



Open Access Medical Journals: Promises, Perils and Pitfalls

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“OPEN ACCESS” Designed at PLoS, modified by Wikipedia users
Nina, Beao, JakobVoss, and AnonMoos <http://www.plos.org>

LEARNING OBJECTIVES. At the end of this talk, attendees will be able to:

| Identify | Use | Describe |
|---|---|---|
| Identify the various types and requirements for legitimate open-access (OA) journals. | Use several methods to differentiate legitimate from predatory OA journals. | Describe the professional and ethical problems associated with publishing in OA journals. |



Problem

- What is the problem?
- Why is it important?
- How common is it?

Number of print and open access (OA) journals increasing dramatically over ~15 years—as are the scientific papers they are publishing

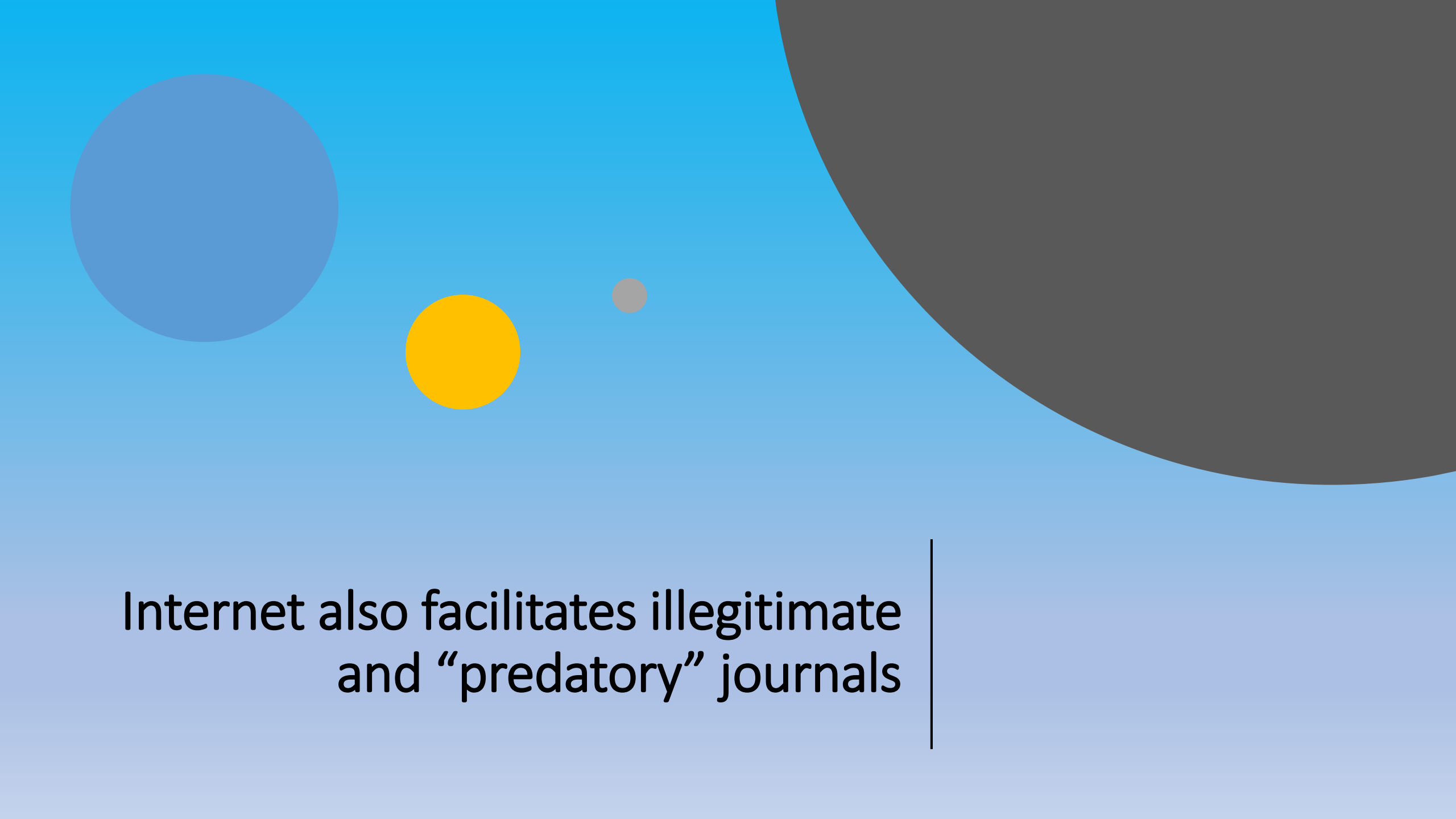
Electronic availability of information on the Internet offers *great potential* for information sharing

