คุณธรรมและการเผยแพร่ผลงานวิจัย

ลีณา สุนทรสุข

25 มีนาคม 2569

Research Misconduct and Integrity

Image manipulation

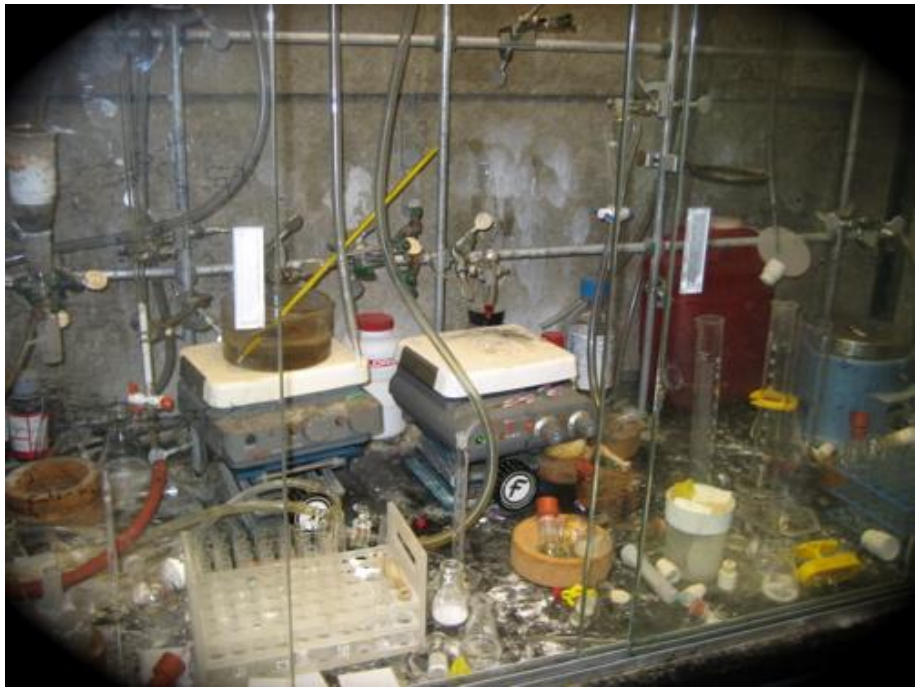
Typical cases

Generative AI

Statistics

Q & A


KUNZ
MAYER
MAYER
MÜLLER
KUNZ



http://ccc.chem.pitt.edu/wipf/GLPs.html

Cases of a novel coronavirus were first reported in Wuhan, Hubei
province, China, in December 2019 and have since spread across the
world. Epidemiological studies have indicated human-to-human
transmission in China and elsewhere.

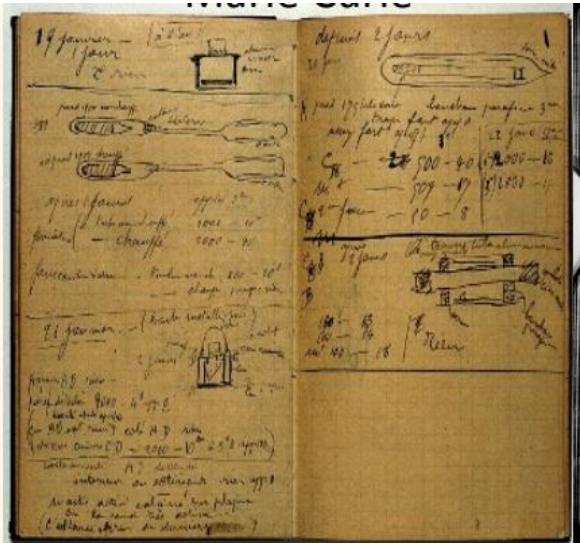
A novel influenza A (H1N1) virus has spread rapidly across the globe in December 2019 and have since spread across the world. The generation of detailed, real-time, and robust data.
transmission in China and elsewhere.

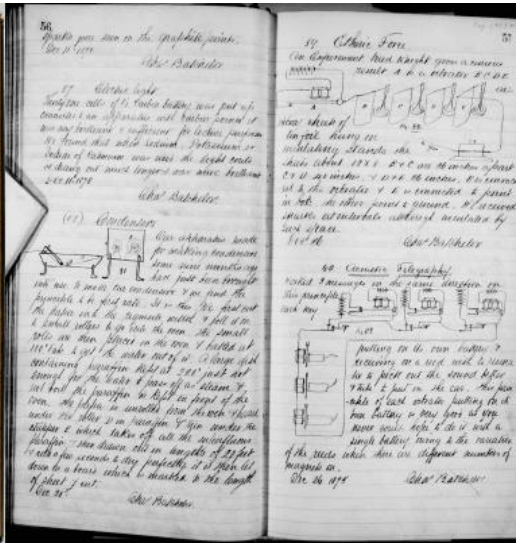
SOURCE WORK

Cases of a novel coronavirus were first reported in Wuhan, Hubei province, China, in December 2019 and have since spread across the world. Epidemiological studies have indicated human-to-human transmission in China and elsewhere.

PLAGIARISM

A novel influenza A (H1N1) virus has spread rapidly across the globe in December 2019 and have since spread across the world. The generation of detailed, real-time, and robust data.
transmission in China and elsewhere.

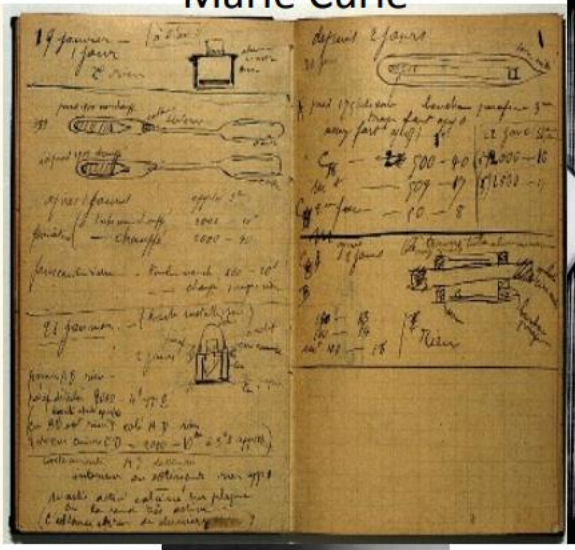




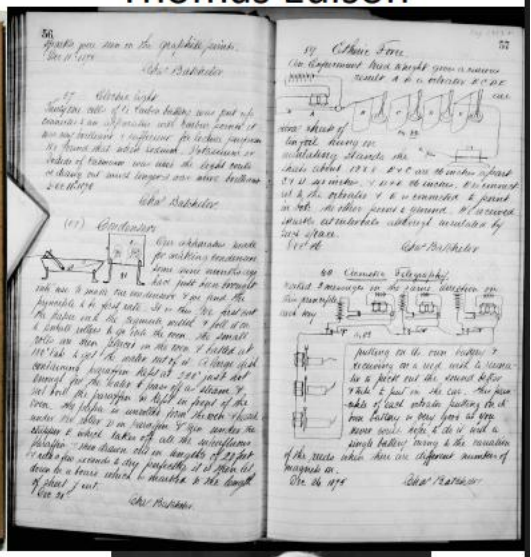
Leonardo Da Vinci

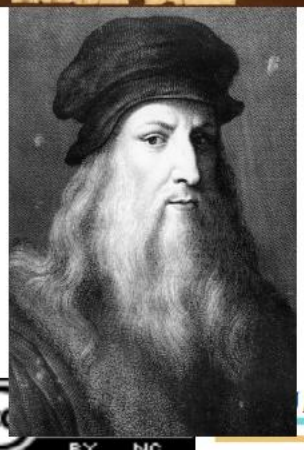
Dmitri Mendeleev

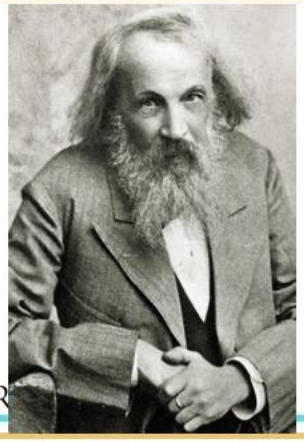
Marie Curie

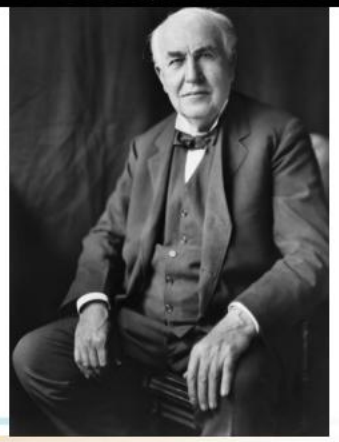


Thomas Edison

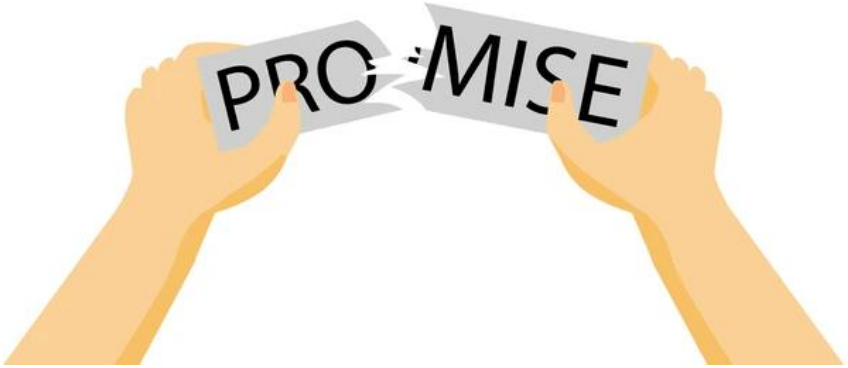


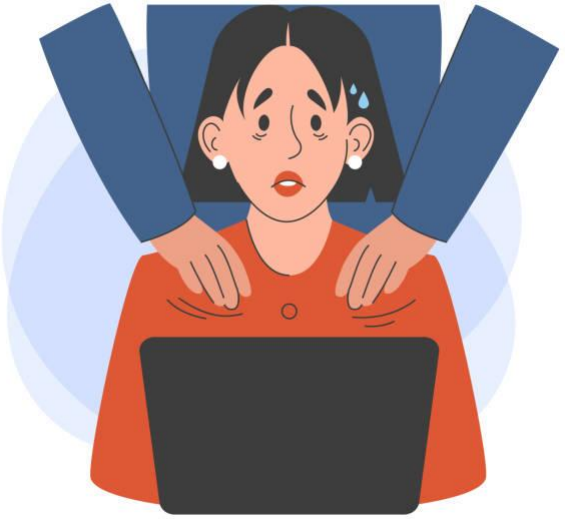






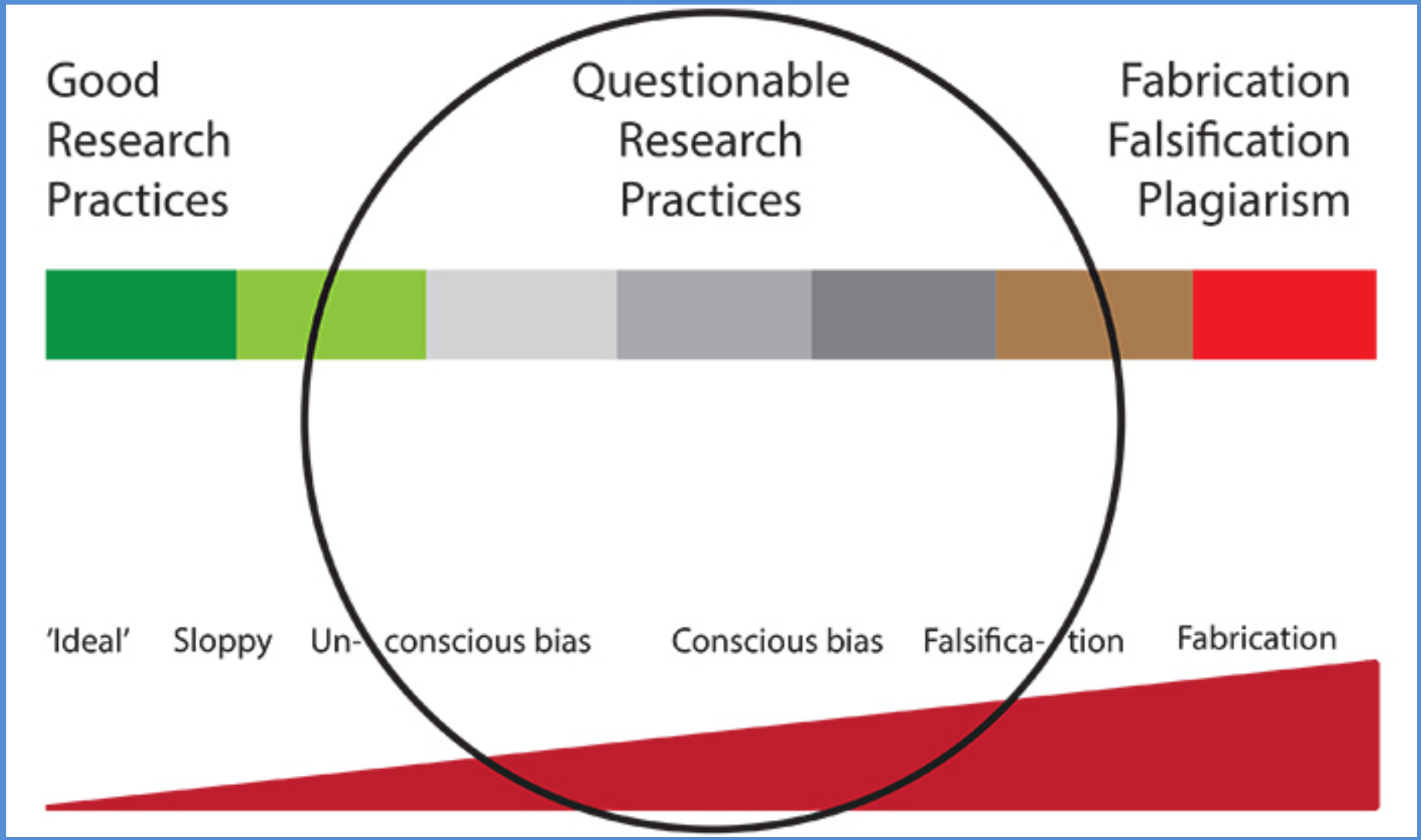
https://research.columbia.edu/sites/research.columbia.edu/files/content/RCT%20content/ReaDI%20Program/tutorial_LabNotebook_V9.pdf


PRO MISE

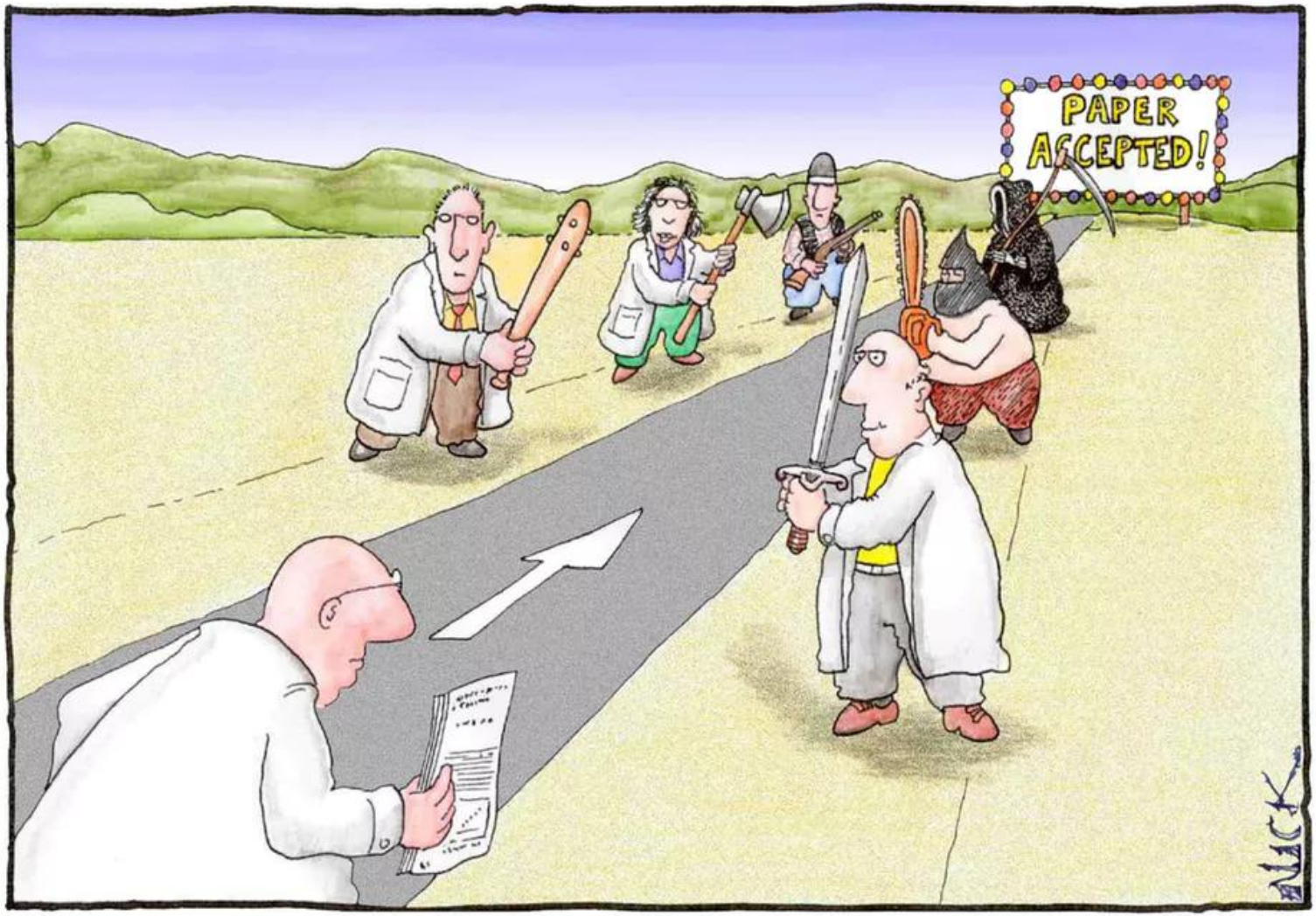



GOSSIP LAB


We've not told you something.
Anything, really!

