

# Research integrity corner: Special issue on predatory journals

## Opinion

### What I learned from predatory publishers

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#### Abstract

This article is a first-hand account of the author's work identifying and listing predatory publishers from 2012 to 2017. Predatory publishers use the gold (author pays) open access model and aim to generate as much revenue as possible, often foregoing a proper peer review. The paper details how predatory publishers came to exist and shows how they were largely enabled and condoned by the open-access social movement, the scholarly publishing industry, and academic librarians. The author describes tactics predatory publishers used to attempt to be removed from his lists, details the damage predatory journals cause to science, and comments on the future of scholarly publishing.

**Key words:** scholarly publishing; open access; journals; predatory publishers; research

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## Introduction

In January 2012, I launched a new blog titled *Scholarly Open Access* that listed predatory publishers and journals and offered critical commentary on scholarly open-access publishing. In January 2017, facing intense pressure from my employer, the University of Colorado Denver, and fearing for my job, I shut down the blog and removed all its content from the blog platform. In the five years I authored and published the blog, I had an amazing learning experience. I met and corresponded with hundreds of brilliant scholars and scholarly publishing industry executives from all over the world. I learned more about scholarly publishing than I ever imagined I would, about the pressure for researchers to publish, about academic evaluation, and about peer review.

### Setting the stage for predatory publishing

Before the internet began to play a role in scholarly publishing, that is, prior to about 1998, when

the World Wide Web became ubiquitous, almost all scholarly journals were print-based, subscription journals. At that time, most journals were generally respected and of good quality, and peer review was taken seriously and managed well. A few low-quality scholarly publishers existed, but generally, researchers were aware of them and knew to avoid them.

In the 1980s and 1990s, many academic libraries in North America carried out journal subscription cancellation projects. They were pressured to cancel journals because subscription prices had gone up and library budgets had decreased. The subscription prices increased in North America for several reasons. First, as the baby-boomer generation reached the age where many were finishing their PhDs and entering tenure track, journals began to publish more articles to accommodate the increase in the amount of research the boomers were carrying out. In some cases, bi-annual journals became quarterlies, and quarterlies became monthlies – all to accommodate the increase in

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the number of research articles being submitted for publication. Naturally, publishing more costs more, and this was especially true in the print environment of the early 1990s. A contemporary discussion of some of the causes of serial price increases is provided by Farrell (1).

There were two other factors that contributed to price increases in subscriptions in North American academic libraries. One was the weak American and Canadian dollars in the late 1990s, and the practice of many larger academic libraries to collect journals from Europe, where currencies were strong at the time. The other was the creation of new fields of study, a phenomenon that paralleled the arrival of the baby boomers into higher education faculty positions. New fields such as nanomaterials and genomics were born, and they spawned many new journals.

Unfortunately, few understood all these reasons for journal price increases. Most took the politically-correct, intellectual shortcut of blaming journal price increases directly – and only – on the publishers, ignoring the true causes.

## Open access advocates

This misplaced blame, coupled with the advent of the World Wide Web in the mid-1990s, led to the open-access movement, which quickly and cleverly turned into a full-fledged social movement.

To succeed, a social movement needs an enemy to grow, prosper, and get media attention. Advocates of higher minimum wages contrived an enemy out of McDonalds, the American restaurant chain. Opponents of chemical products contrived an enemy of Monsanto. Open-access advocates copied the tactic and selected the publisher Elsevier as its enemy.

Soon, the attacks on Elsevier mounted. Many fantasized about being the hero who would bring down the contrived enemy, a feat sure to catapult one into the pantheon of open-access heroes. The publisher Public Library of Science launched in the early 2000s to compete with Elsevier and make it obsolete (it failed in this mission). Numerous online petitions were circulated, signed by small pro-

portions of researchers, yet heralded as a near unanimous groundswell of opposition to Elsevier. Social media saw the rise of virtue signalling by open-access advocates, with many careerist researchers and academic librarians using Twitter, Facebook, email lists, and blogs to praise open-access and condemn the “greedy” publishers. They wanted to broadcast their status as a member in good standing of the open-access movement.

Several prominent “open access statements” were drafted by elite, self-selected committees of hero-wannabes, people whose careers were safely built on the foundation of articles published in subscription journals. Open-access repositories were formed, costing academic libraries huge sums of money in expensive software licensing costs, professional and support staff positions to manage them, and other, additional costs, yet faculty largely ignored their library-managed repositories, despite the fact that they could enjoy the dual-advantage of publishing in a respected, subscription journal and also have their work made open-access in the repository – or at least a post-print counterpart of it. Or was green open access really the great advantage its backer claimed it was?