Procedure &
informational
videos

Guidelines from
professional
organizations

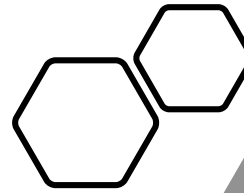
Free articles (e.g.,
through Pub med,
ResearchGate)

Easier collaboration—
worldwide & across
academic disciplines



Internet also facilitates illegitimate
and “predatory” journals

OA: While a laudable development, it . . .



- Provided breeding ground for unacceptable & **unethical publishing practices**
- Is an ever-growing system with **little to no regulation**

Ethical Issues: Predatory OA Publishing

- **Misrepresent** who they are & what services they offer
- Lack editorial/publishing **standards & practices**
- **Academics misrepresent their accomplishments** by publishing in predatory journals
- **Waste** research effort & funding
- Lack of **archived content** for others to access
- Undermine **confidence in research** literature



“An emerging Wild West in academic publishing”



- “From humble and idealistic beginnings a decade ago, open-access scientific journals have mushroomed into a global industry, driven by author publication fees rather than traditional subscriptions. Most of the **players are murky. The identity and location of the journals' editors, as well as the financial workings of their publishers, are often purposefully obscured.** . [and] . a network of **bank accounts based mostly in the developing world.**”

Bohannon J. *Science* Who's afraid of peer review? 2013;342:60-65.

- “Everyone agrees that **open-access is a good thing.** The question is **how to achieve it.**”

David Roos, Ph.D., U. Penn Biologist

- “Journals without quality control are destructive, especially for **developing world** countries where **governments and universities are filling up with people with bogus scientific credentials.**”

Paul Ginsparg, Ph.D., Cornell U. Physicist

As Magicians Say: The “Big Reveal”



- **AUTHOR:** [Bogus] Ocorrafoo Cobange, a biologist at the [Non-existent] Wasee Institute of Medicine in Asmara, Eritrea.
- **ARTICLE:** intentionally seriously flawed and ethically dubious research paper
- **SUBMITTED:** to hundreds of open-access journals.
- **RESULTS:** 98 were rejected; 157 were accepted!

Three that accepted the paper were under the Sage, Elsevier, or Wolters-Kluwer imprint.

“Who’s afraid of peer review?” Bohannon J. *Science* 2013;342:60-65.

Why legitimate researchers are affected?

Young

Inexperienced

Publish or perish mandate/mentality

Ego (solicited through email and other)

Frustration (Can't get paper published due to topic, research approach, poor selection of journal, or poorly written/composed paper.)

Lack of guidance

Who is harmed?

Authors

Academic Evaluators

Potential
Employers/Grantors

Clinicians

Media

Public/Patients/Policy
Makers

False promises of easily fulfilling their “publish or perish” obligation.

We want your article!

- **Deceitful**. Intentionally giving a false impression.
- **Misleading**. Falsely describing conferences or publications.
- **Editorial Board invitations**. Worthless.
- **Tricky**. Journal names only slightly different than reputable publications.
- **Harassment**. Annoyingly repetitive emails (spam).
- **Targeted**. The more you publish, the greater number of these emails you will receive.



Spotting the “Fake/Bogus” Conferences

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ÙĐâuÙøÙăÙÙ
- ẤúýÙøõÙÕÙ ĐÙõü ûøÙÙ “CÃÒÙÿ” cĐõÃÒÙÿ- Đø
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øOăÙÙ Đù õĐđÙÙÕ Ûă úÙùÙÙøÙăõ ùÙÿýúO
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ÒùõÙø đOPÙăÙ õüÙ øÙÙÙÕõøOõÙĐă ùÙÙ Đø ĐüÙă
đOđÙø QÝòAUõõÙú
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õüÙ ùÙÙ đOÙú ùOQõ
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Đø đĐOõđĐăÙ ÛĐâuÙøÙăÙÙ’
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úÙÙÙõOÿ úOõOòOÕÙO’

- Asadi A, et al. Fake/bogus conferences: Their features and some subtle ways to differentiate them from real ones. *Sci Eng Ethics*. 2018;24(2):779-84.

