

Retractions Are On The Rise -- But Not Enough

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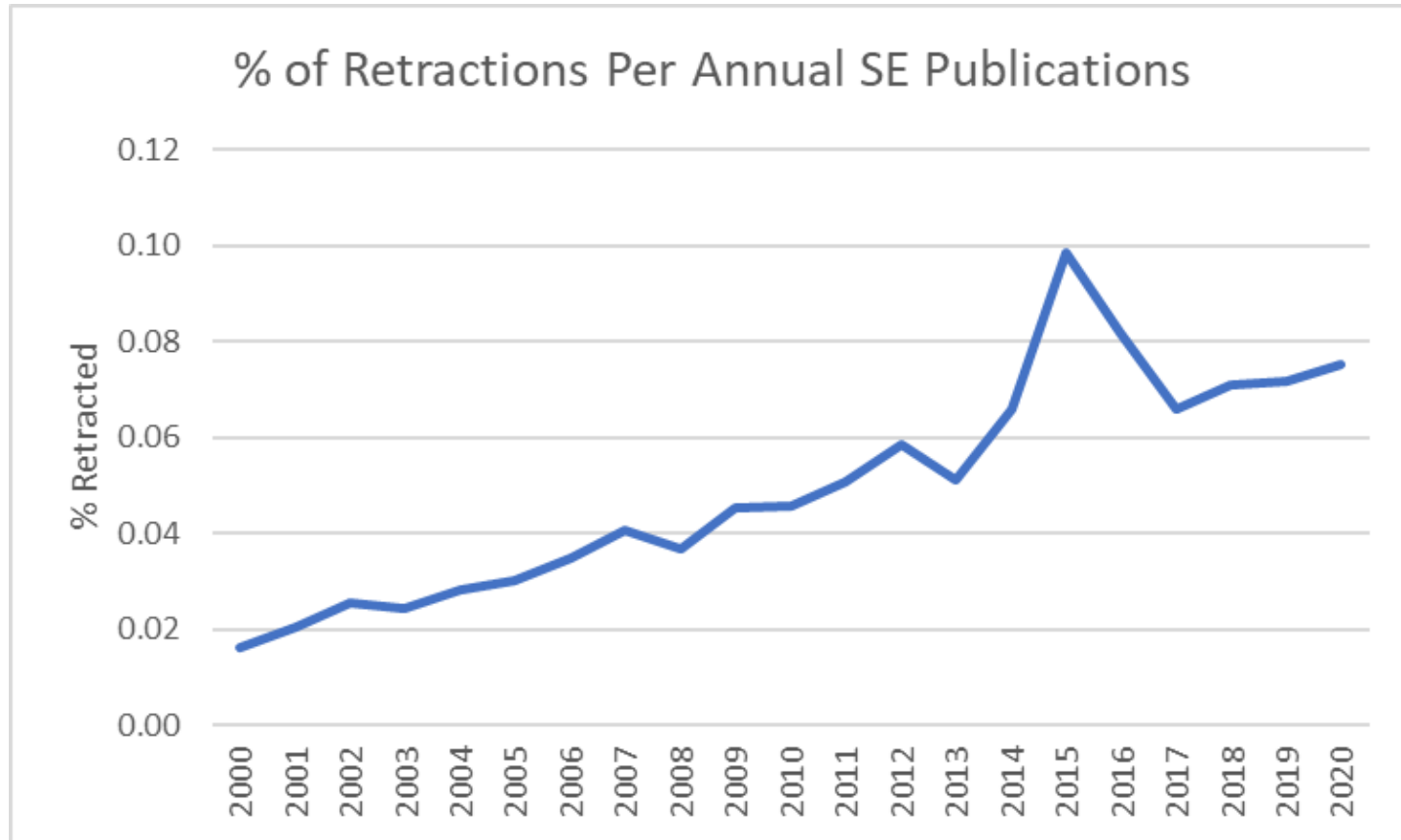
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On The Rise



Retractions of a given year's publications as a percentage of papers published in science and engineering. Retraction data from Retraction Watch Database, overall publication figures via U.S. NSF.