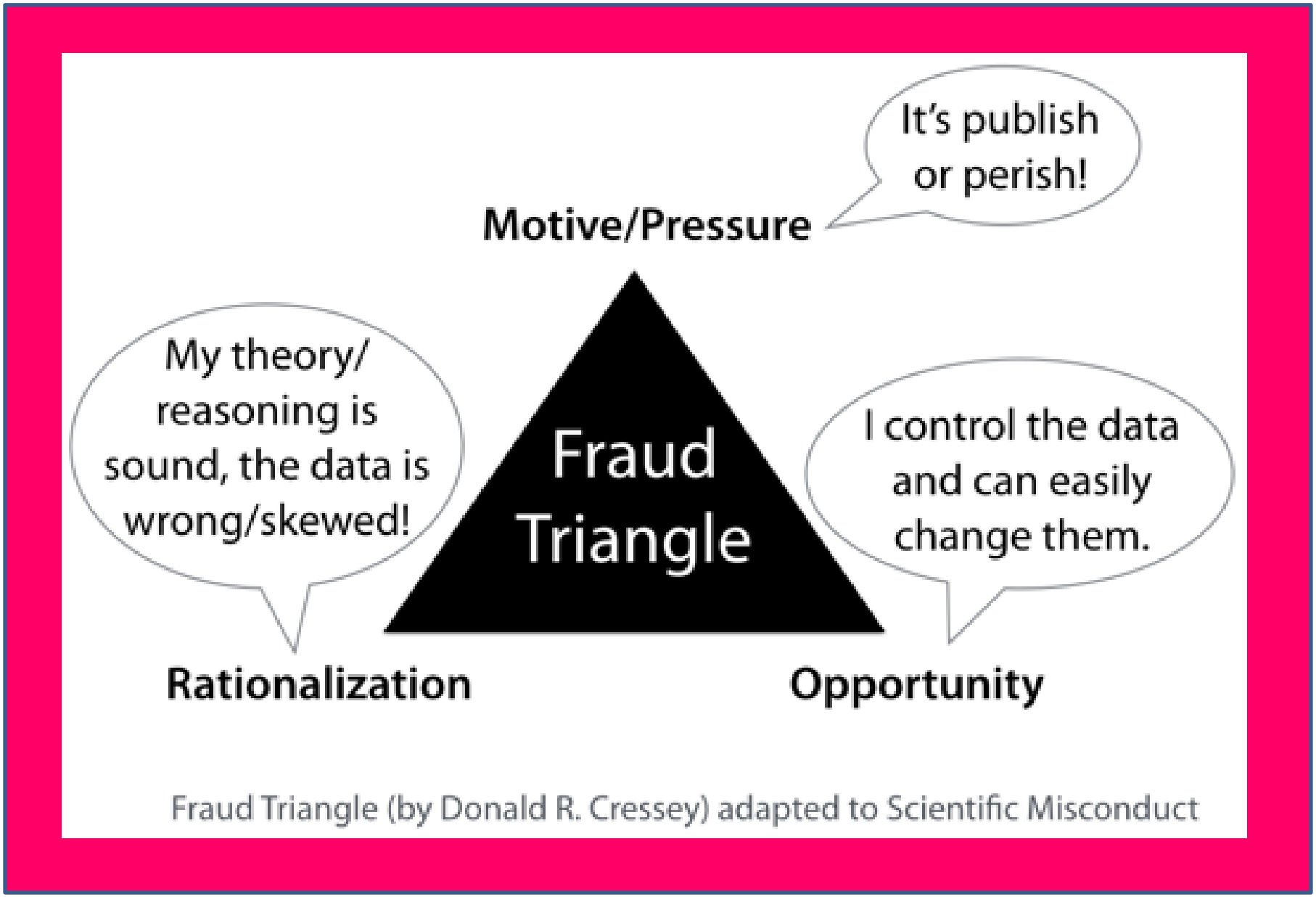


https://www.google.com/search?q=misconduct+in+science&source=lnms&tbm=isch&sa=X&ved=0CAgQ_AUoAmoVChMI7_DR5Oe2xwIVEAuOCh3RKQXG&biw=1600&bih=756#imgrc=ZpHzNKXOZtxXtM%3A



Most scientists regarded the new streamlined peer-review process as "quite an improvement."

http://theconversation.com/predicting-who-will-publish-or-perish-as-career-academics-18473



https://www.google.com/search?q=misconduct+in+science&source=lnms&tbm=isch&sa=X&ved=0CAgQ_AUoAmoVChMI7_DR5Oe2xwIVEAuOCh3RKQXG&biw=1600&bih=756#imgrc=6xvgkMdVTlyDgM%3A

MISCONDUCT VS INTEGRITY IN RESEARCH

ARTICLE RETRACTED

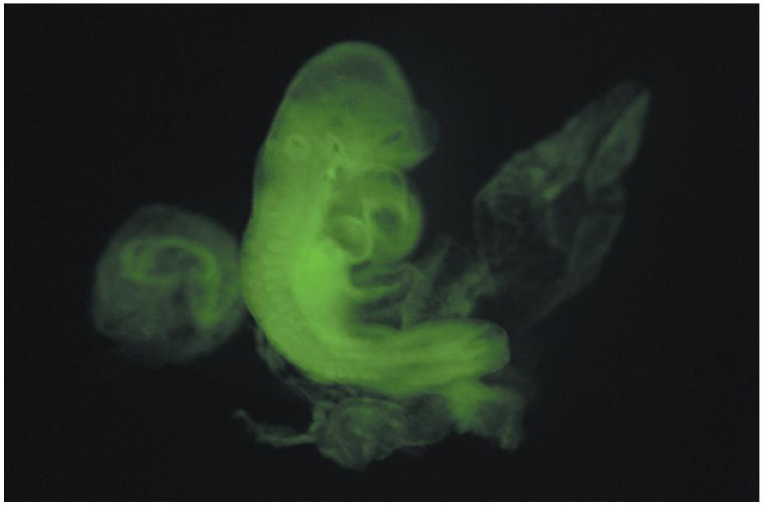
doi:10.1038/nature12968

Stimulus-triggered fate conversion of somatic cells into pluripotency

LETTER RETRACTED

doi:10.1038/nature12969

Bidirectional developmental potential in reprogrammed cells with acquired pluripotency



A mouse embryo injected with cells made pluripotent through stress, tagged with a fluorescent protein.

Acid bath offers easy path to stem cells

Just squeezing or bathing cells in acidic conditions can readily reprogram them into an embryonic state.

Hwang Woo-Suk (2004-05)

http://tinyurl.com/hwang11

- 2 landmark papers in *Science* reporting production of human embryonic stem cells via Somatic Cell Nuclear Transfer
- Data fabricated and falsified
- Also obtained human eggs for research by unethical means, including requiring female team members to superovulate
- Suspended prison sentence for embezzlement

☒ Fabrication
☒ Falsification
☒ Exploitation
☒ Embezzlement

Jon Sudbo (1993-2005)

- Research into prevention of oral cancer at Norwegian Radium Hospital, Oslo
- 2005 paper in *Lancet* raised almost instant accusation of fabrication as it included 900 patients from database that didn't exist at time cited
- Also found that second image in a 2001 NEJM paper just enlargement of first
- Eventually 15 papers (plus PhD) retracted

☒ Fabrication
☒ Falsification

http://tinyurl.com/sudbo11

Andrew Wakefield (1998)

- Author on infamous Lancet paper linking autism with MMR vaccine
- Investigation for >2 years (ended May 2010) decided he was guilty of conflict of interest, both as recipient of money from lawyer looking for link to vaccine, and regarding company he set up looking to market test
- Highly selective reporting of data
- Unethical dealings with children

☒ Consent
☒ Exploitation
☒ Conduct of clinical trial
☒ Conflict of Interest (financial)

Fraudulent papers can cause a lot of harm. Here's two very notable cases:

- **Vaccines and autism.** Andrew Wakefield's fraudulent paper in *The Lancet* kicked off the modern anti-vax movement. The paper was eventually retracted for fraud 12 years later. Today millions still believe that childhood vaccines such as the MMR vaccine cause autism, leading to lower vaccination rates and measles outbreaks in New York and elsewhere.


Research Misconduct
FFP
Conflicts of Interest
Withholding Results
Selective Citing
Self-plagerism
Ethical Misconduct
False/malicious accusation
Poor practices – data management
Poor practices – publication & authorship
Bias
Exaggerating importance of findings
Hampering work of other researchers
Misusing Seniority
Ignoring putative violations of RI

Misconduct

Misconduct that distorts scientific knowledge

- Fabrication
- Falsification

Misconduct that misleads scientific community

- Plagiarism (guest, ghost, gift authors)
- Duplicate publication
- Abuse of peer review process

"FFP"

The Most Misconduct in Scientific Writing

Plagiarism

Use of others' published and unpublished ideas or words (or other intellectual property) without attribution or permission, and presenting them as new and original rather than derived from and existing source.

Self-plagiarism refers to the practice of an author using portions of his or her previous writings on the same topic in another article, without specifically quoting or citing the self-plagiarismed material.

AI-plagiarism

Possible causes of plagiarism

- Excessive competition ("publish vs. perish")
- Reduced motivation to learn and make original contribution to knowledge
- Lack of appropriate role models (ethical and professional)
- Deficiency in language skills (no excuse!)
- Massive explosion in publication (harder to detect!)

Typical cases

- Plagiarism
  - Inadequate paraphrasing of original work

Text operation	Original document	Modified document
Word deletion	A computer is a general-purpose device that can be programmed to carry out arithmetic ~~or logical~~ operations automatically. ~~Conventionally,~~ a computer consists of at least one processing element, typically a central processing unit (CPU), and ~~some form of~~ memory.	A computer is a general-purpose device that can be programmed to carry out arithmetic operations automatically. A computer consists of at least one processing element, typically a central processing unit (CPU), and memory.

Source: https://en.wikipedia.org/wiki/Computer

Text operation	Original document	Modified document
Word insertion	A computer is a general-purpose device that can be programmed to carry out arithmetic or logical operations automatically. Conventionally, a computer consists of at least one processing element, typically a central processing unit (CPU), and some form of memory.	A computer is a general-purpose device that can be **designed and** programmed to carry out **a set of** arithmetic or logical operations automatically. Conventionally, a computer consists of at least one processing element, typically a central processing unit (CPU), and some form of memory **(RAM)**.

Source: https://en.wikipedia.org/wiki/Computer

Text operation	Original document	Modified document
Word replacement	A computer is a general-purpose device that can be programmed to **carry out** arithmetic or logical operations automatically. Conventionally, a computer consists of at least one processing element, **typically** a central processing unit (CPU), and some **form** of memory.	A computer is a general-purpose device that can be programmed to **perform** arithmetic or logical operations automatically. Conventionally, a computer consists of at least one processing element, **normally** a central processing unit (CPU), and some **type** of memory.

Source: https://en.wikipedia.org/wiki/Computer

Available online at www.sciencedirect.com
SCIENCE DIRECT®
Talanta 63 (2004) 303–307
Talanta
www.elsevier.com/locate/talanta

Coated graphite-epoxy ion-selective electrode for the determination of chromium(III) in oxalic medium

S. Khalil [a,*], A.A. Wassel [b], F.F. Belal [c]

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[b] National Organization For Drug Control & Research, Giza, P.O. Box 29, Cairo, Egypt, Saudi Arabia
[c] Faculty of Pharmacy, King Saud Univerisity, Riyadh, Saudi Arabia

Received 25 June 2003; received in revised form 7 October 2003; accepted 31 October 2003

ANALYTICAL LETTERS, 30(3), 417–427 (1997)

COATED GRAPHITE-EPOXY ION-SELECTIVE ELECTRODE FOR THE DETERMINATION OF IRON(III) IN OXALIC MEDIUM

KEY WORDS: iron(III) ion-selective electrode, coated graphite-epoxy conductor electrode, potentiometry, PVC.

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Talanta

Abstract

A coated graphite-epoxy chromium(III) ion-selective electrode, based on the ion-pair between $[Cr(oxalate)_3]^{3-}$ anion and tricaprylmethylammonium cation (Aliquat 336) in a poly(vinylchloride) (PVC) matrix is constructed. A thin membrane film of this ion-pair, dibutylphthalate (DBP) in PVC was deposited directly onto a Perspex® tube containing a graphite-epoxy conductor substrate attached to the end of a glass tube. The effect of membrane composition (ion-pair, DBP and PVC), oxalate concentration, pH and some cations and anions upon the electrode response is investigated. The electrode shows a linear anionic response to E vs. log $[Cr^{3+}]$ in the chromium(III) concentration range from 2.9×10^{-6} to 10^{-2} mol l^{-1}, and a slope of -18.7 ± 0.5 mV dec^{-1}, at pH working range of 2–8 and 0.3 mol l^{-1} oxalate concentration. Variation in the potential of about ±2 mV was observed during a working day of 7–8 h. The response time was less than 5 s and the life time of this electrode was superior to 1 year (over 1500 determinations by each polymeric membrane), with a practical detection limit of 2.1×10^{-6} mol l^{-1}. Application of this electrode for chromium(III) determination in some food materials and various types of plants is described.