How gullible are you?

"Hello: I'm an African prince who wants to give you money"

"Your nephew is stranded in Europe and needs money."

"This is the IRS and we're going to put a lien on your house."

Dear. Doctor,

I hope all is well and trust you are doing splendidly.

We are very delighted to request you to submit a manuscript for the Upcoming Issue of the journal.

We look for Submission of Case Reports, Short Communications, Letter to Editors, Clinical images etc.

Recognizing your expertise in the field of Medicine, it's an honor for us to accept your manuscript for the publication in our journal.


We believe that you will definitely support the journal: <http://www.najmed.org/submitarticle.php>

Regards,
Hope William
Editorial Manager
The New American Journal of Medicine
USA

How common are spam/scam texts soliciting articles for illegitimate OA journals—or their feeder “conferences”?

48 hours in my Inbox (Sample of 37 Solicitations)

- ***Drug Target Insights***. “We’re interested in publishing your research” Below average, but legitimate OA journal [Publishing charge; amount not specified.]
- ***Integrative Journal of Orthopaedics and Traumatology (IJOT)***. “Final Call - Require One Paper. . If you would contribute a short article of 1 or 2 pages such as short commentary (or) any kind of article, so that we can release the issue. Note: papers received for the current issue will be published for £399 only.” [Unknown legitimacy; No Impact Factor found; Not listed in PubMed.]
- “Participation Invitation (Guilin, China). All the accepted papers will be published by Open access journal.” [Not even close to legitimate.]



Legitimate and
respected OA
journals also
exist.

EXAMPLES

- *J Cancer Science & Therapy*
- *J Carcinogenesis & Mutagenesis*
- *J Sports Medicine & Doping Studies*
- *Translational Biomedicine*
- *J Nuclear Med & Radiation Therapy*
- *J Blood Disorders & Transfusion*
- *J Gerontology & Geriatric Research*
-

Opportunities and
barriers associated with
publishing in **legitimate
OA journals.**

