

# **Scientific Integrity**

## **-Role of Journals**

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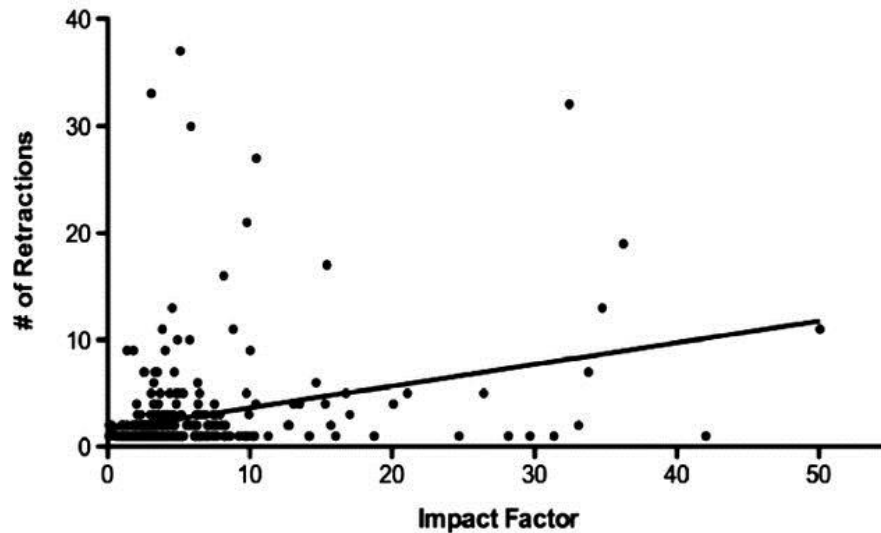
world science forum, Rio 2013

# Role of Journals

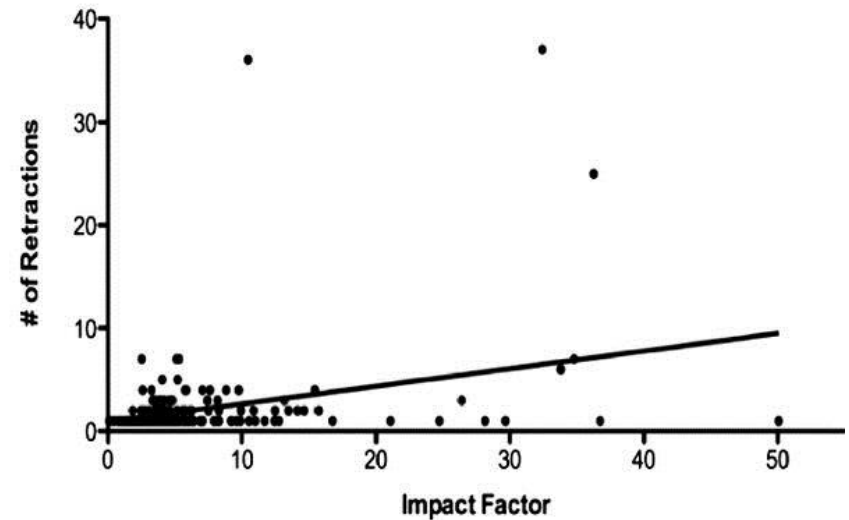
- Protectors of Integrity of Science
  - Impact Factor, misuse, encouraging citations of their own journals, specially in reviews.
  - Detection of plagiarism, fraud
  - Conflict of interest
  - Ethical values