Keywords: Chromium(III) ion-selective electrode; Coated graphite-epoxy conductor electrode; Potentiometry; PVC

Analytical Letters

ABSTRACT

A coated graphite-epoxy iron(III) ion-selective electrode, based on the ion-pair between $[Fe(oxalate)_3]^{3-}$ anion and tricaprylylmethylammonium cation (Aliquat 336) in a poly(vinylchloride) (PVC) matrix is constructed. A thin membrane film of this ion-pair , dibutylphthalate (DBPh) in PVC was deposited directly onto a Perspex^R tube containing a graphite-epoxy conductor substrate attached to the end of a glass tube. The effect of membrane composition (ion pair, DBPh and PVC), oxalate concentration, pH and some cations and anions upon the electrode response is investigated. The electrode shows a linear anionic response to E vs. log$[Fe^{3+}]$ in

Talanta

1. Introduction

Since the development by Ross [1] of the first liquid membrane electrode sensitive to the calcium cation, much progress has been made. Moody et al. [2,3] replaced the thick layer of liquid exchanger material supported by a dialysis membrane (cellulose acetate) by a thin polymeric film of poly(vinylchloride) (PVC), thus significantly decreasing the high resistance and relatively long response of that electrode. Several electrodes were constructed for various cations, anions and organic compounds.

Analytical Letters

INTRODUCTION

Since the development by Ross[1] of the first liquid membrane electrode sensitive to the calcium cation, much progress has been made. Moody and Thomas[2,3] replaced the thick layer of liquid exchanger material supported by a dialysis membrane (cellulose acetate) by a thin polymeric film of poly(vinylchloride) (PVC), thus significantly decreasing the high resistance and relatively long response of that electrode. Several electrodes were constructed for various cations, anions and organic compounds.

Talanta

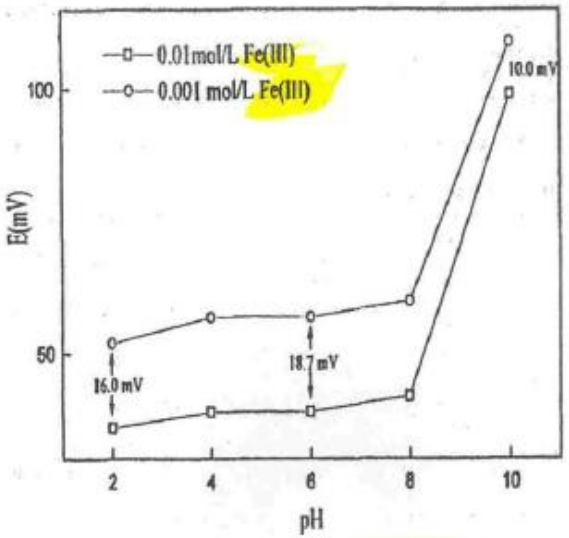


Fig. 1. Effect of pH on the response of the chromium(III) ion-selective electrode for chromium(III) concentration of: (○) 1×10^{-3} and (□) 1×10^{-2} mol l^{-1} in 0.3 mol l^{-1} oxalate, at 25.0 °C.

Analytical Letters

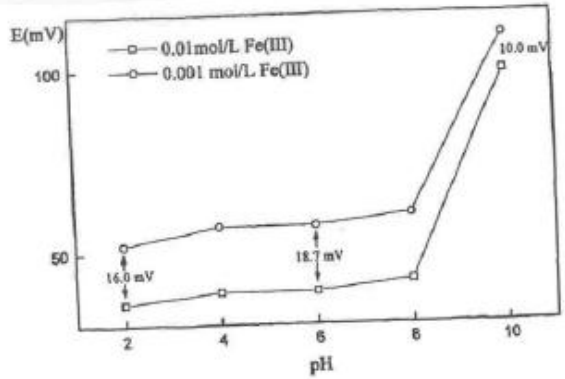


Figure 1: Effect of pH on the response of the iron (III) ion-selective electrode for iron (III) concentration of: ○○○ :$1x10^{-3}$ and □□□ :$1x10^{-2}$ mol/L in 0.3 mol/L oxalate, at 25.0 °C.

Typical cases

- Plagiarism
  - Inadequate paraphrasing of original work
- Simultaneous submission of manuscript for possible publication
- Re-submitting rejected manuscripts without making any changes

Don’t send the same work to two different journals

Additional Editor’s comments:

I have received one review on this paper which recommends rejection (review attached). Whilst awaiting the second review I noticed a paper by the same authors which had recently been published:

Determination of trace lead, cadmium and mercury by on-line column enrichment followed by RP-HPLC as metal-tetra-(4-bromophenyl)-porphyrin chelates. xxx Talanta xx (200x) xxx-xxx

I have compared the Talanta paper with the manuscript submitted to Analytica Chimica Acta and I was astounded to see that they are virtually identical. It therefore appears that the authors have submitted the same work to two journals and were prepared to see it published in both. If true, this is an outrageous and totally unacceptable action.

Don’t try to fool the editors

Some authors will submit a rejected paper some time later

Hope the editor doesn’t notice and will have it reviewed again

Dear [redacted]

I received the attached review on manuscript PH901 for Anal Chim Acta.
The reviewer comments about seeing something very similar for Talanta
Are you able to check into this to see if there is duplication of the Talanta manuscript?

Bets regards,

[redacted]

Dear [redacted]

Yes, we have seen this paper, and rejected it, so the author is recycling it.
Attached is the review we received.
Best regards,

[redacted]

Authorship

Three types of authorship are considered unacceptable:

- "Ghost" authors, who contribute substantially but are not acknowledged (often paid by commercial sponsors);
- "Guest" authors, who make no discernible contributions, but are listed to help increase the chances of publication;
- "Gift" authors, whose contribution is based solely on a tenuous affiliation with a study

Source: Elsevier | Ethics in Research & Publication: https://www.publishingcampus.elsevier.com/pages/63/ethics/Publishing-ethics.html

Typical cases

- Salami slicing
- Research fraud
- Review own publications
- Figure reproduction or manipulation

Misconduct

Misconduct relating to human subjects

- Consent issue
- Exploitation issue

Other issues

- Conflicts of interest
- Poor record keeping
- Fail to obtain necessary ethical approval

Consequences

- Blacklist from editors
- Complaints sent to the university
- Barred from research and research supervision and from holding any administrative position at the university

How to Avoid

- Be ethical
- Give credit where it is due
- Work harder and smarter
- Don’t take short cuts
- Improve language skills
- Be ethical


MORALS
Principles
HONEST
Morals
ACCOUNTABILITY
HONORABLE
Rectitude
Right
VALUE
HONOR
JUST
FAIR
Ethics
Integrity
Lawful
CORE VALUES
Truth
Strong
FAIR
UPRIGHTNESS
WISE
Good Character
VALUES
IDEALS
LIFE
HONESTY
Moral Values
Ideology
Honest
Truthfulness
Ethical
Philosophy
FAITH
Live
RIGHT
TRUE

MISCONDUCT VS INTEGRITY

Broader absence of core ethical qualities (honesty, accountability, responsibility)

Specific, intentional wrongdoing

Misconduct vs Integrity

Research Misconduct

- Rare, but serious (1-2% of papers)
- Example: copy paste data

Research Integrity

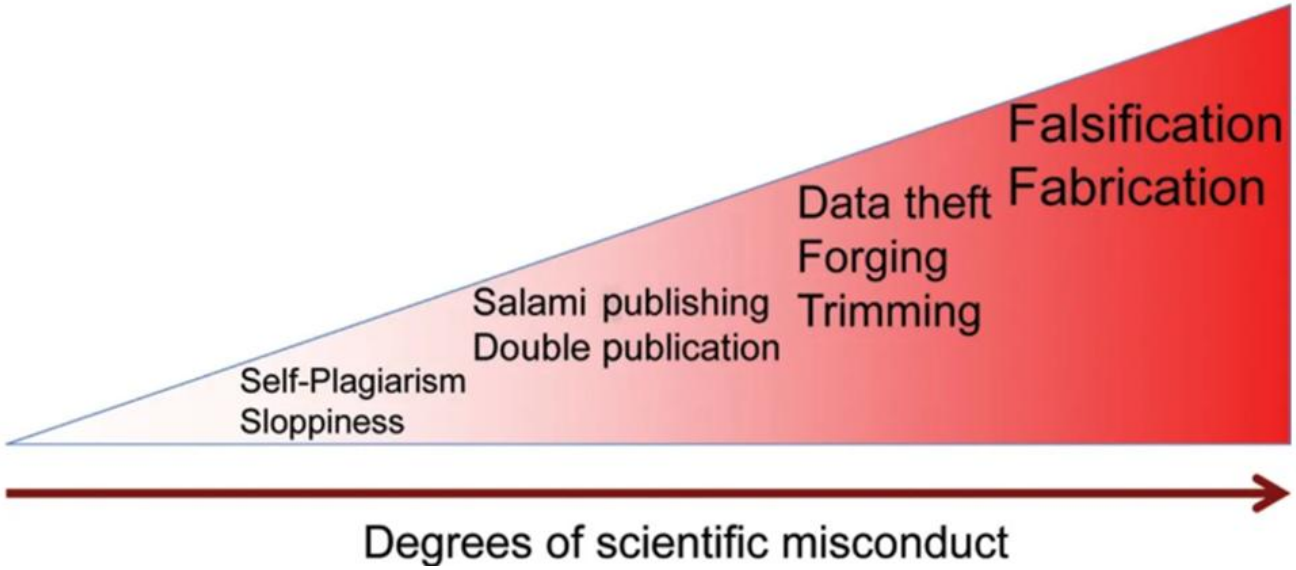
- A broader spectrum, from full integrity to "questionable research practices"
- Example: questionable authorship

Research Integrity: More than just avoiding misconduct, it's about ensuring transparency and fairness

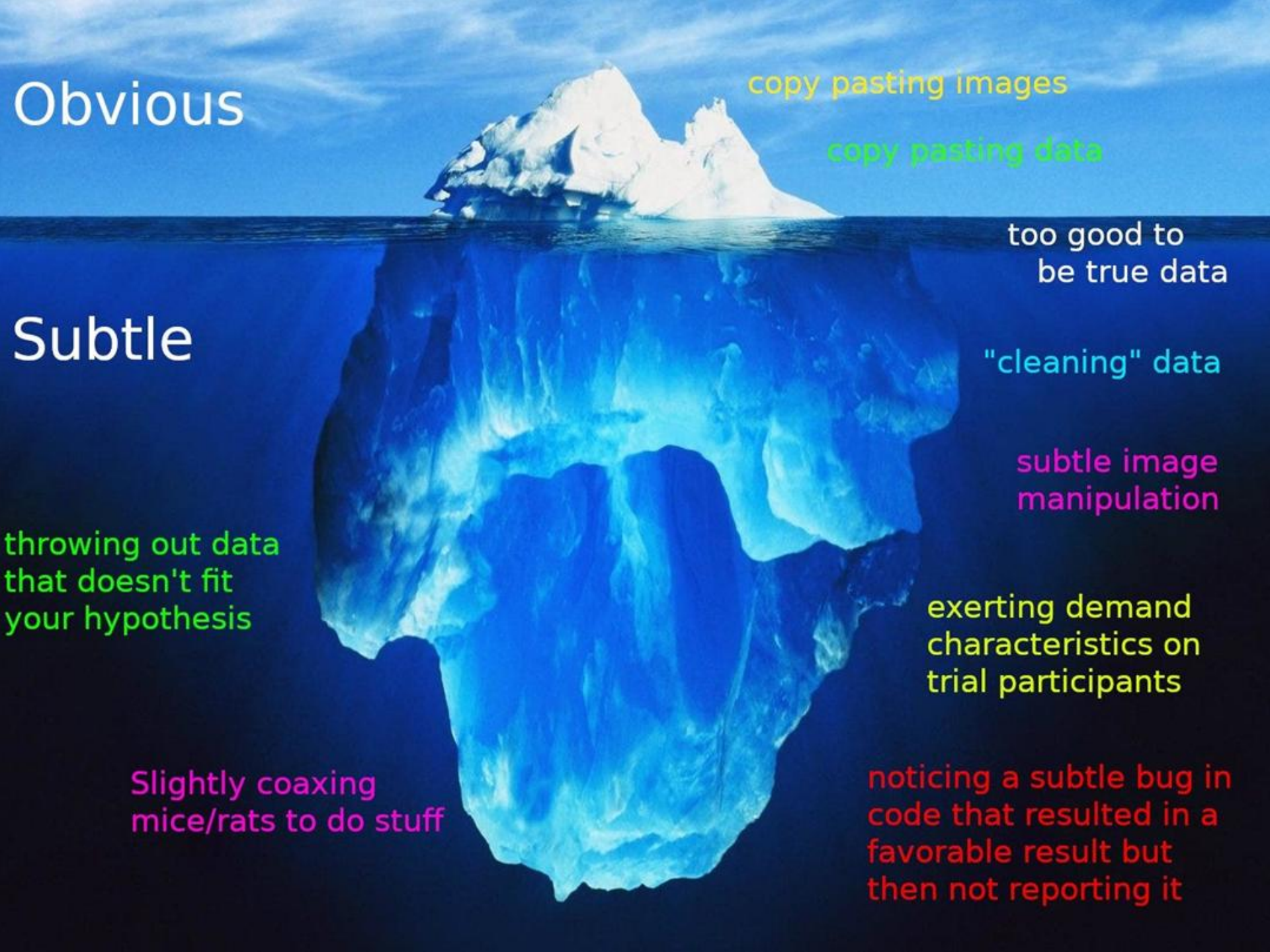
Misconduct vs Integrity

The Spectrum of Research Integrity

- **Research Misconduct**: Tip of the iceberg
- **Questionable Research Practices**: 75% of researchers admit to these practices



https://moreisdifferent.blog/p/how-common-is-scientific-fraud


Obvious
copy pasting images
copy pasting data
too good to be true data
Subtle
"cleaning" data
subtle image manipulation
throwing out data that doesn't fit your hypothesis
exerting demand characteristics on trial participants
Slightly coaxing mice/rats to do stuff
noticing a subtle bug in code that resulted in a favorable result but then not reporting it

MISCONDUCT VS NON-INTEGRITY

Data fabrication
Chronic lying
Plagiarism
Theft
Gossiping
Sloppy work
Fraud
Breaking promises
Harassment
Safety breaches

