BIO10017 – O Que é Ciência/UFRGS

Integridade na Pesquisa

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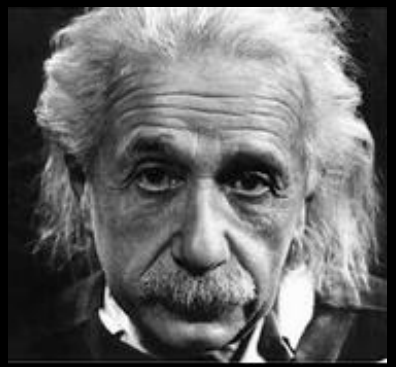
Serviço de Bioética e Laboratório de Pesquisa em Bioética e Ética na Ciência HCPA/Brasil

www.bioetica.ufrgs.br

https://doi.org/10.6084/m9.figshare.8411882

Muitas pessoas dizem
que o intelecto
é que faz um grande cientista.
Eles estão errados:
é o caráter.



Albert Einstein
In: Makay AL.
A dictionary of scientific quotations.
Philadelphia: IPP, 1991:23.

Ética

é a reflexão crítica sobre o agir humano na perspectiva do bem e do mal.

Urbano Zilles
O que é Ética.
Porto Alegre: EST, 2006:7.

Ética

é a busca de justificativas para verificar a adequação ou não das ações humanas.

Adolfo Sanches Vasques
Ética
Rio de Janeiro: Civilização Brasileira, 2000:63.

Decoro

Honestidade

Honradez

Dignidade

Integritate

Decência

Retidão

Seriedade

Respeitabilidade

Ministry of Science, Innovation and Higher Education

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Home › Research and innovation › Councils and commissions › The Danish Committees on Scientific Dishonesty

The Danish Committees on Scientific Dishonesty

The Danish Committees for Scientific Dishonesty (DCSD) handles cases on scientific dishonesty (research misconduct) in research

What is scientific dishonesty (research misconduct)?

Scientific dishonesty (research misconduct) is defined by the Danish Parliament as: Falsification, Fabrication, Plagiarism and other serious violations of good scientific practice committed wilfully or gross negligent in planning, performing, or reporting of research results.

Responsibility / mission of DCSD

DCSD investigates allegations on research misconduct which are of significance for Danish research.

Investigations start upon acceptance of a complaint

Criado em 1993

Povl Riis

Fraude dos Observadores

Trimming

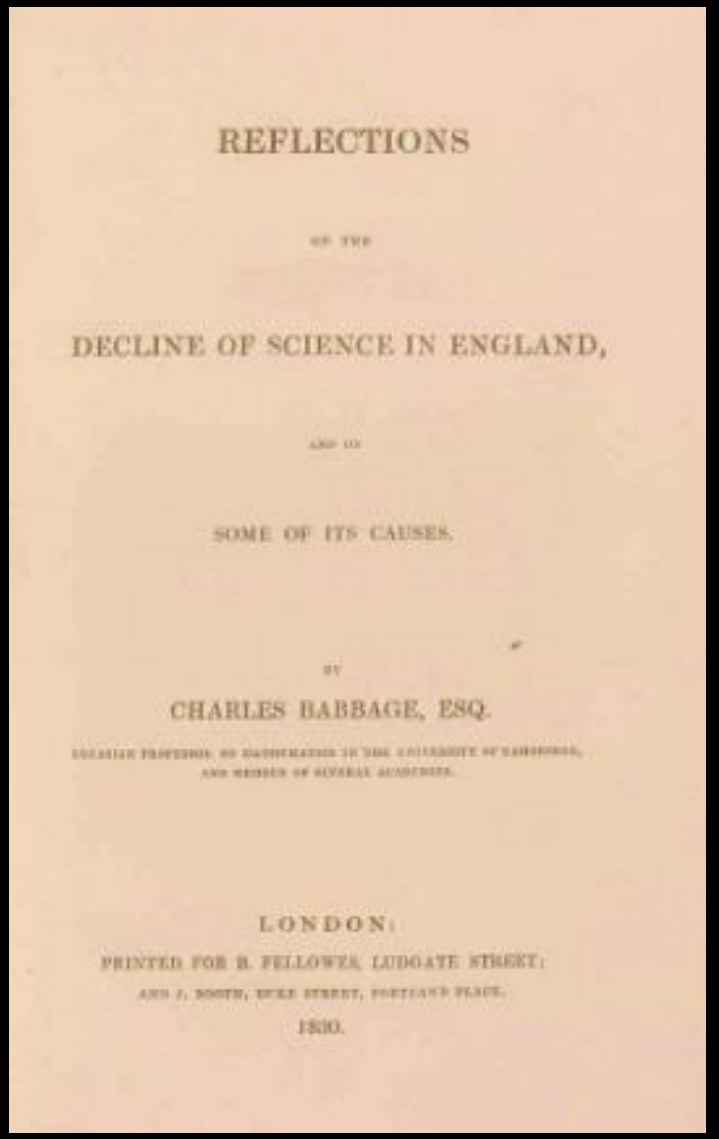
Ajustes de dados

Cooking

Manipulação de dados e
seleção de dados de interesse

Forgery

Falsificação de dados



REFLECTIONS

ON THE

DECLINE OF SCIENCE IN ENGLAND,

AND ON

SOME OF ITS CAUSES.

BY

CHARLES BABBAGE, ESQ.

LONDON:

PRINTED FOR B. FELLOWES, LUDGATE STREET;

1830.

Charles Babbage
Section 3. On the frauds of observers.
Reflections on the Decline of Science in England.

London: B. Fellowes, 1830:174-183.

On the Primary Site of Nuclear RNA Synthesis.* By Lester Goldstein‡ and Julie Micou.
(*From the Cancer Research Institute, University of California Medical Center, San Francisco.*)§

There is increasing cytolo
substantial portion of cyt
acid (RNA) is synthesized i
In two of these papers (3, 4)
work (see pp. 133–135, refer
suggested that the nucleolus
the nucleus) where RNA synt
pletely localized.

Since there are very few n
most cell types, the observati
tion of RNA precursors into n
rapid and occurs much earlie
casts some doubt on the hypo
carrier of information from
That is to say, it is difficult t
mation from many chromo
imparted to RNA synthesiz
represented by the nucleoli. T
still prove valid, however, if
that RNA was synthesized a
loci and was very rapidly
nucleoli where some other act
much slower rate. (This oth
the conjugation of RNA w
hypothesis has been sugge
Taylor (3).

If the latter assumption is
find that following a very brie
active RNA precursor, only
(or chromosomal) RNA wo
experiments herein described
testing this hypothesis.

Experimen

ON THE PRIMARY SITE OF NUCLEAR RNA SYNTHESIS

A Retraction

LESTER GOLDSTEIN and JULIE MICOU EASTWOOD. From the Department of Biology University of Pennsylvania, Philadelphia, and the Department of Zoology, University of California, Berkeley

In 1959, we published in the predecessor of this journal a Brief Note, entitled: "On the Primary Site of Nuclear RNA Synthesis" (2), in which we reported evidence in support of the view that all nuclear RNA (including nucleolar) is synthesized in the nonnucleolar regions of the nucleus of human amnion cells. Shortly thereafter, Sisken and Kinosita (3), Amano and Leblond (1), and others offered strong evidence for the conclusion that "chromosomal" RNA is synthesized in the nonnucleolar parts of the nucleus, and that *nucleolar RNA is synthesized in the nucleolus*. In the face of this contrary evidence, we repeated our experiments (in 1961) and were forced to conclude that our earlier report was erroneous, and that Sisken and Kinosita, Amano and Leblond, and others who contend that nucleolar RNA is synthesized in the nucleolus are correct.

We publish this Note at this time because in the years that have passed since our original publication, and even now, the 1959 note has been quoted as a worthy piece of evidence. We ask to be spared the further embarrassment of having that earlier work cited in the reputable literature, and we hope we can spare other authors the labors of attempting to rationalize our aberrant data.

Received for publication 10 June 1966.

REFERENCES

1. Amano, M., and Leblond, C. P., *Exp. Cell Research*, 1960, **20**, 250.
2. Goldstein, L., and Micou, J., *J. Biophysic. and Biochem. Cytol.*, 1959, **6**, 301.
3. Sisken, J. E., and Kinosita, R., *Exp. Cell Research*, 1961, **24**, 168.

GOLDSTEIN L, MICOU J.
On the primary site of nuclear RNA synthesis.
J Biophys Biochem Cytol. 1959 Oct;6:301–4.

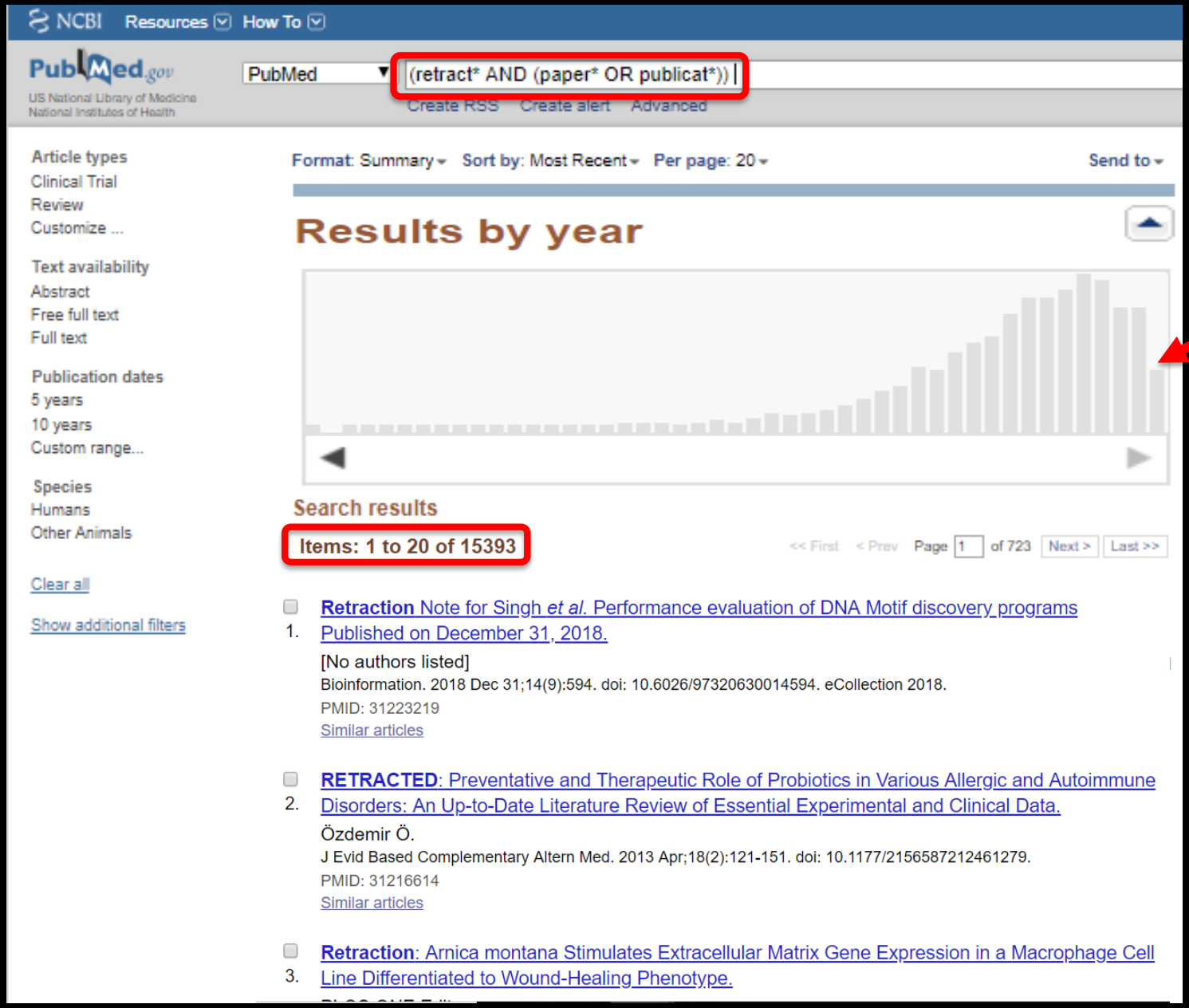
Goldstein L, Eastwood JM.
On the primary site of nuclear RNA synthesis. A retraction.
J Cell Biol 1966 Oct;31(1):195.
1a Retratação – erro de interpretação de resultados

