

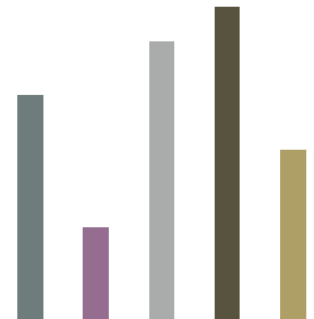


COPE and Publication Ethics

#intropubethics

Chris Graf, Co-Vice Chair, COPE
cgraf@wiley.com

Disclosure: CG works for Wiley and benefits from the company's commercial success. CG receives no form of compensation from COPE for his voluntary role with COPE.



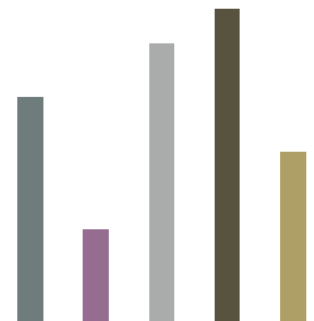


Much of the scientific literature, perhaps half, may simply be untrue

Richard Horton. Offline: What is medicine's 5 sigma? Lancet.
doi:10.1016/S0140-6736(15)60696-1

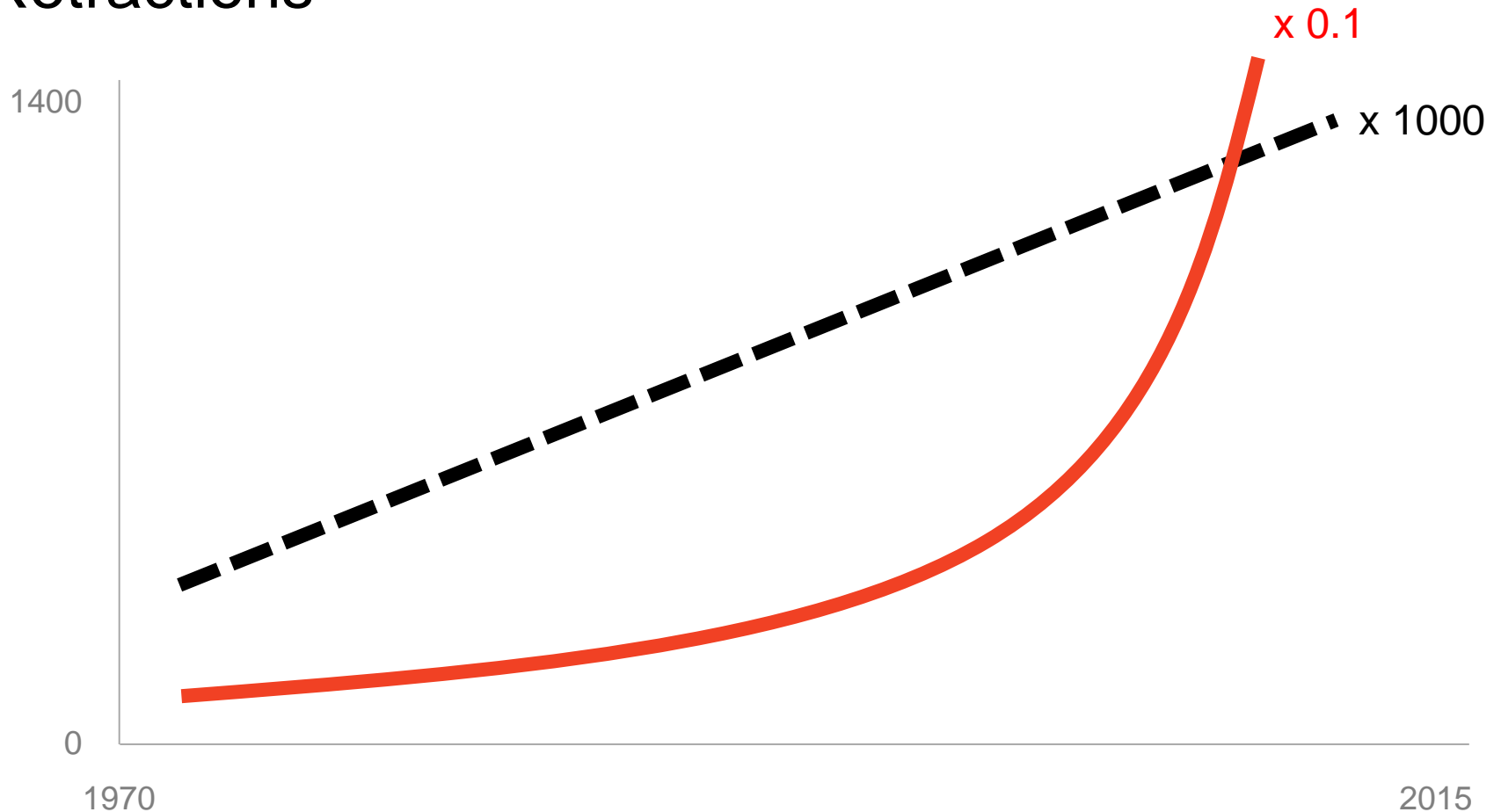


Symposium on Reproducibility and reliability of biomedical research at the Academy of Medical Sciences, April 2015



Papers published - - -

Retractions —



Steen RG, Casadevall A, Fang FC (2013) Why Has the Number of Scientific Retractions Increased? PLoS ONE 8(7): e68397. doi:10.1371/journal.pone.0068397.

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0068397>

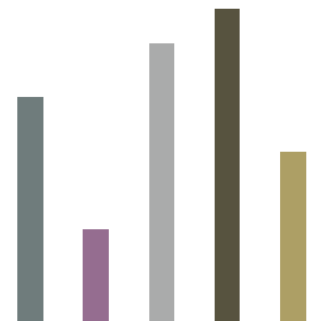