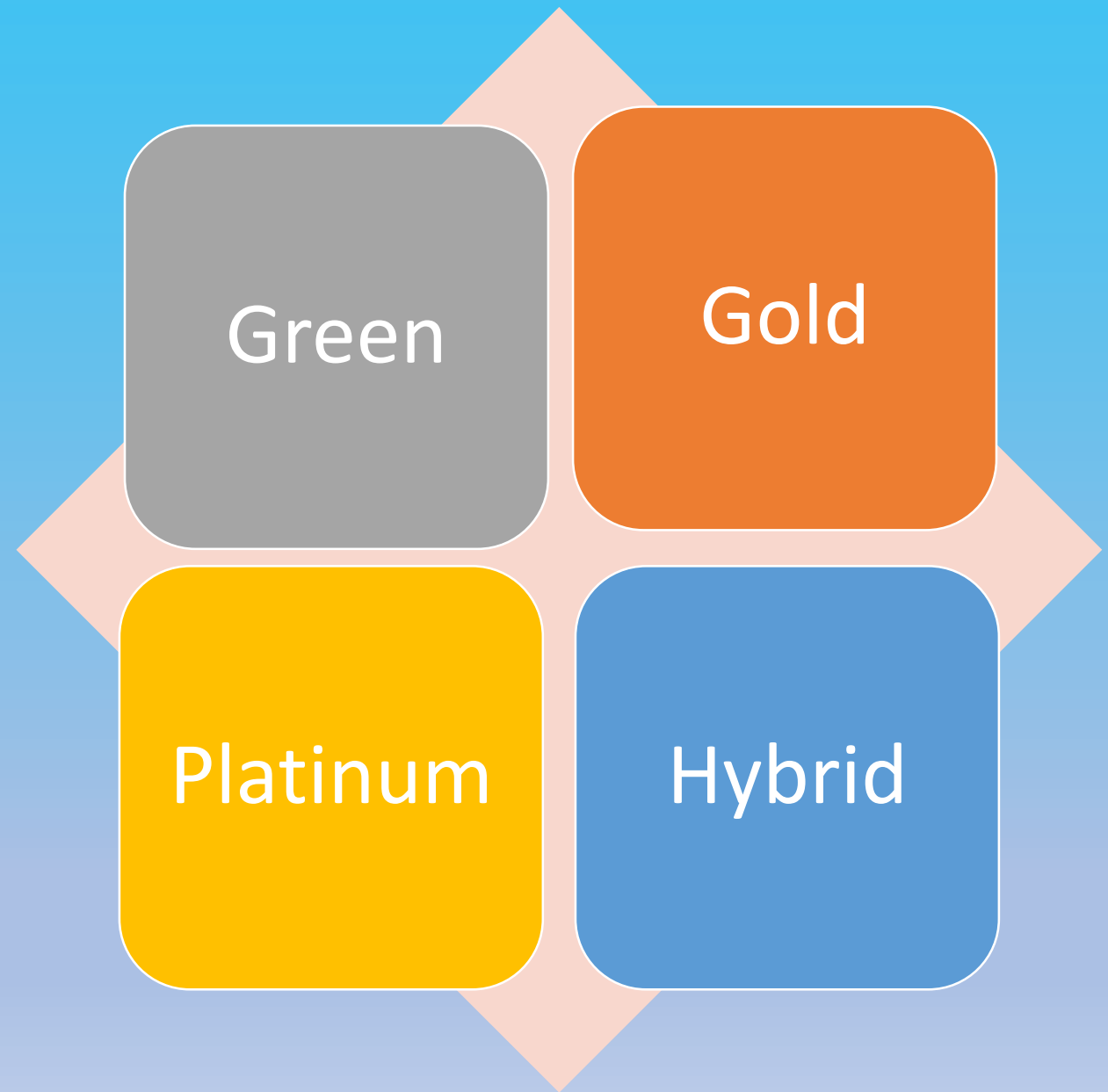
Publishing Costs: Someone must pay

- Maintaining website
- Business support
- Quality control
- Reviewing & Accepting articles
- Formatting & Proofing articles
- Producing & Disseminating journal
- Archiving

Without external support, an OA journal must be either **selective & expensive**, or **inexpensive but less selective**.



Models of
legitimate OA
journals—and
the landscape
is changing



Green “Second-class publishing”

Accept **preprints** (before peer review) or **postprints** (after peer review, before final layout)

1. Authors send articles to **general online OA repository** (e.g., university, ResearchGate)
2. **Discipline-specific** (e.g., medicine) **repository**
 - Funded by sources within the discipline
 - Accept articles from any institution
3. **Institutional repository**
 - Accept articles from individual institution
 - Funded by institution

“Green OA Model” Gray Literature

What is “Gray literature”?

- Documents not published by commercial publishers
- May form a vital component of systematic reviews and systematic maps, rapid evidence assessments, and synopses.
- Includes academic theses, organization reports, government papers, unpublished articles, etc.

Where to find “Gray literature”?

- Google Scholar/Researchgate (free)
www.scholar.google.com
- Web of Science (subscription)

Gold “Pay to play”

- Authors send manuscripts. **No charge unless paper accepted**; fees described on website.
- **Peer Review**
- **If accepted, journal may charge publication fee**
- Often, no fee for articles from low-income countries

Platinum/Diamond

Outside payment for
immediate OA
publication

- Publication & Access **free to authors & readers**
- **Funded by non-profits, societies, institutions, governments**
- Authors retain copyright
- Authors may republish on their own website & in “Green” repositories.