Motivos para Retratação de Artigos

- Erros Não Intencionais dos Pesquisadores
  - Delineamento de Pesquisa
  - Análise de dados
  - Interpretação de Resultados

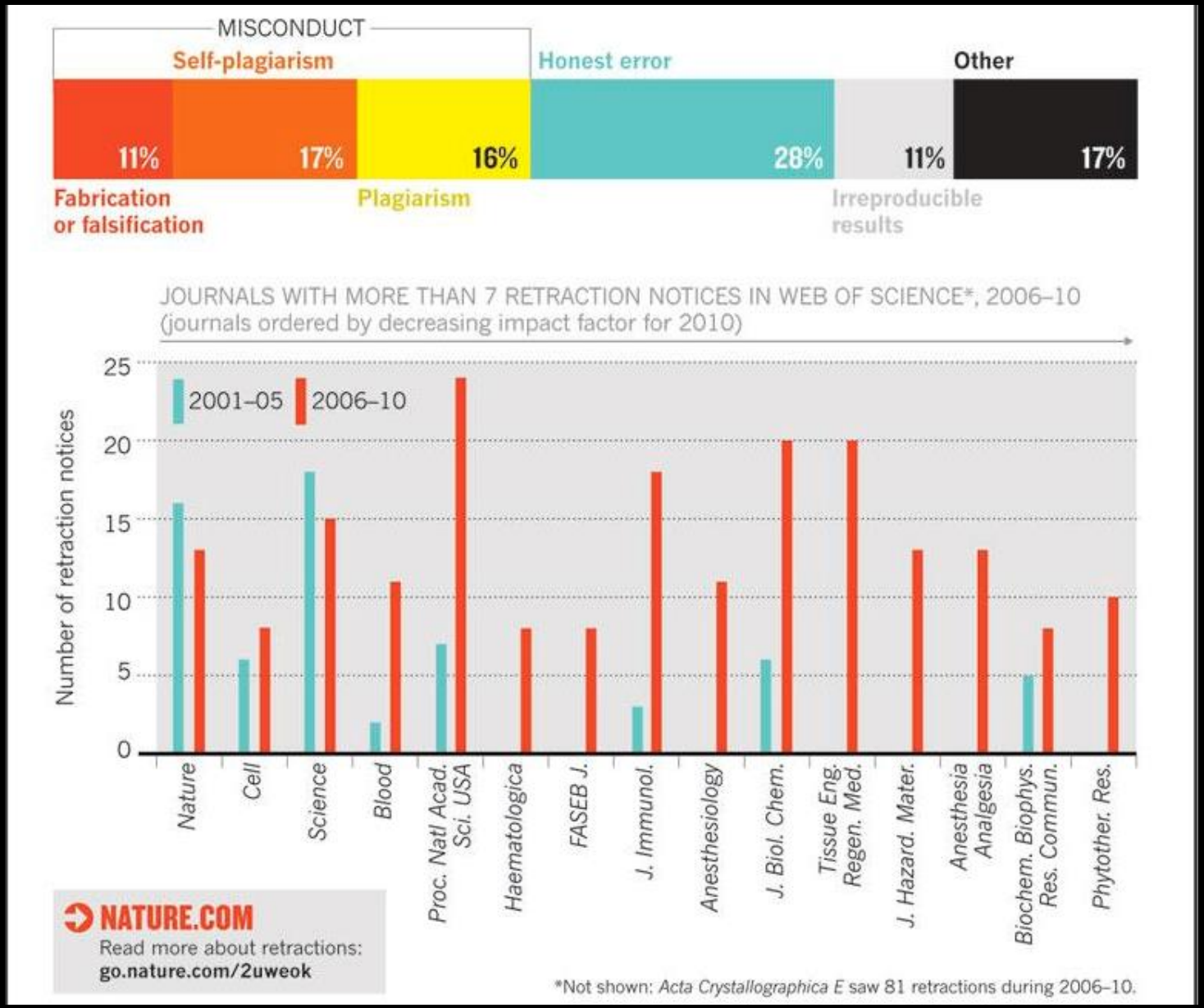
- Condutas Científicas Inadequadas dos Pesquisadores
  - Falsificação e manipulação de dados
  - Duplicação de publicações (autoplágio)
  - Plágio (apropriação de produção alheia)

- Outros motivos
  - Dificuldades técnicas de repetir experimentos
  - Problemas na revisão de artigos
  - Problemas na editoração de artigos



2019
499
retratações
Até 23/06

https://www.ncbi.nlm.nih.gov/pubmed
23/06/2019



Richard Van Noorden
The trouble with retractions.
Nature 2011;478:26-28

Misconduct accounts for the majority of retracted scientific publications

Ferric C. Fang[a,b,1], R. Grant Steen[c,1], and Arturo Casadevall[d,1,2]

Departments of [a]Laboratory Medicine and [b]Microbiology, University of Washington School of Medicine, Seattle, WA 98195; [c]MediCCI Medical Communications Consultants, Chapel Hill, NC 27517; and [d]Department of Microbiology and Immunology, Albert Einstein College of Medicine, Bronx, NY 10461

Edited by Thomas Shenk, Princeton University, Princeton, NJ, and approved September 6, 2012 (received for review July 18, 2012)

A detailed review of all 2,047 biomedical and life-science research articles indexed by PubMed as retracted on May 3, 2012 revealed that only 21.3% of retractions were attributable to error. In contrast, 67.4% of retractions were attributable to misconduct, including fraud or suspected fraud (43.4
plagiarism (9.8%). Incomplete
tion announcements have led
role of fraud in the ongoing r
scientific articles retracted be
since 1975. Retractions exhibi
patterns that may reveal und

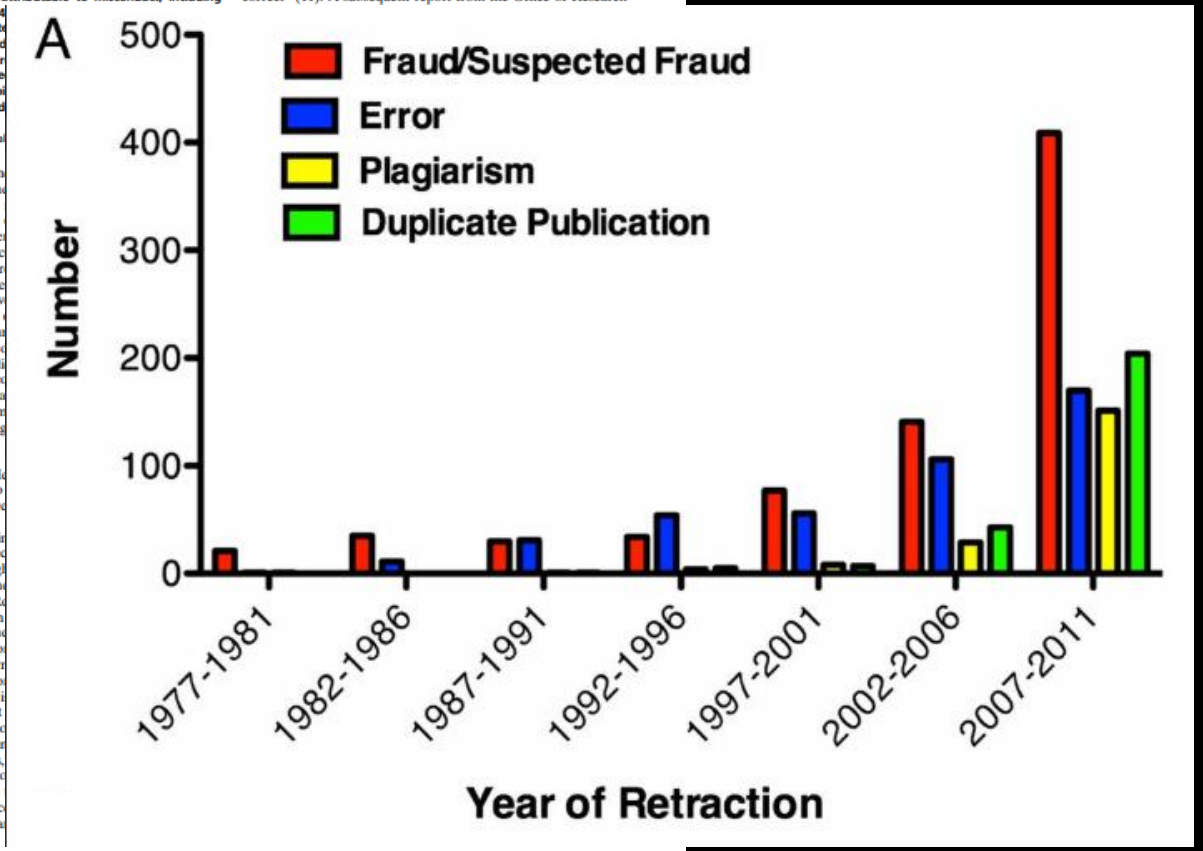
bibliometric analysis | biomedical

The number and frequen
portant indicators of the
because retracted articles
project failure, irrespective
worthy of rigorous and syste
publications corrects the sc
insights into the scientific pr
of retractions has recently e
lected retracted articles hav
mon than fraud as a cause
retraction correlate with jou
a comprehensive analysis
PubMed to ascertain the vali
articles were classified acc
traction was documented fra
suspected fraud, plagiarism
known, or other reasons (e.g

Results

Causes of Retraction. PubM
articles relating primarily to
the 1940s. A comprehensive
May 2012 identified 2,047
retracted article published i
retraction is a relatively re
scientific literature, althoug
sarily new. To understand th
reports from the Office of R
resources (7, 8), in addition
scientific journals. Use of th
resulted in the reclassificatio
an earlier study (4) from er
which the cause of retractio
tation of secondary sources
a retraction announcement
search Communications repo
experiments that were fou
execution and data analysis,
However, an investigation
University and reported to
dicated that "many instanc
tion were found" (10). In a

published by the authors of a manuscript in the *Journal of Cell Biology* stated that "In follow-up experiments . . . we have shown that the lack of FOXO1a expression reported in figure 1 is not correct" (11). A subsequent report from the Office of Research



www.pnas.org/cgi/doi/10.1073/pnas.1212247109

Tempo até a Retratação

N=2047 (100,0%)

Erro
26,0±28,0 meses
N=437 (21,3%)

Fraude
46,8±38,4 meses
N=697 (34,0%)

$t_{fraude} > t_{erro}$
P=0.026

Fang FC, Steen RG, Casadevall A.
Misconduct accounts for the majority of retracted scientific publications.
Proc Natl Acad Sci. 2012;109(42):17028–33.
Fang FC, Steen RG, Cadadevall A.
Correction for "Misconduct accounts for the majority of retracted scientific publications."
Proc Natl Acad Sci. 2012;110(3):1137.

Quando me equivoco, todo o mundo pode reconhecer; quando minto, não.

Johann Wolfgang Goethe
Obras Completas - Vol 1. (Máxima 79)
Madrid: Aguilar; 1950:306.