About COPE

COPE began in 1997

- Informal forum
- A small group of editors
- Discuss ethical issues relating to biomedical research and publication

COPE in 2016

- 10,000+ members in 103 countries (Algeria to Zimbabwe)
- International and fully inclusive



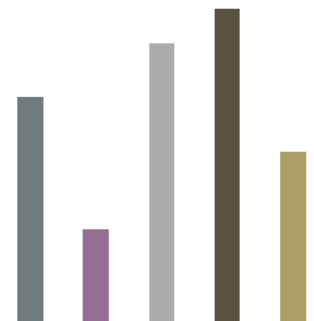
About COPE

General members

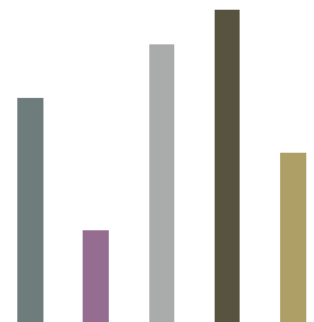
- Journal editors, publishers, associate members

Constitutional members

- Council members elected by general members to 3-year terms
- Trustee Board: officers/committee chairs, elected by Council members

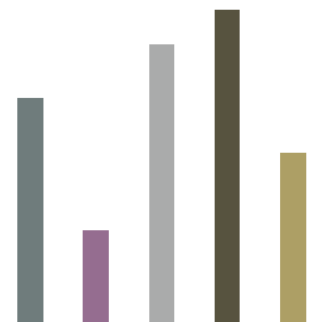


COPE provides

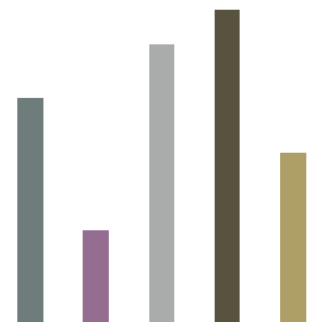


COPE resources and services

- A neutral place (Forum) to discuss
- A website of freely available resources
- Database of cases
- Flowcharts
- Guidance/discussion documents
- Sample letters
- Codes of Conduct
- Best Practice guidelines



What are the big issues?



