Midday at the Oasis: How Librarians and Information Professionals can make a difference in combating Predatory Publishers

Dr. Mark Langdorff, MD, MHPE, FACEP, FAAEM, RDMS
Professor of Clinical Emergency Medicine
Editor-In-Chief, Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health
Department of Emergency Medicine, University of California, Irvine

Linda Murphy, MLIS
Research Librarian for the Health Science
UC Irvine Libraries, University of California, Irvine
Agenda

- A challenging & controversial topic
- Journal publishing models
- The problem with scientific publishing
- Medical publishing and the threat of predatory publishers
- Criteria for legitimacy
- Librarians work collaboratively
- Conclusion & future directions.
A CHALLENGING & CONTROVERSIAL TOPIC
As a librarian, how often you are asked?

“I got an email inviting me to publish in an Open Access journal. Is this a reputable quality open access journal in my field?”
Why is this such a controversial topic?

Discriminating Between Legitimate and Predatory Open Access Journals: Report from the International Federation for Emergency Medicine Research Committee

- Bhakti Hansoti, MBCHB, MPH*
- Mark I. Langdorf, MD, MPH*
- Linda S. Murphy, MLS*

*Johns Hopkins University, Department of Emergency Medicine, Baltimore, Maryland
*University of California, Irvine, Department of Emergency Medicine, Irvine, California
*University of California, Irvine Libraries, Reference Department, Irvine, California

Section Editor: Bob Defel, MD
Submission history: Submitted March 19, 2016; Revision received July 1, 2016; Accepted July 14, 2016
Electronically published online: August 11, 2016
Full text available through open access at http://escholarship.org/uc/uciem_westjem
DOI: 10.5811/westjem.2016.7.30028

Introduction: Open access (OA) medical publishing is growing rapidly. While subscription-based publishing does not charge the author, OA does. This opens the door for "predatory" publishers who take authors' money but provide no substantial peer review or indexing to truly disseminate research findings. Discriminating between predatory and legitimate OA publishers is difficult.

Methods: We searched a number of library indexing databases that were available to us through the University of California, Irvine Libraries for journals in the field of emergency medicine (EM). Using criteria from Jeffrey Beall, University of Colorado librarian and an expert on predatory publishing, and the Research Committee of the International Federation for EM, we categorized EM journals as legitimate or likely predatory.

Results: We identified 15% of journal titles related to EM from all sources. 55 of which met our criteria for OA (37%), the rest subscription based. Of these 55, 25 (45%) were likely to be predatory. We present lists of clearly legitimate OA journals, and, conversely, likely predatory ones. We present criteria a researcher can use to distinguish between the two. We present the indexing profiles of legitimate EM OA journals, to inform the researcher about degree of dissemination of research findings by journal.

Conclusion: OA journals are proliferating rapidly. About half in EM are legitimate. The rest take substantial money from unsuspecting, usually junior, researchers and provide no value for true dissemination of findings. Researchers should be educated about all OA journals. [West J Emerg Med. 2016;17(5):497-507.]

Commentary and Erratum

Not All Young Journals Are Predatory

Adam Singer, MD
Stony Brook University, Department of Emergency Medicine and Editor, Clinical and Experimental Emergency Medicine, Stony Brook, New York

Section Editor: Mark I. Langdorf, MD, MPH
Submission history: Submitted October 1, 2016; Accepted October 19, 2016
Electronically published online: December 5, 2016
Full text available through open access at http://escholarship.org/uc/uciem_westjem
DOI: 10.5811/westjem.2016.10.32826