https://ukrio.org/research-integrity/what-is-research-integrity/

Building good systems

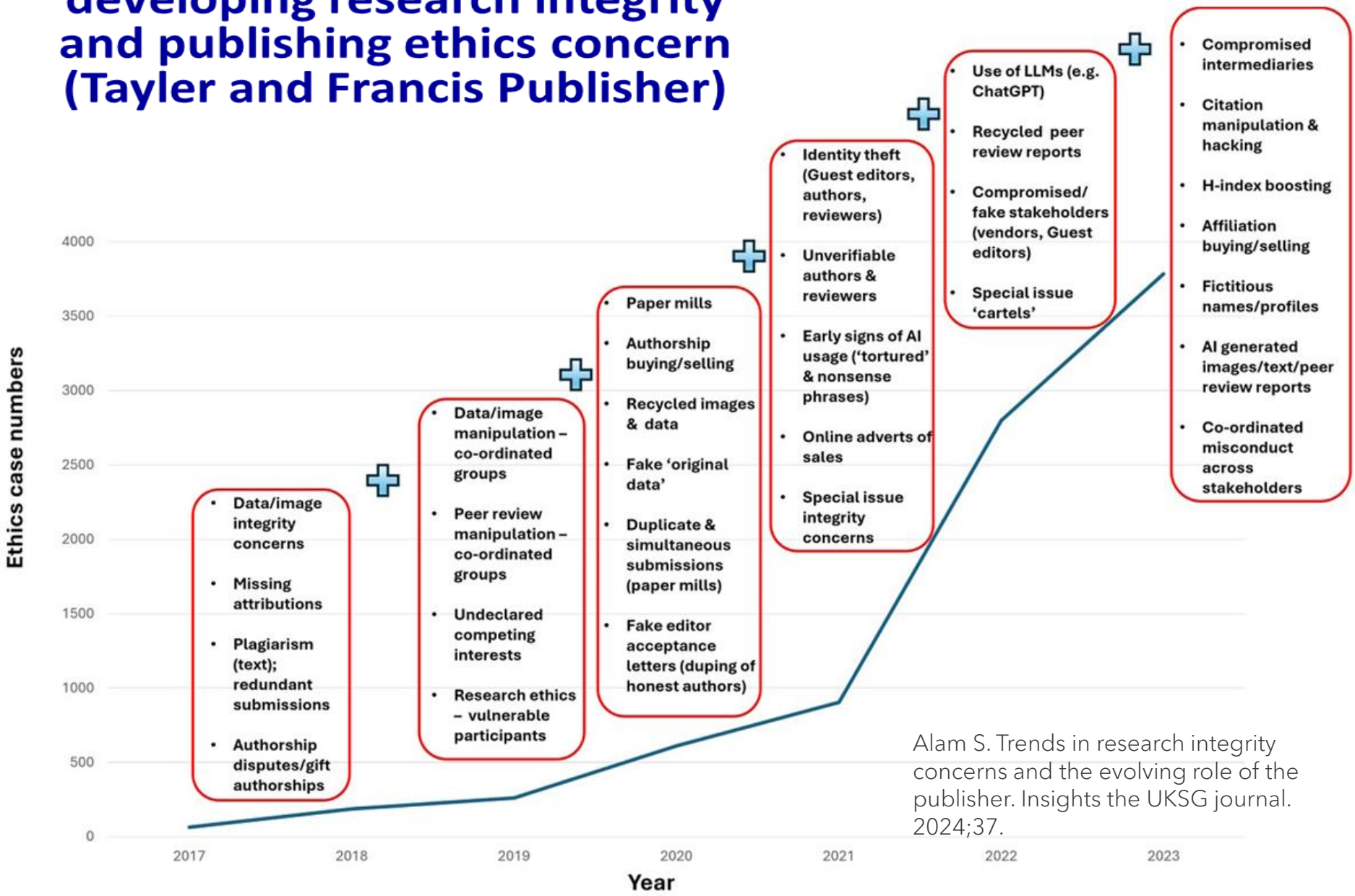
Doing good science

Preventing misconduct

Making misconduct
a *symptom* of low integrity

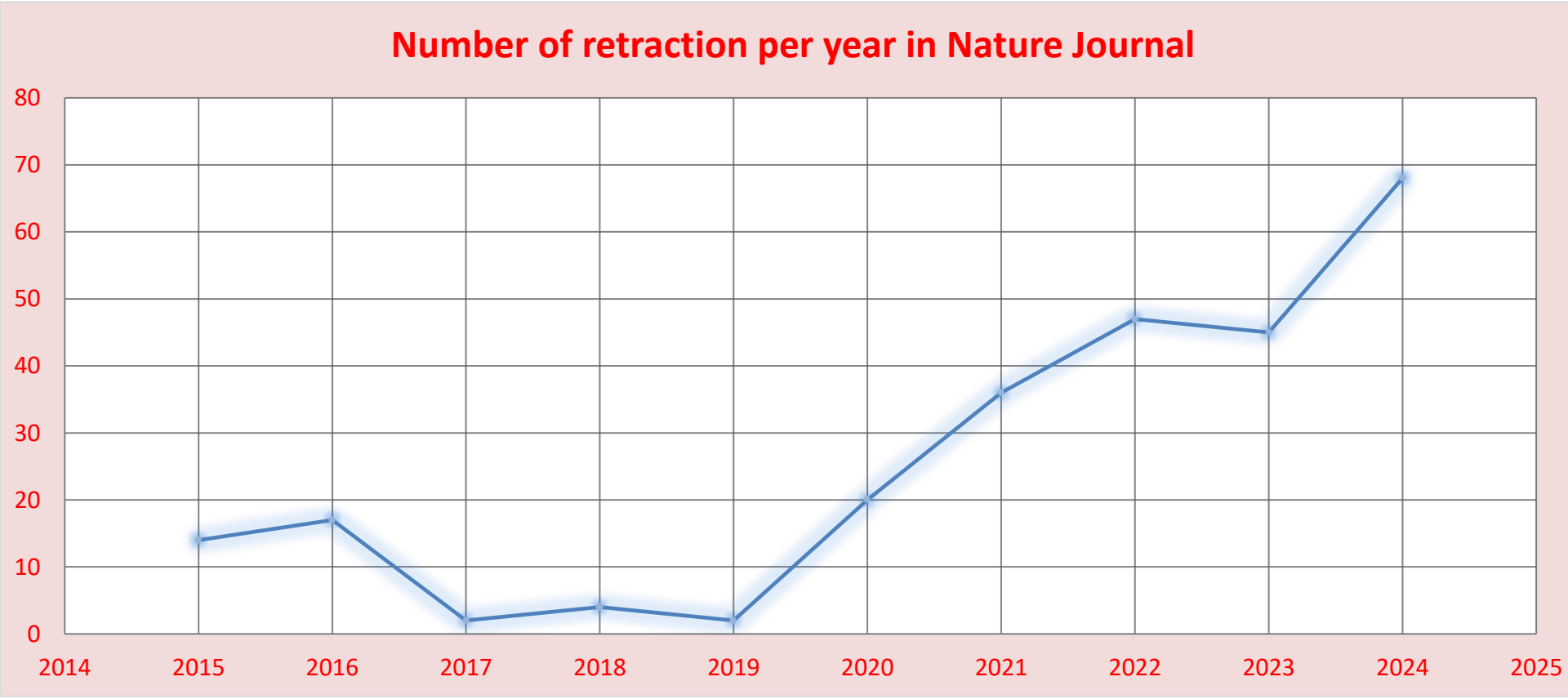
Promoting standard of
ethical behavior

Ethic case numbers and developing research integrity and publishing ethics concern (Tayler and Francis Publisher)



Alam S. Trends in research integrity concerns and the evolving role of the publisher. Insights the UKSG journal. 2024;37.

Trends in scientific report retractions



Nature Publishing Group. Retractions in Scientific Reports - 2024. Nature. 2024 [cited 2024 Mar 9]. Available from: https://www.nature.com/srep/articles?type=retraction&year=2024

Research Misconduct Cases FY 2024

	Plagiarism	Fabrication/Falsification	Mixed*	Total
Allegations	47	17	2	66
Cases Opened	19	7	1	27
Cases Closed	19	15	0	34

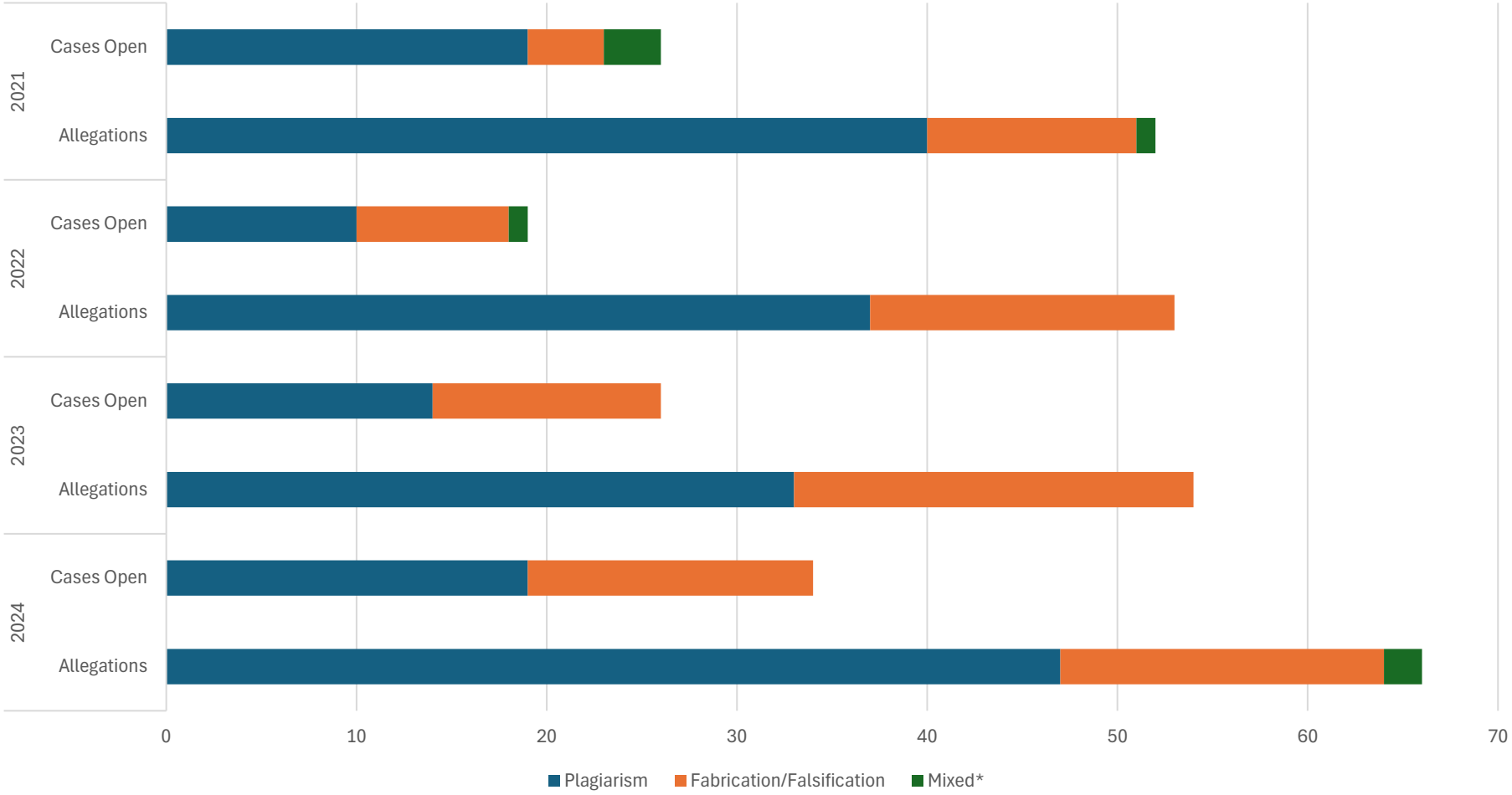
** "Mixed" indicates cases that involved more than one type of allegation.*

Research Misconduct Cases FY 2023

	Plagiarism	Fabrication/Falsification	Mixed*	Total
Allegations	33	21	N/A	54
Cases Opened	14	12	0	26
Cases Closed	10	4	1	15

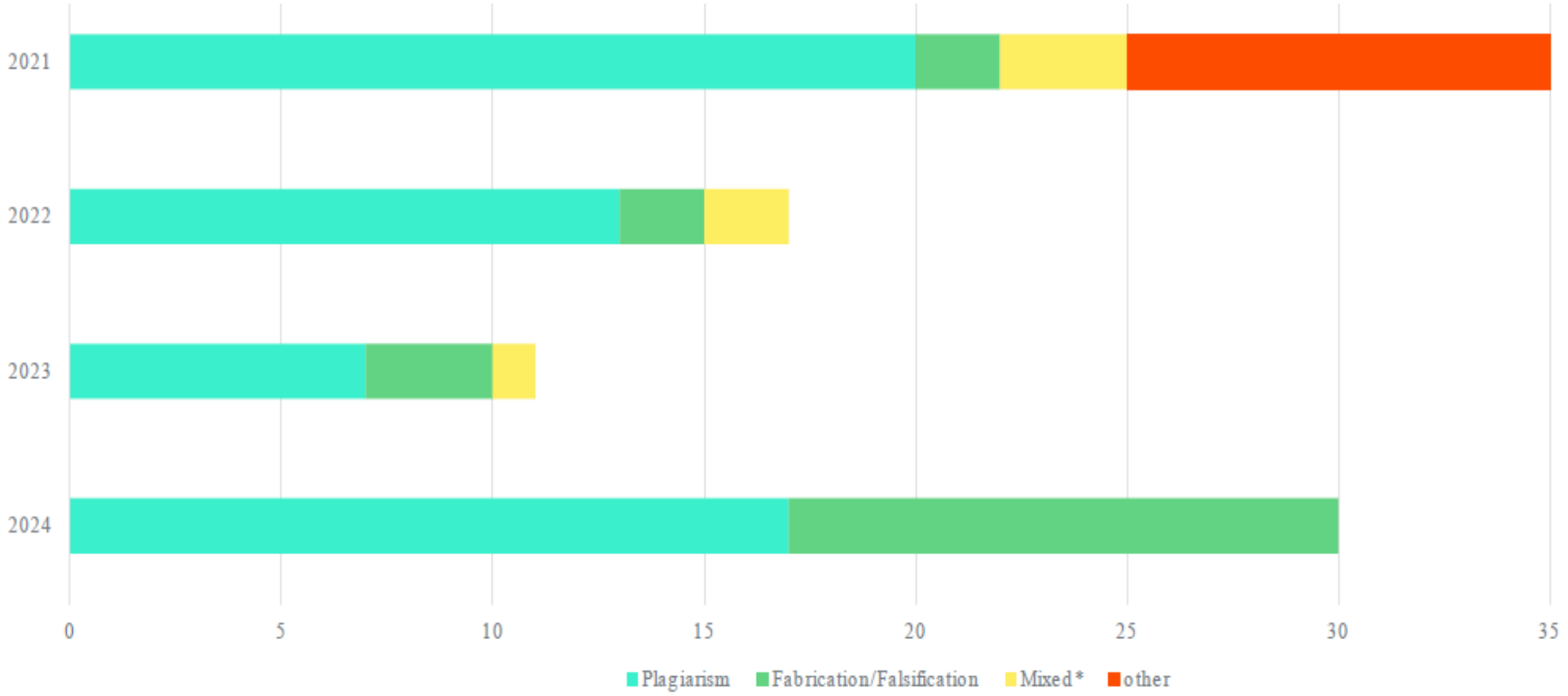
* "Mixed" indicates cases that involved more than one type of allegation.

Research misconduct record in U.S. National Science Foundation Office of Inspector General: The ratios of case with action: allegations



U.S. National Science Foundation Office of Inspector General. Research misconduct by the numbers. [Internet]. 2025 [cited 2025 Mar 9]. Available from: https://oig.nsf.gov/investigations/research-misconduct/by-the-numbers

Research misconduct record in U.S. National Science Foundation Office of Inspector General: Closed case with action



U.S. National Science Foundation Office of Inspector General. Research misconduct by the numbers. [Internet]. 2025 [cited 2025 Mar 9]. Available from: https://oig.nsf.gov/investigations/research-misconduct/by-the-numbers