Tempo até a Retratação

N=2047 (100,0%)

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Proc Natl Acad Sci. 2012;110(3):1137.

20 artigos retratados mais citados (2012)

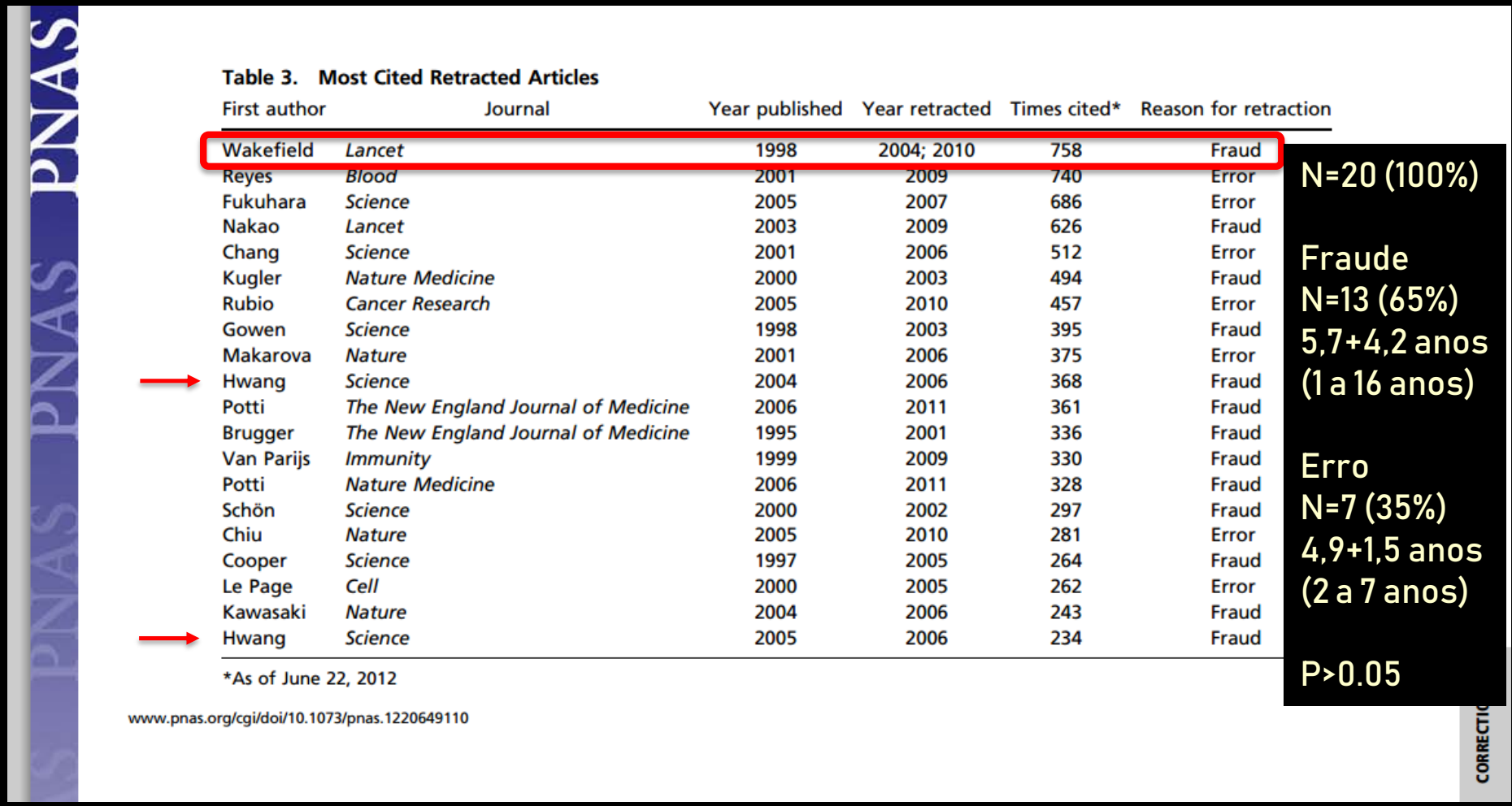


Table 3. Most Cited Retracted Articles

First author	Journal	Year published	Year retracted	Times cited*	Reason for retraction
Wakefield	*Lancet*	1998	2004; 2010	758	Fraud
Reyes	*Blood*	2001	2009	740	Error
Fukuhara	*Science*	2005	2007	686	Error
Nakao	*Lancet*	2003	2009	626	Fraud
Chang	*Science*	2001	2006	512	Error
Kugler	*Nature Medicine*	2000	2003	494	Fraud
Rubio	*Cancer Research*	2005	2010	457	Error
Gowen	*Science*	1998	2003	395	Fraud
Makarova	*Nature*	2001	2006	375	Error
Hwang	*Science*	2004	2006	368	Fraud
Potti	*The New England Journal of Medicine*	2006	2011	361	Fraud
Brugger	*The New England Journal of Medicine*	1995	2001	336	Fraud
Van Parijs	*Immunity*	1999	2009	330	Fraud
Potti	*Nature Medicine*	2006	2011	328	Fraud
Schön	*Science*	2000	2002	297	Fraud
Chiu	*Nature*	2005	2010	281	Error
Cooper	*Science*	1997	2005	264	Fraud
Le Page	*Cell*	2000	2005	262	Error
Kawasaki	*Nature*	2004	2006	243	Fraud
Hwang	*Science*	2005	2006	234	Fraud

*As of June 22, 2012

www.pnas.org/cgi/doi/10.1073/pnas.1220649110

N=20 (100%)

Fraude
N=13 (65%)
5,7+4,2 anos
(1 a 16 anos)

Erro
N=7 (35%)
4,9+1,5 anos
(2 a 7 anos)

P>0.05

Fang FC, Steen RG, Casadevall A.
Misconduct accounts for the majority of retracted scientific publications.
Proc Natl Acad Sci. 2012;109(42):17028–33.
Fang FC, Steen RG, Cadadevall A.
Correction for "Misconduct accounts for the majority of retracted scientific publications."
Proc Natl Acad Sci [Internet]. 2012;110(3):1137.

Early report

Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children

A J Wakefield, S H Murch, A Anthony, J Linnell, D M Casson, M Malik, M Berelowitz, A P Dhillon, M A Thomson, P Harvey, A Valentine, S E Davies, J A Walker-Smith

Summary

Background We investigated a consecutive series of children with chronic enterocolitis and regressive developmental disorder.

Methods 12 children (mean age 6 years [range 3–10], 11 boys) were referred to a paediatric gastroenterology unit with a history of normal development followed by loss of acquired skills, including language, together with diarrhoea and abdominal pain. Children underwent gastroenterological, neurological, and developmental assessment and review of developmental records. Ileocolonoscopy and biopsy sampling, magnetic-resonance imaging (MRI), electroencephalography (EEG), and lumbar puncture were done under sedation. Barium follow-through radiography was done where possible. Biochemical, haematological, and immunological profiles were examined.

Findings Onset of behavioural symptoms was associa by the parents, with measles, mumps, and rub vaccination in eight of the 12 children, with measl infection in one child, and otitis media in a All 1 children had intestinal abnormalities ranging from lymphoid nodular hyperplasia to a noid ul ration. Histology showed patchy chronic inflam tion in 11 children and reactive ileal lymphoi perplasia in seven, but no granulomas. Be oural disor included autism (nine), disintegrativ sis (one), a possible postviral or vaccinal encephalitis o). There were no focal neurological ab malities and MRI and EEG tests were normal. Abno al laboratory results were significantly raised urinary ethylmalo acid compared with age-matched contro (p=0·03), low haemoglobin in four children, a low s m IgA in f children.

Inter pretation e identi associated gastrointestinal dis se and developmental regression in a group of previ y normal chi n, which was generally associated in time with possible environmental triggers.

Lancet 199 **351:** 637–41
See Commentary page

Inflammatory Bowel Disease Study Group, University Departments of Medicine and Histopathology (A J Wakefield FRCS, A Anthony MB, J Linnell PHD, A P Dhillon MRCPath, S E Davies MRCPath) **and the University Departments of Paediatric Gastroenterology** (S H Murch MB, D M Casson MRCP, M Malik MRCP, M A Thomson FRCP, J A Walker-Smith FRCP.), **Child and Adolescent Psychiatry** (M Berelowitz FRCPsych), **Neurology** (P Harvey FRCP), **and Radiology** (A Valentine FRCR), **Royal Free Hospital and School of Medicine, London NW3 2QG, UK**

Correspondence to: Dr A J Wakefield

Introduction

We saw several children who, after a p d of apparent normality, lost acquired skills, includ g com nication. They all had gastrointestinal mptoms, cluding abdominal pain, diarrhoea, and ting and, i some cases, food intolerance. We scribe clinical f dings, and gastrointestinal feature of these ch en.

Patients and meth ds

12 children, cons ctively rred to the department of paediatric gastr terology a hi y of a pervasive developmental der with loss ired skills and intestinal symptoms arrh abdomi in, bloating and food intolerance), were inv gated. All children were admitted to the ward for 1 week, accomp ed by their parents.

Clinical investigations

A took histor including details of immunisations and e sure to infec s diseases, and assessed the children. In 11 ca the histor as obtained by the senior clinician (JW-S). Neur and psychiatric assessments were done by consultant staff (PH, MB) with HMS-4 criteria.[4] Developmental s included a review of prospective developmental records from p ents, health visitors, and general practitioners. Four children did not undergo psychiatric assessment in hospital; all had been assessed professionally elsewhere, so these assessments were used as the basis for their behavioural diagnosis.

After bowel preparation, ileocolonoscopy was performed by SHM or MAT under sedation with midazolam and pethidine. Paired frozen and formalin-fixed mucosal biopsy samples were taken from the terminal ileum; ascending, transverse, descending, and sigmoid colons, and from the rectum. The procedure was recorded by video or still images, and were compared with images of the previous seven consecutive paediatric colonoscopies (four normal colonoscopies and three on children with ulcerative colitis), in which the physician reported normal appearances in the terminal ileum. Barium follow-through radiography was possible in some cases.

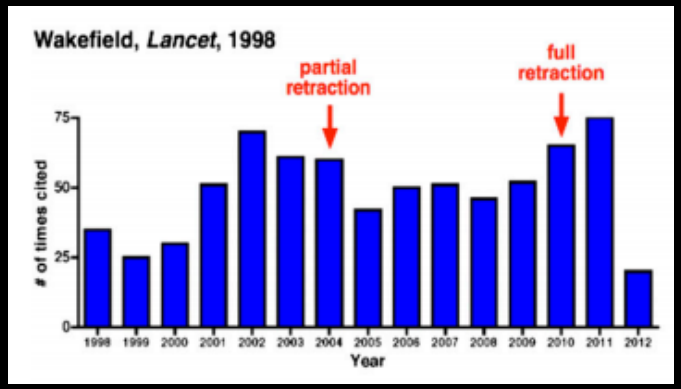
Also under sedation, cerebral magnetic-resonance imaging (MRI), electroencephalography (EEG) including visual, brain stem auditory, and sensory evoked potentials (where compliance made these possible), and lumbar puncture were done.

Laboratory investigations

Thyroid function, serum long-chain fatty acids, and cerebrospinal-fluid lactate were measured to exclude known causes of childhood neurodegenerative disease. Urinary methylmalonic acid was measured in random urine samples from eight of the 12 children and 14 age-matched and sex-matched normal controls, by a modification of a technique described previously.[2] Chromatograms were scanned digitally on computer, to analyse the methylmalonic-acid zones from cases and controls. Urinary methylmalonic-acid concentrations in patients and controls were compared by a two-sample *t* test. Urinary creatinine was estimated by routine spectrophotometric assay.