Prevalence of problems

= Consistent major topics

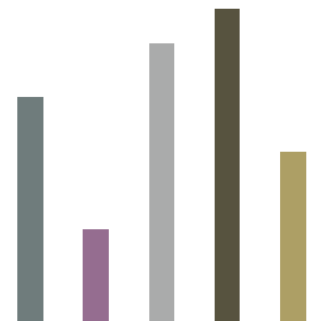
Authorship and plagiarism

↓ High but decreasing

Questionable/unethical research and
redundant/duplicate publication

↑ New and increasing

Conflict of interest and peer review

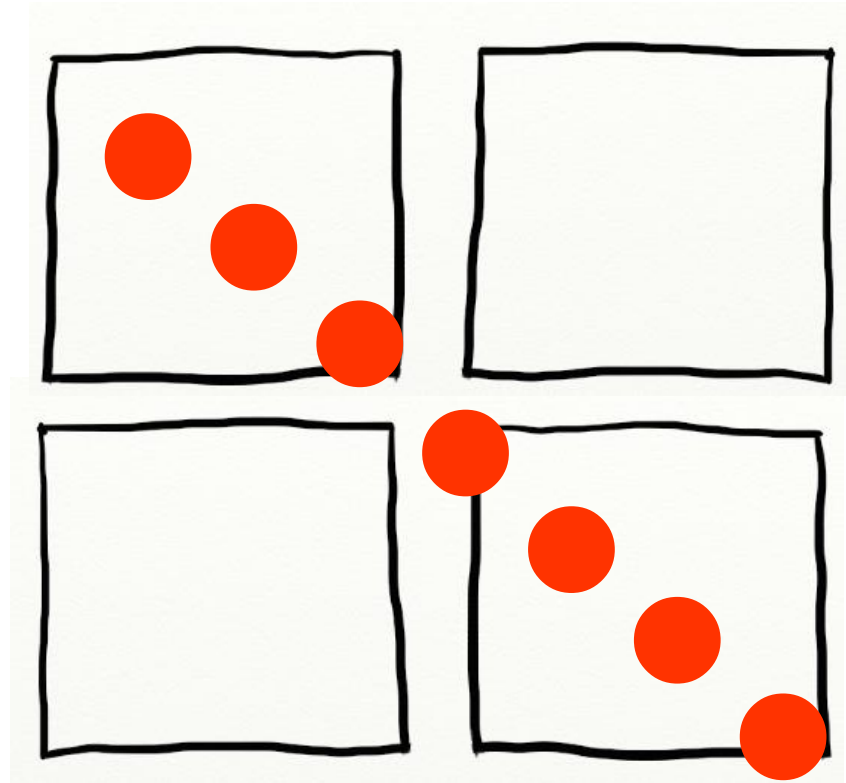


Continuum of issues

Unintentional



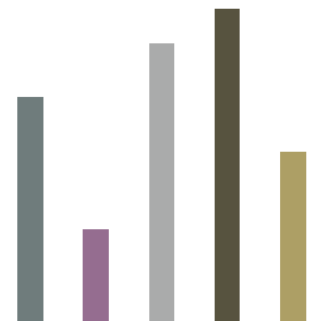
Intentional



Error



Fraud



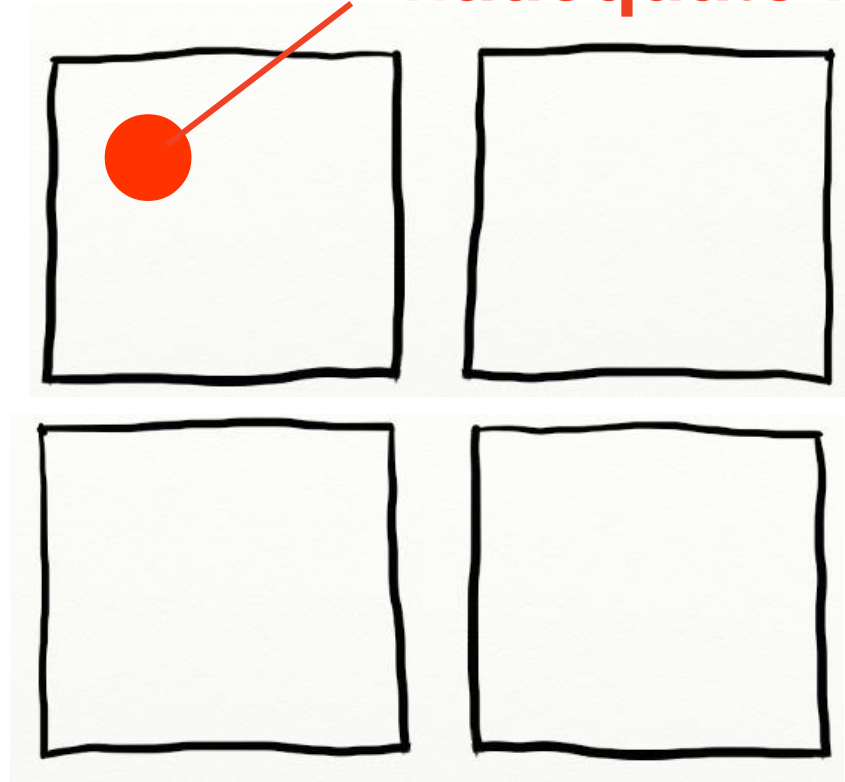
Continuum of issues

Inadequate records

Unintentional



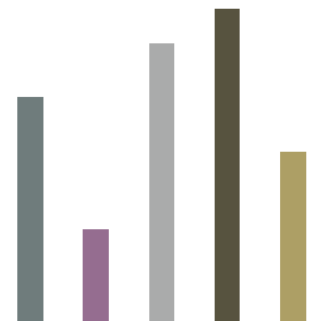
Intentional



Error



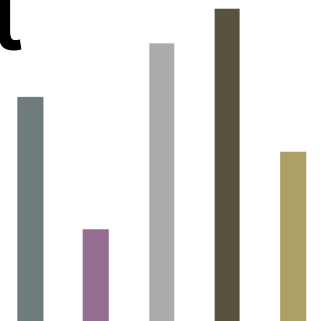
Fraud



Inadequate record-keeping



We have been using the
same database... our new