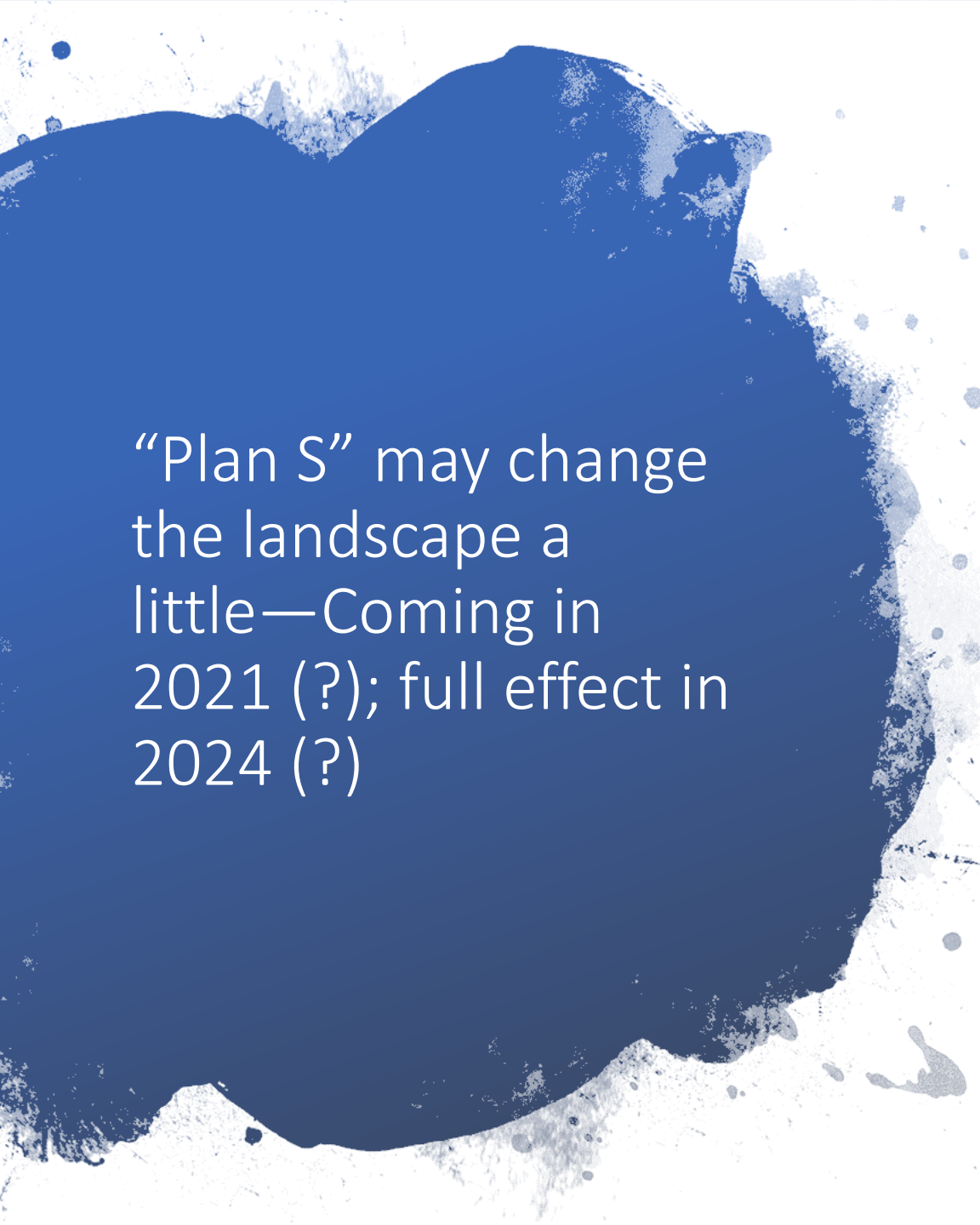
Br Med J
Can Med Assn J
PLOS Med
J of AHA

AMA J Ethics
BMC Med Ethics
Can J Bioeth

Hybrid

Traditional
publication gets fees
from authors &
subscribers
“double-dipping”

- Generally, operate **like traditional journals**
- Funding from subscriptions, advertising, parent organization
- Author or other fees to publish small number of OA articles



“Plan S” may change
the landscape a
little—Coming in
2021 (?); full effect in
2024 (?)

- For research funded by **Plan S** funders (Now ~3.3% of world’s scholarly papers)
- **Gold Model**—**funders pay** publication fees (for a few years)—but charges must be “transparent”
- Backed by **European government funders** and **private foundations**, including Gates Foundation
- **No embargo allowed**; publishers relinquish copyright
- **CC-BY (Creative Commons License)**; Can use if cite source—but funders may agree to more limited use agreements in some cases.
- Funders pledge to **ignore the prestige of journals** when making funding decisions.
- **U.S. says they will not participate** (but government-funded articles must be publicly archived within a year of publication)
- **China says they will participate**, but has yet to sign an agreement

Often difficult to distinguish between the two types of OA journals

How to identify questionable journals?
Methods to help identify those that may not be legitimate.

