Minimizing Reuse of Retracted Research with the New CREC Recommended Practice

CHORUS Forum, July 24, 2024
Todd A. Carpenter, Executive Director, NISO
Effect on Retractions in Scholarly Publishing

Springer Nature slaps more than 400 papers with expressions of concern all at once

A total of 436 papers in two Springer Nature journals are being subjected to expressions of concern, in the latest case of special issues — in this case, "topical collections" — likely being exploited by rogue editors or impersonators.

Wiley and Hindawi to retract 1,200 more papers for compromised peer review

Hindawi and Wiley, its parent company, have identified approximately 1,200 articles with compromised peer review that the publishers will begin retracting this month.

Jay Flynn, executive vice president and general manager of the research division at Wiley, which acquired Hindawi in 2021, wrote about the forthcoming retractions in a blog post at Scholarly Kitchen yesterday.

The plan to retract 1,200 articles, which the publisher expects to take a few months, follows Hindawi’s announcement last September that it would retract 511 articles across 16 journals for manipulated peer re-
Reducing the Inadvertent Spread of Retracted Science: Shaping a Research RISRS Project

Led by Jodi Schneider, Professor at University of Illinois, Urbana-Champaign

Funded by the Alfred P. Sloan Foundation
Basics About Retraction

- 1 in about 1000 articles is retracted
  - Retraction occurs in all fields: 60% of retraction is in engineering.
  - Reasons for retraction include unethical research, redundant publication, issues with data and/or results.
- Retraction is part of the healthy science ecosystem. Honest error may lead to retraction! This is part of the process of doing robust science.
- Retraction time frames vary: may take days, months, years, or decades.
- Even when results are wrong, people may cite and use retracted work.
# RISRS Project Recommendations

**Table 2** Reducing the Inadvertent Spread of Retracted Science (RISRS) Recommendations

<table>
<thead>
<tr>
<th>Publishers/Journals</th>
<th>Standards organizations</th>
<th>Researchers</th>
<th>Other stakeholders</th>
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</thead>
<tbody>
<tr>
<td>Develop a systematic cross-industry approach to ensure the public availability of consistent, standardized, interoperable, and timely information about retractions</td>
<td>(1) Adopt standards for citation of retracted papers, and for labeling retracted papers, (2) use software solutions, (3) invest in metadata quality</td>
<td>Develop standards for (1) retraction labeling in databases and publisher websites, (2) best practices for availability of retraction information in databases</td>
<td>Use citation software to flag retractions</td>
</tr>
<tr>
<td>Recommend a taxonomy of retraction categories/classifications and corresponding retraction metadata that can be adopted by all stakeholders</td>
<td>Adopt, and participate in developing, a retraction taxonomy</td>
<td>Develop and maintain retraction taxonomy</td>
<td>Become aware of taxonomy and pay attention to classifications of articles being cited</td>
</tr>
<tr>
<td>Develop best practices for coordinating the retraction process to enable timely, fair, and unbiased outcomes</td>
<td>Reserve the right to retract in legal agreements; provide clear instructions for inquiries/concerns</td>
<td>Clarify best practices</td>
<td>Follow CLUE report recommendations</td>
</tr>
<tr>
<td>Educate stakeholders about pre- and post-publication stewardship, including retraction and correction of the scholarly record</td>
<td>Develop education aimed at multiple groups; build awareness of existing resources</td>
<td>Develop best practices for emerging concerns such as preprints; support authors in identifying authoritative sources for checking citations</td>
<td>Evaluate and assess references; clearly indicate if cited work is retracted; notify publisher if cited work in evidence synthesis is retracted; notify publisher, institution, and coauthors of issues with a published article</td>
</tr>
</tbody>
</table>
Schneider presented her results during the NISO Plus Conference in February 2021.

CREC was selected as one of the output ideas to be advanced from the Conference.

A meeting was held in May 2021 to develop a project proposal, which was approved in the fall of 2021.
Membership: Group Appointed May 2022

Current members:

- Caitlin Bakker, University of Regina (co-chair)
- Alyssa Conaway, ASTM International
- Joanna Czerepowicz, Taylor & Francis Group
- Tilla Edmunds, Clarivate
- Annette Flanigan, JAMA & the JAMA Network
- Stephen Flockton, IOP Publishing
- Joyce Griffin, Wiley
- Patrick Hargitt, Atypon
- Emily Hazzard, Silverchair
- Rolf Kwakkelaar, Elsevier
- Luigi Longobardi, IEEE
- Marie McVeigh, Mary Ann Liebert
- Ivan Oransky, Retraction Watch
- Francois Renaville, University of Liege
- Rachel Safer, Oxford University Press
- Jodi Schneider, University of Illinois Urbana-Champaign
- Jessie Slater, AAAS
- Pauline Starley, Springer Nature
- Heather Tierney, American Chemical Society
- Elizabeth Wolf, Copyright Clearance Center
- David Wright, Modern Language Association
- Jen Wright, Cambridge University Press
- Maria Zalm, PLoS

