

How do scientific journals deal with scientific fraud? The role of COPE

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Why we should be concerned

- •Influences research and clinical practice (e.g. vaccine scare following Wakefield et al.1998 Lancet paper implying link between MMR vaccine and autism; pain treatment of millions of patients based on fraudulent work by anaesthesiologist Scott Reuben)
- Patients put at risk by flawed research
 - Steen (2011, J Med. Ethics) 9,189 patients treated in 180 retracted primary studies (110 due to error, 70 due to fraud) published 2000-10
 - 70,501 patients treated in 851 secondary studies citing a retracted paper
- ·Retracted work goes on being cited
- ·Waste of resources, human and financial
- ·Damages public trust in research/science









Jan Hendrik Schön

Germany

Physics

Falsified and fabricated data in numerous publications

16 affected articles in *Science* and *Nature* 2000/01 alone

Investigation report Sept 2002

Doctorate revoked, Schön appealed

Woo Suk Hwang

South Korea

Stem cell cloning

Data fabrication and violation of bioethics laws

Involved 2 major Science papers 2004 and 2005

Investigation report Jan 2006

Charged with fraud and embezzlement

Jon Sudbø

Norway

Oral cancer

Data fabrication – 900 fictitious subjects - and manipulation

Published in *The Lancet* Oct 2005

Commission report June 2006

Licence to practice & doctorate revoked

Concerns

Is the incidence of research and publication misconduct increasing?

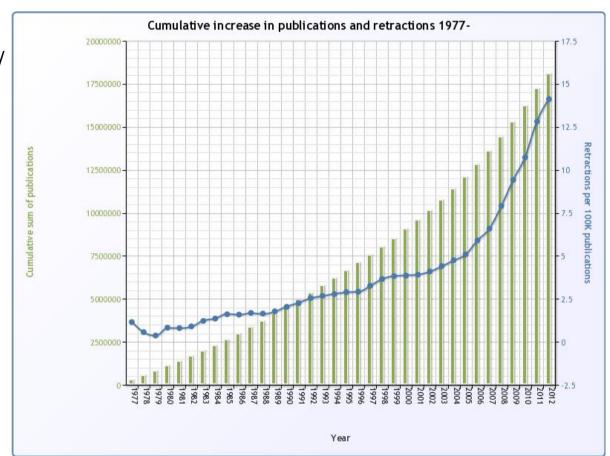
Are we seeing just the tip of the iceberg?

Does the cumulative effect of 'minor' misbehaviours and ethical transgressions present a greater threat than highprofile serious misconduct cases?