Children were screened for antiendomysial antibodies and boys were screened for fragile-X if this had not been done

RETRACTED



Findings Onset of behavioural symptoms was associa by the parents, with measles, mumps, and rub a vaccination in eight of the 12 children, with measl infection in one child, and otitis media in a . All 1

regression.

We have identified a chroni nterocol in children that may be related to neur ychiatric dys nction. In most cases, onset of s mpto was after easles, mumps, and rubella immunisation. rther investigations are needed to exam e this syndro and its possible relation to this vac e.

RETRACTED

Wakefield A, Murch S, Anthony A, Linnell J, Casson D, Malik M, et al. RETRACTED: Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. Lancet. 1998;351(9103):637–41.

Donmez, G., Wang, D., Cohen, D. E., and Guarente, L.
SIRT1 Suppresses b-Amyloid Production by Activating the a-Secretase Gene ADAM10.
Cell 2010;142(2), 320–332.
Retraction notice to: SIRT1 suppresses β-amyloid production by activating the α-secretase gene ADAM10. [Cell. 2014]

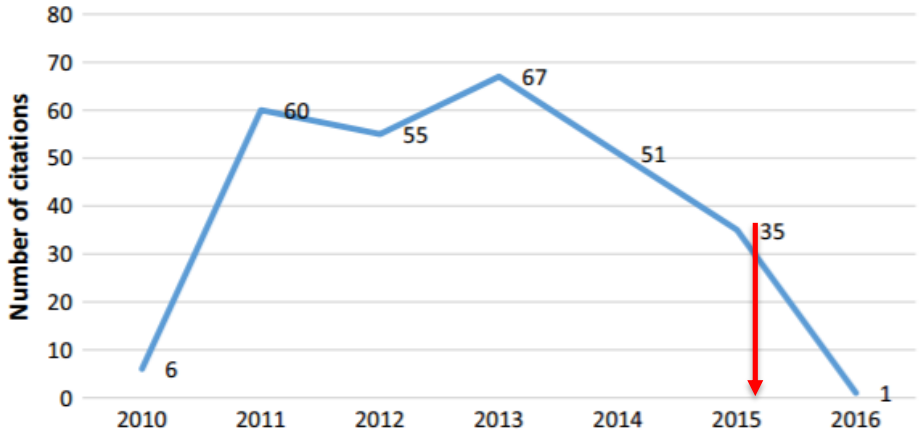


Fig. 3 Number of citations per year—Donmez et al. article

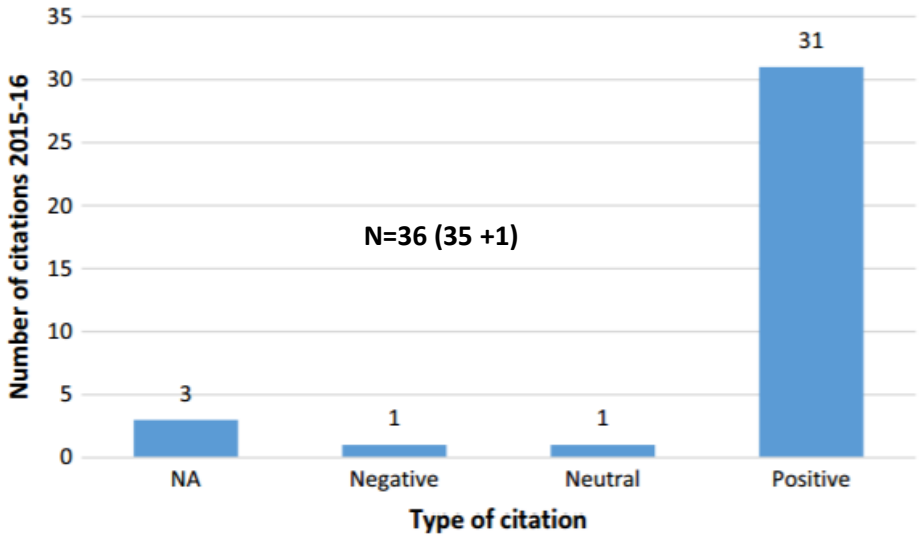
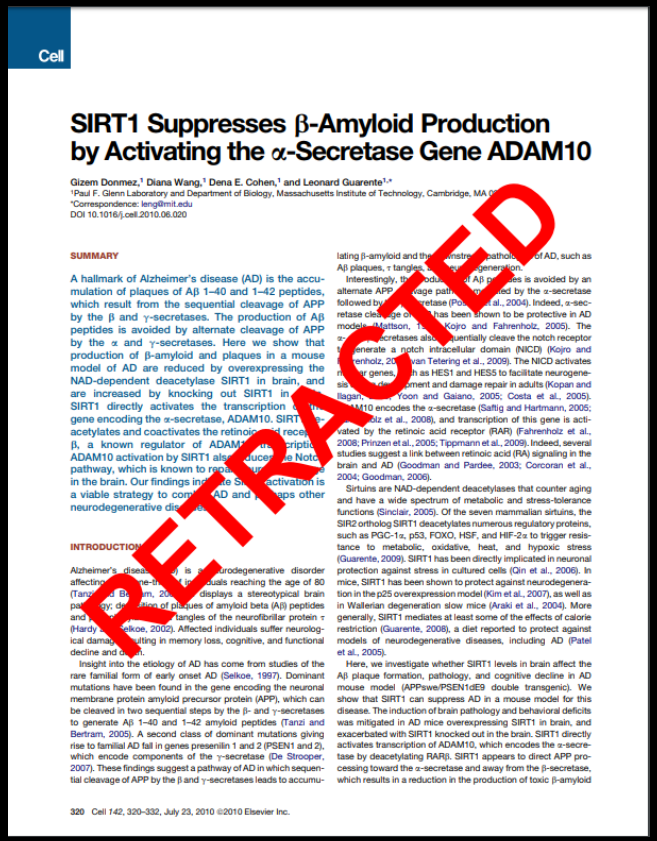


Fig. 4 Distribution of the post retraction citations of the Donmez et al. article


Cell

SIRT1 Suppresses β-Amyloid Production by Activating the α-Secretase Gene ADAM10

Gizem Donmez,[1] Diana Wang,[1] Dena E. Cohen,[1] and Leonard Guarente[1,*]

[1]Paul F. Glenn Laboratory and Department of Biology, Massachusetts Institute of Technology, Cambridge, MA

*Correspondence: leng@mit.edu

DOI 10.1016/j.cell.2010.08.020

RETRACTED

SUMMARY

A hallmark of Alzheimer's disease (AD) is the accumulation of plaques of Aβ 1–40 and 1–42 peptides, which result from the sequential cleavage of APP by the β and γ-secretases. The production of Aβ peptides is avoided by alternate cleavage of APP by the α and γ-secretases. Here we show that production of β-amyloid and plaques in a mouse model of AD are reduced by overexpressing the NAD-dependent deacetylase SIRT1 in brain, and are increased by knocking out SIRT1 in ... SIRT1 directly activates the transcription ... gene encoding the α-secretase, ADAM10. SIRT1 ... acetylates and coactivates the retinoic acid recep... β, a known regulator of ADAM... ADAM10 activation by SIRT1 also ... pathway, which is known to re... in the brain. Our findings ... a viable strategy to com... neurodegenerative dis...

INTRODUCTION

Alzheimer's disease (AD) is a ... neurodegenerative disorder affecting ... equals reaching the age of 80 (Tanzi and Bertram, 2005). ... displays a stereotypical brain pathology: deposition of plaques of amyloid beta (Aβ) peptides and ... tangles of the neurofibrillar protein τ (Hardy and Selkoe, 2002). Affected individuals suffer neurological damage resulting in memory loss, cognitive, and functional decline and death.

Insight into the etiology of AD has come from studies of the rare familial form of early onset AD (Selkoe, 1997). Dominant mutations have been found in the gene encoding the neuronal membrane protein amyloid precursor protein (APP), which can be cleaved in two sequential steps by the β- and γ-secretases to generate Aβ 1–40 and 1–42 amyloid peptides (Tanzi and Bertram, 2005). A second class of dominant mutations giving rise to familial AD fall in genes presenilin 1 and 2 (PSEN1 and 2), which encode components of the γ-secretase (De Strooper, 2007). These findings suggest a pathway of AD in which sequential cleavage of APP by the β and γ-secretases leads to accumulating β-amyloid and the ... pathological ... of AD, such as Aβ plaques, τ tangles, ... degeneration.

Interestingly, ... production of Aβ ... is avoided by an alternate APP ... cleavage pathway ... by the α-secretase followed by ... cretase (Postina et al., 2004). Indeed, α-secretase ... has been shown to be protective in AD models (Mattson, ... Kojro and Fahrenholz, 2005). The ... secretases also ... sequentially cleave the notch receptor ... generate a notch intracellular domain (NICD) (Kojro and ... enholz, 20... van Tetering et al., 2009). The NICD activates ... genes, ... as HES1 and HES5 to facilitate neurogenesis ... development and damage repair in adults (Kopan and Ilagan, ... Yoon and Gaiano, 2005; Costa et al., 2005). ... M10 encodes the α-secretase (Saftig and Hartmann, 2005; ... olz et al., 2008), and transcription of this gene is activated by the retinoic acid receptor (RAR) (Fahrenholz et al., 2008; Prinzen et al., 2005; Tippmann et al., 2009). Indeed, several studies suggest a link between retinoic acid (RA) signaling in the brain and AD (Goodman and Pardee, 2003; Corcoran et al., 2004; Goodman, 2006).

Sirtuins are NAD-dependent deacetylases that counter aging and have a wide spectrum of metabolic and stress-tolerance functions (Sinclair, 2005). Of the seven mammalian sirtuins, the SIR2 ortholog SIRT1 deacetylates numerous regulatory proteins, such as PGC-1α, p53, FOXO, HSF, and HIF-2α to trigger resistance to metabolic, oxidative, heat, and hypoxic stress (Guarente, 2009). SIRT1 has been directly implicated in neuronal protection against stress in cultured cells (Qin et al., 2006). In mice, SIRT1 has been shown to protect against neurodegeneration in the p25 overexpression model (Kim et al., 2007), as well as in Wallerian degeneration slow mice (Araki et al., 2004). More generally, SIRT1 mediates at least some of the effects of calorie restriction (Guarente, 2008), a diet reported to protect against models of neurodegenerative diseases, including AD (Patel et al., 2005).

Here, we investigate whether SIRT1 levels in brain affect the Aβ plaque formation, pathology, and cognitive decline in AD mouse model (APPswe/PSEN1dE9 double transgenic). We show that SIRT1 can suppress AD in a mouse model for this disease. The induction of brain pathology and behavioral deficits was mitigated in AD mice overexpressing SIRT1 in brain, and exacerbated with SIRT1 knocked out in the brain. SIRT1 directly activates transcription of ADAM10, which encodes the α-secretase by deacetylating RARβ. SIRT1 appears to direct APP processing toward the α-secretase and away from the β-secretase, which results in a reduction in the production of toxic β-amyloid

320 Cell 142, 320–332, July 23, 2010 ©2010 Elsevier Inc.

Bar-Ilan J, Halevi G.
Post retraction citations in context: a case study.
Scientometrics. 2017 Mar 3;(July 2016).

Int J Radiat Oncol Biol Phys. 2019 Apr 1;103(5):1036-1042. doi: 10.1016/j.ijrobp.2018.11.014. Epub 2018 Nov 20.

Continued citation of retracted radiation oncology literature - Do we have a problem?

Hamilton DG[1].