results were implausible...
I found we had failed to load
8 files into the dataset

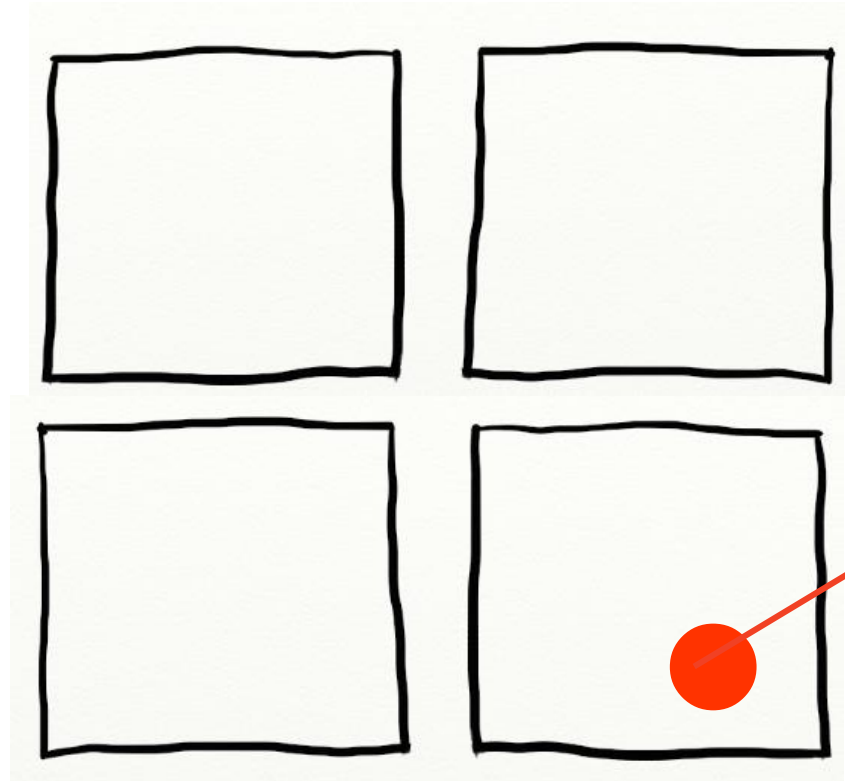


Continuum of issues

Unintentional



Intentional

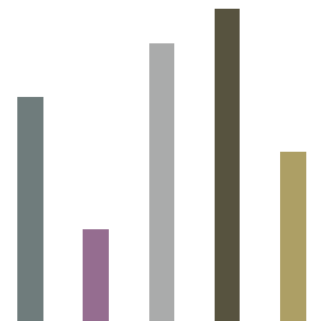


**Data
fabrication**

Error



Fraud



Fraud

STEM CELLS

GASTROINTESTINAL

EPITHEL

DONE

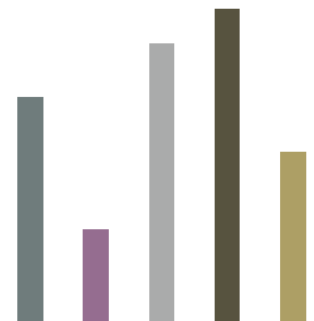
Fabrication

Hwang Woo-suk

How are errors detected?

Misconduct/errors can be detected

- By editor
- By software
- By reviewers
- By post-publication review (readers)
- AND the authors themselves



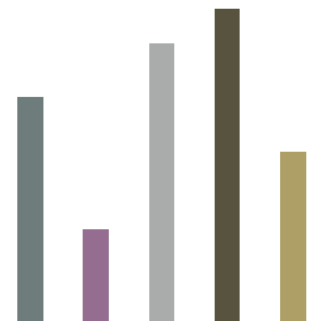
Peer review problems

Relatively recently discovered (2011)

Peer review scams and cartels (2014)

