In January 2017, the medical publishing world was rocked by the news that the Scholarly Open Access blog that included “Potential, Possible, or Probable Predatory Scholarly Open-Access Publishers” was now offline. More commonly known as Beall’s List, the blog was created in 2012 by Jeffrey Beall, a librarian at the University of Colorado Denver. It included lists of publishers, standalone journals, and meetings for medical professionals that Beall deemed “predatory,” and which were designed to bilk unwary authors and meeting attendees out of financial resources. The removal of the content could have been a result of professional and/or legal threats. At the time, this could not be confirmed; however, this did appear in a recent article in Biochimica Medica titled “What I Learned From Predatory Publishers.”

Although the open access (OA) movement is a laudable effort to make the results of medical, scientific, and technical research freely available to researchers and the public around the world, it unwittingly has become host to predatory publishers and standalone journals. The predators’ “business model” is almost elegantly simple. In the most common form of OA publishing, the Gold OA or “author pays” model, publishing costs are borne by the authors through article processing costs (APCs). This is in sharp contrast to the traditional model in which publishing costs are largely defrayed through journal subscriptions. The predatory publishers/journals collect lucrative OA APCs through fraud and misrepresentation.

Using free services such as Hotmail, predators massively spammed scientists with flattering emails soliciting submissions, often failing to mention APCs, which were sometimes much higher or much lower than legitimate OA journals (eg, PLoS and BMC journals). Faux journal websites created with free design software to accept submissions were amateurish but effective. Authors who submitted a manuscript would initially be thrilled that the manuscript had been accepted, often with few to no peer review comments. However, the excitement would soon be tempered by receipt of an invoice in order to publish the manuscript. Authors who refused to pay the invoice could find their submission effectively held hostage, with the journal unresponsive to requests to withdraw the submission. In addition, ethical prohibition against duplicate submission meant that the unpublished work could not be submitted elsewhere. If authors paid the invoice, they would usually find that the online published article appeared exactly as submitted, with no evidence of peer review, editing, or graphic design. With little overhead other than cheap hosting services to house PDFs of the original submissions, a stable of “journals” could be created quickly, even by “publishers” consisting of one person.

Once these publishers had a taste of the potential profits, it was perhaps inevitable that they would branch out into other areas. Predatory publishers large enough to become profitable used their war chests to establish new divisions devoted to organizing meetings, congresses, and symposia. Like their journals, these meetings were of low quality. A common trick was to book large ballrooms at a hotel located in a popular tourist city. By subdividing the larger rooms, small presentation rooms were created so that multiple meetings could be held at the same hotel on the same weekend, all run by a shoestring staff from the predatory organizer. The sources of profit were registration fees (significantly higher than meetings by legitimate societies) and abstract submissions (recruited by spamming in the same manner as for journal manuscripts). Additionally, the meeting organizer would require speakers and regular attendees to use the organizer’s preferred travel vendor, which was—surprise—another division of the predatory parent company.

Other clever predators have metastasized into ancillary services associated with scholarly publishing, such as providing metrics. Unlike those of the established metrics pro-
viders (eg, Thomson Reuters Impact Factor, Scopus), these metrics are either totally fictitious or, if actually calculated, are essentially worthless because they are not accepted by most institutions as valid measures of journal impact and performance. It remains to be seen what will evolve next, as the predators have created a bona fide ecosystem of low-quality, low-impact, low-value products and services.

Sadly, the victims were often researchers in developing nations, hungry to publish for career advancement and eager to network with peers from developed nations, and willing to pay OA APCs or meeting registration fees out of their own pockets.