I read the article by Hansoti et al. with great interest in which they list “predatory” open access emergency medicine journals. Unfortunately, the authors neglected to mention a major limitation of their study methodology. The process required for a new journal to be included in various recognized medical library indexing services such as PubMed or the Scientific Citation Index is often complex and lengthy, sometimes requiring several years before being included. Thus, lack of inclusion of a journal title within these search engines is not evidence that the journal is illegitimate, since it may be too young to be included. Therefore, I was disappointed to see the journal Clinical and Experimental Emergency Medicine among the list of so-called “predator” journals. Clinical and Experimental Emergency Medicine (CEEM) is non-for-profit, peer reviewed and the efficient English language journal of the Korean Society of Emergency Medicine inaugurated about two years ago. The journal does not charge publication fees and is funded by the Korean Society. The journal has just been included into PubMed. The Korean Society of Emergency Medicine represents hundreds of Korean emergency physicians and is a highly reputable organization. Korean emergency physicians have made significant contributions to the body of emergency medicine and acute care knowledge, some of which have been published in CEEM as well as many other well-established journals. The editorial board of CEEM includes multiple internationally renowned emergency physicians who have joined forces to support the efforts of the Korean Society. CEEM was established as a platform for a large number of Asian emergency physicians to highlight many of the issues unique to this region. In today’s era of emergency medicine globalization and rapid international growth it is important for all of us to come together and support the efforts of national emergency medicine organizations to grow their clinical and academic missions, such as the establishment of new journals like CEEM. Thus, extreme care should be taken before prematurely labeling young yet perfectly legitimate journals as “predators,” especially in our relatively young field of emergency medicine.

Address for Correspondence: Adam Singer, MD, Stony Brook University, Department of Emergency Medicine, Clinical and Experimental Emergency Medicine, HSC-L4-080, Stony Brook, NY 11794-8356. Email: Adam.Singer@stonybrook.edu.

Copyright © 2017 Singer et al. This is an open access article distributed in accordance with the terms of the Creative Commons Attribution (CC BY) 4.0 License. See: http://creativecommons.org/licenses/by/4.0/}

REFERENCES


https://escholarship.org/uc/item/64f3v9fj
https://escholarship.org/uc/item/15x152zp
Don’t use PubMed as a journal checklist – Really?

https://journosdiary.com/2017/08/26/pubmed-predatory-journals/

Now, more predatory journals get indexed in PubMed

August 26, 2017

The PubMed database managers have irresponsibly allowed it to become a repository of citations to predatory journal articles.

Among other things, the next time you see a questionable journal proudly announcing that it is indexed in PubMed, chances are that the journal is predatory.

Contrary to the popular notion that only genuine and distinguished journals which take peer reviewing seriously and follow all the norms of scientific publishing are indexed in PubMed, many predatory journals too are included in PubMed. The same holds true for PubMed Central too.

According to PubMed, more than 37 million citations for biomedical literature from MEDLINE and other journals and online books are included. And herein lies the problem. Among other journals indexed are thousands of predatory journals, and their numbers are increasing at an alarming rate.

“The PubMed database managers have irresponsibly allowed it to become a repository of citations to predatory journal articles,” Jeffrey Beall, Librarian at the University of Colorado Denver and publisher of the famous Scholarly Open Access blog that was shut down recently, wrote in his blog. He further added...

Raise the bar

Considering that PubMed handles millions of queries daily and health researchers worldwide regularly turn to it for information, it is “worrysome that PubMed includes journals with seriously flawed peer review processes,” the researchers write in the Correspondence titled “PubMed should raise the bar for journal inclusion.” Dr. Beall had warned about this 1 year ago. “It is misleading that these potentially low-quality articles, many of which have not undergone rigorous peer review, are featured prominently in PubMed searches.”

In a blog post “Don’t use PubMed as a journal checklist” dated October 20th, 2016, Dr. Beall had written: “I recommend against using PubMed as a list of quality journals for the purpose of finding a journal to publish in, evaluating academic performance, awarding grants and degrees, and assessing job candidates.”