Trends in Extramural Research Integrity Allegations Received at NIH

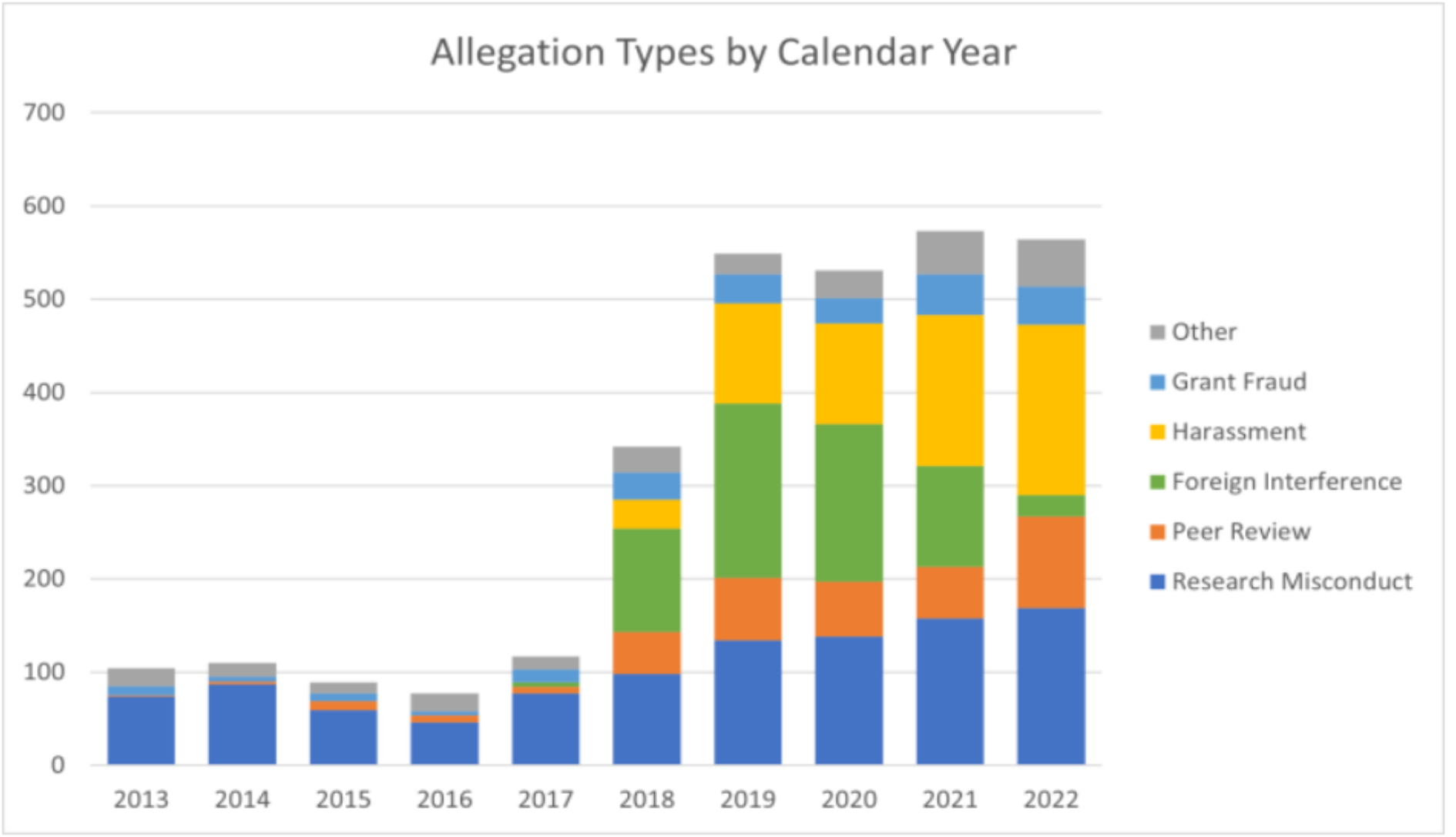
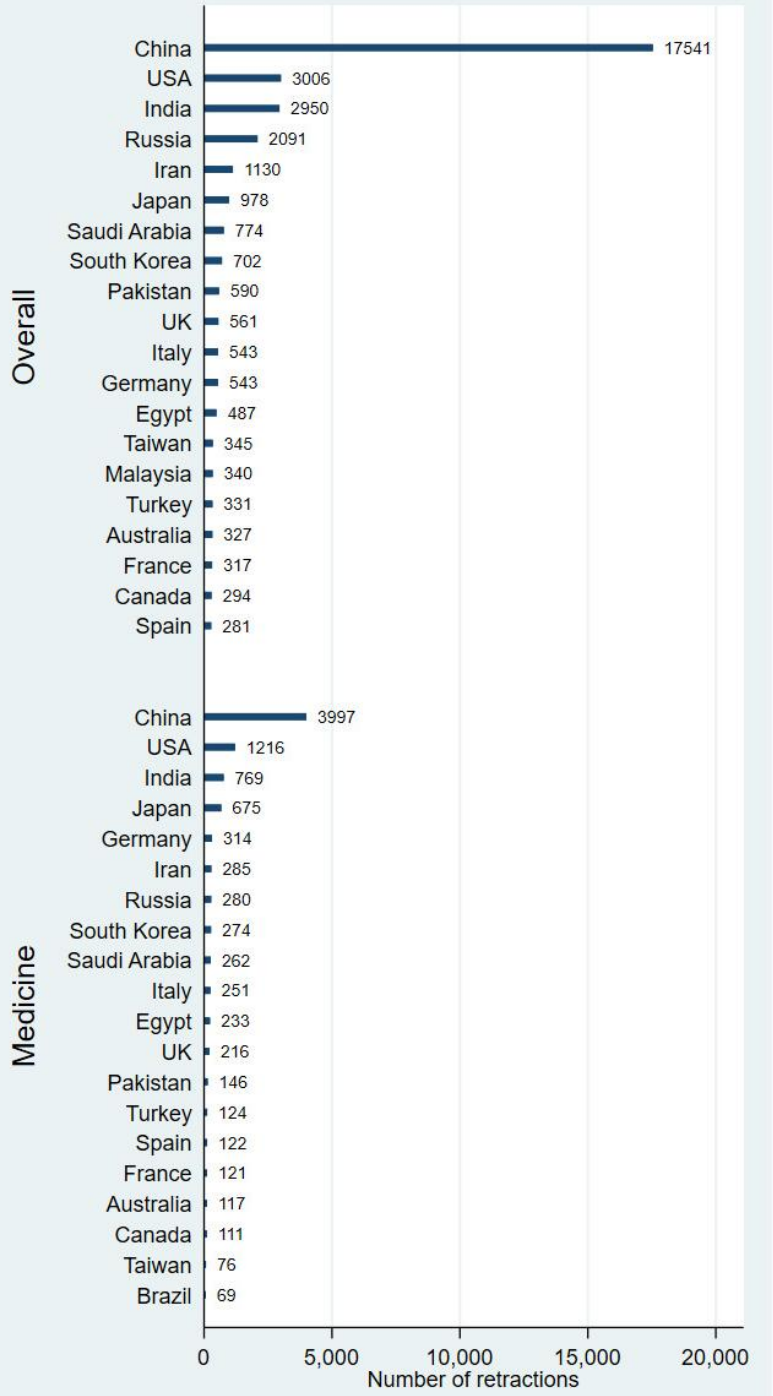


Figure 1: Research Integrity Allegations by Type: CYs 2013 to 2022

National Institutes of Health. Trends in extramural research integrity allegations received at NIH [Internet]. 2023 Mar 22 [cited 2025 Mar 15]. Available from: https://nexus.od.nih.gov/all/2023/03/22/trends-in-extramural-research-integrity-allegations-received-at-nih/



Geographical disparities in research misconduct: analyzing retraction patterns by country

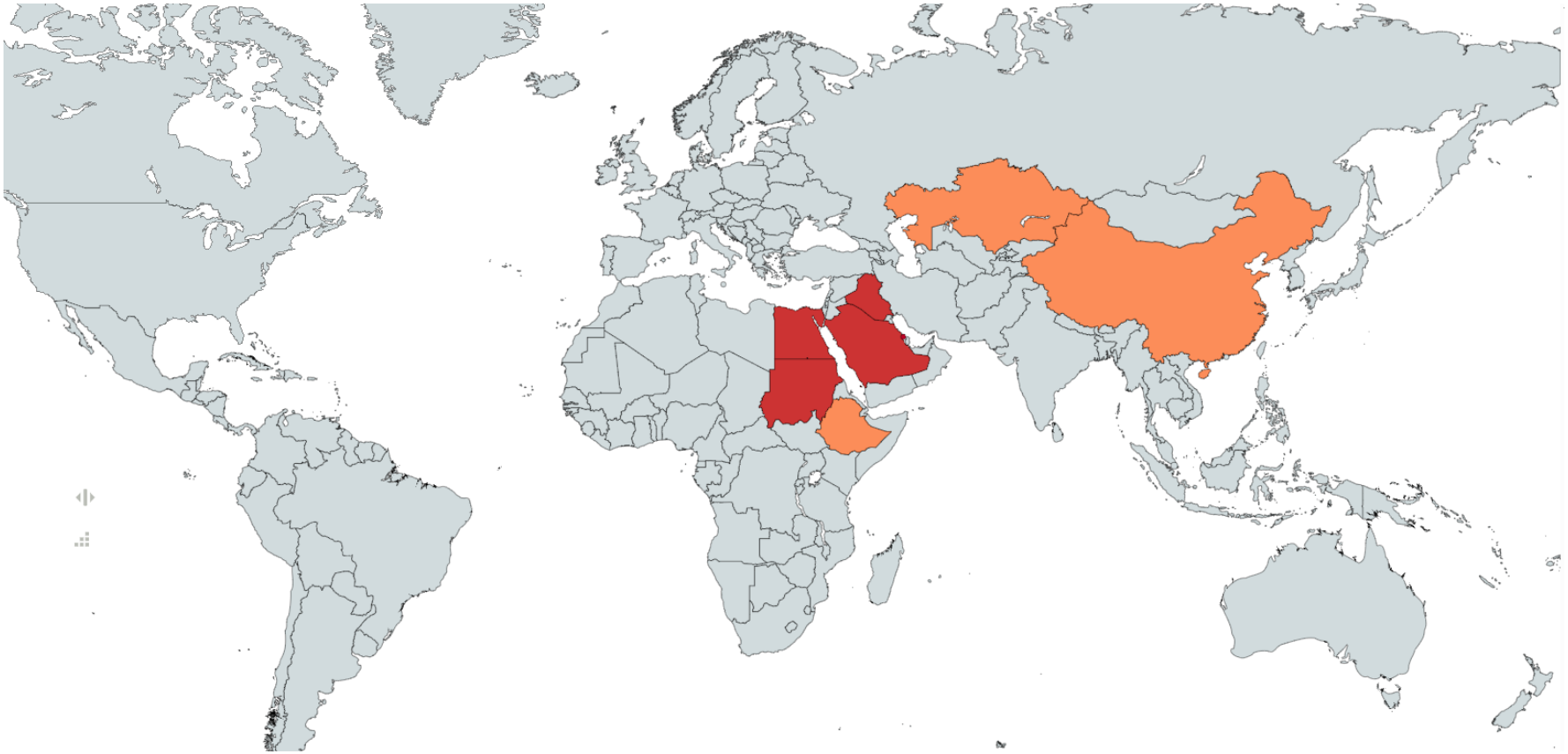
Sebo P, Sebo M. Geographical Disparities in Research Misconduct: Analyzing Retraction Patterns by Country. J Med Internet Res. 2025;27:e65775.

Data Source and Analysis

We used data from the SCImago Journal & Country Rank (SJR), based on Scopus data, to identify the top 100 countries by publication volume from 1996 to 2023—both overall and within the field of medicine.

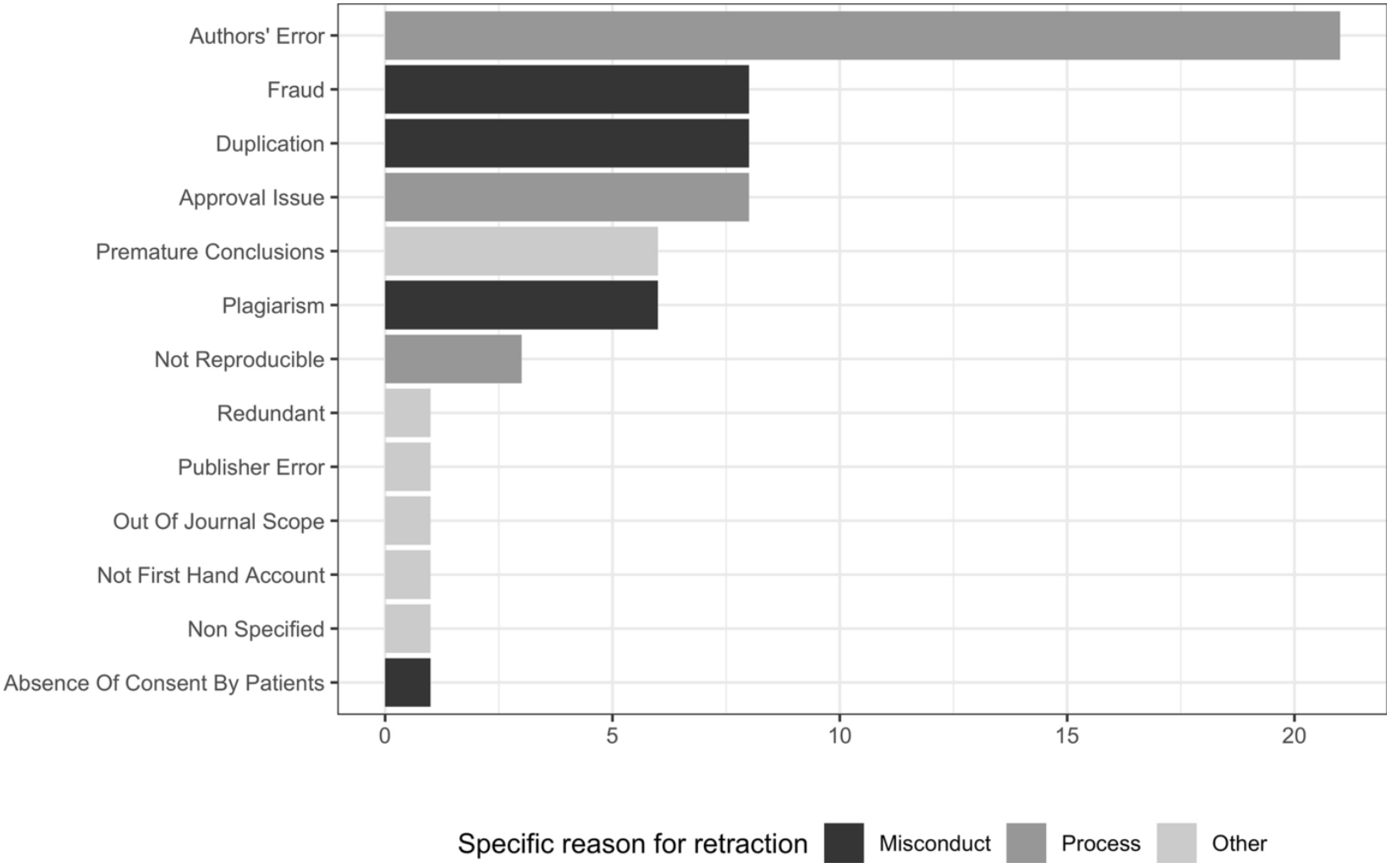
Number of retractions by country (1996-2023) based on overall publications and those in the field of medicine.

Geographical disparities in research misconduct: analyzing retraction patterns by country

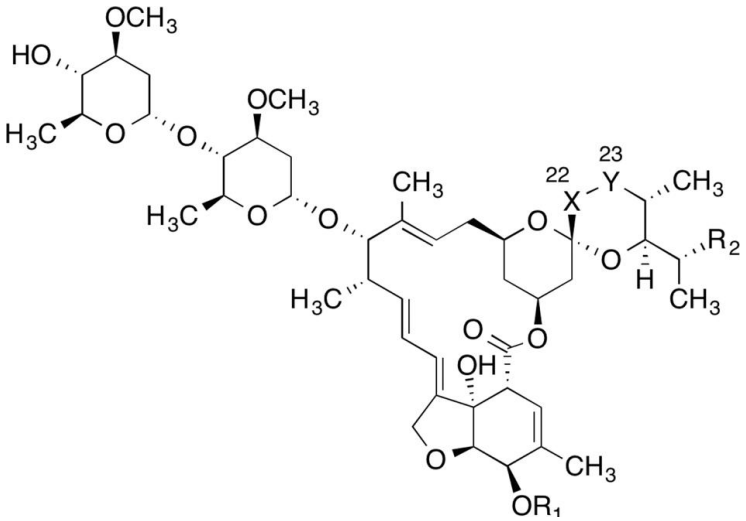


Sebo P, Sebo M. Geographical Disparities in Research Misconduct: Analyzing Retraction Patterns by Country. J Med Internet Res. 2025;27:e65775.

