

The role of editors in cases of suspected misconduct

Liz Wager PhD
Publications Consultant, Sideview
Chair, COPE, 2009-2012
liz@sideview.demon.co.uk

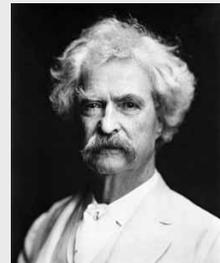
©Sideview



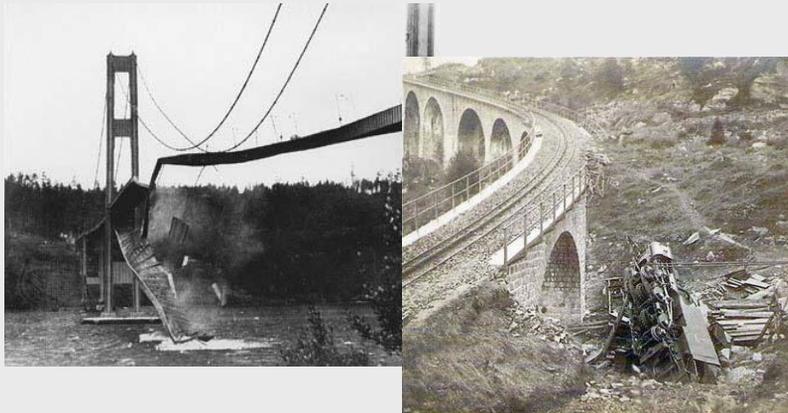
Editors and publishers of scholarly journals have special obligations

*“Be careful about reading health books.
You may die of a misprint.”*
Mark Twain

©Sideview



Not only in medicine ...



©Sideview



What can go wrong?

- Misconduct by authors
 - *Plagiarism, fabrication, falsification*
- Misconduct by editors
 - *Abuse of position, unfairness*
- Misconduct by peer reviewers
 - *Theft of ideas/data*
- Misconduct by publishers
 - *Undue commercial influence*

©Sideview



Misconduct: definitions

Research misconduct

- Fabrication
- Falsification
- Unethical research



Editors can't turn back the clock

Publication misconduct

- Plagiarism
- Biased/selective reporting
- Authorship abuse
- Redundant publication
- Undeclared CoI
- Reviewer misconduct
- Abuse of position



How common is misconduct?

- Systematic review (screened 3207 papers)
- Meta-analysis (18 studies)
 - surveys of fabrication or falsification
 - *NOT* plagiarism
- **2%** admitted misconduct themselves (95% CI 0.9-4.5)
- **14%** aware of misconduct by others (95% CI 9.9-19.7)

Fanelli *PLoS One* 2009;4(5):e5738



How often is misconduct detected?

PubMed retractions	0.02%
US Office of Research Integrity (ORI)	0.01-0.001% (1 in 10,000 / 100,000 scientists)
Image manipulation in <i>J Cell Biology</i>	1% (8/800)
FDA audit – investigators guilty of serious sci misconduct	2%



Editors (and publishers)

Should work to:

- prevent
- detect
- respond appropriately to misconduct



Tools for detecting misconduct

- Anti-plagiarism software (eg eTBLAST, CrossCheck, Turnitin)
- Screening images (PhotoShop)
- Chemical structure checks
- Data review (digit preference)



A powerful tool

- CrossCheck
- <http://www.crossref.org/crosscheck.html>
- >25 million items from 59,000 journals
- About 80 publishers
- BUT it's only available to members



CrossCheck

- Some journals now using CrossCheck*
 - Pre-acceptance
 - Pre-review (ie submission)
- Human judgement is always required
- Should not be applied indiscriminately
- *45% of users had detected plagiarism by March 2010 (Kirsty Meddings, pers comm)



©Sideview

Google searches can be useful (for up to 32 words)

Google

"Breaches of publication ethics such as plagiarism, data fabrica" Search SafeSearch off ▼

3 results (0.54 seconds) Advanced search

"views" (and any subsequent words) was ignored because we limit queries to 32 words.

[Science journal editors' views on publication ethics: results of...](#)
... Breaches of publication ethics such as plagiarism, data fabrication and redundant publication are recognised as forms of research misconduct that can ...
jme.bmj.com/content/35/5/348.short

[Mount Sinai - Lew Library](#)
... Breaches of publication ethics such as plagiarism, data fabrication and redundant publication are recognised as forms of research misconduct that can ...
librarycf.mssm.edu/levy/publishing/bibliography.cfm - Cached

[CiteULike: Imichan's library 1477 articles](#)
... Breaches of publication ethics such as plagiarism, data fabrication and redundant publication are recognised as forms of research misconduct that can ...
www.citeulike.org/user/imichan/page/9 - Cached

*In order to show you the most relevant results, we have omitted some entries very similar to the 3 already displayed.
If you like, you can [repeat the search with the omitted results included](#).*