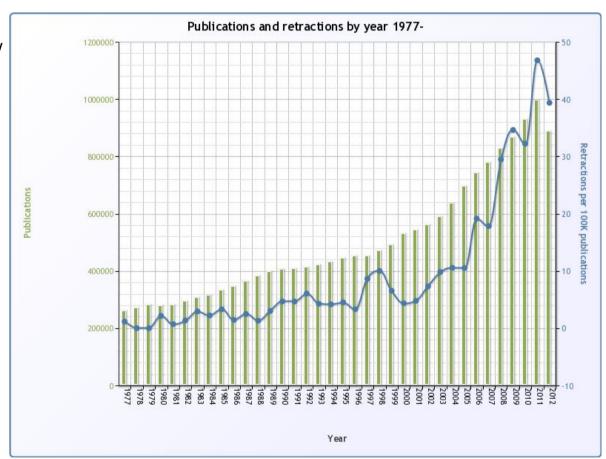
Publications & retractions 1977-2012

http://pmretract.heroku.com/



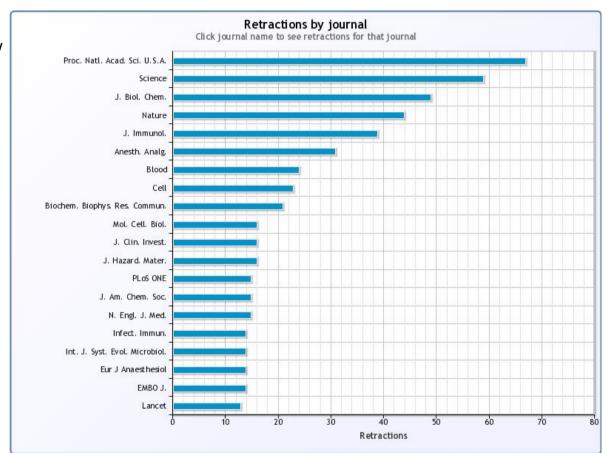
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Reasons for more misconduct and unethical behaviour?

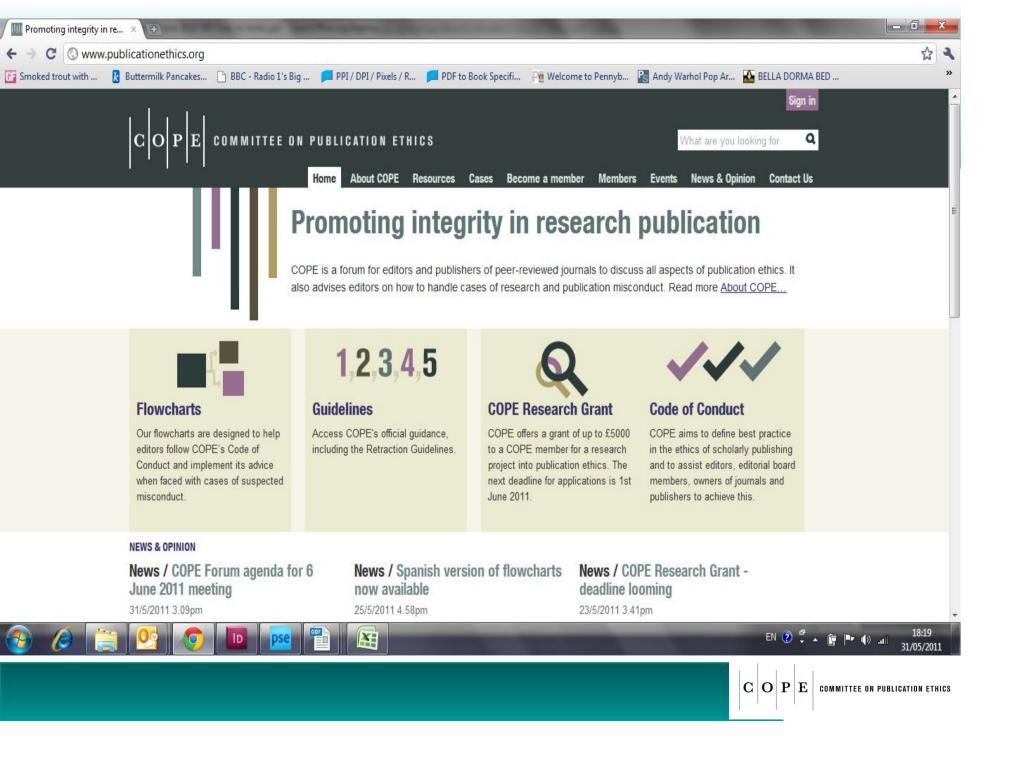
- Lack of knowledge about research and publication ethics
- · Larger, multi-disciplinary and more global collaborations
- Increasing pressure on researchers to publish
- Financial inducements compromising integrity



"Promoting integrity in research publication"

Today ...