Biased, wrong and counterfeited evidences published during the COVID-19 pandemic, a systematic review of retracted COVID-19 papers



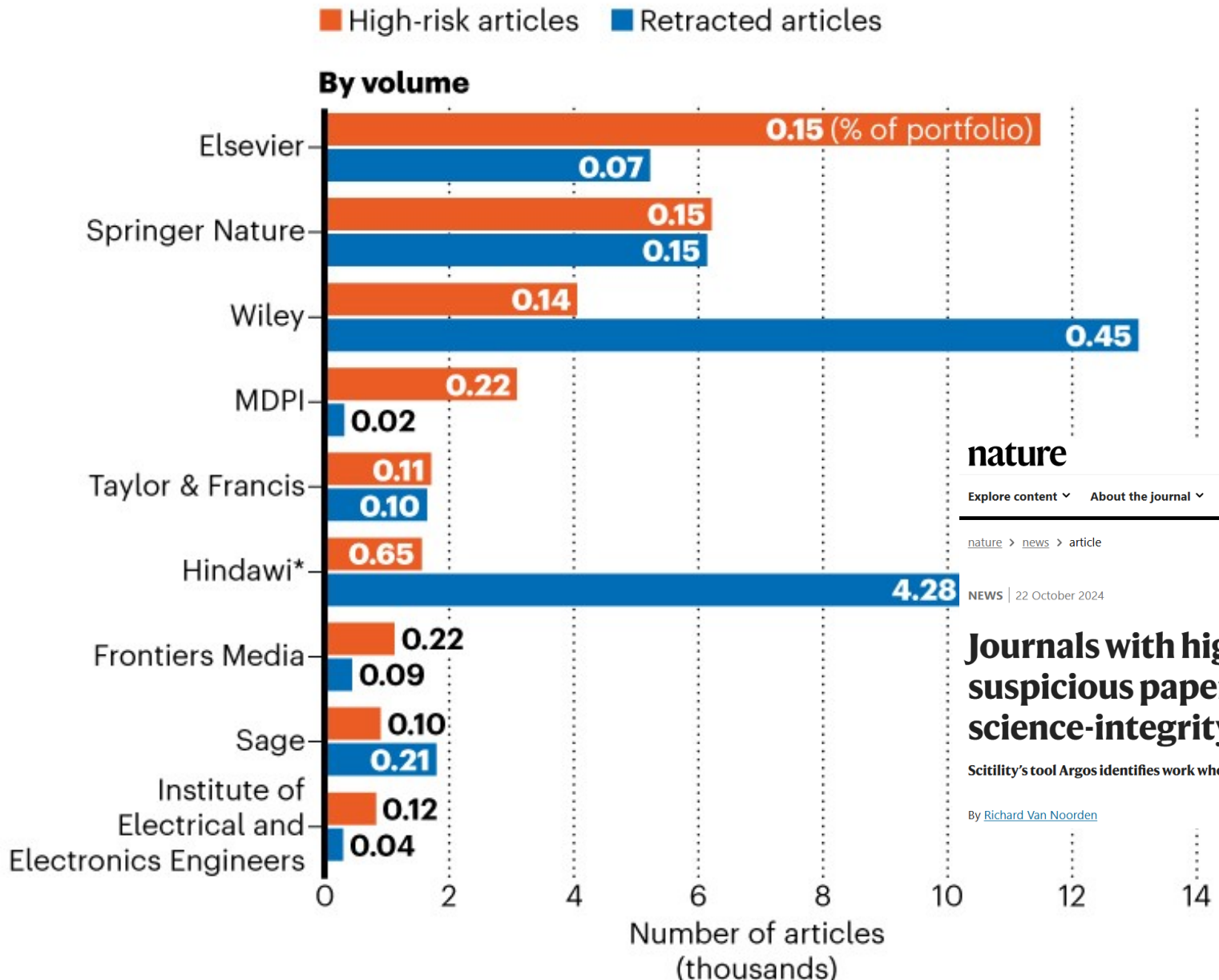
Capodici A, Salussolia A, Sanmarchi F, Gori D, Golinelli D. Biased, wrong and counterfeited evidences published during the COVID-19 pandemic, a systematic review of retracted COVID-19 papers. Quality & Quantity. 2023;57(5):4881-913.



- **Ivermectin** - An analysis of 26 major trials of ivermectin for COVID-19 found that over one third had "serious errors or signs of potential fraud.[7] One of the first papers where fraud was discovered was published by Elgazzar et al. on the preprint platform *Research Square*. Investigators noticed numerous issues - plagiarism, patients who died before the study started, numbers that looked too good to be true. In another ivermectin study, published in *Viruses*, the fraud was one in the most lackadaisical manner - data was just copied 11 times to create a larger sample (and they put this obvious fraud on Github!). Another case of fraud was discovered by *Buzzfeed News* after they called the hospital where a study was supposed to have taken place and found there were no records of it ever having been done. Several meta-analyses remain contaminated with fraudulent studies. When the fraudulent studies are removed no effect is found. As has been well-documented elsewhere, these fraudulent works influenced national COVID-10 policy, in particular in Latin America.

PUBLISHERS AT RISK

The publishers with the greatest number — and proportion — of 'high-risk' articles in their portfolio from 2014 to 2024, according to Argos.*



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NEWS | 22 October 2024

Journals with high rates of suspicious papers flagged by science-integrity start-up

Scitility's tool Argos identifies work whose authors have a record of misconduct.

By Richard Van Noorden

NEWS | 12 December 2023

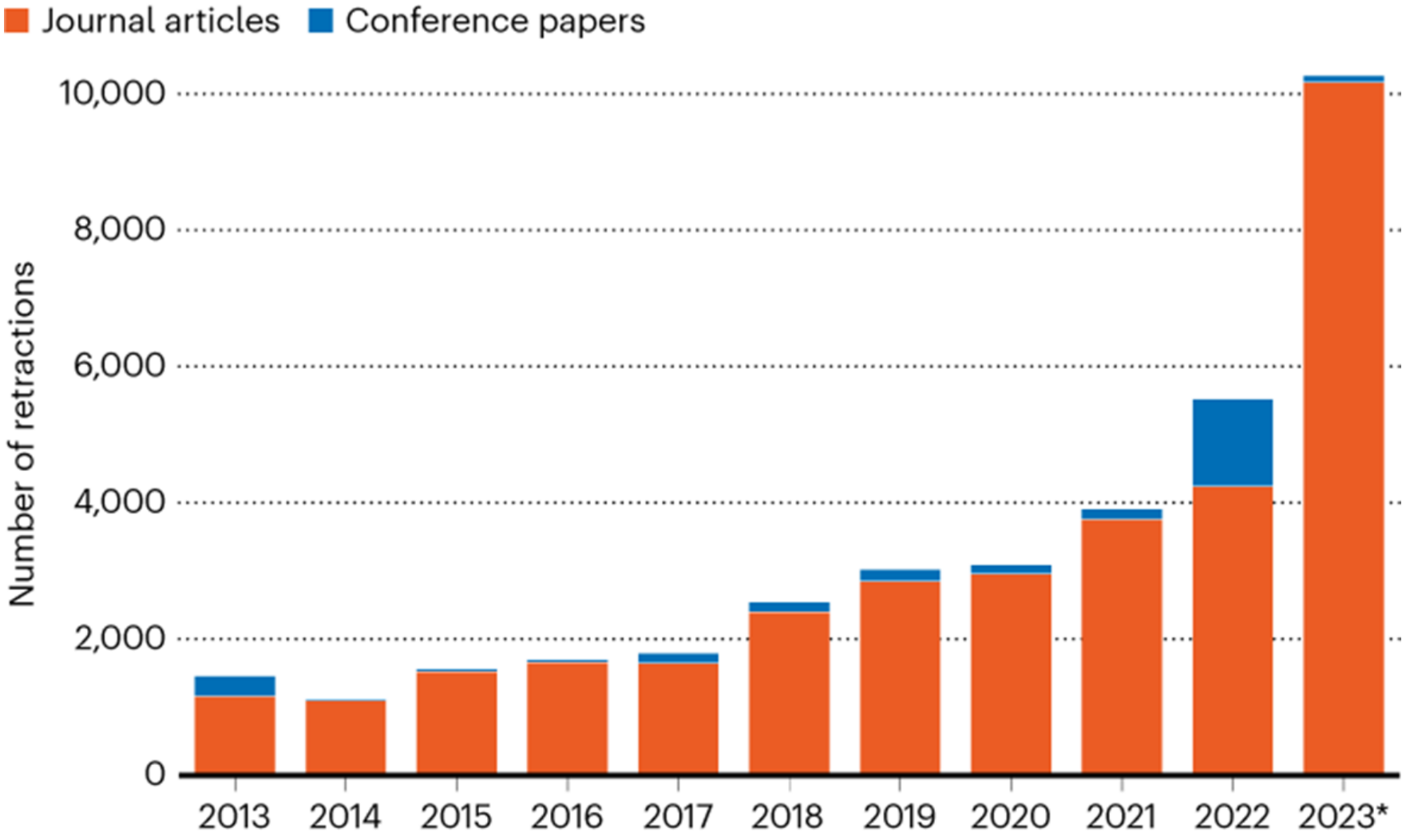
More than 10,000 research papers were retracted in 2023 — a new record

The number of articles being retracted rose sharply this year. Integrity experts say that this is only the tip of the iceberg.

By Richard Van Noorden

A BUMPER YEAR FOR RETRACTIONS

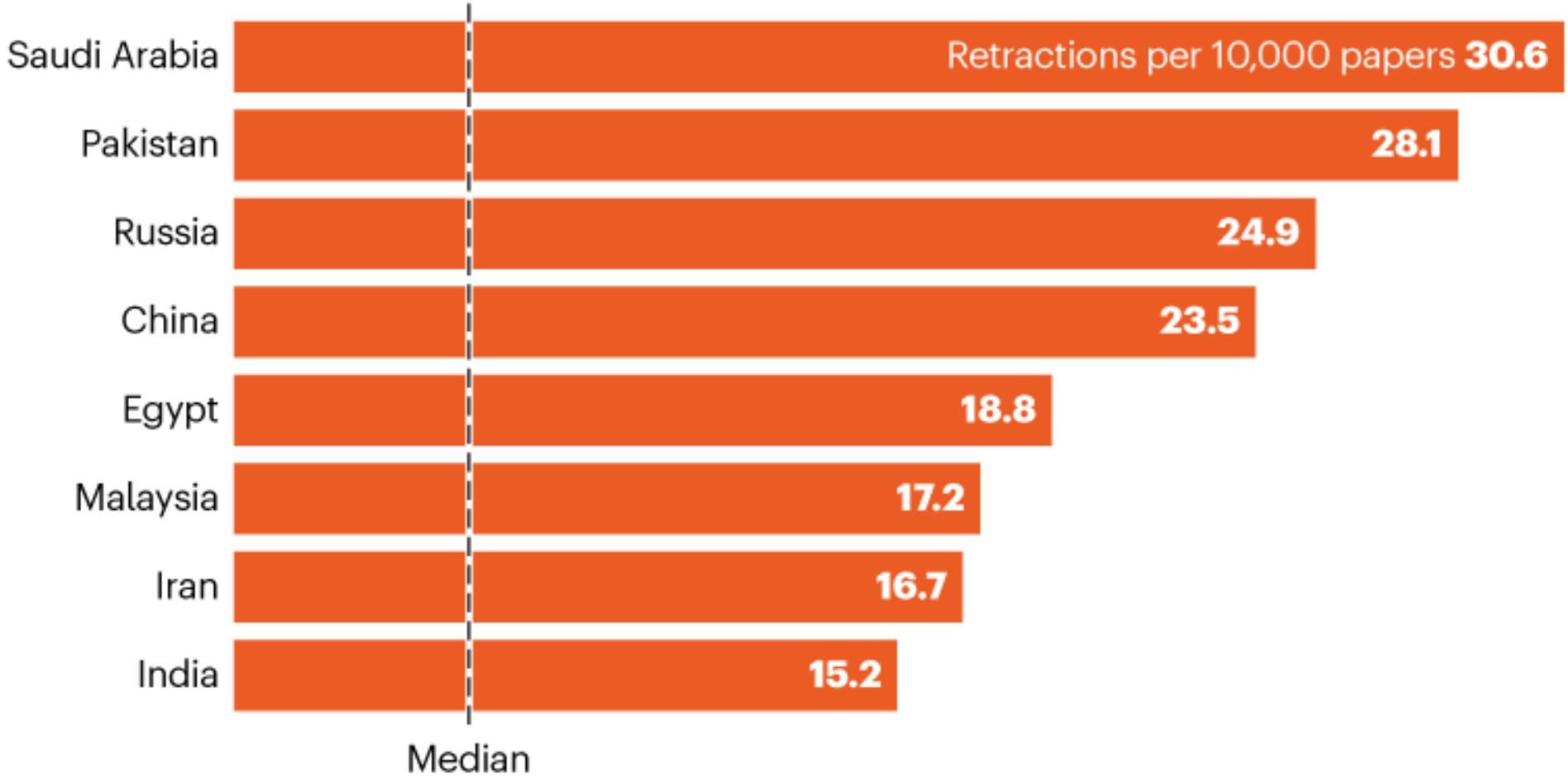
Retraction notices in 2023 have passed 10,000, largely because of more than 8,000 retractions by Hindawi.



*As of 8 December 2023

COUNTRIES WITH HIGHEST RETRACTION RATES

Saudi Arabia, Pakistan, Russia and China have the highest retraction rates among countries with >100,000 papers* published over the past two decades.



*Total number of research papers according to Scopus: articles and reviews. Analysis excludes conference papers (and their retractions)

ORIGINAL INVESTIGATION

DOI: dx.doi.org/10.5195/jmla.2022.1280

JMLA Journal of the Medical Library Association

Retracted publications in pharmacy systematic reviews

Sarah Jane Brown; Caitlin J. Bakker, AHIP; Nicole R. Theis-Mahon, AHIP

Method

- A list of all retracted publications in the Retraction Watch Database from inception to May 2019 (Center for Scientific Integrity)
- Pharmacy field
- Web of Science and Scopus
- Limited results to systematic reviews
- Classified the retraction reason

ORIGINAL INVESTIGATION

DOI: dx.doi.org/10.5195/jmla.2022.1280

Retracted publications in pharmacy systematic reviews

Sarah Jane Brown; Caitlin J. Bakker, AHIP; Nicole R. Theis-Mahon, AHIP

Results

- Of 1,396 retracted publications, 283 were cited 1,096 times in systematic reviews.
- Most (65.0%) (712/1096) citations occurred before retraction.
  - Falsification or manipulation (39.2%)
  - Ethical misconduct including plagiarism (30.4%)
  - Errors in data or methods (26.2%)

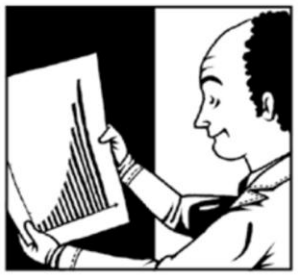


Image manipulation

https://www.linkedin.com/pulse/unleashing-creativity-exploring-image-manipulation-photoshop-rathor-ytroc

The School of Athens', Raphael, c.1509–11 (Stanza della Segnatura, Apostolic Palace, Vatican City).

What is Image Manipulation?

Cropping that changes the context of the final image

Brightness/ contrast adjustment that fades or vanishes part(s) of the image

Selective enhancement of the image with the intent to support the proposed hypothesis

Colour adjustment that distorts the observation and the conclusion from the image

Cloning an object into an image in which it did not appear previously

What are the Implications?

Affects research integrity. Considered a misconduct

Impacts reproducibility of the outcome

May result in paper retraction, damaged reputation and career, etc.

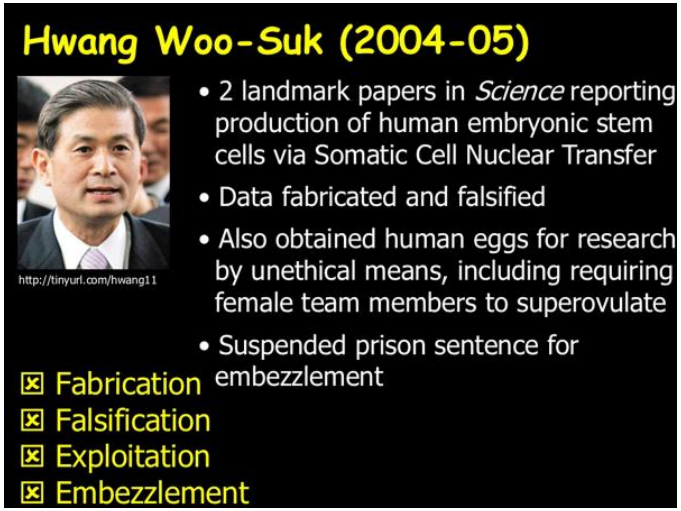
enago academy
Learn. Share. Discuss. Publish.

