



# Current issues in publishing: fraud, plagiarism and predatory journals

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## Disclaimer...

- The opinions expressed in this presentation, and on the following slides, are solely those of Jan Seal-Roberts as a publishing professional, and are not necessarily those of Adis Journals, nor of Springer
- Jan is currently a salaried employee of Springer Healthcare, part of Springer.

## Fraud – what is it?

Defined as **the intentional deception of others for personal gain** (Scheerooren, 2013).

Instances of fraudulent practice occur in most areas of research and publication – but seem most problematic in medicine (lots to gain and lose).

And just about everyone is interested in the latest story or healthcare / health-scare implication – we are all vulnerable targets!



The Washington Post

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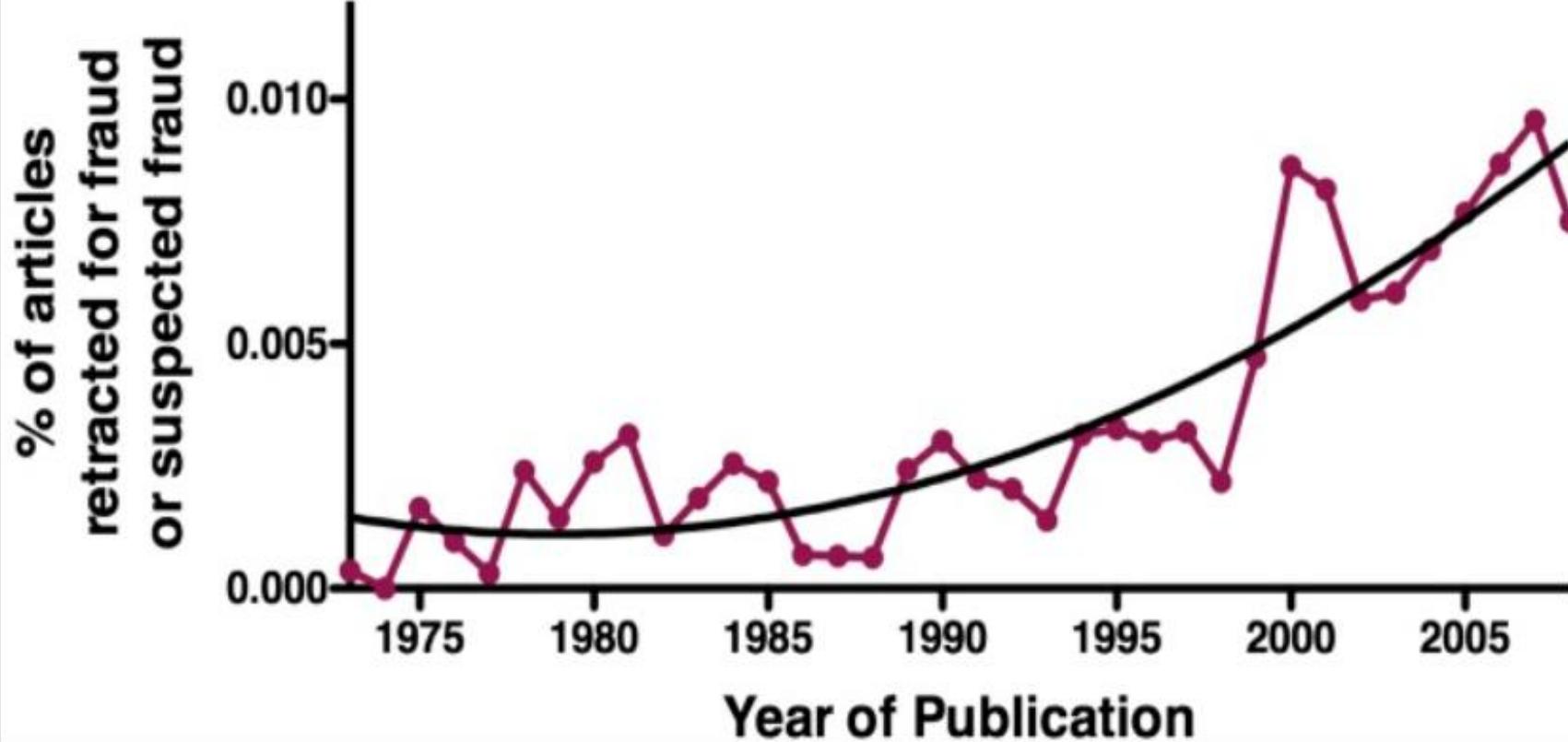
1 California's largest lake is slipping away amid an

A stack of dark chocolate bars with a yellow measuring tape wrapped around them, illustrating the headline about chocolate making you thin.

