admission of wrongdoing.
- Write to the authors asking if the paper should be withdrawn and do not do so unless the paper has been found to contain falsification, fabrication, or plagiarism.
- Publish an expression of concern disclosing that you are aware of an ongoing institutional investigation that may bear on the study.
- Other

Roles and Responsibilities
- Editors
- Authors
- Reviewers
- Sponsors

Editors
- Establish policies and procedures.
- Clearly communicate those policies and procedures.
- Fairness, honesty, courtesy, objectivity.
  - Authors
  - Reviewers
  - Readers
Policies and Procedures

- Conflict of Interest
  - Conditions in which an individual holds conflicting or competing interests that could bias editorial decisions. Conflicts may be potential or perceived, or they may be factual.

Conflict of Interest

- Policy should be continually updated and communicated to the community (publish in the journal, online, in instructions to authors, etc).
- Society journals may have a society COI and societies may strive to make society COI and journal COI policies consistent.
- Policies for editors, authors, reviewers.

Conflict of Interest

- Financial conflicts
  - Stock, patents, consulting fees, speaking fees, etc (define these categories).
- Non-financial conflicts
  - Reviewer bias (e.g. working on similar study; reviewing manuscripts from same institution-use guest editors, etc).
- Funding Source must also be declared, if applicable.

Conflict of Interest

- Editors are dependent on what authors and reviewers tell them. Clear policies and procedures are key.
- Editors cannot be the COI “police.”

Policies and Procedures

- Authorship
  - International Committee of Medical Journal Editors (ICMJE) Uniform Requirements have a definition applicable to almost all fields of research.
  - "Authorship credit should be based on 1) substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the version to be published. Authors should meet conditions 1, 2, and 3." (www.icmje.org/#author)

Authorship

- Some journals also have a model of "contributorship" which is designed to complement ICMJE criteria-explaining what each person did (design, recruitment, collecting and analyzing data, etc. See JAMA 1997;278:579-585.).
### Policies and Procedures
- Advertising Policy
- Embargo Policy
- Archive Policy (records and retention)
- Conflict Resolution Policy
- Editorial Independence

### Research Misconduct
- No standard definition exists—U.S. agencies do not even agree.
- Generally one of these areas
  - Unethical treatment of research subjects
  - Fabrication of data
  - Falsification of data
  - Plagiarism

### Suspect Manuscripts
- Generally best to ask the corresponding author, first. Before you do anything else.
- Asking all authors? Confidentiality has a greater chance of being compromised.
Suspect Manuscripts

- Proceed with caution when investigating.
- Better to turn over to institution if author’s answer not satisfactory (use your discretion).
- Institution should be the one contacting relevant federal agency, if applicable.
- You must correct the literature, if warranted.

CSE Survey

An institutional official writes to you indicating that a published paper should be withdrawn, but none of the co-authors indicates it should be withdrawn. The institution’s investigation is ongoing.

What do you do?

- Do not take action unless the institutional official provides evidence of research misconduct or admission of wrongdoing. 37.5%
- Write to the authors asking whether the paper should not be withdrawn and do not do so unless the paper has been found to contain falsification, fabrication, or plagiarism. 33.3%
- Publish an expression of concern disclosing that you are aware of an ongoing institutional investigation that may bear on the study. 16.7%
- Other 12.5%

What should you do?

- No clear right answer.
- The expression of concern is one mechanism you can use.
- Evidence is not proof.
- Retracting too early may not give the whole story.
- Investigations can take years and you might have an obligation to inform the readers of something…

ORI Investigation

5/97 paper submitted for data fabrication by corresponding author
12/99 investigating committee finds research misconduct
12/00 ORI told no retraction unless corresponding author asks
7/04 ORI makes add’l findings, asks institution to endorse
1/05 Institution endorses additional ORI findings
4/06 ORI advises journal to retract
6/06 article retracted
Over 9 years to correct the literature!
(Source Debbie Parrish, CSE Presentation, May 2007)

- Know that ORI has taken the position that journals are not among those parties that have a need to know about an allegation until the federal agency review is complete.
- Should also consider that the institution may require a corrective action whether or not the federal agency makes a finding.

(Source Debbie Parrish, CSE Presentation, May 2007)
Research Misconduct Outside the U.S.
- Relatively few countries have formal response mechanisms.
- First response is usually have the institution do the investigation, then they can report the results to the national body.
- See the CSE White Paper for more specific information by country.

Digital Images and Misconduct
- Rockefeller University Press guidelines
  - No specific feature within an image may be enhanced, obscured, moved, removed, or introduced.
  - Adjustments of brightness, contrast, or color balance acceptable as long as they do not obscure, eliminate, or misinterpret any information in the original.
  - Grouping of images from different parts of the same gel...must be made explicit by the arrangement of the figure...and in the text of the figure legend
  - If original data cannot be produced...acceptance may be revoked.

Digital Images and Misconduct
- RUP has defined 2 types of digital image-related misconduct.
  - Inappropriate manipulation
    - Adjustment of image data that violates guidelines but does not affect interpretation of data.
  - Fraudulent manipulation.
    - Adjustment of image data that affects interpretation of data.

Correcting the Literature
- Addresses unreliable information that is part of the public record.
- Enables readers to find the correct information.
- Journals should take proactive role in publishing accurate information for its readership.

Correcting the Literature
- No one recognized method for addressing literature corrections.
- Biomedical sciences have the most experience, National Library of Medicine (NLM) and ICMJE policies are a good place to start.
Correcting the Literature

- **Errata**
  - Published changes to an earlier article. NLM does not distinguish between errors from production or errors of logic and methodology.

- **Retractions**
  - Identify a citation previously published and now retracted. NLM does not distinguish between retractions due to honest error or scientific misconduct/plagiarism.

- **Expressions of Concern**
  - Introduced by ICMJE and adopted by NLM in 2004. Editor can use it to draw attention to possible concerns but does not correct or retract an article.

Authors, editors, publishers, deans, lab directors, and legal counsel can all request errata or retractions.

Authors may refuse to request a retraction, despite a finding of misconduct.

NLM requires the retraction be signed off by any of the above parties.

Retractions do not go away, but are clearly linked to the original article.

Look at examples
- CSE White paper has numerous examples

Correcting the Literature

Additional Sources

- COPE, Committee on Publication Ethics
  - http://www.publicationethics.org.uk/about

- WAME
  - http://www.wame.org/

- Best Practice Guidelines on Publication Ethics: A Publisher’s Perspective
  - www.blackwellpublishing.com/publicationethics

- ACCF/AHA Consensus Conference Report on Professionalism and Ethics
  - Circulation 2004;110;2506-2549