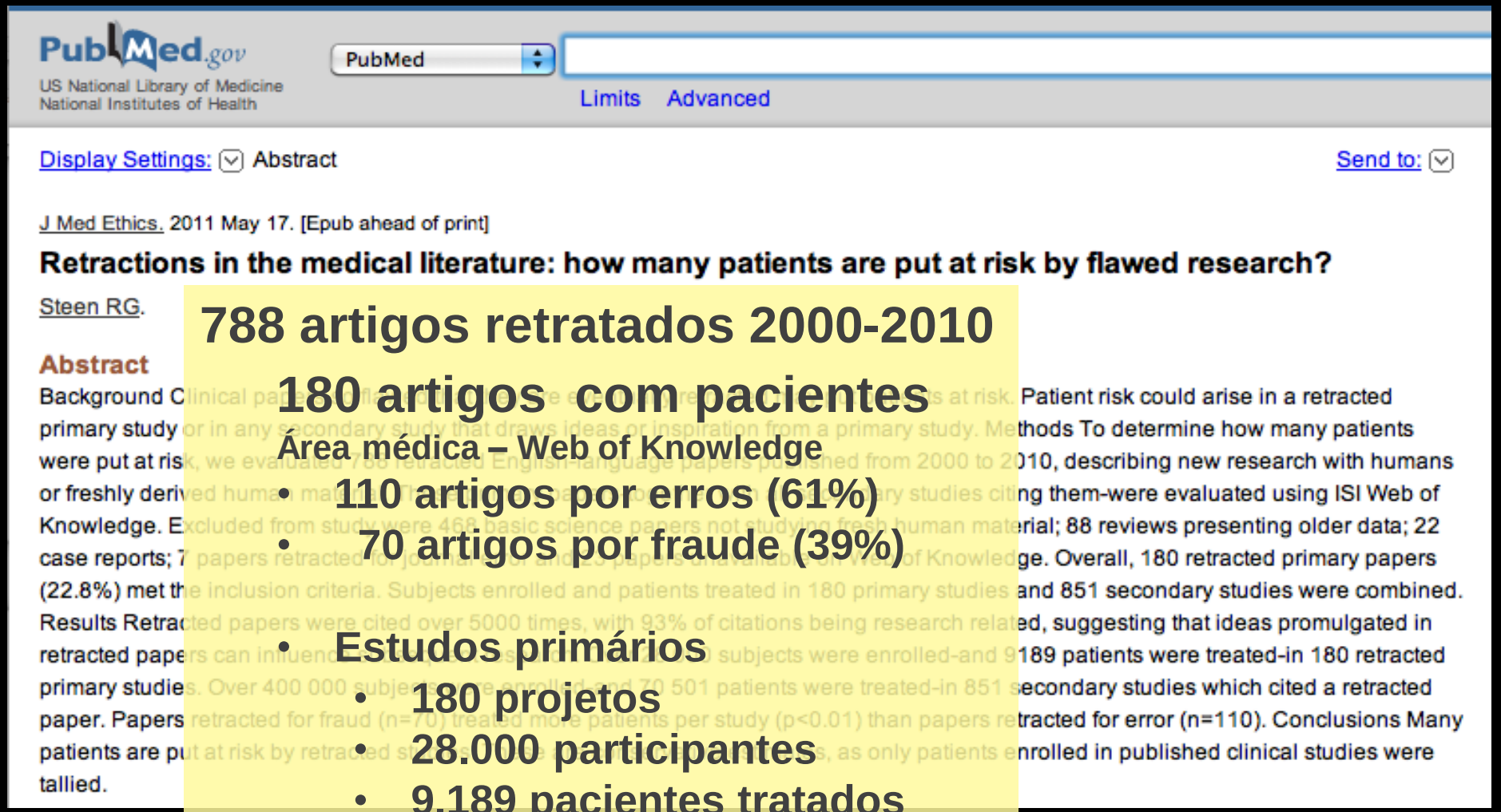
⊕ Author information

Abstract

Most post-retraction citations occurred during the second year after the article's retraction, originated from North America and Asia (each N = 124, 31%) and Europe (N = 122, 30%), and featured in original articles (N = 254, 62%) and reviews (N = 73, 18%). Of the 358 individually evaluable citing studies, 92% referenced the retracted article as legitimate work. Three guidelines and fifteen systematic reviews and meta-analyses were also identified that cited retracted articles as valid work.

CONCLUSIONS: Post-retraction citations are an avoidable phenomenon. The results of the study emphasise the need for adherence to good research practices by investigators to mitigate the influence and propagation of flawed and unethical research. Journal editors, peer reviewers and the broader radiation oncology readership should remain diligent in ensuring that citations of retracted work are identified and removed prior to, during, and possibly even after publication.

Hamilton DG.
Continued Citation of Retracted Radiation Oncology Literature—Do We Have a Problem?
Int J Radiat Oncol. 2019 Apr 19;103(5):1036–42.



788 artigos retratados 2000-2010

180 artigos com pacientes

Área médica – Web of Knowledge

- 110 artigos por erros (61%)
- 70 artigos por fraude (39%)

- Estudos primários
  - 180 projetos
  - 28.000 participantes
  - 9.189 pacientes tratados
  - mais 5000 citações
    - Estudos secundários
      - 851 projetos
      - 400.000 participantes
      - 70.501 pacientes

Número de participantes
Fraude > Erro
P<0,01

Home / The Nutshell

Retractions Often Due to Plagiarism: Study

The number of plagiarism-based retractions has grown since the advent of detection software, according to a BioMed Central analysis.

Jun 2, 2015
KERRY GRENS

PIXABAY, VICTORFLISCORNO

Plagiarism is the most common cause of retractions in BioMed Central journals, accounting for a quarter of cases documented, according to a poster presentation at the World Conference on Research Integrity being held in Rio de Janeiro this week. The authors found that the increase in plagiarism-related retractions rose after 2009, when plagiarism-detection software became more widely used.

"It was a bit unexpected because I don't think this is the number-one reason that comes up in other studies," said study coauthor Maria Kowalczuk, the biology editor in the Research Integrity Group at BioMed Central.

For instance, a 2012 *PNAS* study that analyzed more than 2,000 PubMed-indexed retractions found that fraud was responsible for 43 percent of retractions and plagiarism for 10 percent.

Plagiarism "has become easier to detect," Kowalczuk told *The Scientist*. "Before 2009, it was mostly problems with duplicate publications and coauthors not being aware that the article was being published."

Kowalczuk and Elizabeth Moylan, the senior editor of the Research Integrity Group, surveyed nearly 163,000 articles published between 2000 and 2014 by BioMed Central, which puts out 281 open-access journals. Among them, 77 papers had been retracted. (The authors excluded 43 papers that were pulled this year due to fraudulent peer review because, Kowalczuk said, "they would seriously skew the results.")

Thirteen of the 77 papers were pulled because of "honest error;" 14 because of research misconduct, including data fabrication or an absence of ethical approval; another 14 because of unknown reasons; and 36 due to publishing misconduct, including plagiarism and image duplication.

Kowalczuk said editors and reviewers will use plagiarism-detection services when they are suspicious that there may be duplicate language, but it would be impractical to apply these to every paper reviewed because of time constraints.

In another presentation at the World Conference on Research Integrity, Chris Graf, the new business director for the professional innovations group of Wiley, offered a snapshot of the 82 retractions in Wiley journals in 2014. Nearly half (40) were due to "serious problems," such as fabrication or experimental flaws, while 21 were pulled because of plagiarism.

Keywords:

ethics, misconduct, plagiarism, publishing, scientific ethics, scientific misconduct

World Conference on Research Integrity – Rio 2015

Research Integrity Group
2000-2014 N=163.000
77 (0,05%)artigos retratados

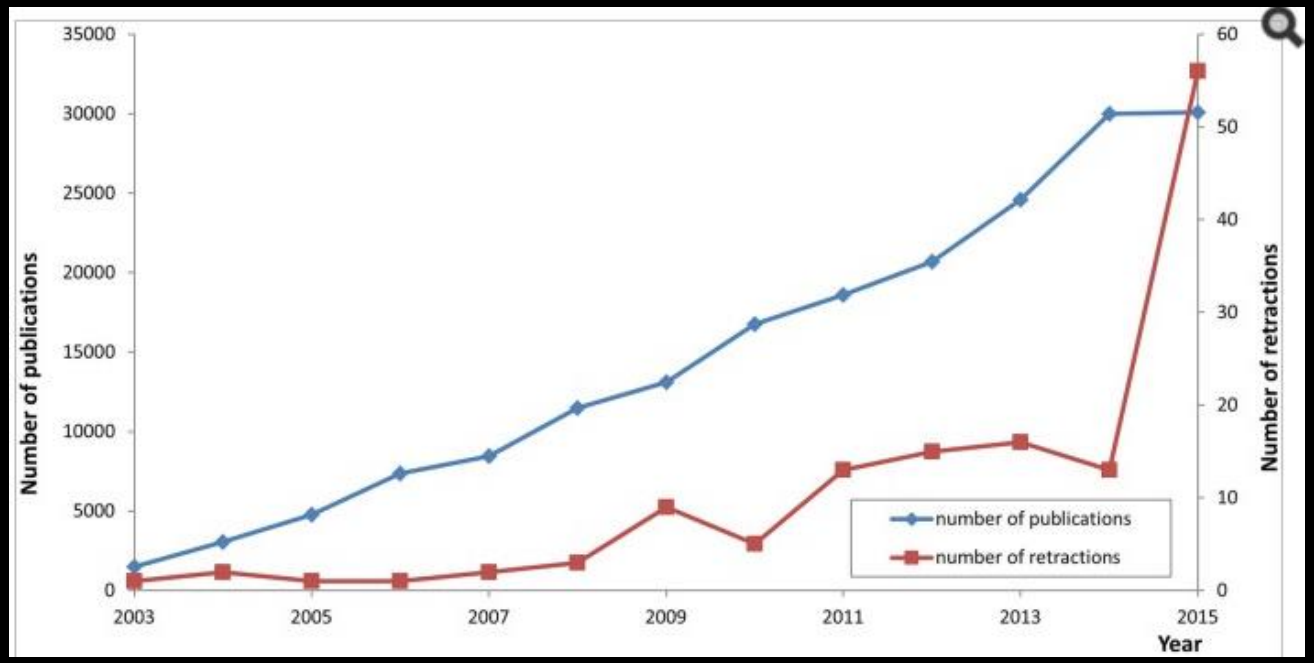
50 (64,9%) condutas inadequadas
- 36 (46,7%) plágio
- 14 (18,2%) fabricação de dados

13 (16,9%) erros não intencionais
14 (18,2%) outros motivos

Wiley Editores
2014
82 artigos retratados
61 (74,4%) condutas inadequadas
- 40 (48,8%) fabricação de dados
- 21 (25,6%) plágio

