

Retractions: On The Rise, But Not Enough

Ivan Oransky, MD

Co-Founder, Retraction Watch

Executive Director, The Center For Scientific Integrity

Distinguished Journalist In Residence, NYU

Editor in Chief, The Transmitter

@ivanoransky

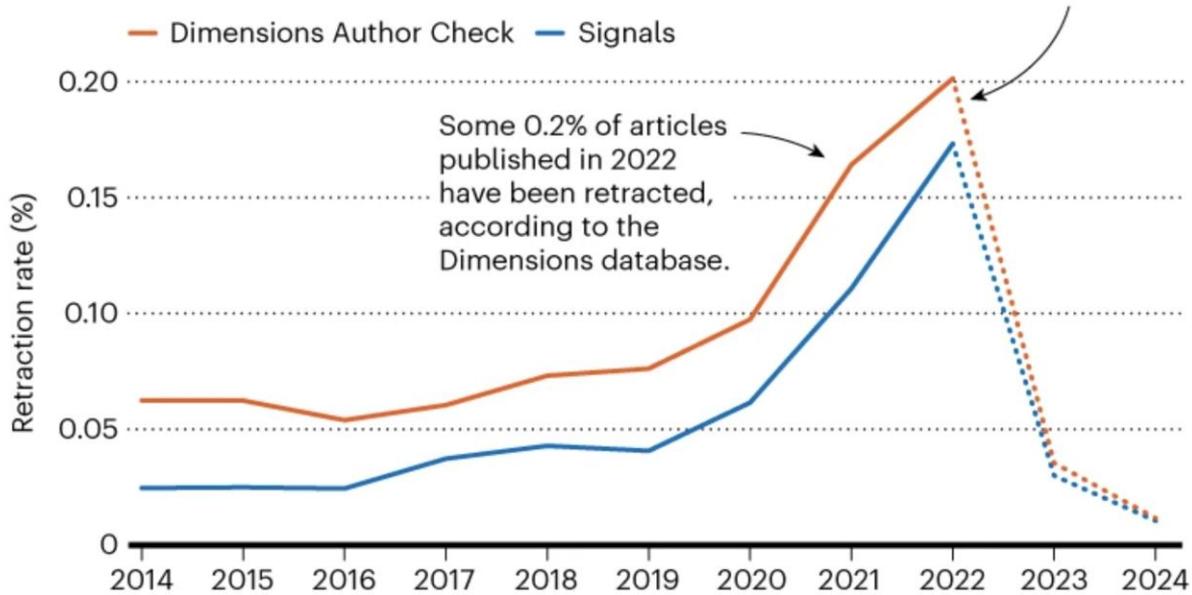
@retractionwatch

On The Rise

RATES ON THE RISE

There has been a steep rise in the rate of retractions, which is the number of retractions of papers published in a given year divided by the overall number of papers published that same year.

Rates for 2023 and 2024 are lower because most retractions of papers published in those years will happen in the future.



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<https://www.nature.com/articles/d41586-025-00455-y>

Common Reasons for Retractions

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

2/3 for misconduct

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:

- **Anna Abalkina**, the creator of the Retraction Watch Hijacked Journal Checker, has revealed how paper mills work.
- **David Allison** and **Andrew Brown** tried getting journals to correct or retract two dozen papers with obvious errors. The results weren't pretty.
-  **Elisabeth "Eagle Eyes" Bik** showed that one in 25 papers she examined had evidence of inappropriate image manipulation. Our 2019 profile for *The Scientist*.
- **Dorothy Bishop's** "eye for detail has given her a second career and a new following."
- **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 <http://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.
- **Guillaume Cabanac** and **Cyril Labbé** have uncovered hundreds of papers with telltale signs that they were created using programs like Scigen and Mathgen, using their Problematic Paper Screener. **Alexander Magazinov** has joined them to find papers that contain such "tortured phrases," and Cabanac and Labbé have also worked with Byrne and others on different projects.