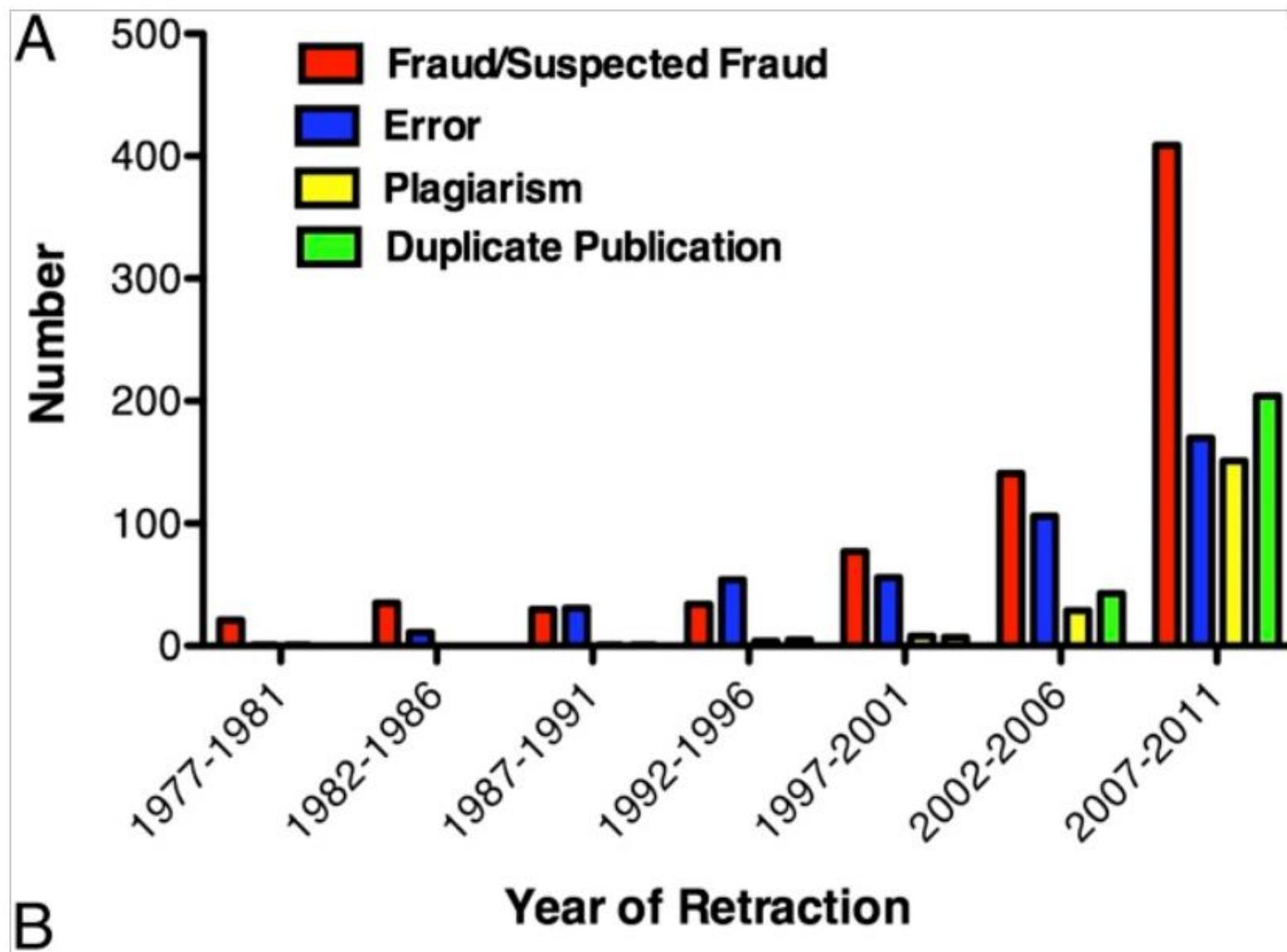
## Number of papers retracted for fraud, 1973 – 2008 (Fang et al., 2012)

B

### Year of Retraction



## Reasons for retractions (Fang et al., 2012)



## Misconduct accounts for majority of retracted scientific papers\*

Of the 2,047 biomed and life science articles listed as retracted in PubMed as of May 12:

- **Only 21.3%** were attributable to error (presumably unintentional)
- **67.4%** were attributed to misconduct:
  - **43.3%** due to fraud (or suspected fraud) in data - either fabrication or falsification
  - **14.2 %** duplicate publication
  - **9.8%** plagiarism
  - Remainder retracted for other miscellaneous or unknown reasons

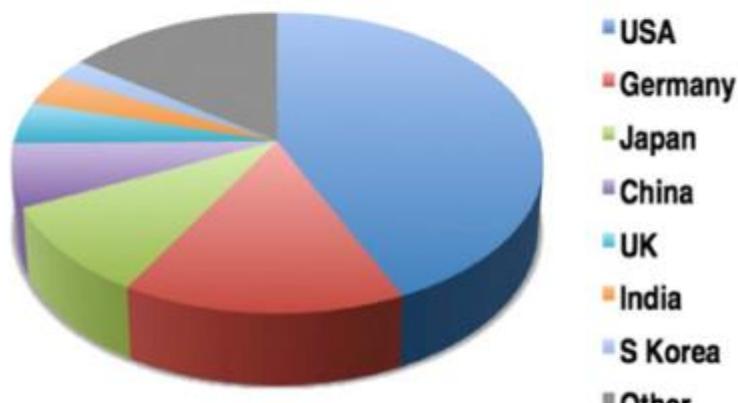
\*Fang et al., 2012. Proceedings of the National Academy of Sciences

**Significant correlation found between journal IF and retractions for fraud**

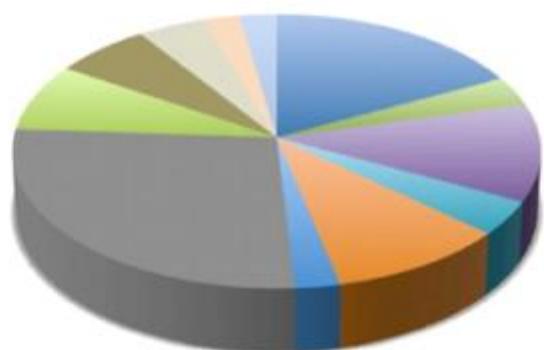
**Plagiarism was more associated with lower-impact journals**

Country of origin of publications retracted for fraud or suspected fraud (A), plagiarism (B), or duplicate publication (C).

A Fraud or Suspected Fraud



B Plagiarism



C Duplicate Publication



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

PNAS

# Where does fraud occur in medical publishing?

## Prior to submission:

- **Data fabrication** - making up research
- **Data falsification** - manipulating data (or images) to give a false impression
- **Duplicate submission / publication** and redundant publication
- **Authorship issues** - Includes plagiarism (and self-plagiarism), inclusion of ‘honorary’ authors and ghost authorship

## At submission:

- **Duplicate submissions** to more than one journal (incl. extremes of salami publishing)
- **Translating exact paper into another language**, without clearly acknowledging parent paper and referencing according
- **Replicating papers** in the name of another author
- **Faking peer-reviewers** – to raise kudos and increase chance of acceptance

## But why?

*“Promotion, appointments, and academic careers are really relying on publication and while that is in some ways good for the publishers and opens up some opportunities, I think there is always a concern that if the pressure is too high it will create an atmosphere in which the temptation to commit research or publication misconduct is increased.”*

Dr. Elizabeth Wager, Council member of  
the Committee on Publication Ethics  
(COPE) (18)

## Pressure to publish...

- Many incidences appear to be caused by ‘repeat offenders’
- But each incidence may have significant knock-on effects for readers, other researchers, citers – and publishers
- Before past decade there was a relatively low chance of being caught
- Now, it’s much more likely, with the advent of internet tools, and also monitoring bodies such as COPE (Committee on Publication Ethics) and the Office of Research Integrity (ORI), and also RetractWatch.com
- And yet there are still reported instances of fraud and scams taking place virtually every month....

**nature** International weekly journal of science

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## Publishers withdraw more than 120 gibberish papers

Conference proceedings removed from subscription databases after scientist reveals that they were computer-generated.

Richard Van Noorden

24 February 2014 | Updated: 25 February 2014

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The publishers Springer and IEEE are removing more than 120 papers from their subscription services after a French researcher discovered that the works were computer-generated nonsense.