"Breaches of publication ethics such as plagiarism, data fabrica" Search

[Search within results](#) [Search Help](#) [Give us feedback](#)

Other tools (some free, some not)

- Grammarly
<http://www.grammarly.com>
- Turnitin
<http://turnitin.com/static/index.html>
- <http://www.checkforplagiarism.net>
- <http://www.plagiarismdetect.com/>

©Sideview



Text / copy editors may also play a role

‘Handling plagiarism at the manuscript editor’s desk’

Mary Ellen Kerans & Marije de Jager

European Science Editing

August 2010

Vol **36**:62-5

©Sideview



Danger signs

- Uneven style or quality of writing
- Mixture of UK and US spelling
- Inconsistent terminology / abbreviations
- Repetitiveness or excessive detail
- Lack of cohesion between sentences or paragraphs

©Sideview



What does COPE suggest?

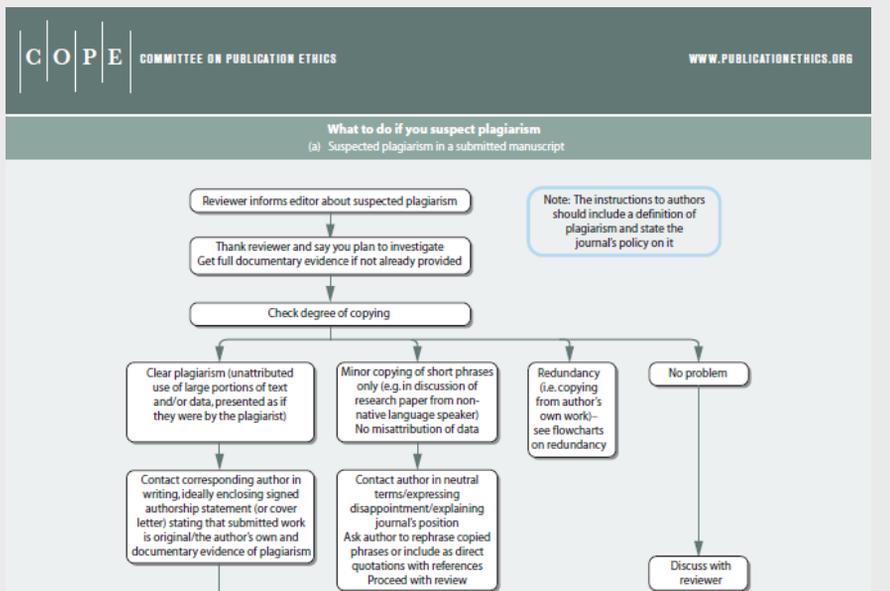


Image screening

- Pioneered by *J Cell Biology*
- Used in some life sciences journals
- Important for research where the image = the findings
 - genetics / cell biology / radiography
- Manual check using PhotoShop
- Requires editor time / expertise

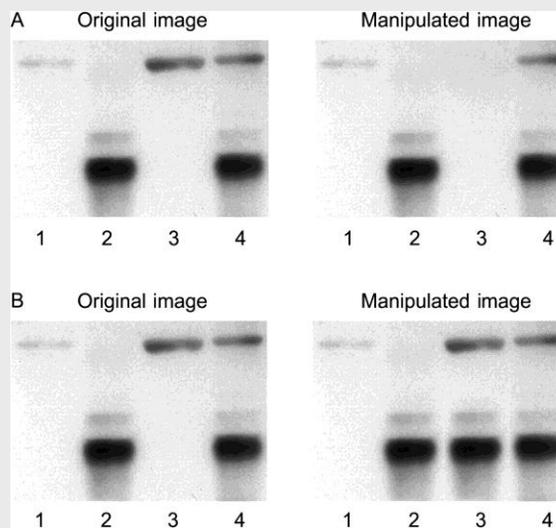
Found 1% unacceptable manipulation

Rossner & Yamada, *JCB* 2004;166:11-15



JCB

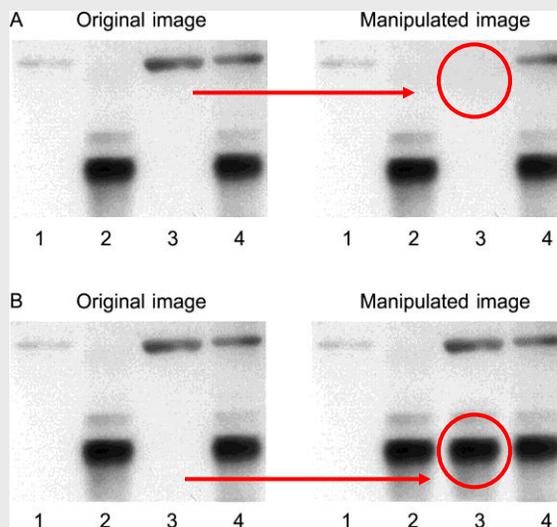
Figure 1. Gross manipulation of blots



Rossner M., Yamada K. M. *J. Cell Biol.* 2004;166:11-15



Figure 1. Gross manipulation of blots



Rossner M., Yamada K. M. J. Cell Biol. 2004;166:11-15

© 2004 Rossner et.al.