“A journal’s inclusion in PubMed does not mean the journal has a stamp of approval from NIH (National Institutes of Health). There is such a low barrier to inclusion that researchers are advised to be suspicious of any journal that boasts about its inclusion in PubMed, especially if the boasting is prominently displayed on the journal’s main web...
A Confusion of Journals -- What is PubMed Now?

https://scholarlykitchen.sspnet.org/2017/09/07/confusion-journals-pubmed-now/


Twenty years ago, PubMed was a credentialing system, an online port of the MEDLINE index. This shift of medium quickly made it a search engine, but one built on a manual and highly curated index. If your journal was in MEDLINE/PubMed, it had gone through an exhaustive evaluation, and had earned a badge of legitimacy. You were searching a credentialing system. You were getting filtered results based on MEDLINE inclusion criteria, which were well-accepted.

Starting with E-Biomed and stretching to PubMed Central, the credentialing system pegged in many users’ minds morphed into a publisher (a primary publisher in the case of at least two journals, and, for a time, three), a competitor (here, here, and here, as well as here and here), and a technology provider. Its management also has advanced the cause of OA publishing, in both legitimate and controversial ways. Part of the extension of PubMed’s original purpose has come through brand extension. Via PubMed Central, which has been used to muddy the waters about what is PubMed and what is not. PubMed inclusion has been used, for example, as an incentive for journals to include themselves in PubMed Central, eroding the idea that PubMed is a neutral arbiter of quality.

Now, a new twist is emerging, and that seems to be that PubMed may be consciously or unwittingly acting as a facilitator of predatory or unscrupulous publishing.

In a paper published in *Neuroscience*, the authors analyzing the neurology and neuroscience journals included in PubMed found that:

- Twenty-five predatory neurology journals were indexed in PubMed, accounting for 24.7% of all predatory neurology journals.
- Fourteen predatory neuroscience journals were indexed in PubMed, accounting for 16.1% of all predatory neuroscience journals.
- Only one of the 188 predatory neuroscience or neurology journals appeared in the DOAJ index.
- Only 54.6% of the journals deemed predatory in neuroscience actually contained articles.

The authors note how PubMed Central provides a backdoor into PubMed and the National Library of Medicine (NLM) for these predatory publishers:

*Noteworthy, predatory journals are retrievable in the catalog of the National Library of Medicine (NLM), are labeled by a unique NLM identification number and referenced as “Not currently indexed for MEDLINE. Only citations for author manuscripts are included.”*

This is the kind of fine print that will escape the attention of most users, and which itself is unclear as to reliability, process, or value. Are we to think that something that appears in PubMed and the NLM but not in
More challenging issues

- “Medical Journals Have a Fake News Problem - With help from drug companies, Omics International is making millions as it roils the scientific community with sketchy publications” *Bloomberg Businessweek*, August 29, 2017
  
  https://www.bloomberg.com/news/features/2017-08-29/medical-journals-have-a-fake-news-problem

- Is PubMed consciously or unwittingly acting as a facilitator of predatory publishing?
  
  o **Open Access Text** – 29 out of 119 Journal Titles are found in the NLM Catalog
    

  o **OMICS International, OMICS Publishing Group** – 176 out of 746 Journal Titles are found in the NLM Catalog
    
Predatory Journals

Open Access Text is a predatory publisher. 29 out of 119 titles were found in the NLM Catalog, but most are not in PubMed or PMC.

Only one citation published in this journal was found in PubMed and this was a NIH funded study. The manuscript was deposited in PMC in compliance with the NIH Public Access Policy.
PubMed Journal Selection and the Changing Landscape of Scholarly Communication

Kathryn Funk, Rebecca Stanger, Judith Eannarino, Lauren Topper, Katherine Majewski
National Library of Medicine
National Institutes of Health
U.S. Department of Health & Human Services

To learn more about how journals are selected to PubMed and PMC, I urge you to watch this recorded NLM Webinar at: https://www.nlm.nih.gov/bsd/disted/video/selection.html
JOURNAL PUBLISHING MODELS
Fee-Based vs. Free vs. Open Access