Common Reasons for Retractions

- Duplication (“self-plagiarism”)
- Plagiarism
- Image Manipulation
- Faked Data
- Fake Peer Reviews
- Publisher Error
- Authorship Issues
- Legal Reasons
- Paper Mills

Trends in Biomedicine

Science & technology | Scientific malpractice

There is a worrying amount of fraud in medical research

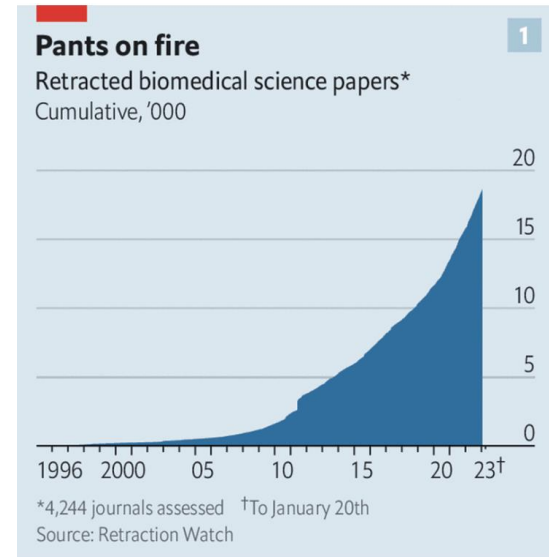
And a worrying unwillingness to do anything about it



Alberto Miranda

Feb 22nd 2023

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The Economist



Who Retracts Most?

The Retraction Watch Leaderboard

Who has the most retractions? Here's our unofficial list (see notes on methodology), which we'll update as more information comes to light:

1. [Yoshitaka Fujii](#) (total retractions: 183) See also: [Final report of investigating committee](#), [our reporting](#), [additional coverage](#)
2. [Joachim Boldt](#) (175) See also: [Editors-in-chief statement](#), [our coverage](#)
3. [Hironobu Ueshima](#) (123) See also: [our coverage](#)
4. [Yoshihiro Sato](#) (113) See also: [our coverage](#)
5. [Ali Nazari](#) (96) See also: [our coverage](#)
6. [Jun Iwamoto](#) (88) See also: [our coverage](#)
7. [Diederik Stapel](#) (58) See also: [our coverage](#)
8. [Yuhji Saitoh](#) (56) See also: [our coverage](#)
9. [Adrian Maxim](#) (48) See also: [our coverage](#)
10. [Chen-Yuan \(Peter\) Chen](#) (43) See also: [SAGE](#), [our coverage](#)

Why Does It Take So Long?

“I do wish that journal editors would not take six years to perform an investigation and to retract.”

Nearly two years after a university asked for retractions, two journals have done nothing

The waiting game: A university requests a retraction. Then it waits three years.

‘Slow, Opaque and Inconsistent’

“After 1 year, journals had communicated decisions for 16/36 (44%) publications. None of the decision letters specifically addressed each of the concerns raised. Decisions were no action, correction and retraction for 9, 3 and 4 publications, respectively: the amounts of duplicate data reporting and data/reporting discrepancies were similar irrespective of journal decision...Journal responses to concerns about duplicate publication, authorship transgressions, and data/reporting discrepancies were slow, opaque and inconsistent.”

> [Sci Eng Ethics](#) 2019 Oct 31[Online ahead of print]

Assessing and Raising Concerns About Duplicate Publication, Authorship Transgressions and Data Errors in a Body of Preclinical Research

[Andrew Grey](#)¹, [Alison Avenell](#)², [Greg Gamble](#)³, [Mark Bolland](#)³

Affiliations + expand

PMID: 31673984 DOI: [10.1007/s11948-019-00152-w](https://doi.org/10.1007/s11948-019-00152-w)

House of Commons Committee Agrees



House of Commons
Science, Innovation and
Technology Committee

Reproducibility and Research Integrity

Sixth Report of Session 2022–23

123. Publishers have a vital role in the maintenance of the scholarly record. *Publishers should support academics who report issues with published research in their journals and should commit to timely publication of research error corrections and retractions where necessary—in our view this process should not take longer than two months. Publishers should also commit to timely deployment of technology to support the quality of the published record.*