Differentiating is not a simple task; there is no shortcut.

Questions to Ask and Preferred Answers for Identifying a Legitimate Open Access Journal^a

| | | | |
|--|------------------------------------|--|-------------------------------------|
| Journal familiarity/name/association/scope | Solicitations and promises limited | Website professional & with vital info | Publisher contact information valid |
| Editorial board known individuals | Sample issue available | Submission and review | Fees openly stated |
| Memberships and listings | Copyright and embargo limited | Baker EF, Iserson KV, Aswegan AL, et al. "Open access medical journals: Promise, perils, and pitfalls." <i>Acad Med.</i> 2019;94(5):634-9. | |

^a Information compiled from several sources.

Journal familiarity/name/association/scope

Do you or your colleagues **know**
the journal? **Yes**

Are you sure that the **name** is not a
confusing or potentially **misleading**
variation of a well-known journal
(e.g., *Lancel*)? **Yes**

Have you **read any articles** in the
journal before? **Yes**

Does the **journal's title**
inappropriately use the terms
"American" or "British" (and it is
not published in the United
States or Great Britain), or
"International" (no evidence of
global expertise or articles)? **No**

Is the **content** of the journal
consistent with its title and within
a well-defined and clearly stated
scope? **Yes**

Is the journal **affiliated** with or
sponsored by an established
scholarly society or academic
institution? **Yes**

Are the affiliated **organizations'**
or institutions' names designed
to mislead potential authors and
editors (e.g., *The Journal of*
Internal Medical Practice, *The*
American Collegial Emergency
Physicians)? **No**

Are researchers and practitioners the
journal's **primary audience**? **Yes**

Solicitations and promises

Did the publisher send you unsolicited, over-solicitous, and generalized **direct marketing** (i.e., spam)? This is the most obvious red flag.

No

Ignore these requests for articles, to be a guest editor or peer reviewer, or to become an editorial board member.

Do they promise an **unusually short submission-to-publication time**, such as a few weeks to a month? This is the second most obvious red flag

No

*These answers suggest it is a legitimate OA journal.

Website

Can you **easily locate** the journal's website? **Yes**

Does the website appear **professional**? **Yes**

Are there **advertisements** from sources unrelated to the journal's scope? **No**

Does the website contain **misleading information**, including any attempt to imitate a better-known journal/publisher's site? **No**

Does the website contain many **language errors**? **No**

*These answers suggest it is a legitimate OA journal.

Publisher contact information

Is the publisher's full **contact information**, including address, telephone, and email, on the website? **Yes**

Does the website contain information about the **ownership or management**? **Yes**

Is the journal's **business model** or revenue sources (e.g., author fees, subscriptions, advertising, reprints, institutional support, and organizational support) clearly stated or otherwise evident on the website? **Yes**

*These answers suggest it is a legitimate OA journal.

Editorial board

Are the journal's editor and **editorial board** recognized experts in the field? **Yes**

Does the website or journal provide their full **names and affiliations**? **Yes**

Does the website provide **contact information** for the editorial office? **Yes**

*These answers suggest it is a legitimate OA journal.

Sample issue

- Can you easily find the **journal's latest papers**? **Yes**
- Are they of **good quality**? **Yes**
- **Can anyone read** the journal's published articles without registration? **Yes**
- Does all published material **contain author contact information** and dates of submission and acceptance, and provide information to enable correct citation? **Yes**
- Does the journal repeatedly feature the **same lead authors**? **No**
- Does the website state **how often they will publish** the journal? Have they **met that schedule**? **Yes**
- Are the articles **indexed** in services that you use? **Yes**

*These answers suggest it is a legitimate OA journal.

Submission and review

Does the journal's homepage provide clear, detailed, and easily located **Author Instructions**?

Yes

Does the website clearly describe an independent **external peer review process** by experts in the field for all noneditorial content?