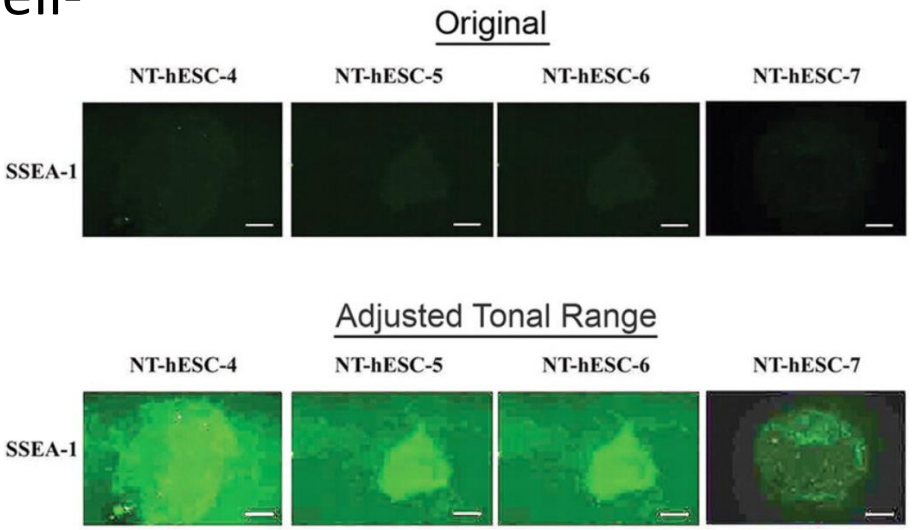
Source: https://ori.hhs.gov/education/products/RIandImages/practices/default.html

https://www.enago.com/academy/scientific-fraud-journals-detect-image-manipulation-part-1/

The growing concern over image manipulation

In 2009, researcher **Hwang Woo-Suk** was convicted of research misconduct that included embezzlement and unethical procurement of human eggs. Among his less widely reported ethical violations, however, was the manipulation of images to show negative staining for a cell-surface marker.





https://www.researchgate.net/figure/Detecting-image-manipulation-in-the-Hwang-et-al-stem-cell-paper-9-The-image-in-the_fig1_6590342

The growing concern over image manipulation

- In 2013, readers of *Cell* discovered duplicate images in a paper by reproductive biologist **Shoukhrat Mitalipov**, attributed to "sloppiness."

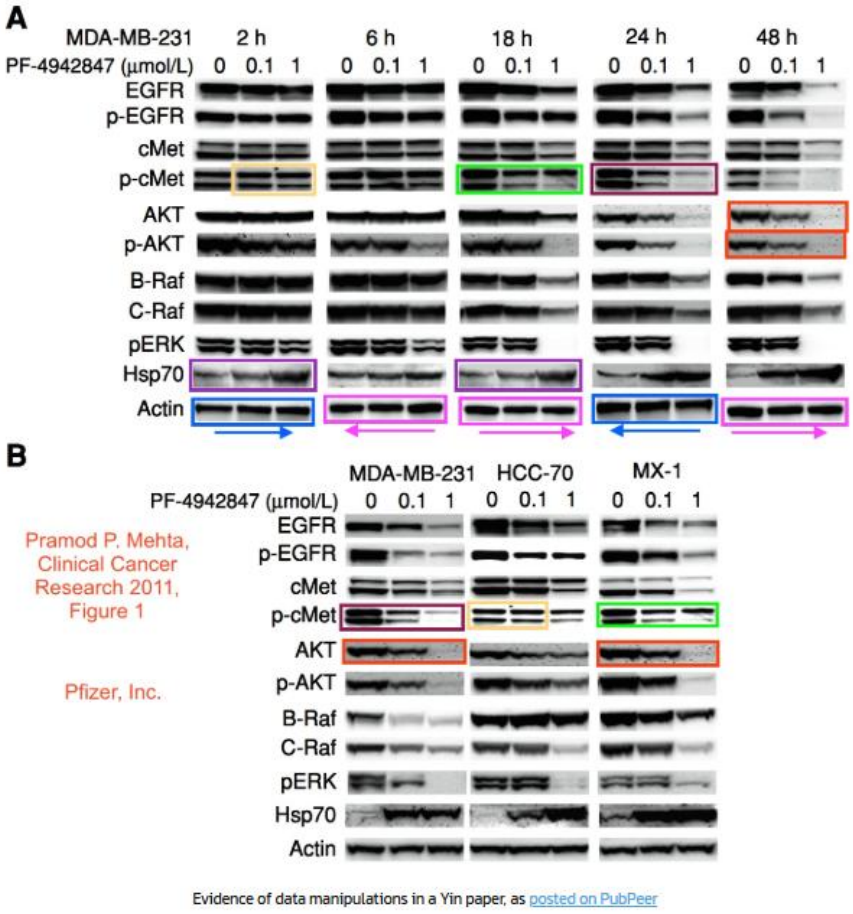
Change history

23 May 2013 *Cell* has now published a statement responding to the errors in the paper. "Based on our own initial in-house assessment of the issues raised in PubPeer and in initial discussions with the authors, it seems that there were some minor errors made by the authors when preparing the figures for initial submission," Cell's editorial team said in a statement sent Thursday afternoon. "While we are continuing discussions with the authors, we do not believe these errors impact the scientific findings of the paper in any way." Cell also defended its rapid review of the paper. "The comparatively rapid turnaround for this paper can be attributed to the fact that the reviewers graciously agreed to prioritize attention to reviewing this paper in a timely way. It is a misrepresentation to equate slow peer review with thoroughness or rigor or to use timely peer review as a justification for sloppiness in manuscript preparation," the statement said.

https://www.enago.com/academy/scientific-fraud-journals-detect-image-manipulation-part-1/

The growing concern over image manipulation

5 retractions and a sack for Pfizer lead cancer researcher Min-Jean Yin



Evidence of data manipulations in a Yin paper, as posted on PubPeer

https://forbetterscience.com/2016/10/11/5-retractions-and-a-sack-for-pfizer-lead-cancer-researcher-min-jean-yin/

The growing concern over image manipulation

MD Anderson's investigation concerned a paper published in *Cancer Cell* in 2014. On August 7 the journal marked it with a "temporary Expression of Concern" detailing duplicated and relabeled data found in the probe, which was completed in May 2024. The article has been cited 1,462 times, according to Clarivate's Web of Science.

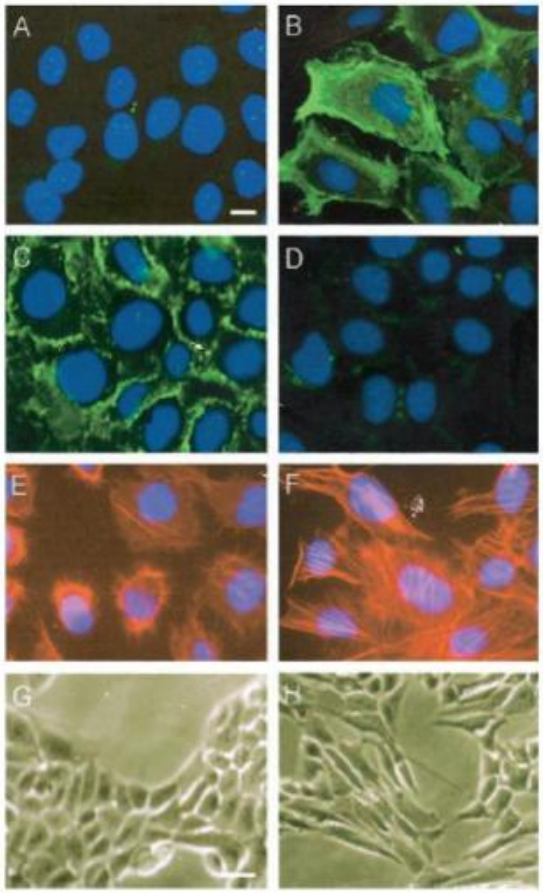
The investigation "concluded that there are no authentic, original, and uncontested data to verify the results presented in the publication and recommended retraction of the article," the notice states.

https://retractionwatch.com/2025/08/28/exclusive-sonia-melo-sues-md-anderson-cancer-center-misconduct-finding/

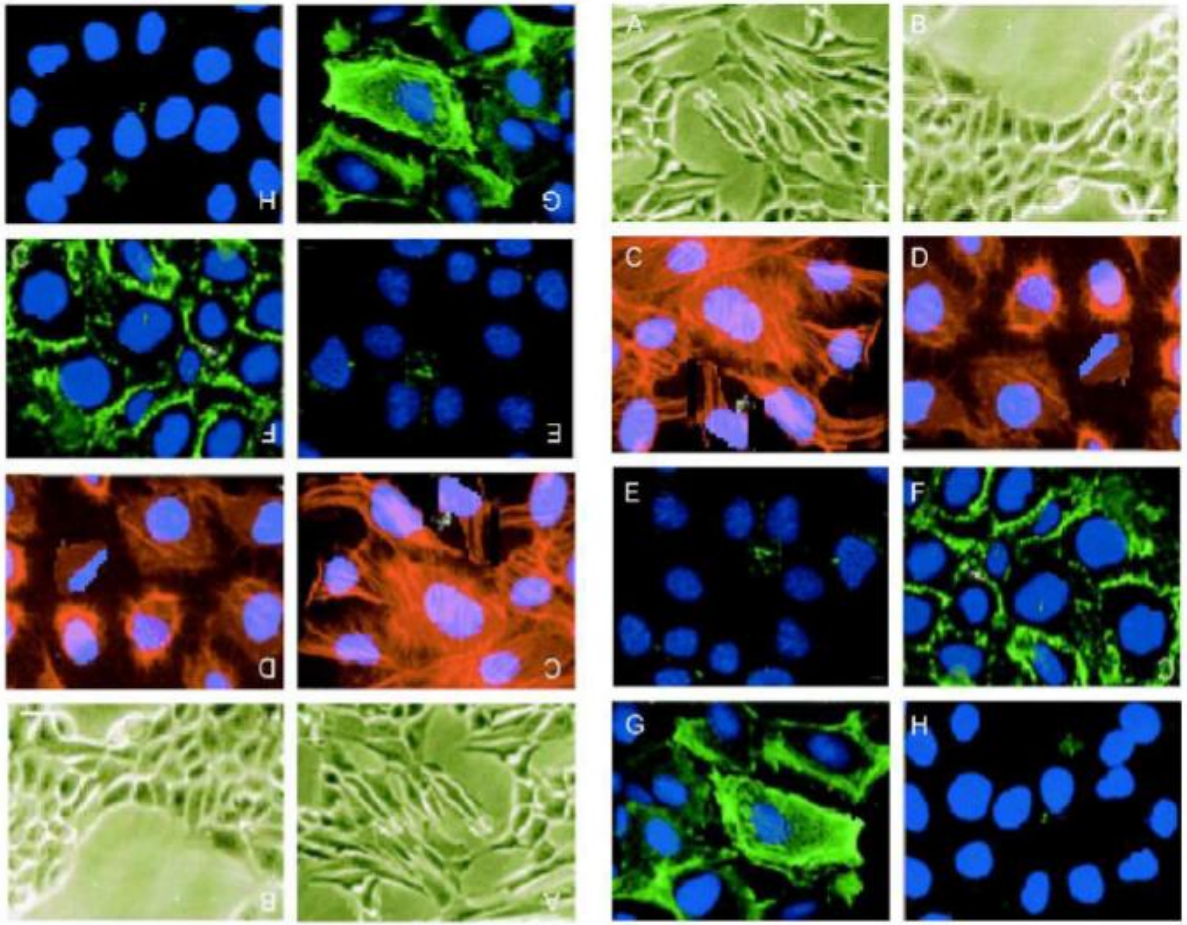
A biochemist who worked as a postdoc at The University of Texas MD Anderson Cancer Center in Houston has sued the institution to dispute findings of research misconduct.

Sonia Melo

Am J Pathol, 2001



Life Sci, 2004



Source: Scientific Integrity and Elsevier Presented by: IJsbrand Jan Aalbersberg CSAB, Washington DC, November 6, 20 15

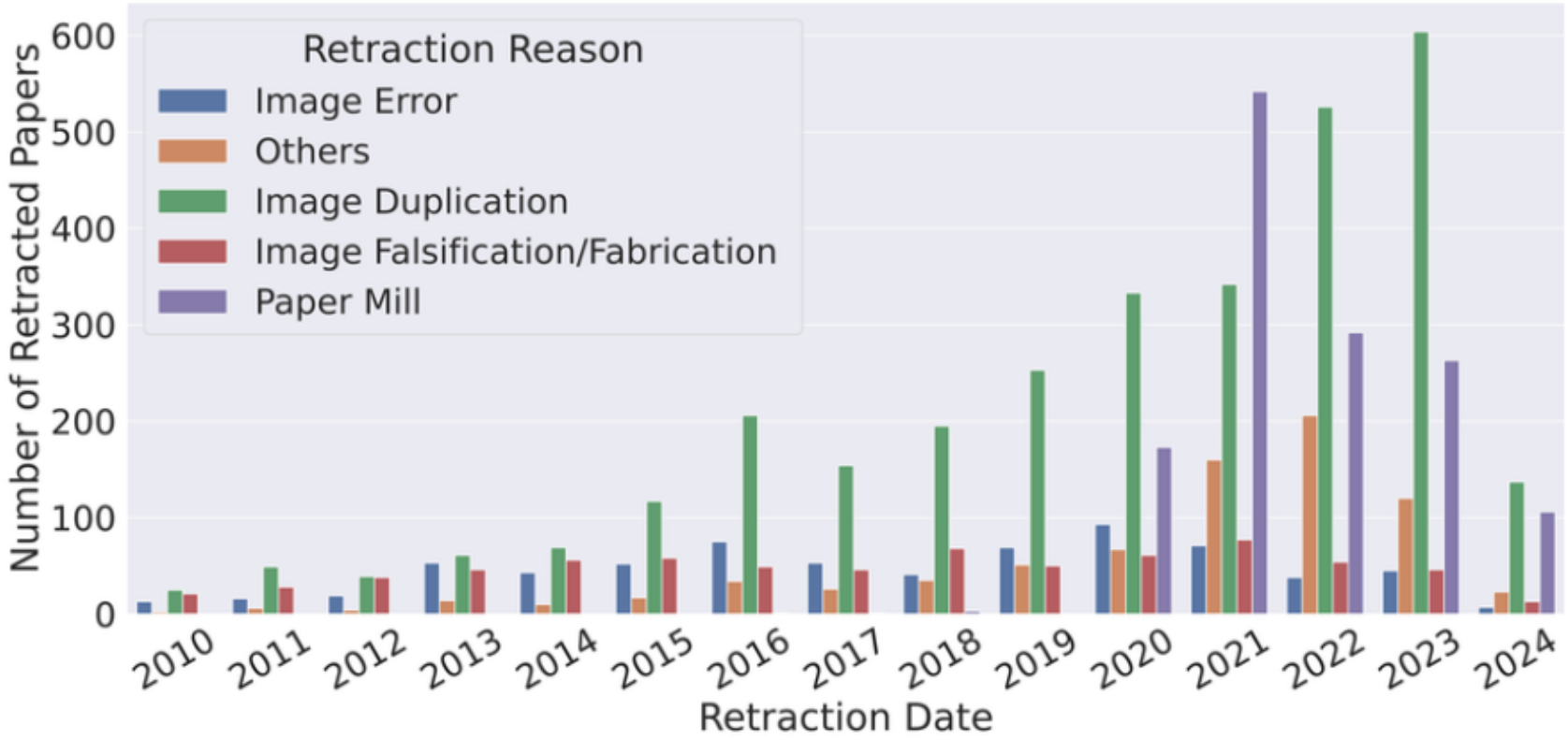
What constitutes image misconduct?

Microbiologist Elisabeth Bik

1. Simple duplication
2. Duplication with repositioning
3. Duplication with alteration
4. Cuts
5. Beautification

https://www.biorxiv.org/content/biorxiv/early/2016/04/20/049452.full.pdf

Trends in retraction reasons involving image problem



Retracted papers due to image problems from 2010 to 2024 Paper mill production has drastically increased from 2020 to 2024. The category "Others" regards ambiguous retraction reasons related to images that we could not fit into any other category.