- **Fee-based** (the traditional model): Revenue based on subscription fees, licensed contents, advertisements, and reprint fees.
- **Free access**: Content is free to read, but not to reuse.
- **Open Access**:
  - Content is available online to the reader "without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself."
  - Author Reuse rights vary depending on type of creative common licenses.
  - Publication costs shift to authors, and indirectly, to funders.
Types of Open Access (OA) Journals

- **Gold OA**: Journals do not charge subscription fees and authors pay the article processing charges (APC).
- **Green OA** (self-archiving): Authors upload pre or post-prints to digital repositories and pay no fee (with 6-24 months embargo).
- **Hybrid OA**: A mixed revenue model of subscription charges and pay-to-publish options. Authors pay a subscription-based journal a publication fee to make their individual article open access immediately upon its release. Hybrid OA remains significantly more expensive than full OA (~50% more per APC).
- **Bronze OA**: Delayed OA. Free to read on the publisher’s website. The publisher controls copyrights.
- **Platinum OA**: Free to the authors and free to the readers. Usually sponsored and published by nonprofit societies and associations, e.g., the Beilstein-Institut and the Electrochemical Society.
Understanding Journal Policies and Licensing conditions

![Diagram of Creative Commons Licenses]

Source: [https://currikiblog.files.wordpress.com/2013/01/creative-commons-licenses-explained_fotor-com.jpg](https://currikiblog.files.wordpress.com/2013/01/creative-commons-licenses-explained_fotor-com.jpg)
THE PROBLEM WITH SCIENTIFIC PUBLISHING
What’s wrong with this picture?

- You get a research grant from the government.
- You do the research.
- You send it to a subscription journal publisher.
- They accept it.
What’s wrong with academic publishing?

- The publisher sells your work, your intellectual property, to libraries, universities, advertisers and back to the governments who provided the funding.
- You’re not allowed to use your own work once you sign it over to the publisher.
- Largest profit margin of any worldwide industry.
Scientific publishing is a remarkably big business
A huge headache for librarians

With budget constraints and price hike by publishers, academic libraries no longer can afford the high cost of academic journal and database subscriptions.
Predatory Journal Definition:

“...an exploitative open-access publishing business model that involves charging publication fees to authors without providing the editorial and publishing services associated with legitimate journals (open access or not)."
The predatory publishers know that medical researchers often have research grants and that they frequently use this funding to pay author fees.

Predatory publishing make easy money with little upfront investment.
Sting Operation: John Bohannon 2013

- Expose lack of peer review in predatory OA journals
- Published in Science
- Fictitious paper, made-up authors from non-existent African university
- Purported to identify a new chemical that inhibited cancer cell growth.

RE: JECAR 13-1315

30th July 2013

“Inhibitory effect of alectronic acid on reproduction and growth of methylcholanthrene-induced hepatic malignancy: in vitro observations from a murine model”

Dear Dr. Womay NY Awoonee,

Congratulations! The manuscript listed above has been approved for publication in JECAR, after having completed peer-review and editorial consideration.

You will soon be contacted by the billing office (Bursar-MMC) to settle the Article Processing Charge (APC) associated with this submission. The APC for this work has been calculated at $1000. If you do not receive an invoice for this amount within two weeks, please contact this office for follow-up. Your manuscript cannot be processed for publication until the APC has been cleared.

Once the article is published, it will be freely accessible for unlimited download to all readers without subscription or other costs.

Again, congratulations on publication of this important research contribution. We hope to have the opportunity to consider additional manuscripts from your institution going forward.

Yours sincerely,

JECAR Editorial Office
Sting Operation: Methods

- Purposely fundamentally flawed, so Any peer review would result in rejection

- Sent to 304 OA journals from both the “predatory” journal list of Beall and DOAJ (presumably legitimate)
Sting Operation: Results

- 157/304 (52%) accepted, 98 (32%) rejected and the rest did not respond.

- Average time to acceptance 40 days, and to rejection 24 days.