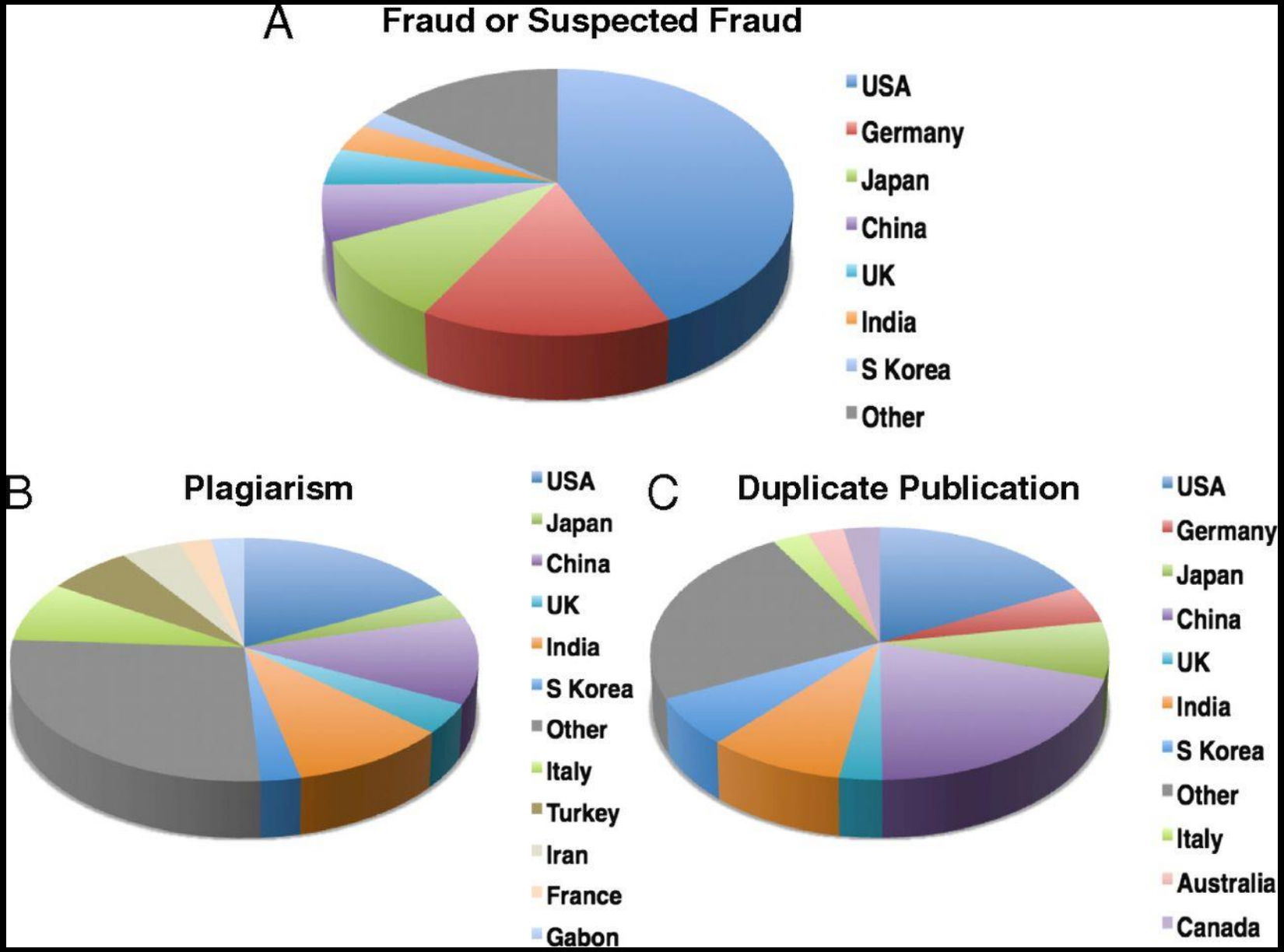
Grens K.
Retractions Often Due to Plagiarism: Study. Sci [Internet]. 2015;
Available from: http://www.the-scientist.com/?articles.view/articleNo/43130/title/Retractions-Often-Due-to-Plagiarism--Study/

BioMed Central (+250 periódicos *open access*)
Total de artigos publicados = 190514 (2000-2015)
- **N=134 artigos retratados (0,07%)**
  - **N=47 (35%) próprio autores retrataram**
  - **N=102 (76%) conduta inadequada**
    - **N=22 (16%) plágio**
    - **N=10 (7%) falsificação de dados**
  - **Mediana de retratação=337,5 dias**



Moylan EC, Kowalczuk MK.
Why articles are retracted: a retrospective cross-sectional study of retraction notices at BioMed Central.
BMJ Open [Internet]. 2016 Nov 23;6(11):e012047.

País de origem da publicação retratada por fraude (A), plágio (B) ou publicação duplicada (C).



Ferric C. Fang et al. PNAS 2012;109:42:17028-17033

País de origem da publicação retratada

The Retraction Watch Database
Please see this user guide before you get started

Author(s): Type to search
Country(s):
Title: Type to search
Reason(s) for Retraction:
Subject(s):
Article Type(s):
Journal:
Publisher:
Affiliation(s):
Notes:
URL:

Clear Search
Search

20 Countries Publishing The Most Scholarly Articles

Rank	Country	Scientific and Technical Journal Articles Per Year
1	United States	412,542 articles
2	China	401,435 articles
3	Japan	103,377 articles
4	Germany	101,074 articles
5	United Kingdom	97,332 articles
6	India	93,349 articles
7	France	72,555 articles
8	Italy	66,310 articles
9	South Korea	58,844 articles
10	Canada	57,797 articles
11	Spain	53,342 articles
12	Brazil	48,622 articles

0,9%

16,9%

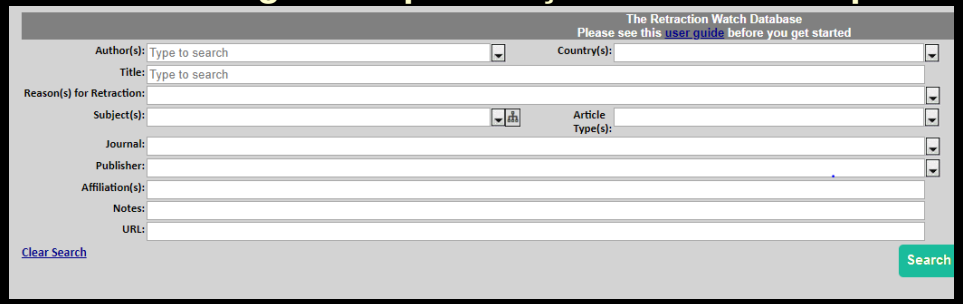
43,0%

20542 artigos retratados
23/06/2019

https://www.worldatlas.com/articles/20-countries-publishing-the-most-scholarly-articles.html (2017)

Oransky I, Marcus A.
Retraction Watch Database. 2018.
http://retractiondatabase.org/RetractionSearch.aspx

País de origem da publicação retratada e tipo de retratação



País	Retratações	Falsificação de dados	Revisor Falso
USA	3573 (17,4%)	535 (46,4%)	28 (3,7%)
China	9557 (46,5%)	149 (12,9%)	401 (54,0%)
Índia	1031 (5,0%)	28 (2,4%)	21 (2,8%)
Brasil	164 (0,7%)	1 (0,8%)	0 (0,0%)
Total	20542 (100%)	1152 (5,6%)	742 (3,6%)

23/06/2019

Oransky I, Marcus A.
Retraction Watch Database. 2018.
http://retractiondatabase.org/RetractionSearch.aspx

Caso Doutorados – Alemanha - Plágio

Karl-Theodor zu Guttenberg

Ministro da Defesa – Alemanha

Universidade de Bayreuth

Perda do título de PhD

Plágio na tese doutoral

2011

https://www.faz.net/aktuell/feuilleton/zu-guttenbergs-doktorarbeit-summa-cum-laude-1593701.html

Annette Schavan

Ministra da Educação – Alemanha

Universidade de Düsseldorf

Perdeu o título de PhD

Plágio na sua tese doutoral

2013

https://www.spiegel.de/lebenundlernen/job/plagiatsaffaere-von-annette-schavan-doktorarbeit-im-lebenslauf-a-983488.html

Caso Yoshitaka Fujii – Japão – Falsificação de Dados

1993-2012
- 249 artigos publicados (246 PUBMED)
  - 212 examinados
    - 3 com dados válidos
    - 37 com dados insuficientes
    - 172 contem dados fabricados
      - 126 só dados fabricados

Comitê da Japanese Society of Anesthesiologists

Retraction Watch
http://retractiondatabase.org
10/08/2012

Caso AJEAP – Republicação e Política Editorial

Production of Pure Ethanol from Azeotropic Solution by Pressure Swing Adsorption

P. Pruksathorn and T. Vitidsant

American Journal of Engineering and Applied Sciences
DOI: 10.3844/ajeassp.2009.1.7
Volume 2, Issue 1
Pages 1-7

Korean Journal of Chemical Engineering
July 2009, Volume 26, Issue 4, pp 1106-1111

Production of pure ethanol from azeotropic solution by pressure swing adsorption

Pit Pruksathorn, Tharapong Vitidsant

The first one is the one published in a predatory journal. The *American Journal of Engineering and Applied Sciences* is published by Science Publications, which is listed on my list of predatory publishers. The second is a Springer journal.

Here's the problem: The predatory publisher is charging the author $650 to retract the paper. I find this charge unethical. Scholarly publishers have an obligation to "maintain the integrity of the academic record" and should immediately retract an article that is to be excluded from that record, without charge to anyone. This policy of charging disincentivises paper retractions — which are sometimes necessary — by adding a fee barrier.

Pit Pruksathorn
Publisher charges authors for retractions.
http://scholarlyoa.com/2012/12/19/publisher-charges-authors-for-retractions/

Caso Neurociências – Erros de Métodos Estatísticos

Nat Neurosci. 2011 Aug 26;14(9):1105-7. doi: 10.1038/nn.2886.

Erroneous analyses of interactions in neuroscience: a problem of significance.

Nieuwenhuis S, Forstmann BU, Wagenmakers EJ.

Department of Psychology, Leiden University, Leiden, The Netherlands. s.nieuwenhuis@fsw.leidenuiv.nl

Abstract

In theory, a comparison of two experimental effects requires a statistical test on their difference. In practice, this comparison is often based on an incorrect procedure involving two separate tests in which researchers conclude that effects differ when one effect is significant ($P < 0.05$) but the other is not ($P > 0.05$). We reviewed 513 behavioral, systems and cognitive neuroscience articles in five top-ranking journals (Science, Nature, Nature Neuroscience, Neuron and The Journal of Neuroscience) and found that 78 used the correct procedure and 79 used the incorrect procedure. An additional analysis suggests that incorrect analyses of interactions are even more common in cellular and molecular neuroscience. We discuss scenarios in which the erroneous procedure is particularly beguiling.

- Periódicos: Science, Nature, Nature Neuroscience, Neuron and The Journal of Neuroscience
  - 513 artigos de Neurociência
    - 157 artigos comparavam dados
      - **78 corretos (49,7%)**
      - **79 incorretos (50,3%)**

Nieuwenhuis S, Forstmann BU WE. Erroneous analyses of interactions in neuroscience: a problem of significance. Nat Neurosci. 2011;14(9):105–7.

Caso Genética – Erros de Métodos Estatísticos

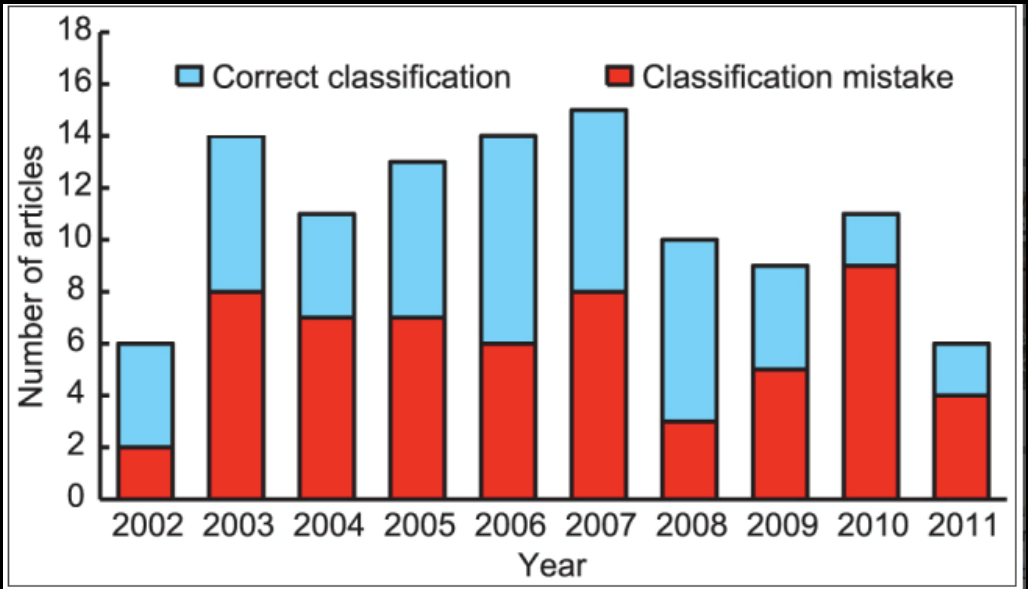


Figure 3
Scope of invalid analyses in the literature.