Fake email addresses and electronic submissions facilitated this activity

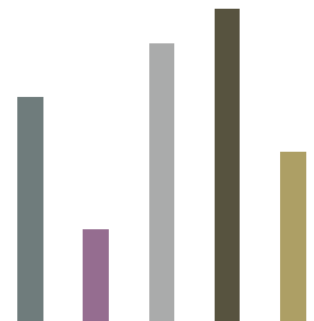
- Resulted in mass retractions by publishers in 2015



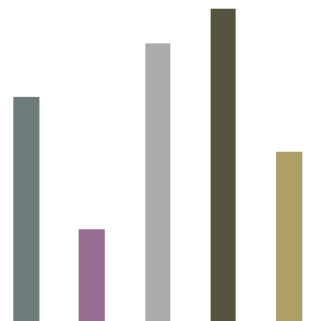


The manipulations may have been conducted by agencies offering language-editing and submission assistance

Elizabeth Moylan, Inappropriate manipulation of peer review
<http://blogs.biomedcentral.com/bmcblog/2015/03/26/manipulation-peer-review/>



What help can you get?



Resources

From our Code of Conduct and our Guidelines to useful sample letters and flowcharts, COPE offers a range of useful tools for journal editors and writers.



Code of Conduct

Through the Code of Conduct, COPE aims to define best practice in the ethics of scholarly publishing and to assist editors, editorial board members, owners of journals and publishers to achieve this.

[View Code](#)

Flowcharts

Flowcharts are designed to help editors follow COPE's Code of Conduct and implement its advice when faced with cases of suspected misconduct.

[View Flowcharts](#)

Guidelines

Access COPE's official guidance, including the Retraction Guidelines.

[View Guidelines](#)

eLearning

COPE's eLearning course is designed to give editors a deeper understanding about publication ethics and practical guidance about how to detect, prevent and handle misconduct.

[View eLearning](#)

International standards for editors and authors

Position statements setting out international standards for responsible research publication for



Discussion Documents

Discussion documents aim to stimulate discussion and debate within the academic publishing

COPE Ethical Guidelines for Peer Reviewers

*Irene Hames on behalf of COPE Council
March 2013, v.1*

Peer review in all its forms plays an important role in ensuring the integrity of the scholarly record. The process depends to a large extent on trust, and requires that everyone involved behaves responsibly and ethically. Peer reviewers play a central and critical part in the peer-review process, but too often come to the role without any guidance and may be unaware of their ethical obligations. The COPE Ethical Guidelines for Peer Reviewers set out the basic principles and standards to which all peer reviewers should adhere during the peer-review process. It is hoped they will provide helpful guidance to researchers, be a reference for journals and editors in guiding their reviewers, and act as an educational resource for institutions in training their students and researchers.

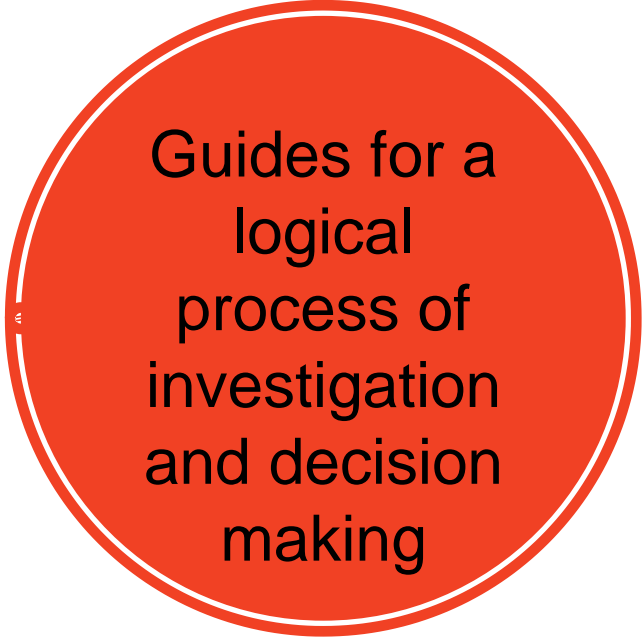
Basic principles to which peer reviewers should adhere

Peer reviewers should:

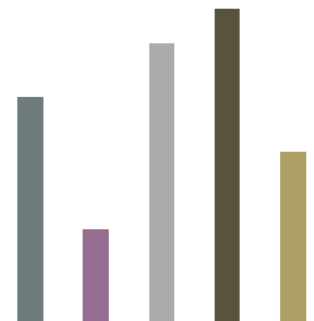
- only agree to review manuscripts for which they have the subject expertise required to carry out a proper assessment and which they can assess in a timely manner
- respect the confidentiality of peer review and not reveal any details of a manuscript or its review, during or after the peer-review process, beyond those that are released by the journal