- 60% of those that were accepted or rejected showed no signs of peer review for content.
WHO EMBRACED THE FAKE?
Journals deemed predatory were much more likely to accept a fake, subpar candidate as an editor.

- **Predatory titles** as assessed by librarian Jeffrey Beall:
  - Accepted 33%
  - Rejected 13%
  - No response 54%

- **Titles on the Directory of Open Access Journals (DOAJ)**:
  - Accepted 7%
  - Rejected 38%
  - No response 55%

- **Titles indexed by Journal Citation Reports (JCR)**:
  - Accepted 0%
  - Rejected 40%
  - No response 60%

120 titles
Jeffry Beall is a critic of the OA publishing movement. He is well-known for his blog, Scholarly Open Access, which monitors "predatory open access publishing."
### Publishers

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of publishers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>18</td>
</tr>
<tr>
<td>2012</td>
<td>23</td>
</tr>
<tr>
<td>2013</td>
<td>225</td>
</tr>
<tr>
<td>2014</td>
<td>477</td>
</tr>
<tr>
<td>2015</td>
<td>693</td>
</tr>
<tr>
<td>2016</td>
<td>923</td>
</tr>
</tbody>
</table>
Predatory Publishers & Journals – The Beall’s List

- Updated January 7, 2016, contained 923 publishers from all scientific fields
- Each publishes multiple (3–30+) journals (33% increase over 2015)
- 882 stand-alone journals (74% increase over 2015)
- None of the 923 publishers contained “emergency” or “medicine” in their titles
Predatory OA Journals in Emergency Medicine (EM)

- None of the 882 stand-alone journals contain the stem, “emerg” (except “emerging” in many journal titles).
- 16 “medical” journal titles of the 882 stand-alones were possibly related enough to EM to fool a novice researcher.
- For perspective, the largest legitimate journal databases (HINARI from WHO) lists 14,964 journals worldwide.
- So “predatory” journals amount to 12–50% of the legitimate titles (1–7 journals per predatory publisher).
Study Methods

- Began with principles from IFEM Research Committee Report
- Journal had to have all these:
  - Author retained copyright
  - Completely open access to reader without charge
  - Creative commons license
- Searched Google Scholar, EMBASE, Scopus, Beall’s list, PubMed, DOAJ, Web of Science, EBSCO for titles containing “emerg” and permutations 2016.
Criteria for Legitimacy?

- You’ve heard of it. (interesting and relevant)
- Will reach community you want to read the work
- Ask mentors which journals are legitimate
- Librarians can help
- Is there an impact factor?
- Even this can be fabricated
Legitimacy: Look for Obvious Flaws

- Beall published new list in 2015 of 38 “Misleading Metrics” companies that offer journal’s impact factor, and scholarly metrics at researcher and article level.

- Methodological flaws relegate work to lesser journal: be honest.

- If “peer review” glosses over, beware.

- Outright acceptance is very rare.
Legitimacy: Validate in the NLM databases

- Look up journal in the NLM Catalog: shows where indexed in MEDLINE, PubMed, or PubMed Central
- PMC: free full text articles, publicly accessible
- PubMed Central journals clearly legitimate
- May also be indexed in MEDLINE (most discriminating 6000+ journals)
Legitimate: OA Journal Criteria

- OA journals in PMC all have abstracts in PubMed.
- If OA, is it in Directory of Open Access Journals (DOAJ)?
- “Whitelist” of legitimate journals that must meet specific criteria.
- Review website for journal policies and governance.
What to look for in the journal?