Yes

*These answers suggest it is a legitimate OA journal.

Fees

Does the journal **ask for a submission fee, rather than a publication fee** paid only when an article is accepted for publication? **No**

Does the website clearly and prominently **display their policy regarding any fees or charges** required for manuscript processing or publishing? **Yes**

Does the policy **include the fee amount** and when, after the article is accepted, it must be paid? **Yes**

*These answers suggest it is a legitimate OA journal.

Memberships and listings

Is the publisher a **member of a recognized open access group?** ^C (You may need to check this through your library or ask your reference librarian.) **Yes**

^C **Recognized Open Access groups** include Directory of Open Access Journals (www.doaj.org) and Open Access Scholarly Publishers Association (<https://oaspa.org>).

Is the publisher a **member of a recognized industry initiative**, such as the Committee on Publication Ethics (COPE; <https://publicationethics.org/members>)? **Yes**

Is the journal **hosted on a recognized international nonprofit website?** ^D **Yes**

^D Such sites include **International Network for the Availability of Scientific Publications (INASP) Journals Online platforms** (www.inasp.info/en/work/journals-online) for journals published in Bangladesh, Nepal, Sri Lanka, Central America, and Mongolia; and African Journals Online (www.ajol.info) for African journals.

Do published articles **have DOIs?** **Yes**

Doi: digital object identifier.

Does the journal **have an ISSN?** **Yes**

ISSN: International Standard Serial Number.

Is the journal **registered in ULRICHSWEB Global Serials Directory** (which includes whether a publication is academic or practitioner based and if it is peer reviewed/refereed)? **Yes**

*These answers suggest it is a legitimate OA journal.

Listed on “Research Tool Box”

- Contains Beall’s List of Predatory Journals and Publishers and Updates) by Dr. Nader Ale Ebrahim
- <http://researchtoolsbox.blogspot.com/2019/01/bealls-list-of-predatory-journals-and.html>
- Simplest way to identify predatory journals
—but it can **never be complete**.

Copyright and embargo

Is **copyright and licensing information** clearly described on the journal's website? **Yes**

Are the **licensing terms** indicated on all published articles? **Yes**

Does the **journal try to keep the copyright** to an author's work? This is a big red flag! **No**

Do authors **maintain the copyright**, with the work **ultimately released under a Creative Commons license**? **Yes**

*These answers suggest it is a legitimate OA journal.

Professional
problems with
publishing in
predatory OA
journals

Little or no **dissemination**
of scholarly work

Academic output seen as
low quality

Generally, **not accepted**
for promotion/tenure

Ethical issues in OA publishing include:

1. APC (article processing charges) as a quality measure
2. Possibility of restricting academic freedom due to APC costs (\$100 EDP Sciences to \$2,700 Frontiers journals, 2018)
3. OA publishing costs disadvantage researchers from poor institutions/countries
4. Mushrooming & increased use of bogus ('predatory') journals
5. Editorial conflicts of interest in selecting papers for hybrid journals.
6. Hybrid journals – 'double dipping'

Other ethical issues with publishing in predatory OA journals

- “Fake News”
- Protecting **integrity** of valid biomedical literature.
- **Protecting patients** from bad science (results of Wakefield’s bogus vaccine study)
- **Paid/Ghost-written research**
- **Misleading use of or Dry Lab statistics**
- **Often not accessible by others** (Benefit?)
- **Damage to young researchers, institutional and specialty reputations**
- **Steering authors of rejected papers to company’s OA (pay) sister journals**

Federal Trade Commission injunction

[The cited OA journals] “**deceptively claim** that their journals provide authors with rigorous peer review and have editorial boards made up of prominent academics when in fact, many articles are published with **little to no peer review** and many individuals represented to be **editors have not agreed to be affiliated with the journals** . . . [they] do not tell authors submitting papers for publication that, after their online journals accept an article, the defendants **charge the authors significant publishing fees** and **often do not allow authors to withdraw their articles** from submission, making their research ineligible for publication in other journals.” (Federal Trade Commission (US) 2017)

Whose
responsibility
is it to guide
authors
toward
legitimate
journals?



Now What?

**That's up to you, your institution,
your colleagues, and your
professional organizations.**

Thank you for your attention!