COPE's 18 Flowcharts (in 6 languages)

- How to respond to whistle blowers
- What to do if you suspect a reviewer has appropriated an author's idea or data
- What to do if you suspect plagiarism
- What to do if you suspect redundant (duplicate) publication
- Changes in Authorship
- Conflict of Interest
- What to do if you suspect an ethical problem
- What to do if you suspect fabricated data



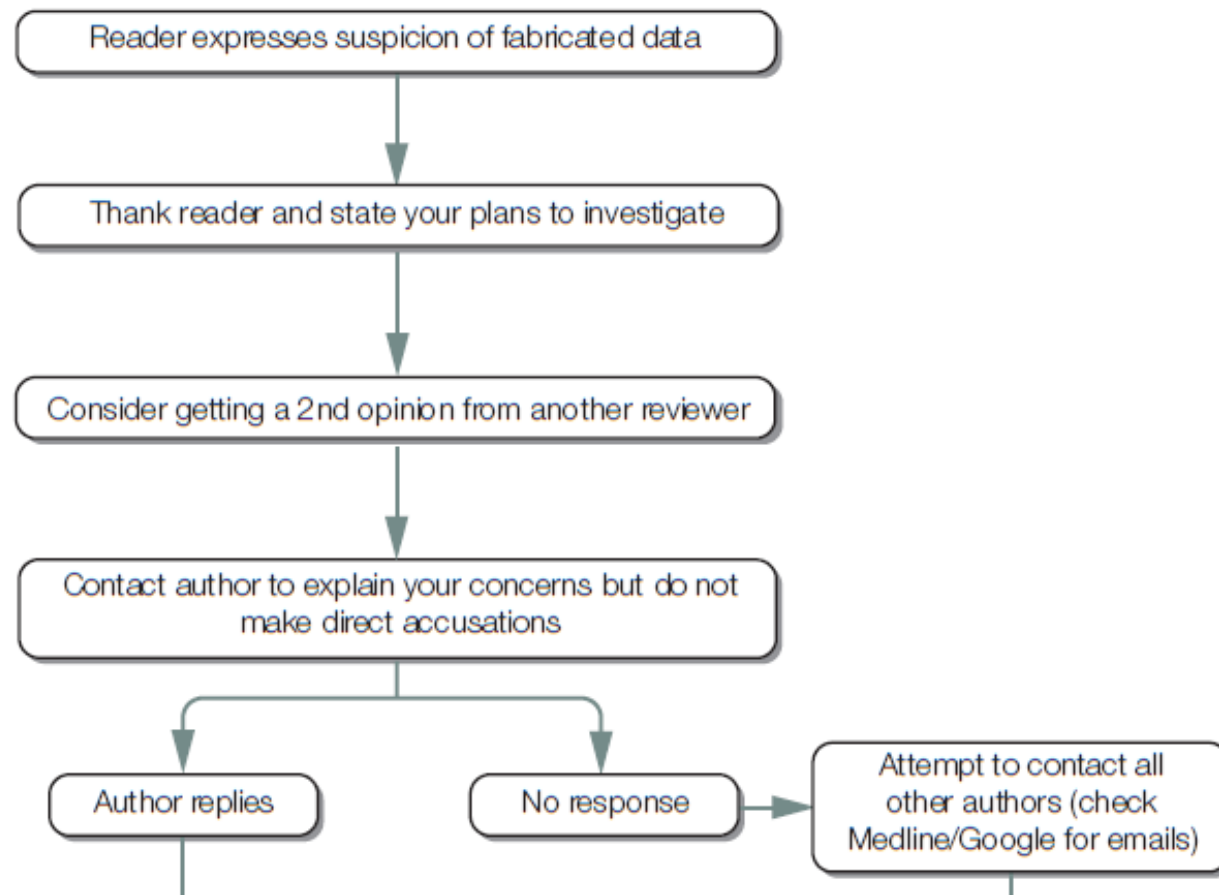
Guides for a
logical
process of
investigation
and decision
making