- Should have human and animal subject policies, OA license type (Creative Commons Attribution License), COI, informed consent, plagiarism, authorship and copyright
- Read articles before submitting
- Red flags: grammar errors, typos, poor quality science, poorly maintained website
Legitimacy: Journal Impact Factor Tools

- Journal name makes sense? Excessively broad?
- Impact factor? Too good to be true (> 2)
- Can be found in Clarivate (formerly Thomson Reuters) Journal Citation Reports® (JCR)
- Scimago Journal & Country Rank index (free)
- Google Scholar Metrics (free)
<table>
<thead>
<tr>
<th>Title</th>
<th>Type</th>
<th>SJR</th>
<th>H Index</th>
<th>Total Docs (2016)</th>
<th>Total Docs (3years)</th>
<th>Total Refs</th>
<th>Total Cites (2years)</th>
<th>Citable Docs (3years)</th>
<th>Cites/Ref (2years)</th>
<th>Net. / Doc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Resuscitation</td>
<td>journal</td>
<td>2.401</td>
<td>109</td>
<td>367</td>
<td>1291</td>
<td>623</td>
<td>4170</td>
<td>628</td>
<td>5.24</td>
<td>22.87</td>
</tr>
<tr>
<td>2 Annals of Emergency Medicine</td>
<td>journal</td>
<td>1.657</td>
<td>130</td>
<td>468</td>
<td>1160</td>
<td>597</td>
<td>1310</td>
<td>568</td>
<td>9.06</td>
<td>12.77</td>
</tr>
<tr>
<td>3 Academic Emergency Medicine</td>
<td>journal</td>
<td>1.659</td>
<td>104</td>
<td>228</td>
<td>723</td>
<td>555</td>
<td>1887</td>
<td>650</td>
<td>2.67</td>
<td>24.36</td>
</tr>
<tr>
<td>4 Critical Care and Resuscitation</td>
<td>journal</td>
<td>1.689</td>
<td>26</td>
<td>50</td>
<td>135</td>
<td>1162</td>
<td>340</td>
<td>151</td>
<td>2.29</td>
<td>28.24</td>
</tr>
<tr>
<td>5 Shock</td>
<td>journal</td>
<td>1.240</td>
<td>93</td>
<td>242</td>
<td>635</td>
<td>382</td>
<td>1591</td>
<td>600</td>
<td>3.11</td>
<td>24.64</td>
</tr>
<tr>
<td>6 Prehospital Emergency Care</td>
<td>journal</td>
<td>1.282</td>
<td>59</td>
<td>115</td>
<td>230</td>
<td>503</td>
<td>599</td>
<td>220</td>
<td>2.59</td>
<td>26.24</td>
</tr>
<tr>
<td>7 Current Heart Failure Reports</td>
<td>journal</td>
<td>1.216</td>
<td>26</td>
<td>22</td>
<td>169</td>
<td>1500</td>
<td>457</td>
<td>157</td>
<td>2.94</td>
<td>68.16</td>
</tr>
<tr>
<td>8 Injury</td>
<td>journal</td>
<td>1.019</td>
<td>96</td>
<td>536</td>
<td>1577</td>
<td>1547</td>
<td>9106</td>
<td>1570</td>
<td>2.17</td>
<td>26.91</td>
</tr>
</tbody>
</table>
### CiteScore rank & trend

#### Western Journal of Emergency Medicine
- **CiteScore 2016**: 0.95
- **Percentile**: 66th percentile

#### CiteScore trend

![CiteScore trend chart](chart_url)