To deal with researchers’ near-complete lack of interest in contributing to open-access repositories, open-access zealots imposed mandates on their fellow researchers, mandates that were celebrated by OA advocates, often with emotional announcements posted to the movement’s email lists, announcements dripping with military metaphors heralding the latest victory.

## Predatory journals

And then predatory journals, those using the author-pays model just for their own profit, started to appear (2). I first noticed them in 2008 and 2009, when I received spam emails soliciting me to submit to broad-scoped, newly-launched library science journals I had never heard of before. I began to print out the solicitations as I received them, and as an academic librarian, it was natural for me to want to organize this new information and share it. I published my first list of predatory publishers on the Posterous blog platform (3). The list

was informal and only had a few entries. For borderline cases, I had, for a time, a second list called the "Watchlist," but it soon became clear to those using the list that a publisher's inclusion on the Watchlist was essentially the same as being on the main list.

What I learned from predatory publishers is that they consider money far more important than business ethics, research ethics, and publishing ethics and that these three pillars of scholarly publishing are easily sacrificed for profit. Soon after they first appeared, predatory publishers and journals became a godsend both for authors needing easy publishing outlets and sketchy entrepreneurs wanting to make easy money with little upfront investment.

I think that, since the advent of predatory publishing, there have been tens of thousands of researchers who have earned Masters and Ph.D. degrees, been awarded other credentials and certifications, received tenure and promotion, and gotten employment – that they otherwise would not have been able to achieve – all because of the easy article acceptance that the pay-to-publish journals offer.

Of course, this speaks to higher education institutions and employers' use of journal articles as a measure of academic achievement. Both the academy and industry have been slow to understand predatory journals and to appreciate how severely they corrupt research communication, with many tenure committees and other academic committees using evaluation criteria drafted long before predatory journals – with their near-automatic acceptance of submitted manuscripts – appeared. Another reason that so many have been able to easily use predatory journals for academic credit is that it takes a lot of time and effort to effectively vet a list of publications.

That is to say, looking at a list of publications on a vita, it is no longer possible to automatically assume that all the publications are legitimate. Any list of publications that one submits for academic credit or employment now must be carefully scrutinized. Predatory journals are counterfeit, and one of their tricks is to use titles that sound or read

like those of legitimate journals. Often, the difference between a legitimate journal's title and a predatory journal's title can be as little as one word. There are even a few that predatory journals that duplicate other journals' titles exactly.

Of course, not all open-access journals are predatory journals. Some operate ethically and aim to uphold research integrity. Still, all open-access journals using the gold (author pays) model face a conflict of interest. The more papers they accept and publish, the more money they make, meaning there is an ongoing temptation to accept unworthy manuscripts to generate needed revenue.

### **Remove our publisher from your list**

Over the five years I published my blog and its list, publishers and standalone journals constantly tried various means of getting off the lists. Over time the requests to remove journals and publishers increased in number, as more and more universities recommended the lists or used them as official blacklists. Also, the methods publishers used became more intense.

Often owners of predatory publishing operations would email me, extolling the virtues of their journals, describing the rigor of their peer review and the credentials of their esteemed editorial boards. Some of them did a self-analysis using the criteria document I used and made available, and without exception these self-analyses found that the publisher didn't meet any of the criteria – not even close – and deserved to be removed from the list immediately.

Others used more aggressive strategies. Some publishers, especially the publishers of standalone mega-journals, would go through my university's website and cherry-pick names and email addresses of the university officials they thought important. Then they would send an email blast to them, denouncing me and making false accusations about my work, my ethics, and my ability to make judgments about journals and publishers. The publishers were driven by money, competition, and greed, and they sought to remove any obstacle standing in the way of increased revenue, and my list was one such obstacle.

Still others tried different strategies. Some tried annoying university officials with numerous emails and letters, often sent as PDF attachments, with fancy letterhead, informing the university how I was hurting its reputation. They kept sending the emails to the university chancellor and others, hoping to implement the heckler's veto. They tried to be as annoying as possible to the university so that the officials would get so tired of the emails that they would silence me just to make them stop. The publisher MDPI used this strategy.