# Relation of impact factor to retractions

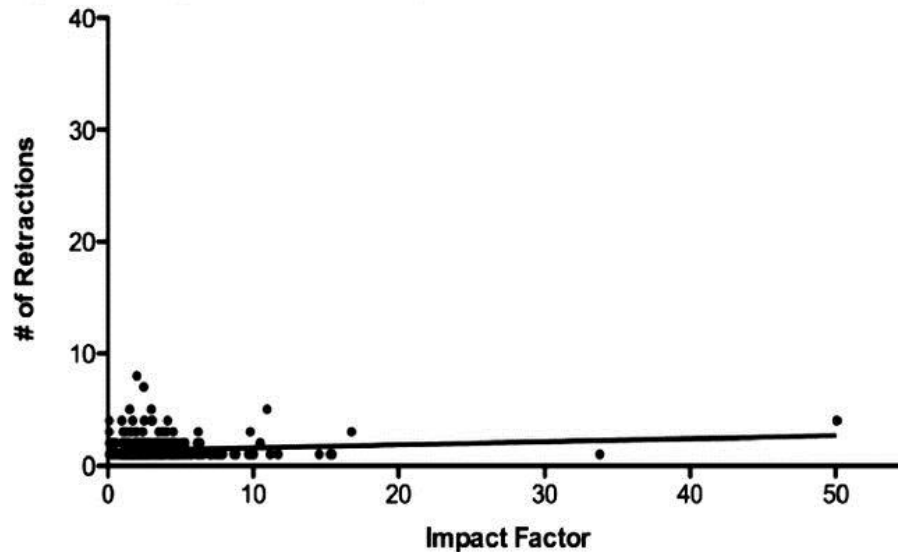
**A** Fraud or Suspected Fraud



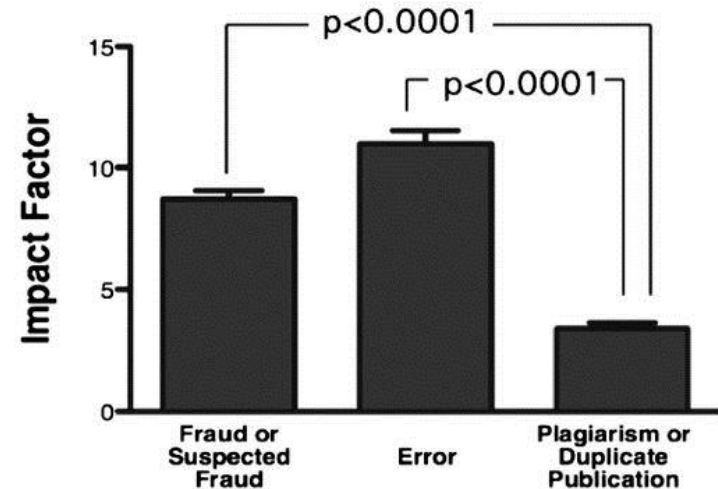
**B** Error



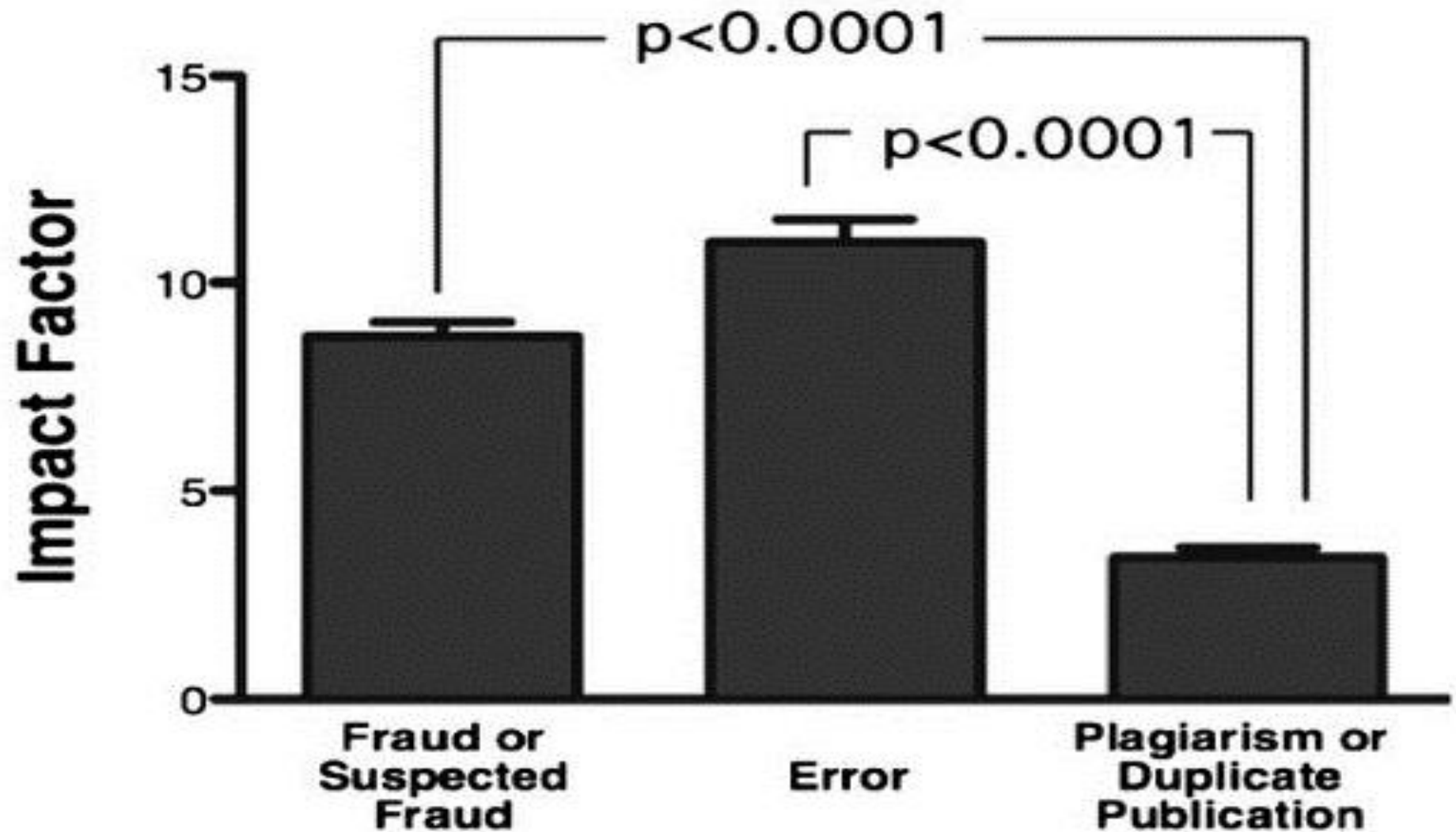
**C** Plagiarism or Duplicate Publication



**D** Mean IF by Cause



## Mean IF by Cause



Fang F C et al. PNAS 2012;109:17028-17033

# **Impact Factor- Metrics- Data bases**

- **IF is meant to judge quality of Journals and NOT the quality of individual research.**
- **Misuse of IF by journals is a worry**
- **Bibliographic metrics are being used to judge research projects, promotions etc.**
- .

# Fallout from hailed cloning paper

Duplicated figures raise debate over expedited publication.

David Cyranoski, Nature 28 May 2013

‘Paper published online in *Cell* on 15 May  
(<http://doi.org/mkn>),

Creation of human embryonic stem-cell lines from  
cloned human skin cells.

The lines are expected to answer cell  
reprogramming.

Potential therapeutic applications.’

‘*Cell* accepted it **just three days after receiving it**  
and **published it online 12 days later** —

Contd.

➤ ‘Anonymous online commenter noted three pairs of duplicated images with conflicting labels in the paper’.

Excitement soon turned to confusion

➤ The leader of the study, acknowledged –use of duplicated images.

In two cases that was intentional

A pair of labels was mistakenly reversed

In the third case, an incorrect scatterplot was included in a table— one that had already been used in the paper.

➤ Is such rapid publication good for science?

➤ Why did the referees allow such images?

“this type of image manipulation is not something we expect referees to pick up. It’s not really their role *Nature* journals do “spot-checking” -  
Veronique Kiermer, executive editor at Nature Publishing Group,

# Emerging trends

- **Temptation to publish 'exciting' results in a rapid manner.**
- **Predatory Open Access Journals**
- **Dual Use Technologies**
- **Data mining from open access data bases for commercial interest without giving attribution.**





**Thank you**