#### Scopus content coverage

<table>
<thead>
<tr>
<th>Rank</th>
<th>Source title</th>
<th>CiteScore 2016</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Resuscitation</td>
<td>3.26</td>
<td>99th percentile</td>
</tr>
<tr>
<td>2</td>
<td>Current Heart Failure Reports</td>
<td>2.89</td>
<td>98th percentile</td>
</tr>
<tr>
<td>3</td>
<td>Shock</td>
<td>2.57</td>
<td>96th percentile</td>
</tr>
<tr>
<td>4</td>
<td>World Journal of Emergency Surgery</td>
<td>2.51</td>
<td>95th percentile</td>
</tr>
<tr>
<td>5</td>
<td>Prehospital Emergency Care</td>
<td>2.38</td>
<td>94th percentile</td>
</tr>
<tr>
<td>6</td>
<td>Academic Emergency Medicine</td>
<td>2.32</td>
<td>92nd percentile</td>
</tr>
<tr>
<td>7</td>
<td>Injury</td>
<td>2.03</td>
<td>91st percentile</td>
</tr>
<tr>
<td>8</td>
<td>Critical Care and Resuscitation: Journal of the Australasian College of Critical Care Medicine</td>
<td>1.84</td>
<td>90th percentile</td>
</tr>
<tr>
<td>9</td>
<td>Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine</td>
<td>1.81</td>
<td>88th percentile</td>
</tr>
<tr>
<td>10</td>
<td>Burns</td>
<td>1.68</td>
<td>87th percentile</td>
</tr>
<tr>
<td>11</td>
<td>Annals of Emergency Medicine</td>
<td>1.58</td>
<td>86th percentile</td>
</tr>
<tr>
<td>12</td>
<td>BMC Emergency Medicine</td>
<td>1.51</td>
<td>84th percentile</td>
</tr>
<tr>
<td>13</td>
<td>European Journal of Emergency Medicine</td>
<td>1.38</td>
<td>83rd percentile</td>
</tr>
<tr>
<td>14</td>
<td>MicroRNA (Sharjah, United Arab Emirates)</td>
<td>1.36</td>
<td>82nd percentile</td>
</tr>
<tr>
<td>15</td>
<td>Internal and Emergency Medicine</td>
<td>1.34</td>
<td>80th percentile</td>
</tr>
<tr>
<td>16</td>
<td>Emergency Medicine Clinics of North America</td>
<td>1.31</td>
<td>78th percentile</td>
</tr>
<tr>
<td>17</td>
<td>Journal of Trauma Management and Outcomes</td>
<td>1.31</td>
<td>78th percentile</td>
</tr>
</tbody>
</table>
Google Scholar Metrics

https://scholar.google.com/citations?view_op=top_venues

<table>
<thead>
<tr>
<th>Publication</th>
<th>h5-index</th>
<th>h5-median</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Resuscitation</td>
<td>87</td>
<td>89</td>
</tr>
<tr>
<td>2. Journal of Trauma and Acute Care Surgery</td>
<td>58</td>
<td>75</td>
</tr>
<tr>
<td>3. Annals of Emergency Medicine</td>
<td>53</td>
<td>81</td>
</tr>
<tr>
<td>4. The Journal of Emergency Medicine</td>
<td>39</td>
<td>52</td>
</tr>
<tr>
<td>5. The American Journal of Emergency Medicine</td>
<td>38</td>
<td>53</td>
</tr>
<tr>
<td>6. Current Opinion in Critical Care</td>
<td>36</td>
<td>49</td>
</tr>
<tr>
<td>7. Clinical Toxicology</td>
<td>36</td>
<td>54</td>
</tr>
<tr>
<td>8. Emergency Medicine Journal</td>
<td>30</td>
<td>44</td>
</tr>
<tr>
<td>10. Journal of Medical Toxicology</td>
<td>31</td>
<td>48</td>
</tr>
<tr>
<td>11. Internal and Emergency Medicine</td>
<td>31</td>
<td>41</td>
</tr>
<tr>
<td>12. Prehospital Emergency Care</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>13. Pediatric Emergency Care</td>
<td>29</td>
<td>36</td>
</tr>
<tr>
<td>14. Critical Care Clinics</td>
<td>26</td>
<td>36</td>
</tr>
<tr>
<td>15. World Journal of Emergency Surgery</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>16. Western Journal of Emergency Medicine</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>17. European Journal of Emergency Medicine</td>
<td>23</td>
<td>29</td>
</tr>
<tr>
<td>18. Emergency Medicine Australasia</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>19. Emergency Radiology</td>
<td>21</td>
<td>31</td>
</tr>
<tr>
<td>20. Prehospital and Disaster Medicine</td>
<td>21</td>
<td>27</td>
</tr>
</tbody>
</table>
Legitimacy: PubMed Central (PMC)