- •COPE currently has more than 7000 members and is international in its reach and membership
- ·All academic disciplines are covered
- ·18 Council members from 7 countries and a range of disciplines (biomedicine, feminist media studies, geophysics, life sciences, literary studies, maths, psychiatric nursing)



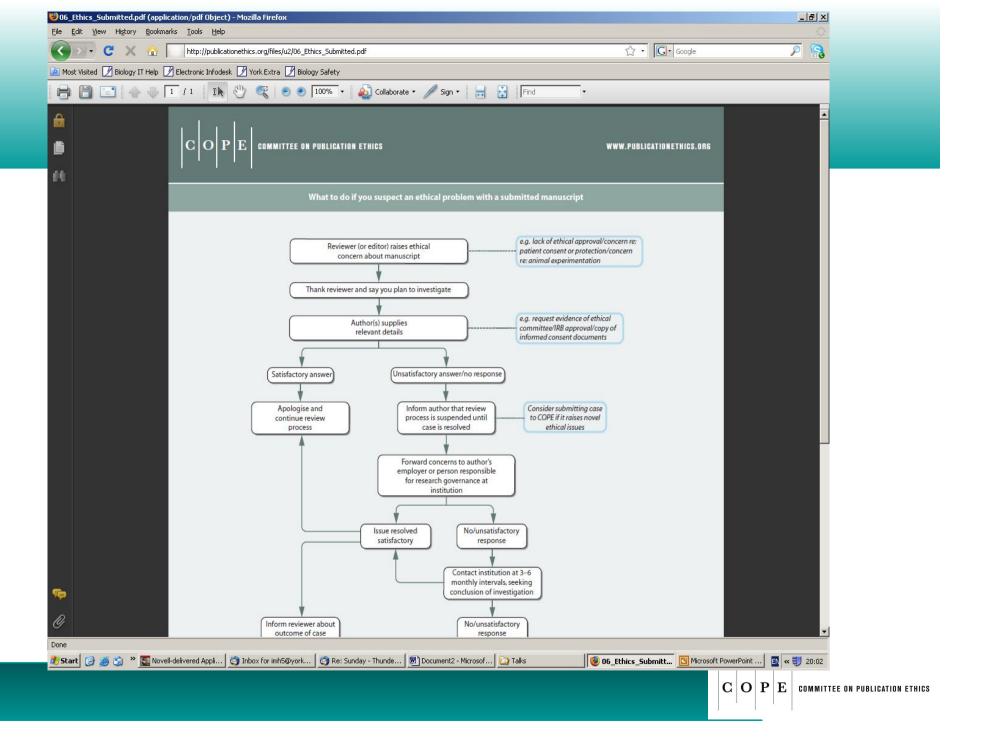
COPE in action: guidance documents

COPE has produced **guidelines**:

- Code of Conduct and Best Practice Guide for Journal Editors
- Code of Conduct for Journal Publishers
- Guidelines for Retracting Articles
- Guidelines for the Board of Directors of Learned Society Journals
- Guidance for Editors on Research, Audit and Service Evaluations
- Sample letters for handling common problems
- A series of flowcharts (also available translated into Italian, Spanish, Chinese, Croatian, Japanese, Persian (Farsi) and Turkish – more planned)

All available at http://www.publicationethics.org





The flowcharts cover

- ·Redundant (duplicate) publication
- ·Plagiarism
- ·Fabricated data
- ·Changes in authorship
- ·Ghost, guest or gift authorship
- ·Conflicts of interest
- ·General suspected ethical concerns
- ·Reviewer misconduct
- ·How COPE deals with complaints

COPE in action: advice and guidance to members

COPE offers advice and guidance to its members, primarily through its quarterly **Forum meetings**:

held in London but members worldwide can take part via telephone-conference

allow members to benefit from the views and experiences of other members

case summaries on the website (database of > 400 cases, searchable by year and keywords, some now recorded)



COPE: other services

•Ethics Audit (members only)

- Annual seminars (European, North American, and new for 2011 - Asia-Pacific) – free for members
- Research Grants (members only)
- eLearning course (members only) launching
 September 2011, with 4 of the planned 11 modules:
 An Introduction to Publication Ethics, Plagiarism,
 Fabrication, and Falsification
- · Quarterly Newsletter 'Ethical Editing'



COPE contact details

Thank you!

Comments/queries for COPE:

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