Over the past two years, computer scientist Cyril Labbé of Joseph Fourier University in Grenoble, France, has catalogued computer-generated papers that made it into more than 30 published conference proceedings between 2008 and 2013. Sixteen appeared in publications by Springer, which is headquartered in Heidelberg, Germany, and more than 100 were published by the Institute of Electrical and Electronic Engineers (IEEE), based



### Recommended



#### Blame it on the antibodies

Could antibodies be to blame for the 'reproducibility crisis' in biomedical science?

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4. [Nearby star hosts Kuiper belt twin](#)  
*Nature* | 28 May 2015

## What is being done to counteract fraud in medical publishing?

Research: onus is on education – encouraging and demanding responsible conduct in research. Also now more closer supervision.

Now near-global expectation that researchers follow best practice and codes of conduct relevant to their professional bodies and/or national and international regulatory bodies, **from research proposal to publication**

### Publishing perspective:

Focus is also on education – Journal Editors and Publishers have key role in:

- Having clear policies in place providing clear advice and guidance for potential authors
- Raising awareness of what is acceptable – and what is not
- Educating authors and readers (and those in publishing industry) re what to do if fraud is suspected

COPE (Committee on Publication Ethics) has played a major role in this area

Also most medical societies, journals and publishers have increasingly rigorous guidelines to safeguard the integrity of scientific research, and to report incidences of fraud / misconduct.

## Journal submission requirements

International Committee of Medical Journal Editors (ICMJE) guidelines:

All authors submitting to subscribing journals are required to complete and sign form at submission:

- confirming the role of each of the contributing authors,
- to verify that the paper has not been published elsewhere,
- and that the work is legitimate, to the best of their knowledge

However, submission process is still predicated on **trust**:

- that every author will complete form honestly and to best of knowledge
- Also that every peer-reviewer involved in reviewing a submission will provide feedback objectively, and be able to discern meaningful research from poor science , and to identify misleading – or even falsified - papers.

The system isn't perfect – but seems to be the best we can get at the moment.

## What are publishers doing about fraud?

Most publishers strongly encourage every journal to have an Ethics policy, and clear statements to encourage responsible publication practices, including:

- Clear guidelines on how work should be submitted
- What type of content is (or is not) acceptable for publication
- Guidelines on what constitutes authorship – and how proposed changes to authorship are handled
- Description of the peer-review process
- Inclusion of the necessary ethical statements if required.

And every major publisher will have its own policies on how to:

- Investigate and deal with accusations of fraud
- Correct the literature, if necessary
- Respond in serious cases - including whether to ban an author from future association with the journal (in extreme cases).

## So what about plagiarism?

What is it?

'*Plagiarius*' - literally 'to kidnap'

First recorded use by 1<sup>st</sup> century Roman poet [Martial](#), who complained that another poet had "kidnapped his verses"

The World Association of Medical Editors (WAME) defines plagiarism as:

**"... the 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 an existing source."\***

Although accepted that plagiarism may 'exceptionally' happen unintentionally, it is generally held that plagiarism is deliberate, and that the primary intention of plagiarism is to deceive the reader.

\*World Association of Medical Editors. Publication ethics policies for medical journals. Available from:

<http://www.wame.org/resources/publication-ethics-policies-for-medical-journals>

## How does plagiarism occur in publishing?

Plagiarism generally takes three main forms:

- **Direct plagiarism:** completely or partially copying text (or digital sources etc.) without acknowledging the primary source
- **Bits and pieces:** ‘borrowing’ ideas/ opinions from an original source, together with a few words and phrases, without citing the source
- **Self-plagiarism** – reuse of one’s own work without citing previous work, and without permission to reproduce text (yes – permission is usually necessary!).

Essentially to intentionally use or ‘pass off’ another person’s ideas, statements, phrases etc. as your own, without acknowledging the intellectual originators.