- OA journals listed with application after 2 years
PMC (free full-text) vs. PubMed (database of references & abstracts)

- PubMed Central: 4.4 million citations/papers - most of which have a corresponding entry in PubMed
- PubMed (citations and abstracts only): 27 million citations
Criteria: Copyrights & Publication Ethics

- Publisher:
- Membership in organizations?
  - Open Access Scholarly Publishers Association (OASPA)
  - Committee on Publication Ethics (COPE)
  - International Association of Scientific, Technical & Medical Publishers (STM)
Legitimacy Criteria: Editorial Board

- Editor-in-chief and editorial board?
- Academic affiliations and credentials?
- Specific and detailed instructions for authors?
Legitimacy: APC

- Reasonable fees clearly stated up front?
- OA fees: $300 to > $4,000 USD/paper.
- Wolters-Kluwer lists fees for hundreds of their journals
- Discount/waiver for junior authors or from LMICs
- Publication fee easily found or hidden?
Legitimacy: Spot the Red Flags

- Journal asks author for reviewers (red flag)?
- Spam emails? Beware. (“esteemed author”)
- Email addresses from .gmail.com, .yahoo.com, or other free supplier?
- Excessive advertising on the website?
- Journal with no membership or industry association?
- No mention of where indexed? (only Google Scholar?)
Publishing Landscape Changes Weekly

- Movement to identify legitimate journals in each discipline rather than “blacklist”
- Beall abandoned this under legal pressure from publishers
- Buyer beware
- Build publication costs into any new grant (2-3K per anticipated paper)
LIBRARIANS WORK COLLABORATIVELY
Work Collaboratively to Promote OA

- Work together to stop the rumors, but educate users and researchers about the quality of PubMed.
- Develop guidelines for choosing reliable OA journals.
- Create a ‘Whitelist’ of reputable journals in various disciplines.
  - Absence of a journal from the ‘Whitelist’ does not necessarily indicate that it is a predatory publication.
  - Less controversy, not likely to result in litigation simple to maintain.
- Identify available resources and tools that can help researchers locate trusted journals for their research.
Urology Green List

- Blog that informs researchers which urology journals are genuine and legitimate (https://urologygreenlist.wordpress.com/)

- If a journal should be on this list, contact them with recommendation and justification for inclusion
Think. Check. Submit.

http://thinkchecksubmit.org/

- Provides an easy-to-use checklist that researchers can refer to when they are investigating whether a journal can be trusted.
Cabell’s International: Whitelist – Blacklist

- A fee-based subscription database.

- **The Whitelist** -- Includes only 11,000 titles with 18 subject disciplines. Medicine and Engineering are not included ([http://www.cabells.com/about-whitelist](http://www.cabells.com/about-whitelist)).

- **The Blacklist** - includes 4,700 journals and a large number of journals are listed in the Beall’s list. Cabell's Blacklist criteria ([http://www.cabells.com/blacklist-criteria](http://www.cabells.com/blacklist-criteria)).
Other Resources

- Identify misleading metrics companies and provide criteria for determining misleading metrics
  

  

- "Identifying Predatory or Pseudo-Journals" from WAME (World Association of Medical Editors)
  
  [http://www.wame.org/about/identifying-predatory-or-pseudo-journals](http://www.wame.org/about/identifying-predatory-or-pseudo-journals).

- Stop Predatory Journals [https://predatoryjournals.com/about/](https://predatoryjournals.com/about/)

- Choose the right journal for your research, “Think. Check. Submit” initiative [go.nature.com/2plm8kd](go.nature.com/2plm8kd).
Conclusion & Future Directions

- Biomedical publishing is big business
- Corruption inevitable
- Open access is part of solution
- Still has costs but less without paper
- $2-4000/paper is excessive
- Real cost to publisher is ~$1200/paper
- Remainder is profit.