But It's Not Enough

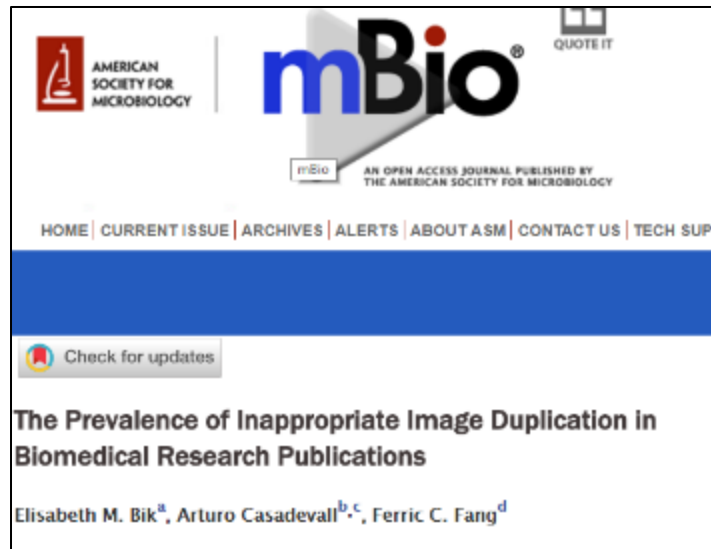


A tragedy of errors

Mistakes in peer-reviewed papers are easy to find but hard to fix, report **David B. Allison** and colleagues.

Allison et al Nature 2016 <http://www.nature.com/news/reproducibility-a-tragedy-of-errors-1.19264>


Two Percent?



“Overall, 3.8% of published papers contained problematic figures, with at least half exhibiting features suggestive of deliberate manipulation. The prevalence of papers with problematic images has risen markedly during the past decade.”

What Happens to Retracted Papers' Citations?

Proceedings of the Association for Information Science and Technology

Computer Science |  Free Access |

An investigation of retracted articles in the biomedical literature

John M. Budd , Zach Coble , Alison Abritis 

First published: 27 December 2016 | <https://doi.org/10.1002/pr2.2016.14505301055> | Citations: 4

Total Articles: 265

Tacit Cites: 3,946 (80.25%)

Substantive Cites: 767 (15.60%)

Retraction Noted: 204 (4.15%)

“One other phenomenon should be mentioned; there were 64 instances of self-citation. The vast majority of the self-citations did not make mention of the fact that the cited article had been retracted.”

Do Journals Get the Word Out?

ISSN 2162-3309

10.7710/2162-3309.2199

RESEARCH

Retracted Publications in Mental Health Literature: Discovery across Bibliographic Platforms

Caitlin Bakker

Biomedical/Research Services Liaison, University of Minnesota

Amy Riegelman

Social Sciences Librarian, University of Minnesota

Journal of Librarianship and Scholarly Communication,
January 8, 2018

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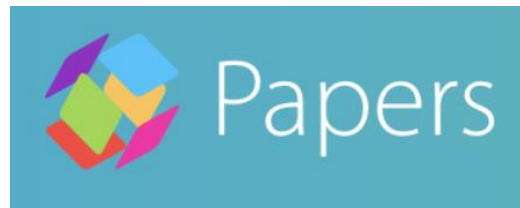
RESEARCH

Of the 812 records for retracted publications, 40.0% (n=325) did not indicate that the paper had been retracted.

Amy Riegelman

Social Sciences Librarian, University of Minnesota

Journal of Librarianship and Scholarly Communication,
January 8, 2018



Want Retraction Alerts?



Open Post-Publication Peer Review On The Rise

Tracking retractions as a

Retraction Watch

PubPeer strikes again: Leukemia paper retracted for image duplications

with 4 comments

In July, a PubPeer commenter called out a paper in *Biochimica et Biophysica Acta* for image duplication; by September, the paper was retracted for the exact reason detailed in the anonymous comment.

Here's the [notice](#) for "Effect of ST3GAL 4 and FUT 7 on sialyl Lewis X synthesis and multidrug resistance in human acute myeloid leukemia," a paper initially published in June:

“ This article has been retracted at the request of the authors. It contained several inappropriately processed and incorrect Figures. On behalf of all authors, the corresponding author has taken full responsibility and apologizes to the readers of BBA Molecular Basis of Disease for submitting and publishing the erroneous article and any inconvenience caused.

An anonymous PubPeer commenter [compiled the following criticism](#) (click [here](#) or on the picture below for a larger image):

Concern about Figures 3, 5, and 7:



The Role of The Sleuths

Meet the scientific sleuths: More than two dozen who've had an impact on the scientific literature

Over the years, we have written about a number of the sleuths who, on their own time and often at great risks to their careers or finances, have looked for issues in the scientific literature. Here's a sampling:

- **David Allison** and **Andrew Brown** tried getting journals to correct or retract two dozen papers with obvious errors. The results weren't pretty.