Beall’s List was initially one of the few, and certainly the most famous, of the online resources designed to help researchers identify predatory publishers and meeting organizers (and, more recently, bogus metrics providers). It was essentially an assortment of blacklists—those that Beall considered “potential, possible, or probable predatory” vendors. Many considered it a valuable resource, but it was not without numerous critics. Some pointed out that, as the work of one person, the evaluations were subjective and Beall’s criteria were insufficiently transparent. As an outspoken critic of OA, Beall was sometimes accused of having an agenda to discredit the OA movement. (Indeed, the publishers and journals listed were only OA; subscription-based publishers and publications were not evaluated.) Still others felt that the blacklist approach was less desirable than a whitelist approach listing publishers/journals that had been thoroughly vetted and approved as legitimate and ethical. Regardless of opinion, there is no denying that Beall’s List was a popular place to verify whether a prospective journal or meeting was likely a predator.

Evaluating a journal before submitting material is a core responsibility of the authors. For example, the International Committee of Medical Journal Editors states that “authors have a responsibility to evaluate the integrity, history, practices and reputation of the journals to which they submit manuscripts.”

But how? Or, if you plan to attend a meeting, how can you be sure it is legitimate?

While this article is not definitive nor a systematic review of all resources available, it comprises my own musings from more than 20 years as a medical editor. As do others, I still struggle with the question, “Is this journal/meeting legitimate, or a predator?” The question often comes from colleagues, seeking to guide clients and external medical experts in selecting a journal that may accept their manuscript submission, or a meeting to which to submit an abstract. It is surprising how often my answer is not 100% certain. There are startup journals that continuously surface; some are legitimate, while others are predatory. I have developed a list of criteria that is frequently updated (Figure 1). This list includes tips and is by

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**Figure 1.** Tips for identifying potential predatory publishers, journals, and meetings.
no means exhaustive, in no particular order, and drawn from my experience and study of websites and communications from known predators. I would also caution against putting too much weight on any single criterion. But if you answer “yes” to the majority of the characteristics in Figure 1, there is an excellent chance that you’ve identified a true predator, one that should be avoided at all costs.

The best defense against the predators is common sense, tempered with a healthy dose of caution. Awareness of this enemy is the first step to avoiding it.

In addition to these tips, there are online resources to consult. Although not up to date, a number of sites have archived versions of the Beall’s List(s). A quick Google search will identify the available copies of the list. This is still a good place to start, but it should not be the only resource. Rather, I would recommend a combination of resources, possibly including new whitelists and blacklists that are now available (eg, from Cabells International, https://www.cabells.com/), although these are pay-to-play services. The Think. Check. Submit. initiative (http://thinkchecksubmit.org/) is a collaboration of industry and professional societies, and its 3-step system is easy to use and available in many languages. Laine and Winkler produced a valuable resource for the World Association of Medical Editors website.5 For meetings, an excellent example by Cobey et al recently appeared in the Journal of Oncology Practice.6

The best defense against the predators is common sense, tempered with a healthy dose of caution. Awareness of this enemy is the first step to avoiding it. Although Figure 1 lists other criteria, what are considered the most useful for identifying a predatory publisher/journal are bad grammar (numerous typos, sentence fragments, inconsistent capitalization, horrible punctuation) and poor website design (think Web design circa 1995). For meetings, be suspicious of a company running multiple meetings at the same venue on the same dates, and those that force you to use only their own preferred travel vendor. Often this is a first, obvious way to identify a predator! Also, be alert for lists of Editorial Boards or Congress Faculty that (a) contain a larger-than-expected number of members, (b) are more geographically diverse or from widely divergent fields, and (c) contain headshots/photos that appear to have been pirated from other sources (eg, unclear/fuzzy, pixelated, or with wide variation in background colors/scenery). Often, these experts are unaware that they have been virtually abducted to serve on these fictitious boards/faculty.

Predatory publishers, journals, and meeting organizers pose a serious threat to the integrity of science. Therefore, it is necessary to be vigilant and to carefully evaluate if a publisher/provider is reputable before submitting an article or abstract; it is also a professional and ethical responsibility. Although Beall’s List is no longer available, there are numerous online resources to help authors, medical writers, and editors. Remember—if it feels wrong, it probably is. Simple common sense is the best guide!

References