I was also always surprised at the extent to which researchers who had published in one or more of a predatory publisher's journals became the publisher's biggest defender. It's as if they felt a sense of loyalty to the publisher. I think this was because most of these predatory publisher defenders had numerous articles rejected many times from legitimate scholarly publishers. Upon finally finding a publisher willing to accept and publish their work, they become elated and did everything possible to protect and defend the publisher – especially defend the publisher against its inclusion on my list. Researchers love publishers who accept and publish their papers, especially researchers whose work is consistently rejected by journals from the respected publishers, that is to say, journals that carry out a rigorous peer review.

## On blacklists and whitelists

A conversation about the advantages and disadvantages of journal whitelists and blacklists is always an interesting one. As the author and publisher of two blacklists for five years, I can confirm that neither publishers nor universities like the idea of blacklists. Publishers don't like them because a listing means reduced revenue, as researchers avoid the journals and publishers included on the lists, especially if their universities refuse to grant academic credit for papers published in listed journals, as many did with my lists.

Universities, I learned, don't like the negativity associated with journal blacklists. Universities in the United States are far along in the process of corporatizing themselves, and, in doing so, their public relations departments prefer that all university

output be positive and aimed at attracting new customers, tuition-paying students. So if you are a faculty member at a university and you publish a blacklist, you will likely face much opposition and even harassment from the university, despite assurances of academic freedom.

On the other hand, the biggest weakness of whitelists is that they often – perhaps unintentionally – include predatory journals, or journals that turn predatory after they're listed, and dishonest researchers tend to seek out and publish in the easiest acceptance journals on such lists. One gets the same credit for publishing in the most selective journal on a whitelist as one does for publishing in the easiest journal on the list (4). In this way, whitelists promote the creation of predatory pay-to-publish journals, publications that can make a fortune after they appear on a whitelist, be it *Journal Citation Reports*, the *Directory of Open Access Journals*, or *Scopus*.

Both blacklists and whitelists make academic evaluation easier for deans and provosts. When such lists are used, a researcher doesn't get credit for publishing in a blacklisted journal but does receive credit for publishing in a whitelisted one. The evaluation becomes simple and binary, devoid of thoughtful evaluation.

## Predatory publishers and the threat to science

I think predatory publishers pose the biggest threat to science since the Inquisition. They threaten research by failing to demarcate authentic science from methodologically unsound science, by allowing for counterfeit science, such as complementary and alternative medicine (CAM) to parade as if it were authentic science, and by enabling the publication of activist science.

Because they aim to generate profits for their owners, gold (author-pays) open-access journals have a strong conflict-of-interest when it comes to peer review. They always want to earn money, and rejecting a paper means rejecting revenue. This conflict is at the heart of the ongoing downfall of scholarly publishing. Increasingly, the consumers

of scholarly publishers' services are the authors, not the readers, and not academic libraries. Businesses naturally always want to keep their customers content, for they want the revenue streams to continue and grow larger, as they add new services – such as more easy-acceptance journals – to their offerings.

Many of the larger predatory publishers, especially those based in Western Europe, offer a niche business. Their businesses are set up to publish manuscripts rejected by the top publishers, that is, papers rejected by Elsevier, Wiley, Sage, Taylor & Francis, Oxford University Press, and several others. They function something like a lender of last resort – they provide a publishing opportunity when no other publisher will, becoming, essentially, a *Salon des Refusés* for scholarly articles. However, the market is so lopsided now that there are more “publishers of last resort” than there are authentic ones, and they're all competing with each other for subpar manuscripts.

Like counterfeit science itself, these publishers go through the motions of being a legitimate publisher. Some open-access publishers, even though they are not based in England, hire spokesmen with strong British accents to attend scientific conferences and other meetings and talk up the publisher, often renting a booth in the exhibit hall and even co-sponsoring some of the smaller meetings. They join publisher associations, make a show of donating to open-access causes, and manage to convince one or two aged Nobel Laureates to agree to serve on one of their editorial boards, no work required.

CAM is really taking off, and it's being largely fuelled by pay-to-publish journals, though a few subscription journals have gotten in on the action as well. Predatory journals and even journals from legitimate publishers are legitimatizing this unscientific medical research in the public's eye. Acupuncture and homeopathy are thriving, and numerous “studies” are being published each year to back up their effectiveness claims. In medicine, demarcation is failing, and there's no longer a clear line where legitimate medical research ends and unsound medical research begins (5). More questionable medical research is being published now

than ever before in history, including bogus research promoting fake medicines and nutraceuticals. There's no longer a clear separation between the authentic and counterfeit medical research, even though medical research is the most important research for humankind today. Indeed, of all human endeavours, what surpasses medical research in importance, value, and universal benefit?