Chemical structure checks

- Examined structure-factor files
- Identified >70 bogus organic structures
- Authors had taken a genuine structure and switched metals (eg Fe / Cu) or chemical groups (CH₂ / NH / OH)
- Editors note: *“it is a concern and a disappointment that these [chemically implausible or impossible structures] passed into the literature”*
- >70 articles retracted

Acta Crystallographica 2010;E66:e1-2



Journals should liaise with research institutions

- Journals are not equipped to investigate serious research misconduct
- Important that researchers get a fair hearing
- Journals should request that authors' institution investigates ...

©Sideview



Recent example of good cooperation

- *Nature* 19 Sept 2012: 489: 346-7
- Retraction record rocks community
- Yoshitaka Fujii
- Investigated / Dismissed by Toho University
- 23 journal editors wrote to 6 universities
- *“Five of those institutions have responded to say that they could not find evidence to corroborate the veracity of 88 papers. The sixth institution, the University of Tsukuba, has so far found only five papers to be valid. It is still investigating another 92 publications.”*

©Sideview



Cooperation between research institutions and journals on research integrity cases: guidance from the Committee on Publication Ethics (COPE)

Elizabeth Wager & Sabine Kleinert on behalf of COPE Council
5th March 2012

Cite this as: Wager E, Kleinert S, on behalf of COPE Council. Cooperation between research institutions and journals on research integrity cases: guidance from the Committee on Publication Ethics (COPE). 5th March 2012. www.publicationethics.org

Summary

Institutions and journals both have important duties relating to research and publication misconduct. Institutions are responsible for the conduct of their researchers and for encouraging a healthy research environment. Journals are responsible for the conduct of their editors, for safeguarding the research record, and for ensuring the reliability of everything they publish. It is therefore important for institutions and journals to communicate and collaborate effectively on cases relating to research integrity. To achieve this, we make the following recommendations.

Correcting the record

- Corrections
- Retractions
- Expressions of Concern



COPE retraction guidelines

- Wager, Barbour, Yentis & Kleinert
- Published Sept 2009
- Available at:
www.publicationethics.org
- Co-published in several journals



RETRACTION GUIDELINES

Summary

Journal editors should consider retracting a publication if:

- they have clear evidence that the findings are unreliable, either as a result of misconduct (e.g. data fabrication) or honest error (e.g. miscalculation or experimental error)
- the findings have previously been published elsewhere without proper crossreferencing, permission or justification (i.e. cases of redundant publication)
- it constitutes plagiarism
- it reports unethical research

Journal editors should consider issuing an expression of concern if:

- they receive inconclusive evidence of research or publication misconduct by the authors

Why did we need guidelines on retraction?

- Some editors seem reluctant to retract
- Some retraction statements are unclear (?misconduct / honest error)
- Some retracted articles are not properly labelled
- Some editors retract inappropriately (eg for authorship disputes)



What do the guidelines say?

- The main purpose of retractions is to correct the literature and ensure its integrity rather than to punish authors who misbehave



Editors should consider a **Retraction:**

- If they have clear evidence that findings are unreliable due to misconduct or honest error
- In cases of:
 - plagiarism
 - redundant publication
 - unethical research



Use an **Expression of Concern**

In cases of:

- inconclusive evidence of misconduct
- institution will not investigate
- investigation is not fair, impartial or conclusive
- on-going investigation



Use a **Correction** if:

- a small portion of an otherwise reliable publication is misleading
- the author / contributor list is incorrect



Retractions should be:

- Linked to the retracted article
- Clearly identified as a retraction
- Published promptly
- Freely available to all readers





What can editors and publishers do?

- Detect research and publication misconduct
- Prevent publication misconduct
- Educate authors
- Promote good practice
 - be aware of how journal policies may influence behaviour
- Inform authorities, employers
- Correct the literature



What editors CANNOT do

- Prevent research misconduct
 - Investigate research misconduct
 - Settle disputes (e.g. authorship)
 - Investigate most types of publication misconduct
-
- although they may request investigations



Although perhaps MORE of them should be concerned....

- In a survey of 231 editors considerable numbers stated that these problems never occurred at their journals
 - Falsification / fabrication 35%
 - Reviewer misconduct 32%
 - Gift authorship 30%
 - Plagiarism 19%

Wager et al. *J Med Ethics* 2009; **35**:348-53

©Sideview



*The things that will destroy us are:
politics without principle
pleasure without conscience
wealth without work
knowledge without character
business without morality
science without humanity
and worship without sacrifice*

Mahatma Gandhi

© Sideview