Elies Bik

Elisabeth "Eagle Eyes" Bik showed that one in 25 papers she examined had evidence of inappropriate image manipulation.

- **Mark J. Bolland**, **Alison Avenell**, **Greg D. Gamble**, and **Andrew Grey** demonstrated that the work of Yoshihiro Sato — who now holds a prominent place on our leaderboard — was deeply flawed. Grey even published a letter about how bad one of the retraction notices was. More on this case from Kai Kupferschmidt at Science.
- **Paul Brookes** created Science-Fraud.org. He had to shut it down after legal threats. But the scientists featured there have now retracted dozens of papers.
- **Jennifer Byrne** became a literature watchdog after she found a bunch of errors in DNA constructs reported by papers. The number of papers that have resulted from her inquiries keeps climbing.
- **John Carlisle** was instrumental in exposing the statistical anomalies in the work of Yoshitaka Fujii, who tops our leaderboard with 183 retractions. Another of Carlisle's projects looked at more than 5,000 clinical trials, and flagged a study in the New England Journal of Medicine that was retracted and replaced last week.



• **Michael Dougherty** has become the philosophy plagiarism police.



Michael Dougherty

- **Malte Elson** and **Patrick Markey** paid a price for being right about problems in a study of violent video games.
- **James Heathers** — who calls himself a “data thug” — and **Nick Brown** have been central to the Brian Wansink saga, and have created tools that others can use to detect problems.
- Three years ago, **Joshua Kalla** and **David Broockman** began to think something wasn't right with a paper in Science about how best to change people's minds about same-sex marriage. They were right, and the retraction captured international attention.
- **John Loadsman** has identified numerous cases of misconduct in the anesthesiology literature, including a case in which a researcher was found to have committed misconduct in more than 140 papers.
- **Michèle B. Nuijten**, along with **Chris Hartgerink**, created “statcheck,” which automatically spots statistical mistakes in psychology papers, making it significantly easier to find flaws.
- The grad student who raised concerns about the work of Cornell psychology researcher Robert Sternberg was **Brendan O'Connor**. Another “data thug” is born.
- **Mike Rossner** has made a name for himself as an image manipulation detective for more than a decade.
- **David Sanders** was sued for his efforts, and won — but did not emerge unscathed.
- **Artemisia Stricta** — a pseudonym — has uncovered hundreds of problematic papers by researchers including one on our leaderboard.
- **Deborah Weber-Wulff** is a key member of VroniPlag Wiki, a group of German-language scientists who have been scanning for — and publicly tracking — cases of plagiarism.

The Role of The Sleuths

‘I thought I had messed up my experiment’: How a grad student discovered an error that might affect hundreds of papers

Earlier this month, we reported on how Susanne Stoll, a graduate student in the Department of Experimental Psychology at the University College London, discovered an error that toppled a highly-cited 2014 article — and which might affect hundreds of other papers in the field of perception.



Signs of Change

To catch misconduct, journals are hiring research integrity czars

By IVAN ORANSKY *and* ADAM MARCUS / NOVEMBER 21, 2018



Signs of Change

A survey of biomedical journals to detect editorial bias and nepotistic behavior

Alexandre Scanff, Florian Naudet, Ioana A. Cristea, David Moher, Dorothy V. M. Bishop, Clara Locher 

Published: November 23, 2021 • <https://doi.org/10.1371/journal.pbio.3001133>

Article	Authors	Metrics	Comments	Media Coverage	Peer Review 
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Peer Review History

Original Submission	January 15, 2021
Decision Letter - Roland G Roberts, Editor	27 Jan 2021
Revision 1	
Decision Letter - Roland G Roberts, Editor	26 Mar 2021
Revision 2	
Author Response	27 Jul 2021
Decision Letter - Roland G Roberts, Editor	5 Oct 2021

Signs of Change

'I'm starting the year off with something I didn't expect to ever do: I'm retracting a paper.'



Kate Laskowski

In journalism, we often joke that three cases of a phenomenon is a trend. If that's the case, the trend of late 2019 and early 2020 would appear to be authors announcing retractions on Twitter.

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