## The scholarly publishing industry

The once-proud scholarly publishing industry is in a state of rapid decline. There is a general sense among scholars that scholarly publishing is collapsing, falling apart, or whatever metaphor one might select that compares the industry to something that was once mighty and respected that later declined rapidly and unexpectedly into an embarrassing heap of debris. Two things caused this decline.

One of them is the advent of gold (author-pays) open-access publishing, which does not generate enough revenue to sustain a high-quality scientific journal. In most cases, journals financed by payments from authors are basically repositories where people pay to have their papers converted to portable document format (PDF) and mounted on the internet. The only exception might be journals that benefit from a great amount of voluntarism, journals that serve as the chief scholarly communication tool for a tight-knit community of scholars in a particular field or sub-field.

The scholarly publishing industry is also responsible for its own decline, and this is the other thing. The industry has consistently failed to regulate itself. It allowed the predatory journals to appear, multiply, and prosper, and it looked the other way. The one open-access publisher industry association that does exist is a fox guarding the henhouse. The scholarly publishing industry has no credentialing system, no quality control, and many of the publishing-support businesses, such as *Crossref* (the supplier of digital object identifiers, DOIs), happily welcome predatory journals as sources of additional income. Predatory publishers are bringing down the scholarly publishing industry and taking science and peer review down with it.

Prior to the advent of open-access journals, scholarly publishing was governed by a tacit “gentleman’s agreement” among researchers, journal editors, publishers, and readers (6). The agreement was to maintain high levels of integrity at all levels of the research and publishing processes. The agreement is now abandoned, as predatory publishers and complicit authors have corrupted scholarly communication for their own ends.

## The future of scholarly publishing

To close, here are some thoughts on scholarly publishing’s future, a future in which I think preprint servers and overlay journals will play a role. Preprint servers, pioneered by *arXiv.org* are growing in number and are serving more scholarly fields. I expect this to continue. Compared to high-quality scholarly journals, they are inexpensive to operate – especially since they don’t have to manage peer review or do copyediting. They do minimal vetting, but when they do it, it’s usually done at the researcher level rather than at the paper level. That is to say, they blacklist researchers submitting papers that diverge from the scientific consensus.

One advantage of a move from open-access journals to preprint servers is the elimination of author fees and all the corruption that goes along with them.

Overlay journals in each field will select the best articles appearing in the corresponding preprint servers each month or quarter and will prepare a table of contents listing these and linking to them,

an eclectic, *ad hoc* journal issue. The editorial board of each overlay journal, experts in their field, will select preprints that are methodologically sound, novel, scientific, and of importance to the field.

## Conclusion

Over the five years I tracked and listed predatory publishers and journals, those who attacked me the most were other academic librarians. The attacks were often personal and unrelated to the ideas I was sharing or to the discoveries I was making about predatory publishers.

Academic librarians constantly attacked me because I dared to point out the weaknesses of the open-access publishing model. Librarianship slavishly follows political correctness and trendiness, so it’s no surprise that the profession fell in line with the open-access social movement and attacked those seeking to tell the truth about it. Many of these librarians were untrue to the faculty at their universities, praising open-access but failing to warn of the traps the predatory publishers were setting.

So, it’s not only the scholarly publishing industry that needs reform and self-regulation. Academic librarianship needs to wake up to the problem of predatory publishers and be true to library patrons seeking help and advice on scholarly communication.

## Potential conflict of interest

None declared.

## References

1. Farrell D, ed. *Systems and procedures exchange center (SPEC) flyer*. In: *Serials control and deselection projects*. 147th ed. Washington, NW: Association of research libraries, Office of management service, 1988. p. 1-2.
2. Beall J. Dangerous predatory publishers threaten medical research. *J Korean Med Sci* 2016;31:1511-3. <https://doi.org/10.3346/jkms.2016.31.10.1511>
3. Anonymous. Posterous. Available at: <https://en.wikipedia.org/wiki/Posterous>. Accessed February 9th 2017.
4. Moosa IA. A critique of the bucket classification of journals: The ABDC list as an example. *Econ Rec* 2016;92:448–63. <https://doi.org/10.1111/1475-4932.12258>
5. Gieryn TF. Boundary-work and the demarcation of science from non-science: Strains and interests in professional ideologies of scientists. *Am Sociol Rev* 1983;48:781-95. <https://doi.org/10.2307/2095325>
6. Beninger PG, Beall J, Shumway SE. Debasing the currency of science: The growing menace of predatory open access journals. *J Shellfish Res* 2016;35:1–5. <https://doi.org/10.2983/035.035.0101>