**Plagiarism is understood to be an intentional act.**

## How common is plagiarism in medical publishing?

Results of study by Katherine Amos (2014) on data published 2008 – 2012:

Table 2

| Country        | Number of papers retracted |            |                       | Rate of retraction |                       |
|----------------|----------------------------|------------|-----------------------|--------------------|-----------------------|
|                | Total                      | Plagiarism | Duplicate publication | Plagiarism         | Duplicate publication |
| United States  | 199                        | 17         | 26                    | 8.5%               | 13.1%                 |
| China          | 143                        | 24         | 42                    | 16.8%              | 29.4%                 |
| Japan          | 57                         | 2          | 13                    | 3.5%               | 22.8%                 |
| Germany        | 55                         | 0          | 9                     | —                  | 16.4%                 |
| South Korea    | 55                         | 3          | 7                     | 5.5%               | 12.7%                 |
| India          | 49                         | 18         | 7                     | 36.7%              | 14.3%                 |
| United Kingdom | 30                         | 3          | 5                     | 10.0%              | 16.7%                 |
| Italy          | 24                         | 16         | 2                     | 66.7%              | 8.3%                  |
| Australia      | 19                         | 4          | 1                     | 21.1%              | 5.3%                  |
| Netherlands    | 17                         | 2          | 2                     | 11.8%              | 11.8%                 |
| Iran           | 14                         | 6          | 3                     | 42.9%              | 21.4%                 |
| Canada         | 13                         | 2          | 2                     | 15.4%              | 15.4%                 |
| France         | 13                         | 5          | 1                     | 38.5%              | 7.7%                  |
| Turkey         | 13                         | 8          | 2                     | 61.5%              | 15.4%                 |
| Egypt          | 12                         | 4          | 1                     | 33.3%              | 8.3%                  |
| Spain          | 12                         | 2          | 1                     | 16.7%              | 8.3%                  |
| Brazil         | 9                          | 3          | 1                     | 33.3%              | 11.1%                 |
| Finland        | 8                          | 0          | 3                     | —                  | 37.5%                 |
| Tunisia        | 7                          | 3          | 2                     | 42.9%              | 28.6%                 |
| Sweden         | 5                          | 1          | 0                     | 20.0%              | —                     |

Retraction numbers and rates for the 20 countries with 5 or more retracted papers, 2008–2012

## What is being done to detect plagiarism in medical publishing?

Historically, reliance on editors and peer-reviewers at submission, and on readers to report plagiarism post-publication

### Now most publishers use plagiarism detection / text authentication tools

- Most publishers are part of the **CrossCheck** community (200+ members, and currently 50m+ articles) - which uses the software 'iThenticate' as part of the submission process.
- Each donates the links for DOIs and publisher metadata for their published journal articles and books (NB: this works across all disciplines)
- CrossRef provides 'the organizational and technological backbone to facilitate linking by associating DOIs with publisher metadata'. There is no centralized repository of abstracts or full text involved.

<http://www.crossref.org/02publishers/index.html#sthash.fLEXP9jA.dpuf>

- But use of CrossCheck requires knowledge of where replications may naturally occur (e.g. methods sections) and being able to assess accordingly

## What happens when apparent ‘duplications’ are detected?

- Any alerts are addressed to the corresponding author for them to respond in the first instance, in the expectation that this will hopefully be easily resolved (focus is on educating - and hopefully resolving).
- But if not, the paper will be rejected, with clear reasons and explanation.
- In the case of plagiarism identified post-publication, a full investigation will be carried out – and if substantiated, the offending paper will be retracted.

Check out **RetractionWatch.com**

### Oregon public health employee faked 56 infection case reports: ORI

with 2 comments

A former employee in the public health division of the Oregon Health Authority committed misconduct in 56 case reports about *Clostridium difficile* infections in Klamath County, Oregon, as well as in a manuscript submitted to *JAMA Internal Medicine* and a published report in the *Morbidity and Mortality Weekly Report* in March, 2012.

Ryan Asherin, previously a Surveillance Officer and Principal Investigator at the OHA, was a busy man. According to the details from a report by the U.S. Office of Research Integrity, Asherin:

[Read the rest of this entry »](#)

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Written by Alison McCook  
May 29th, 2015 at 12:32 pm

Posted in [faked data freely available on investigations public health safety united states](#)

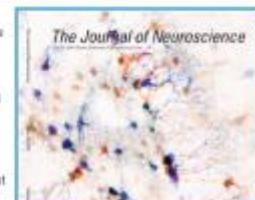


### Brain paper retracted after university report finds “substantial data misrepresentation”

with 2 comments

The *Journal of Neuroscience* is retracting a 2012 paper on how estrogen produced in the brain shapes the auditory system on the basis of “a report from Northwestern University that describes substantial data misrepresentation” in the paper.