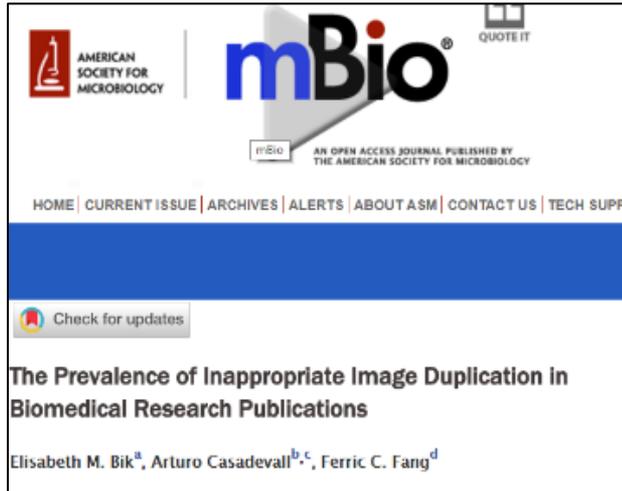
Elies Bik

- **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.
- "From a small town in Wales, a scientific sleuth has shaken Dana-Farber — and elevated the issue of research integrity." Meet **Sholto David**.
- **Michael Dougherty** has become the philosophy plagiarism police.
- **Malte Elson** and **Patrick Markey** paid a price for being right about problems in a study of violent video games.
- **Fabrice Frank**, **Nans Florens**, **Gideon Meyerowitz-Katz**, **Jérôme Barriere**, **Éric Billy**, **Véronique Saada**, **Alexander Samuel**, **Jacques Robert** and **Lonni Besançon** have taken on the work of **Didier Raoult**. Some of these sleuths, along with others, also took on a paper that made unsubstantiated claims about the risks of COVID-19 vaccines.
- **Hampton Gaddy** uncovered more than two dozen odd papers about *Star Trek* in a journal about early human development. They've been retracted.
- **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.
- In 2015, **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.
- **Ben Mol** has been making a mark, particularly in the obstetrics and gynecology literature.
- **Leif Nelson**, **Uri Simonsohn**, and **Joe Simmons** — the scientists behind **Data Colada** — have found fatal flaws in high-profile studies of behavior and related subjects, including in the work of **Francesca Gino** — who has sued them.



Michael Dougherty

Two Percent?



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The Prevalence of Inappropriate Image Duplication in Biomedical Research Publications

Elisabeth M. Bik^a, Arturo Casadevall^{b,c}, Ferric C. Fang^d

“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.”



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How Many Scientists Fabricate and Falsify Research? A Systematic Review and Meta-Analysis of Survey Data

Daniele Fanelli*

INNOGEN and ISSTI-Institute for the Study of Science, Technology & Innovation, The University of Edinburgh, Edinburgh, United Kingdom

Abstract

The frequency with which scientists fabricate and falsify data, or commit other forms of scientific misconduct is a matter of controversy. Many surveys have asked scientists directly whether they have committed or know of a colleague who committed research misconduct, but their results appeared difficult to compare and synthesize. This is the first meta-analysis of these surveys. To standardize outcomes, the number of respondents who recalled at least one incident of misconduct was calculated for each question, and the analysis was limited to behaviours that distort scientific knowledge: fabrication, falsification, “cooking” of data, etc... Survey questions on plagiarism and other forms of professional misconduct were excluded. The final sample consisted of 21 surveys that were included in the systematic review, and 18 in the meta-analysis. A pooled weighted average of 1.97% (N = 7, 95%CI: 0.86–4.45) of scientists admitted to have fabricated, falsified or modified data or results at least once – a serious form of misconduct by any standard – and up to 33.7% admitted other questionable research practices. In surveys asking about the behaviour of colleagues, admission rates were 14.12% (N = 12, 95% CI: 9.91–19.72) for falsification, and up to 72% for other questionable research practices. Meta-regression

Two in 100 clinical trials in eight major journals likely contain inaccurate data: Study

A sweeping analysis of more than 5,000 papers in eight leading medical journals has found compelling evidence of suspect data in roughly 2% of randomized controlled clinical trials in those journals.



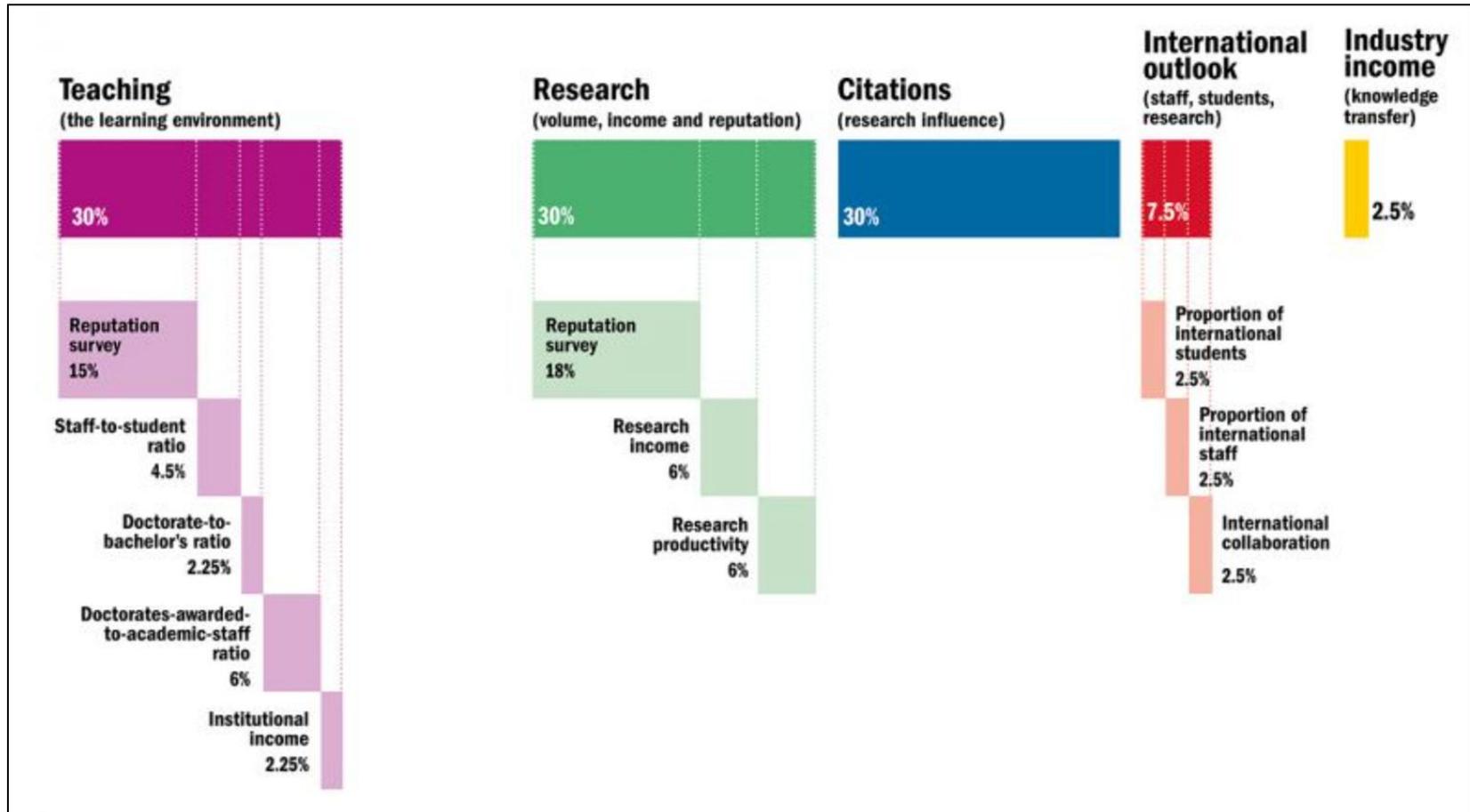
Why Does It Take So Long?