- 111 artigos sobre expressão gênica
  - 58 artigos (53%) métodos estatísticos não adequados

Barbash S, Soreq H.
Statistically invalid classification of high throughput gene expression data.
Scientific reports. 2013 Jan;3:1102.

Caso Molecular Neurobiology – Política Editorial

Molecular Neurobiology
April 2016, Volume 53, Issue 3, pp 1648–1653 | Cite as

RETRACTED ARTICLE: TGF-β Regulates Survivin to Affect Cell Cycle and the Expression of EGFR and MMP9 in Glioblastoma

Authors | Authors and affiliations

Wenliang Chen, Xiao Zhong, Yi Wei, Yun Liu, Quan Yi, Genshui Zhang, Lishan He, Fajiang Chen, Yingping Liu, Jiandong Luo

Article
First Online: 17 February 2015

1 Shares | 969 Downloads | 5 Citations

This article has been retracted at the request of the Editor-in-Chief and the Publisher per the Committee on Publication Ethics guidelines. There is strong reason to believe that the peer review process was compromised and the authors have plagiarized parts from the following articles:

Anyan Liao, Ranran Shi, Yuliang Jiang, Suqing Tian, Panpan Li, Fuxi Song, Yalan Qu, Jinna Li, Haiqin Yun, Xiangshan Yang, SDF-1/CXCR4 Axis Regulates Cell Cycle Progression and Epithelial-Mesenchymal Transition via Up-regulation of Survivin in Glioblastoma, Molecular Neurobiology, January 2016, Volume 53, Issue 1, pp 210–215, DOI: 10.1007/s12035-014-9006-0

Received: 1 November 2014

Peng Yang, Gang Wang, Hongjun Huo, Qiang Li, Yan Zhao, Yuanhang Liu, SDF-1/CXCR4 signaling up-regulates survivin to regulate human sacral chondrosarcoma cell cycle and epithelial–mesenchymal transition via ERK and PI3K/AKT pathway, Medical Oncology, January 2015, 32:377, DOI: 10.1007/s12032-014-0377-x

Received: 13 November 2014

As such, the validity of the content of this article cannot be verified

An erratum to this article is available at http://dx.doi.org/10.1007/s12035-017-0581-8.

Abstract

Transforming grov herapy
due to its involven rivin is
identified as an ap estigate
the potential assoc rvivin
small interfering R d to
detect relevant pro and
time-dependent in the
kinase inhibitors U rison
with DMSO. In ad 7 cells,
therefore affected ssion of
epidermal growth
comparison with n
upregulates surviv a cell
cycle progression. oma,
partially attributing to the inhibition of EGFR and MMP9 expression.

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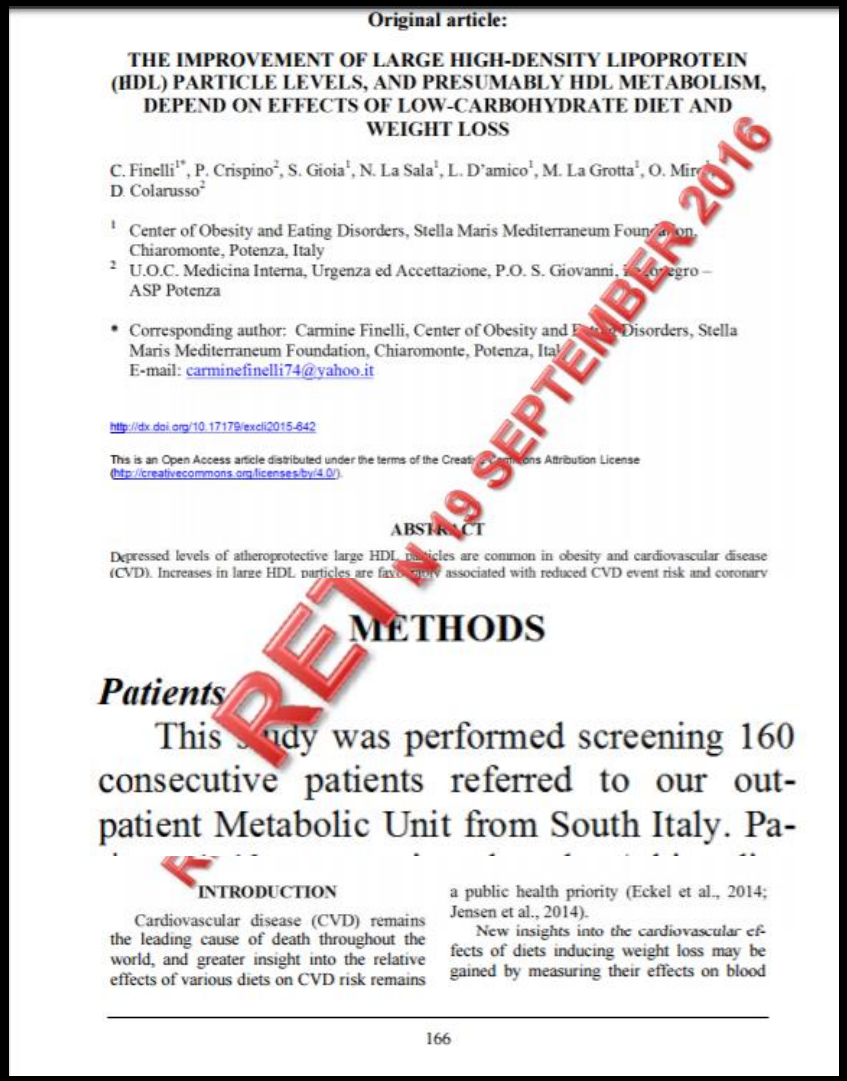
Cite article

Mesmo depois de ter sido retratado, este artigo continua a ser comercializado pela editora

Caso Carmine Finelli - Itália – Plágio de Revisor



Original article:

THE IMPROVEMENT OF LARGE HIGH-DENSITY LIPOPROTEIN (HDL) PARTICLE LEVELS, AND PRESUMABLY HDL METABOLISM, DEPEND ON EFFECTS OF LOW-CARBOHYDRATE DIET AND WEIGHT LOSS

C. Finelli[1*], P. Crispino[2], S. Gioia[1], N. La Sala[1], L. D'amico[1], M. La Grotta[1], O. Miro[1], D Colarusso[2]

[1] Center of Obesity and Eating Disorders, Stella Maris Mediterraneum Foundation, Chiaromonte, Potenza, Italy
[2] U.O.C. Medicina Interna, Urgenza ed Accettazione, P.O. S. Giovanni, Lagonegro – ASP Potenza

* Corresponding author: Carmine Finelli, Center of Obesity and Eating Disorders, Stella Maris Mediterraneum Foundation, Chiaromonte, Potenza, Italy
E-mail: carminefinelli74@yahoo.it

http://dx.doi.org/10.17179/excli2015-642

RETIRADO 19 SEPTEMBER 2016

ABSTRACT

Depressed levels of atheroprotective large HDL particles are common in obesity and cardiovascular disease (CVD). Increases in large HDL particles are favorably associated with reduced CVD event risk and coronary

METHODS

Patients

This study was performed screening 160 consecutive patients referred to our outpatient Metabolic Unit from South Italy. Pa-

INTRODUCTION

Cardiovascular disease (CVD) remains the leading cause of death throughout the world, and greater insight into the relative effects of various diets on CVD risk remains a public health priority (Eckel et al., 2014; Jensen et al., 2014).

New insights into the cardiovascular effects of diets inducing weight loss may be gained by measuring their effects on blood

EXCLI Journal
Experimental and Clinical Sciences

EXCLI J. 2016; 15: 570. PMCID: PMC5138495
Published online 2016 Sep 19. doi: 10.17179/excli2016-570

Retraction: The improvement of large High-Density Lipoprotein (HDL) particle levels, and presumably HDL metabolism, depend on effects of low-carbohydrate diet and weight loss

C. Finelli,*[1] P. Crispino,[2] S. Gioia,[1] N. La Sala,[1] L. D'amico,[1] M. La Grotta,[1] O. Miro,[1] and D. Colarusso[2]

Author information ► Article notes ► Copyright and License information ►

This retracts the article "The improvement of large High-Density Lipoprotein (HDL) particle levels, and presumably HDL metabolism, depend on effects of low-carbohydrate diet and weight loss" on page 166, which was published in final edited form.

Go to:

Dear editor,

As corresponding author I ask for retraction of our article Finelli et al. (2016[1]) with the consent of all co-authors, because of unauthorized reproduction of confidential content of another manuscript. The data in the retracted article actually are from a cohort of patients from the Boston, MA enrolled in a trial registered in ClinicalTrials.gov, NCT02454127. We deeply regret these circumstances and apologize to the scientific community.

Carmine Finelli, MD PhD

Caso Carmine Finelli - Itália – Plágio de Revisor

EDITORIAL

Annals of Internal Medicine

Scientific Misconduct Hurts

Plagiarism and other forms of intellectual theft are far more common in science than one would like to think (1–3). Recently, *Annals of Internal Medicine* experienced an egregious case of scientific misconduct that I bring to light for 2 reasons—to assure readers that *Annals* takes such matters very seriously and to serve as an example that might deter such misbehavior.

In June 2015, Dansinger and colleagues from Tufts University in Boston, Massachusetts, submitted a manuscript to *Annals* titled "One-Year Effectiveness of the Atkins, Zone, Weight Watchers, and Ornish Diets for Increasing Large High-Density Lipoprotein Particle Levels: A Secondary Analysis of a Randomized Trial." After external peer review, we decided not to publish the manuscript and sent our decision to the authors in July 2015. In August 2016, Dansinger contacted *Annals* when he became aware of an article published in the *EXCLI Journal* on 23 February 2016 that was almost identical to the manuscript that he and his colleagues had submitted to *Annals*. His concern was that an *Annals* reviewer may have misappropriated the content of his manuscript, plagiarized the work, and published it in the *EXCLI Journal*. We determined that an author of the article in the *EXCLI Journal* was, in fact, someone who had reviewed the manuscript for *Annals*. When I contacted that person, he admitted to plagiarism and I informed the editor of the *EXCLI Journal*. The journal retracted the fraudulent article in September 2016 (4). As is the recommended practice when scientific misconduct is uncovered (5–7), I informed the leadership of the institution listed as sponsoring the fraudulent article. The institution acknowledged receipt of this information but did not indicate the actions, if any, that it planned in response.

This case shows several layers of bold misconduct. First, peer reviewers should maintain the confidentiality of the papers they review (5–7). They should refrain from using for their own purposes what they learn during peer review until the work is published and can be cited as the source of that information.

Second, the reviewer blatantly plagiarized Dansinger and colleagues' work, reproducing almost verbatim the text, tables, and figures.

Third, the reviewer fabricated a cohort of European patients that did not exist—a particularly egregious act that could have resulted in clinicians (unknowingly) basing decisions about patient care on fraudulent data.

Fourth, the plagiarized article had many coauthors. These coauthors are also culpable. They allowed their names to be used, apparently without contributing anything of value—not even verification of the study's existence.