The paper, “Mechanistic Basis and Functional Roles of Long-Term Plasticity in Auditory Neurons Induced by a Brain-Generated Estrogen,” is, according to PubMed, the last one published by its last (and corresponding) author Raphael Pinaudi, and first author Lisa Tremere, who were both at Northwestern University at the time. Before his position at Northwestern, Pinaudi held positions at the [University of Oklahoma](#) and the [University of Rochester](#).



## How can med comms assist us in reducing plagiarism?

Education, education, education....

Some good tips for avoiding plagiarism in medical publishing (according to [Natasha Das](#) and [Monica Panjabi](#) 2012):

- **COMMON TIPS FOR AVOIDING PLAGIARISM**
- Ethical medical writers must always acknowledge the original source of the idea, text, or illustration.
- They must remember to enclose within quotation marks, all the text that has been copied verbatim from another source.
- When paraphrasing, they must read the text, understand completely, and then use only their own words.
- Even when explaining somebody else's ideas in their own words, it is important that they properly acknowledge the original source.
- When not sure if the idea/fact they wish to include is common knowledge, a medical writer must cite references.

## And there's more....

More good tips for avoiding plagiarism in medical publishing (according to [Natasha Das](#) and [Monica Panjabi](#) 2012):

- They must cite references accurately. The writer must read the instructions to authors to know what style they need to use. Biomedical journals commonly use the Vancouver style. Some textbook publishers prefer the Harvard referencing style. Insufficient and inaccurate acknowledgement can also amount to plagiarism.
- A medical writer should avoid writing multiple separate articles if he can present a large complex study in a cohesive manner in a single article.
- Along with the manuscript, he should submit a cover letter to the editor, clearly stating any instances of overlapping from previous publications and asking for advice.
- Last, but not the least, if he feels he has unintentionally used somebody else's ideas or text without appropriate referencing, he needs to write to the editor of the journal for advice. Confession is always better than to be caught stealing.

## 'Predatory' Publishing – what is it?

Term means different things to different people – but these days used almost exclusively in the context of open access (OA) publishing



According to **Jeffry Beall** (Academic Librarian at University of Colorado in Denver):

**"Predatory OA publishers are those that unprofessionally exploit the author-pays model of OA publishing (Gold OA) for their own profit.**

Generally speaking, aim to attract article-processing charges and other revenues under false pretences, either by:

- pretending to be what they are not, or
- pretending to be better than they really are.

Typically, these publishers spam professional email lists, broadly soliciting article submissions for the clear purpose of gaining additional income.

[jeffrey.beall@ucdenver.edu](mailto:jeffrey.beall@ucdenver.edu)

## How common is predatory publishing?

Very – and the unwary may easily come unstuck.

Companies usually operate via credible websites, but often with no clear geographical basis or association – and often have credible-sounding names.

Criticised by Jeffry Beall for having:

- “low article acceptance threshold,
- little or no real peer-review process,
- add little value to scholarship,
- pay little attention to digital preservation,
- and operate using fly-by-night, unsustainable business models.”

## Beall's List of Predatory Open Access Publishers (actually two lists):

- The first includes publishers that he considers questionable.

| Publishers |                      |
|------------|----------------------|
| Year       | Number of publishers |
| 2011       | 18                   |
| 2012       | 23                   |
| 2013       | 225                  |
| 2014       | 477                  |
| 2015       | 693                  |



- The second lists individual journals that do not publish under the platform of any publisher (essentially independent), which he considers to be questionable

| Standalone Journals |                    |
|---------------------|--------------------|
| Year                | Number of journals |
| 2013                | 126                |
| 2014                | 303                |
| 2015                | 507                |

## From 2014, he started two additional lists:

**Misleading metrics:** list includes companies that “calculate” and publish counterfeit impact factors (or some similar measure)

**Hijacked journals:** list includes journals for which someone has created a counterfeit website, stealing the identity of an established journal, and soliciting articles submissions using the author-pays model (gold open-access).

- **Misleading metrics**: no. of titles = 26 (list debuted in March 2014)
- **Hijacked journals**: no. of titles = 30 (list started in May 2014)

## Beall's recommendations....

- “That researchers, scientists, and academics avoid doing business with these publishers and journals;
- That scholars avoid sending article submissions to them, serving on their editorial boards or reviewing papers for them, or advertising in them.
- Also, tenure and promotion committees should give extra scrutiny to articles published in these journals, for many of them include instances of author misconduct.”