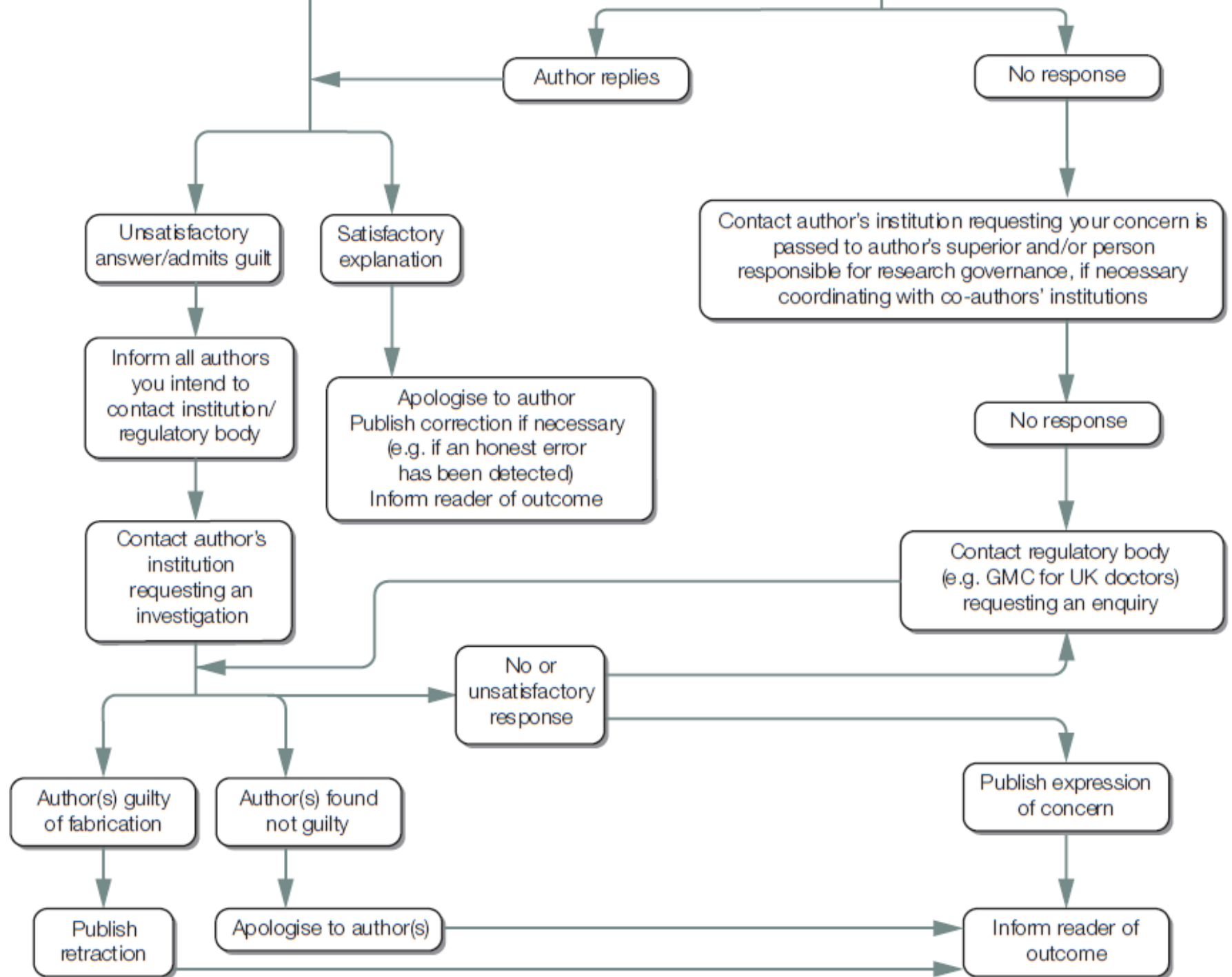


COPE's 18 Flowcharts (in 6 languages)

What to do if you suspect fabricated data

(b) Suspected fabricated data in a published manuscript

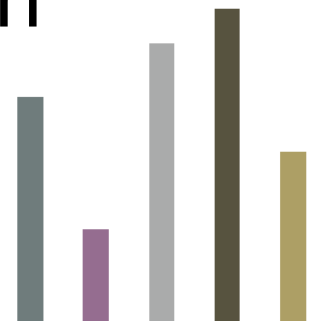




COPE Retraction Guidelines

Purpose of retractions

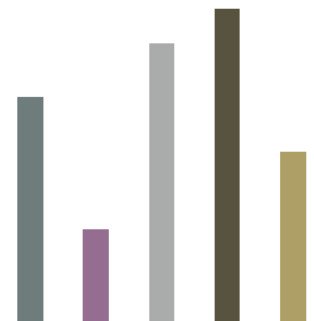
- They are not punishment for misconduct
- Must not be defamatory or libelous
- Clearly and rationally correct the literature
- Insure integrity of scientific record
- Alert readers to redundant publication