Cardenuto J, Moreira D, Rocha A. Unveiling scientific articles from paper mills with provenance analysis. PLOS ONE. 2024;19.

คำถามที่พบบ่อย

- การทำสิ่งใดบ้างที่เข้าข่ายผิดจริยธรรมในการเผยแพร่ผลงานวิจัย
- บทความที่ลงเอกสารประชุมวิชาการ **conference proceeding** ไปแล้ว สามารถนำไปส่งวารสารได้อีกหรือไม่
- ประโยคที่ปรากฏในบทความเดิมแล้วนำมาใช้ในบทความใหม่ ถือเป็นการซ้ำซ้อนหรือไม่
- รูปภาพ หรือกราฟที่ปรากฏในบทความที่เผยแพร่ไปแล้ว สามารถนำมาใช้ในบทความใหม่ได้อีกหรือไม่

  งานวิจัยที่เคยเผยแพร่เป็นภาษาไทยแล้ว สามารถแปลเป็นภาษาอังกฤษแล้วเผยแพร่เป็นบทความใหม่ได้หรือไม่
- การละเมิดสิทธิความเป็นผู้นิพนธ์ (Authorship) คืออะไร

  การนำงานวิจัยที่ทำไว้ขณะเรียนปริญญาโทและเอกหรือที่ทำงานเดิม มาทำต่อและเขียนบทความเผยแพร่ สามารถทำได้หรือไม่?

  กรณีใดที่ผลการวิจัยต้องได้รับการรับรองจริยธรรมการวิจัยในมนุษย์ จึงสามารถใช้เผยแพร่ในบทความได้

คำถามที่พบบ่อย

1. บทความวิจัยจาก conference ไปลงพิมพ์ใน journal ได้หรือไม่?
2. บทความวิจัยจาก conference ไปลงนำเสนอใน conference อีกที่ได้หรือไม่?
3. สามารถนำข้อมูลที่ลงพิมพ์ใน journal นำไปเสนอใน conference ได้หรือไม่?
4. บทความภาษาไทย นำไปแปลและลงพิมพ์เป็นบทความภาษาต่างประเทศอีกได้หรือไม่?
5. บทความจากconference ถูกคัดเลือกมาลง journal ถือเป็นบทความ conference หรือ บทความ journal
6. นำข้อมูลบางส่วนของบทความตนเอง (เช่น ส่วนของ introduction and experimental) ไปพิมพ์ซ้ำได้ไหม?

Source: https://en.wikipedia.org/wiki/Computer

Narongrit Sombatsompop

คำถามที่พบบ่อย

1. Corresponding author และ First authors มีความหมายอย่างไร?
2. การใส่ชื่อที่หน้า front page กับ acknowledgement ใช้กติกาใดเป็นตัวตัดสิน?
3. งานวิจัยมาจาก thesis ของนักศึกษา จำเป็นต้องใส่ชื่อ นศ. ไหม (ใส่ใน acknowledgement ได้ไหม?)
4. เราสามารถปรับเปลี่ยนจำนวนผู้นิพนธ์ (เอาออก และใส่เพิ่ม) ในบทความได้หรือไม่?
5. ลาเรียนเต็มเวลา สามารถใส่ชื่อต้นสังกัดร่วมด้วยได้ไหม (ต้นสังกัดให้ทุนและให้เวลามาเรียน)
6. เอาบทความจาก conference มาตีพิมพ์ จำนวนและชื่อผู้เขียนต้องเหมือนเดิมหรือไม่?

Criteria for authorship

Corresponding authors

- Consider carefully the list and order of authors before submission
- Provide the definitive list of authors at the time of the original submission

Authors

- Take collective responsibility for the work
- Each individual author is accountable for ensuring that questions related to the content, accuracy or integrity of any part of the work are appropriately investigated and resolved

Criteria for authorship

Authorship

- Made significant scientific contributions to the conception, design, execution, or interpretation of the reported study

- Only essential scientific contributions merit co-authorship

Acknowledgement

- Taking samples
- Giving access to samples and sampling locations and other resources
- Performing routine literature search
- Project administration and acquisition of funding
- Routine lab work including routine analysis, calculations and modelling or proof-reading manuscripts

คำถามที่พบบ่อย

1. Primary and secondary citations มีการใช้งานอย่างไร?
2. ทำไมการอ้างอิง websites จึงเป็นข้อที่ไม่ควรทำ?
3. การอ้างอิงจาก text books หรือ journals แบบไหนดีกว่ากัน?
4. จำนวนรายการอ้างอิงควรมีประมาณกี่รายการ? และมีลักษณะการอ้างอิงในบทความวิจัยอย่างไร?
5. อ้างอิงบทความของตนเอง ดีหรือไม่?
6. ถ้าทำการอ้างอิงทุกอย่าง ก็copy ได้ใช่ไหม?

คำถามที่พบบ่อย

- Withdraw, Retract, Errata ต่างกันอย่างไร
- บางบทความ accept เร็วมาก ทำอย่างไร
- Supplemental and special issue ต่างกันอย่างไร
- Paper mill คืออะไร
- จำนวน author ที่เหมาะสม
- การใช้ AI declaration and citations

Guide for Authors

Introduction

Editorial Office

Akshay Nair, Administrative Editor

The Journal of Pediatrics

jpedsedoffice@elsevier.com

Checklist for Manuscript Submission

Please click to access the checklist

Declaration of Generative Artificial Intelligence in Scientific Writing

The below guidance only refers to the writing process, and not to the use of artificial intelligence (AI) tools to analyse and draw insights from data as part of the research process.

Where authors use generative artificial intelligence (AI) and AI-assisted technologies in the writing process, authors should only use these technologies to improve readability and language. Applying the technology should be done with human oversight and control, and authors should carefully review and edit the result, as AI can generate authoritative-sounding output that can be incorrect, incomplete, or biased. AI and AI-assisted technologies should not be

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Example of AI declaration in manuscripts

Disclosure instructions

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This declaration does not apply to the use of basic tools for checking grammar, spelling, references etc. If there is nothing to disclose, there is no need to add a statement.

Transparency

Accountability

Reliability

Fairness

Security

Privacy

Safety

Law, Ethics, Standard

https://www.neilsahota.com/what-is-artificial-intelligence-how-does-it-work/

Mahidol University
Wisdom of the Land

3 Level of Human Involvement

Mahidol University

Human-in-the-loop

is a level of involvement where **humans completely control the operation or decision-making, with AI serving only to provide recommendations or information.**

- In medical diagnostics, **AI can help** analyze the likelihood of disease and **provide useful information to physicians for diagnosis and treatment planning**.
- In such cases, if AI misdiagnoses, the physician's judgment can help mitigate the risk and potential harmful consequences to patient health, preventing irreversible damage.

Human-over-the-loop

refers to a level of involvement where **AI can operate or make decisions automatically (without waiting for human intervention), but still requires humans for oversight.** Additionally, humans can intervene or adjust the operations if errors are detected

- In the case of a quality control system, AI can automatically sort out products that do not meet quality standards without waiting for a human decision.
- However, the system still allows humans to intervene if it fails to properly separate products that do not meet the set standards. In such cases, AI's operation remains under human supervision, and humans can still intervene to correct issues.

Human-out-of-the-loop

refers to a level of AI involvement **where AI fully controls operations or decisions without human capability to intervene or adjust its actions.**

- In the case of customer service chatbots and product recommendation systems on online platforms, organizations might choose to use AI to instantly meet customer needs without human intervention.
- In both these scenarios, humans may not be able to interfere with AI operations or directly communicate with customers.

To mitigate potential dissatisfaction with the chatbot system, organizations should provide alternative channels for customers to directly contact human representatives.

Contact: tipajin.tha@mahidol.edu, [Credited Tipajin T.]

ตำแหน่งทางวิชาการ: การปรับปรุงเปลี่ยนแปลงในประกาศ กพอ.2568

ศาสตราจารย์กิตติคุณ นายแพทย์สุทธิพร จิตต์มิตรภาพ

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ประธานคณะวุฒยาจารย์ จุฬาฯ
ประธาน กพว สจล นมร

การประเมินผลงานวิชาการ/ จริยธรรม

1. ประเมินเกี่ยวกับ จริยธรรม และ จรรยาบรรณในการดำเนินการวิจัย การเผยแพร่ผลงาน รูปแบบการนำเสนอทั้งในแต่ละชิ้นงาน และในภาพรวมของผู้ขอกำหนดตำแหน่ง
2. หากพบประเด็นที่เข้าข่ายผิดจริยธรรม หรือมีข้อสงสัย ให้ดำเนินการพิจารณาหาข้อสรุปในรูปแบบองค์คณะของผู้ทรงคุณวุฒิ แล้วสรุป

มีการปรับปรุงเพิ่มข้อความเกี่ยวกับเรื่องนี้ ซึ่งเคยระบุไว้ 6 หัวข้อ 1.ซื่อสัตย์ทางวิชาการ ไม่ผิดมาตรฐานการเผยแพร่ 2. ต้องอ้างอิง 3. ไม่ละเลย หรือ ละเมิดสิทธิส่วนบุคคล/สิทธิมนุษยชน 4. ใช้หลักวิชาการ ไม่จงใจเบี่ยงเบน ขยายข้อค้นพบโดยไม่ตรวจสอบ 5. ใช้ผลงานในทางที่ชอบ 6. ต้องขออนุญาต วิจัยในคน ในสัตว์

เพิ่ม 7. ผิดจริยธรรมทั่วไปร้ายแรง ทุจริตต่อหน้าที่ กระทำผิดที่เสื่อมเสียต่อตำแหน่งวิชาการ

จริยธรรมและจรรยาบรรณทางวิชาการ

(1) ต้องมีความซื่อสัตย์ทางวิชาการ ต้องระบุการมีส่วนร่วมในผลงานทางวิชาการอย่างถูกต้องตรงกับความเป็นจริง ต้องไม่ลอกเลียนผลงานทางวิชาการของผู้อื่นไม่ว่าทั้งหมดหรือบางส่วน และต้องไม่นำผลงานทางวิชาการของผู้อื่นหรือที่ผู้อื่นมีส่วนร่วมด้วยไปใช้ในการเสนอขอกำหนดตำแหน่งทางวิชาการโดยอ้างว่าเป็นผลงานทางวิชาการของตนเองหรือของตนเองแต่ผู้เดียว

(2) ไม่นำผลงานของผู้อื่นมาเป็นผลงานของตน ไม่ลอกเลียนผลงานของผู้อื่น ไม่สร้างข้อมูลหรือข้อเท็จจริงอันไม่มีอยู่จริง (fabrication) ไม่บิดเบือนข้อมูลหรือข้อเท็จจริง (falsification)

(3) ต้องไม่นำผลงานทางวิชาการของตนเองในเรื่องเดียวกันไปเผยแพร่มากกว่าหนึ่งแหล่ง และไม่คัดลอกข้อความใด ๆ จากผลงานเดิมของตนโดยไม่อ้างอิงผลงานเดิมตามหลักวิชาการ ทั้งนี้ ในลักษณะที่จะทำให้เข้าใจผิดว่าเป็นผลงานใหม่

(4) ต้องไม่คำนึงถึงผลประโยชน์ทางวิชาการจนละเลยหรือละเมิดสิทธิส่วนบุคคลของผู้อื่น สิทธิมนุษยชน หรือจรรยาบรรณ แห่งวิชาชีพซึ่งก่อให้เกิดความเสียหายแก่ผู้อื่น

(5) ต้องเสนอผลงานตามความเป็นจริง และไม่กระทำการใด ๆ ที่เบี่ยงเบนผลการศึกษาหรือวิจัย

จริยธรรมและจรรยาบรรณทางวิชาการ

(6) ผลงานทางวิชาการที่นำมาใช้ขอกำหนดตำแหน่งทางวิชาการ ต้องได้มาจากการศึกษาวิจัยโดยใช้หลักวิชาการเป็นเกณฑ์ ไม่มีอคติมาเกี่ยวข้อง

(7) ต้องไม่นำผลงานที่เป็นส่วนหนึ่งส่วนใดของการศึกษาเพื่อรับปริญญาหรือประกาศนียบัตรใด ๆ ของตนเองหรือของผู้อื่น มาใช้ในการเสนอขอกำหนดตำแหน่งทางวิชาการ

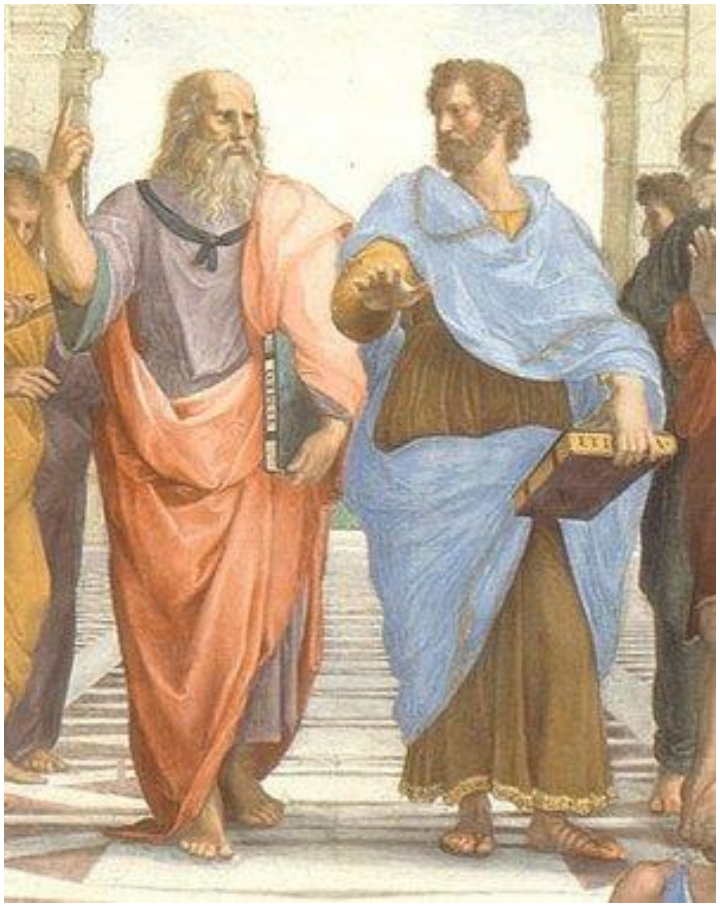
(8) ต้องไม่สร้างหรือขยายข้อค้นพบในผลงานทางวิชาการโดยปราศจากการตรวจสอบยืนยันในทางวิชาการ

(9) ต้องอ้างอิงบุคคลหรือแหล่งที่มาของข้อมูลที่นำมาใช้ในผลงานทางวิชาการของตนเองและแสดงหลักฐานของการอ้างอิงอย่างสมบูรณ์ตามระเบียบวิธีการอ้างอิงทางวิชาการ

(10) หากผลงานทางวิชาการมีการใช้ข้อมูลจากการทำการวิจัยในคนหรือสัตว์ตามที่กำหนดไว้ใน “แนวทางจริยธรรมการทำวิจัยในคน และที่เกี่ยวข้องกับคน” และ “จรรยาบรรณการดำเนินการต่อสัตว์เพื่องานทางวิทยาศาสตร์” ของสำนักงานการวิจัยแห่งชาติ ผู้ขอกำหนดตำแหน่งทางวิชาการจะต้องยื่นหลักฐานแสดงการได้รับอนุญาตจากคณะกรรมการจริยธรรมการวิจัยของมหาวิทยาลัยประกอบผลงานทางวิชาการนั้นด้วย

(11) ต้องไม่นำผลงานไปใช้ประโยชน์ในทางที่ไม่ชอบธรรมและไม่ชอบด้วยกฎหมาย

Thank you for your attention



The Timaeus represents his focus on ideal, abstract truths and heavenly forms.

The *Nicomachean Ethics* is depicted as a bound, leather-covered book, representing Aristotle's focus on human conduct, virtue, and practical, earthly matters