## Unaware victims are likely to face serious consequences...

- Authors may be deceived in terms of the fate of their submissions
- Even if published, authors may subsequently be revisited with ‘surprise’ invoices
- And journals are more likely to close in due course, often leaving no digital preservation (in which case an article would then be lost to the public domain)
- Author reputations may be permanently damaged by association with a journal widely considered to be ‘questionable’
- KOLs and others may find their names (and/or photos) utilised in ed bd listings without their knowledge or permission, thereby losing credibility
- Publishers may find that established and successful journal titles are being mimicked (by use of very similar names, and website designs) – or even hijacked.
- And legitimate OA publishers (which these days includes just about every publisher!) can feel that they are being tarred with the same brush.

**Lots of recent examples in the press of ‘publishers’ seemingly keen just to pocket the APC, irrespective of content!**

# Journal Accepts Paper Reading “Get Me Off Your Fucking Mailing List”

November 23, 2014 | by Stephen Luntz

## Get me off Your Fucking Mailing List

David Mazières and Eddie Kohler  
New York University  
University of California, Los Angeles  
<http://www.mailavenger.org/>

### Abstract

photo credit: David Mazieres and Eddie Kohler. Who says swearing is not scientific?



A paper that largely consists of the words "Get me off your fucking mailing list" repeated 863 times has been accepted by a journal that claims to be peer reviewed. The move might appear to offer hope to scientists struggling to get marginal work published, but really just exposes the extent of scam publications pretending to be contributing to science.

"Publish or Perish" is more than a catch-phrase for scientific researchers. With rare exceptions, such as those working for secret military projects, research scientists need to publish regularly if they hope to advance, or often just keep, their career. High impact journals such as *Science* and *Nature* help most, but getting into these is hard and even less

## And of 'scammy' practices

SEP  
2

### Science Journal SPAM of the Week: the Journal of HIV/AIDS from Sci Forschen

Well, got this email this AM. It is yet another spammy journal (I don't work on HIV/AIDS). I particularly like the part where I am called an "eminent personality".

Dear Dr. Jonathan Eisen,

Greetings from the [Journal of HIV/AIDS](#),

We take great delight in inviting you to join the **Editorial Board** for the [Journal of HIV/AIDS](#), which is an open access, peer reviewed journal managed by [Sci Forschen](#). Ensuring quality and accuracy for every submitted article is the top most priority for [Sci Forschen](#), and we genuinely believe that someone with the knowledge and experience, such as yourself, can really make a huge difference for us.

[Journal of HIV/AIDS](#), publishes cutting edge research work submitted by scholars from all over the world, and we believe that your presence will polished up with the help of illustrious experts in research field.

We are always striving to involve [eminent personalities](#) like you and your standing in the global community makes us confident.

Kindly let us know your valuable response and acceptance if possible with in 48 hours.

Please kindly submit your following particulars to update in our Journal website

1. Updated CV
2. Passport Size Photo
3. Short Biography
4. Research Interest

Looking forward for your valuable and soon response.

Regards,

Editorial Office  
Sci Forschen Incorporation  
913 Catkin Ct.

# How do we recognise a predatory publisher or journal?

## Business management

- Publisher demonstrates lack of transparency in publishing operations
- No policies or practices for digital preservation (thus, if a journal were subsequently to close, all content would disappear)
- Provides insufficient info about author fees, and later sends ‘surprise’ invoices
- Locks pdfs, so content can’t easily be checked for plagiarism (lack of transparency)

## Integrity

- May quote fake impact factors
- May send spam requests for peer reviewers to those unqualified to review
- Also may republish papers already published without appropriate credits
- May operate in a Western country – but predominantly to function as a vanity press for those from a developing country
- Provides no copy editing or proof reading of submissions
- Publisher hides behind web address, so doesn’t reveal real location

## And finally, some take-home messages....

- Please keep your staff and clients informed and aware of the need to avoid falling into any of these pitfalls. (And if your advice is not heeded, get it in writing!)
- Avoid salami-slicing data – this is no longer considered acceptable.
- Make sure you, your team and your authors understand the ICMJE rules /criteria of authorship, and ensure you get up to speed with GPP-3
- Breaches of copyright can be expensive to resolve post-publication. It's much easier (and cheaper) to check first!
- Remember to keep checking Beall's list – and ensure your clients are aware of these journals
- And lastly....

Stay informed and be aware. And be sure to let others know!



OK Steve, it's your turn to stand guard while we graze.  
If any predator is nearby, send us an SMS...

# Thank you!



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