Former members:

- Rachael Lammey, Crossref (co-chair)
- Hendia Edmund, American Society for Microbiology
- Hannah Heckner Swain, Silverchair
- Sylvia Hunter, Inera
- Catherine Nancarrow, California Digital Library
- Deborah Poff, Journal of Scholarly Publishing
- Teodoro Pulvirenti, American Chemical Society
- Michael Roberts, Emerald Publishing Group
- Sonal Shukla, Springer Nature
- Maja Choma, Springer Nature
- Emily Kean, ProQuest

With support from:

- Keondra Bailey, NISO
- Nettie Lagace, NISO
May 2022: Appointment of the Working Group

July 2022 to June 2023: Phase 1: Information Gathering

October - December 2023: Public comment period

July 2022: Approval and publication of charge and initial work plan

July-September 2023: Phase 2: Initial drafting of recommended practices document

June 2024: Publication of the final NISO Recommended Practice
Communication of Retractions, Removals, and Expressions of Concern (CREC)

A Recommended Practice of the National Information Standards Organization

Approved June 26, 2024
Prepared by the NISO CREC Working Group
Scope of Recommended Practice

Focuses on metadata transfer and display
Rationale and justification for retractions, EoCs, and removals are out of scope
Considers articles that are the VoR as well as other scholarly outputs
Guidance on implementation and operationalization
Summary recommendations

Outlines best practices for retraction-related metadata distribution, receipt, display, and transfer

Includes a responsibility assignment (RACI) matrix

Utilizing existing metadata schema, defines Essential, Essential if Available, and Recommended metadata elements
Summary recommendations (continued)

Retracted publications: 23 elements (8 essential, 14 essential if available, 1 recommended)

Retraction notices: 20 elements (8 essential, 2 essential if available, 10 recommended)
Essential Metadata Elements for the Retracted Publication (5.1)

Work Title - Prepend “RETRACTED: “ in the title
Date of Publication
Publisher
Publication Source (and identifiers)
First Author’s Full Name
Indication of Corresponding Author
Link Between Retraction Notice/EoC and Original Publication
Article Type
### 5.1 Metadata Elements for the Retracted Publication

<table>
<thead>
<tr>
<th>Metadata Element</th>
<th>Essential/Recommended/Essential if Available</th>
<th>Description</th>
<th>JATS Element/Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Title</td>
<td>Essential</td>
<td>“RETRACTED.” is inserted (in all caps) at the beginning of the title so it is clear to users that the work is retracted. If applicable, include all titles that are available (e.g., transliterated, translated, official titles in every language printed on document). Use “RETRACTED.” (in English), whatever the language, the script, or the writing direction (left-to-right or right-to-left) of the retracted work or the publication source. Include the equivalent word in the</td>
<td>&lt;article-meta&gt; &lt;title-group&gt; &lt;article-title&gt; RETRACTED: Original Title&lt;/article-title&gt; &lt;/title-group&gt; &lt;/article-meta&gt;</td>
</tr>
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<td>Title of Retraction Notice/EoC</td>
<td>Essential</td>
<td>Repeatable field. If applicable, include all titles that are available (e.g., transliterated, translated, official titles in every language printed on document). The retraction notice title should clearly identify the retracted publication, e.g., by including the retracted publication title in the phrase “RETRACTION OF: [publication title].” The EoC title should clearly identify the concerned publication, e.g., by including the concerned publication title in the phrase “Expression of concern for: [publication title].”</td>
<td></td>
</tr>
<tr>
<td>Date of Retraction Notice/EoC</td>
<td>Essential</td>
<td>Retraction notice/EoC publication date.</td>
<td>&lt;article-meta&gt; &lt;pub-date&gt;</td>
</tr>
</tbody>
</table>
Summary recommendations (continued)

Implementation Guidance

For publishers and journals
For web vendors
For full-text hosts
For aggregators
For library services platforms (LSPs)

Complex Scenarios

epub ahead of print
Journals that have ceased publication
Journals that have been transferred
Figure 1: Primo VE example.43
Source: Primo, provided by Ex Libris, part of Clarivate.

Figure 4: Example of article published in French, where article title has not been translated into English © 2019. This work is openly licensed via CC BY 4.0.
Appendix A
Proposed Flowcharts and Scenarios

A visual representation of the recommendations for retractions is shown below.

Figure A-1: Retraction communication flowchart
What happens next for the CREC project

Publicity about the outputs.
Promotion, maintenance, and potential for further work.
Integration work with systems providers and repositories - connecting the outputs
Thank you!

For more information about CREC:
https://www.niso.org/standards-committees/crec