COPE Retraction Guidelines

Retractions should

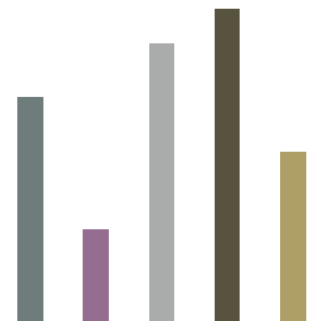
- Identify article and link to it
 - 32% of retracted articles are not noted as retracted in any way
- Be clearly identified as retraction
- Original article should remain available but marked in some way
- Be published promptly



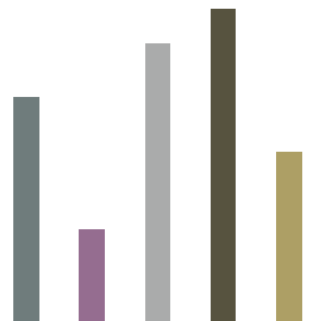
COPE Retraction Guidelines

Retractions should

- Be freely available (no paywall)
- State the reasons for retraction
- Avoid defamatory statements
- State who is retracting (author, editor)



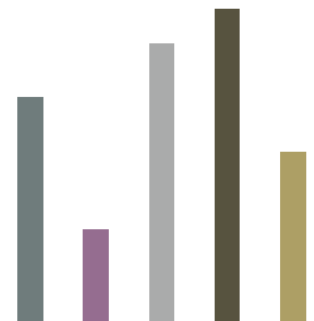
Yes, there are challenges



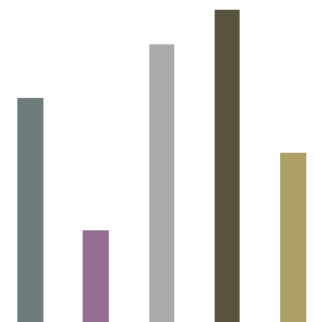


Scientists feel pressure to compromise on research integrity

Ottoline Leyser, Deputy Chair Nuffield Council on Bioethics, et al. The Culture of Scientific Research in the UK. <http://nuffieldbioethics.org/project/research-culture/>



Yes, there is progress



Issues, from the Reproducibility Symposium



Data dredging



Omitting null
results



Underpowered
study



Errors



Underspecified
methods



Weak
experimental
design

Strategies, from the Reproducibility Symposium

Open data

Openly sharing results and the underlying data with other scientists.



Pre-registration

Publicly registering the protocol before a study is conducted.



Collaboration

Working with other research groups, both formally and informally.



Automation

Finding technological ways of standardising practices, thereby reducing the opportunity for human error.



Open methods

Publicly publishing the detail of a study protocol.



Post-publication review

Continuing discussion of a study in a public forum after it has been published (most are reviewed before publication).



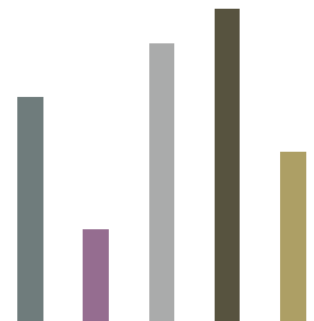
Reporting guidelines

Guidelines and checklists that help researchers meet certain criteria when publishing studies.



“Our replication standards
contribute directly to a more
rigorous, rational, theory-driven,
and cumulative approach

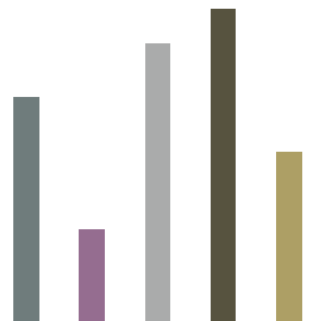
William Jacoby, “Replication” at *American Journal of Political Science*
http://exchanges.wiley.com/authors/videos-and-webinars_654.html



We need multiple strategies

Accept there is a problem and that addressing it requires time, money, people, different thinking

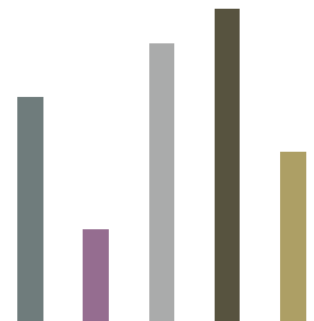
- Improve detection
- Education and support
- Tackle the root causes





We need a culture of
responsibility for the integrity of
the literature... it's not just the
job of editors

Ginny Barbour, COPE Chair, Tokyo, Japan, 2015



Thanks

Chris Graf, cgraf@wiley.com