My colleagues and I find it deeply disturbing that someone whom we selected to review a manuscript entrusted to us would commit such heinous intellectual theft. We thankfully do not have previous experience with such a situation but believe our response was congruent with recommendations (5–7). Although the fraudulent article was retracted, it is worrisome that, at the time this is written, it remains available in PubMed Central without an indication that it has been retracted (8).

Dansinger, the author whose work was stolen, provides an impassioned letter to the plagiarizer outlining the harm that this misbehavior has caused for both those who did the research and those who attempted to pass it off as their own (9). Other casualties include the reputation of the plagiarizer's institution; faith in the peer-review process; and, importantly, the public's trust in medical research. Dansinger deserves commendation for the grace with which he has weathered this unfortunate situation and his desire that something positive come from it. His commentary and the circumstances behind it provide a compelling case for educational activities related to scientific integrity. Providing the information that guides patient care is important, and tampering with that process is dangerous. If reading Dansinger's commentary prevents even 1 person from stealing another's work, something good will come from it.

Christine Laine, MD, MPH
Editor in Chief

Disclosures: Disclosures can be viewed at www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M16-2550.

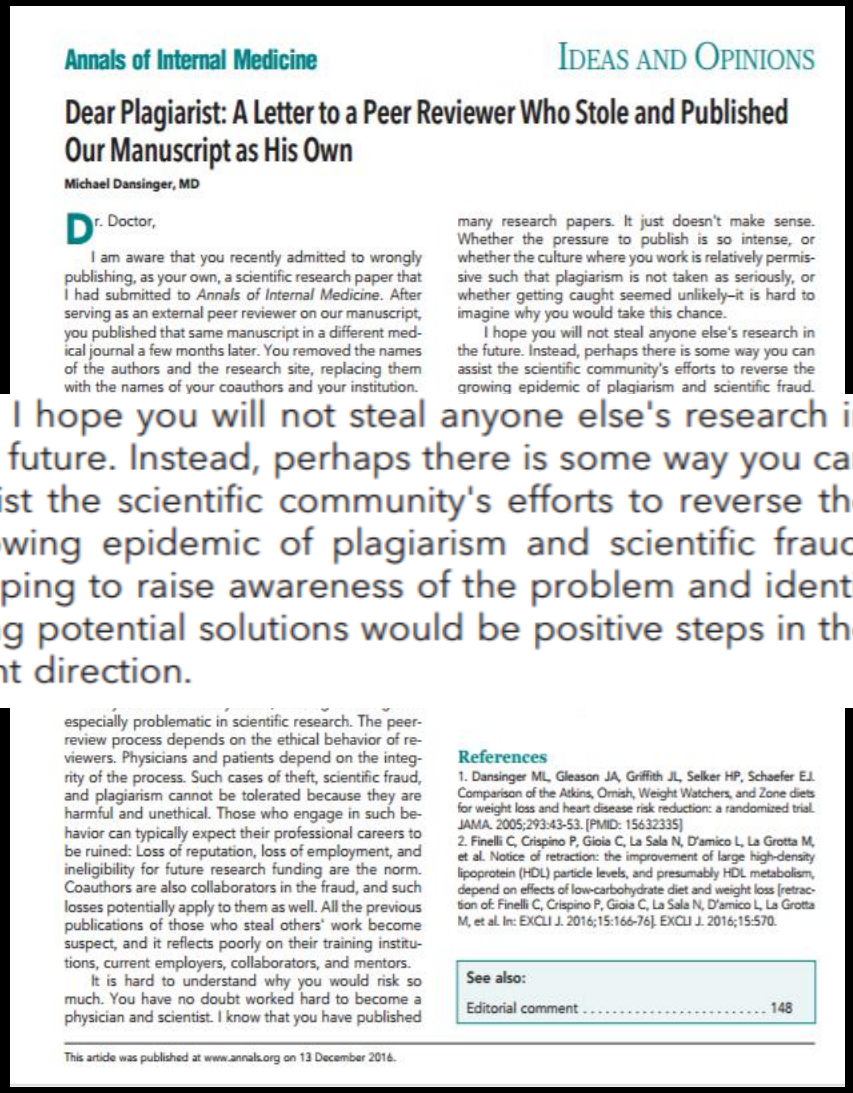
Requests for Single Reprints: Christine Laine, MD, MPH, Annals of Internal Medicine, 190 North Independence Mall West, Philadelphia, PA 19106; e-mail, claine@acponline.org.

Ann Intern Med. 2017;166:148-149. doi:10.7326/M16-2550

References

1. Roberts DL, St John FA. Estimating the prevalence of researcher misconduct: a study of UK academics within biological sciences. PeerJ. 2014;2:e562. [PMID: 25250215] doi:10.7717/peerj.562
2. Lam B. A scientific look at bad science. The Atlantic. September 2015. Accessed at www.theatlantic.com/magazine/archive/2015/09/a-scientific-look-at-badscience/399371 on 23 December 2015.
3. Grieneisen ML, Zhang M. A comprehensive survey of retracted articles from the scholarly literature. PLoS One. 2012;7:e44118. [PMID: 23115617] doi:10.1371/journal.pone.0044118
4. Finelli C, Crispino P, Gioia C, La Sala N, D'amico L, La Grotta M, et al. Notice of retraction: the improvement of large high-density lipoprotein (HDL) particle levels, and presumably HDL metabolism, depend on effects of low-carbohydrate diet and weight loss [retraction of: Finelli C, Crispino P, Gioia C, La Sala N, D'amico L, La Grotta M, et al. In: EXCLI J. 2016;15:166-76]. EXCLI J. 2016;15:570.

This article was published at www.annals.org on 13 December 2016.



Annals of Internal Medicine

IDEAS AND OPINIONS

Dear Plagiarist: A Letter to a Peer Reviewer Who Stole and Published Our Manuscript as His Own

Michael Dansinger, MD

Dr. Doctor,

I am aware that you recently admitted to wrongly publishing, as your own, a scientific research paper that I had submitted to *Annals of Internal Medicine*. After serving as an external peer reviewer on our manuscript, you published that same manuscript in a different medical journal a few months later. You removed the names of the authors and the research site, replacing them with the names of your coauthors and your institution.

many research papers. It just doesn't make sense. Whether the pressure to publish is so intense, or whether the culture where you work is relatively permissive such that plagiarism is not taken as seriously, or whether getting caught seemed unlikely–it is hard to imagine why you would take this chance.

I hope you will not steal anyone else's research in the future. Instead, perhaps there is some way you can assist the scientific community's efforts to reverse the growing epidemic of plagiarism and scientific fraud.

I hope you will not steal anyone else's research in the future. Instead, perhaps there is some way you can assist the scientific community's efforts to reverse the growing epidemic of plagiarism and scientific fraud. Helping to raise awareness of the problem and identifying potential solutions would be positive steps in the right direction.

especially problematic in scientific research. The peer-review process depends on the ethical behavior of reviewers. Physicians and patients depend on the integrity of the process. Such cases of theft, scientific fraud, and plagiarism cannot be tolerated because they are harmful and unethical. Those who engage in such behavior can typically expect their professional careers to be ruined: Loss of reputation, loss of employment, and ineligibility for future research funding are the norm. Coauthors are also collaborators in the fraud, and such losses potentially apply to them as well. All the previous publications of those who steal others' work become suspect, and it reflects poorly on their training institutions, current employers, collaborators, and mentors.

It is hard to understand why you would risk so much. You have no doubt worked hard to become a physician and scientist. I know that you have published

References

1. Dansinger ML, Gleason JA, Griffith JL, Selker HP, Schaefer EJ. Comparison of the Atkins, Ornish, Weight Watchers, and Zone diets for weight loss and heart disease risk reduction: a randomized trial. JAMA. 2005;293:43-53. [PMID: 15632335]
2. Finelli C, Crispino P, Gioia C, La Sala N, D'amico L, La Grotta M, et al. Notice of retraction: the improvement of large high-density lipoprotein (HDL) particle levels, and presumably HDL metabolism, depend on effects of low-carbohydrate diet and weight loss [retraction of: Finelli C, Crispino P, Gioia C, La Sala N, D'amico L, La Grotta M, et al. In: EXCLI J. 2016;15:166-76]. EXCLI J. 2016;15:570.

See also:
Editorial comment 148

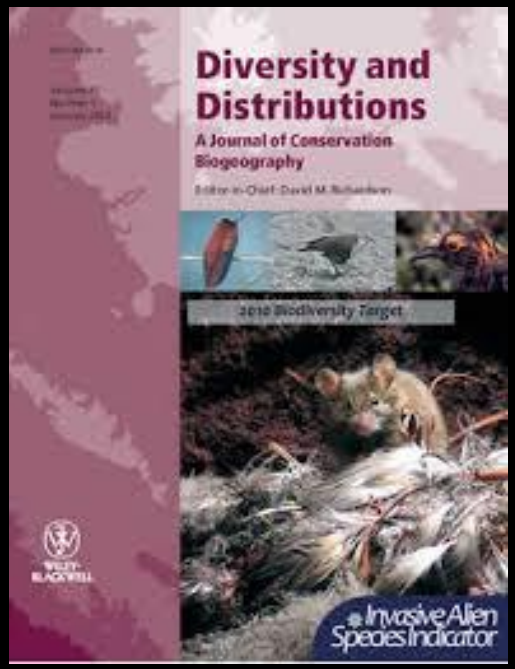
This article was published at www.annals.org on 13 December 2016.

Caso Diversity and Distributions – Wiley - Editor

A Editora Wiley comunicou ao Comitê Editorial da Revista *Diversity and Distributions* que iria transformá-la em Open Access. Isto acarretará um aumento significativo nas taxas de publicação de artigos no periódico. Este valor será, no mínimo, de US$1400,00.

Todo o Corpo Editorial se demitiu, inclusive os Editores.

Um membro do Corpo Editorial submeteu uma Carta ao Editor intitulada: *"Open Access Solutions for Biodiversity Journals: Don't Replace One Problem with Another"*, onde faz críticas a mudança proposta. A Editora Wiley propôs algumas correções que julgou adequadas ao artigo ao Editor Chefe da revista. A Carta ao Editor ainda não foi aceita.



https://retractionwatch.com/2018/11/28/majority-of-journals-editorial-board-resigns-after-publishers-handling-of-letter-about-move-to-open-access/

OPEN ACCESS Freely available online

PLoS one

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:

However, it is likely that, if on average 2% of scientists admit to have falsified research at least once and up to 34% admit other questionable research practices, the actual frequencies of misconduct could be higher than this.

showed that self reports surveys, surveys using the words "falsification" or "fabrication", and mailed surveys yielded lower percentages of misconduct. When these factors were controlled for, misconduct was reported more frequently by medical/pharmacological researchers than others. Considering that these surveys ask sensitive questions and have other limitations, it appears likely that this is a conservative estimate of the true prevalence of scientific misconduct.

Fanelli D.
How many scientists fabricate and falsify research? A systematic review and meta-analysis of survey data.
PLoS One. 2009;4(5).

Princípios para a Integridade na Pesquisa

1. Honestidade em todos os aspectos da pesquisa
2. Responsabilidade social na condução da pesquisa
3. Polidez e justiça no trabalho com outras pessoas
4. Boa gestão da pesquisa em benefício de terceiros

The Singapore Statement on Research Integrity.
2nd World Conference on Research Integrity, Singapore, 21-24 July 2010
http://www.singaporestatement.org/

Integridade sem
conhecimento
é frágil e inútil,
e
conhecimento sem
integridade
é perigoso e terrível.

Samuel Johnson
A história de Rasselas, príncipe da Abissínia.
Rio de Janeiro: Imago; 1994 (1759):124.

Integridade na Pesquisa

www.bioetica.ufrgs.br

https://doi.org/10.6084/m9.figshare.8411882