“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.

The Upstream Problem: Rankings



<https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2023-methodology>

House of Commons Committee Agrees



House of Commons
Science, Innovation and
Technology Committee

Reproducibility and Research Integrity

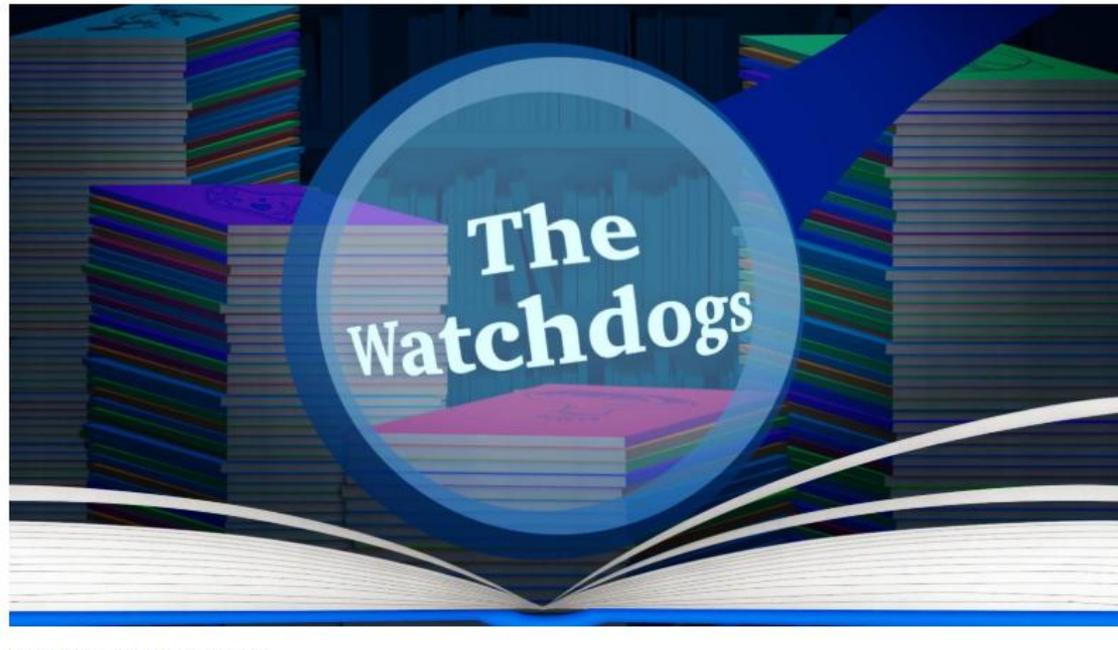
Sixth Report of Session 2022–23

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.*

Signs of Change

To catch misconduct, journals are hiring research integrity czars

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



Divorcing Investigations From Retractions?

inquisitive | A quarterly periodical of Heterodox Academy

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FEBRUARY 20, 2025 — *Discipline*

The Discipline of Last Resort

Retraction isn't designed as punishment, but it serves that role by default. And that's OK.

BY [IVAN ORANSKY](#) & [ADAM MARCUS](#)



"Retraction" by Chris Dreger (licensed for use).

<https://inquisitivemag.org/articles/theme-essay/the-discipline-of-last-resort/>

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Our goal is to promote transparency, integrity and efficiency in science and scientific publishing.

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