Evaluating Open Access Journals

Moving from Provocative to Practical in Characterizing Journal Practices

Instructors

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Goals for the course

Day 1: Understand the Evolution of Scholarly Publishing

- Explore the history of scholarly publishing, the development of open access, and the **drivers** that have contributed to the rise of predatory practices in open access scholarly publishing.

Day 2: Recognize and Address Predatory Publishing

- Develop an awareness of low-quality and predatory **behaviors** in scholarly publishing and understand their **impact** on researchers, institutions, and the public.

Day 3: Implement and Advocate for Best Practices

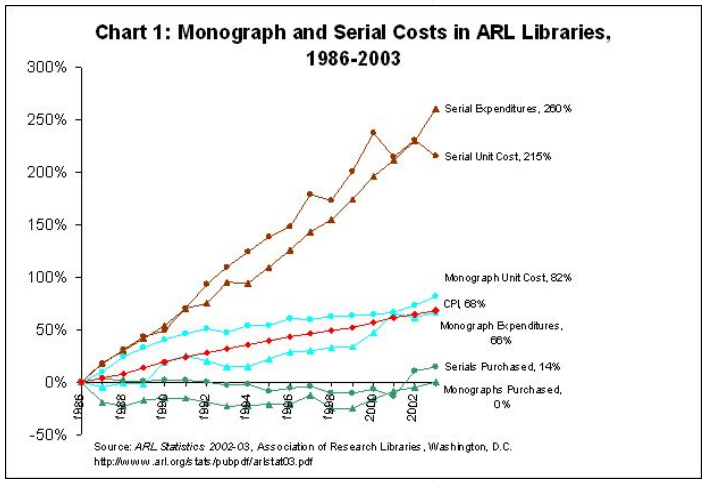
- Identify effective interventions to **lessen the reach and impact** of deceptive and low-quality journals and discuss strategies to prevent predatory practices in scholarly publishing.

Day	Date	Pacific Time (PT)	Mountain Time (MT)	Central Time (CT)	Eastern Time (ET)
Day 1	Tuesday, July 23, 2024	4:00 – 5:30 pm	5:00 – 6:30 pm	6:00 – 7:30 pm	7:00 – 8:30 pm
Day 2	Wednesday, July 24, 2024	4:00 – 5:30 pm	5:00 – 6:30 pm	6:00 – 7:30 pm	7:00 – 8:30 pm
Day 3	Thursday, July 25, 2024	4:00 – 5:30 pm	5:00 – 6:30 pm	6:00 – 7:30 pm	7:00 – 8:30 pm

Introduction – Day 1

Serials Crisis and the “Big Deal”

1991: 61% of the 118 Association of Research Libraries acquire 55% fewer serials than in 1986



2001: “Big Deals” are introduced to provide comprehensive licensing to publisher content and cap price increases for a limited time

Early Document Repositories

1991, Aug: Preprint server arXiv is launched

1994: Preprint server SSRN is launched (acquired by Elsevier in May 2016)

1983, Jan: Beginning of Internet

1993: Preprint server RePEc is launched

1997: Preprint server CogPrints is launched

Early Electronic Journals

1992: Elsevier and nine research universities pilot The University Licensing Program (**TULIP**) to prototype electronic delivery, storage and printing of journal articles

1992, Aug: AT&T Bell Laboratories, Springer-Verlag, and the University of California, San Francisco begin **The Red Sage Project** to create a Digital Journal Library of the Health Sciences at UCSF

1995, Nov.: E-journal announcement for American Journal of Nursing (Lippincott Williams & Wilkins)

1995, Nov.: E-journal announcement for Nature (Springer Nature)

1995, Oct: Academic Press makes 175+ journals available via **IDEAL** (International Desk-top Electronic Access Library), later IDEAL is acquired by Elsevier

1995, July: E-journal announcement for Applied Physics Letters (American Institute of Physics)

1996, Mar.: E-journal announcement for New England Journal of Medicine (Massachusetts Medical Society)

1996, July: E-journal announcement for The Journal of Clinical Investigation (American Society for Clinical Investigation)

1996, Nov.: E-journal announcement for Lancet (Elsevier)

1997 Jan.: E-journal announcement for Proceedings of the National Academies of Sciences (PNAS)

1997, May: E-journal announcement for Cell (full text back to Jan. 1996 and abstracts since 1974) (Elsevier)

1997, July: E-journal announcement for British Medical Journal (BMJ) (BMJ Publishing Group)

1999, Mar.: SciELO – Scientific Electronic Library Online for Brazilian scientific journals in electronic format

Scholarly Publishing and Academic Resources Coalition (SPARC)

2001: SPARC Europe was launched

1998, June: SPARC is launched by Association of Research Libraries in the US.

The Open Access Movement

2003: Bethesda Statement on Open Access Publishing

2002, Dec: Budapest Open Access Initiative

2003, Oct: Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities.

Why Open Access?

Open Access

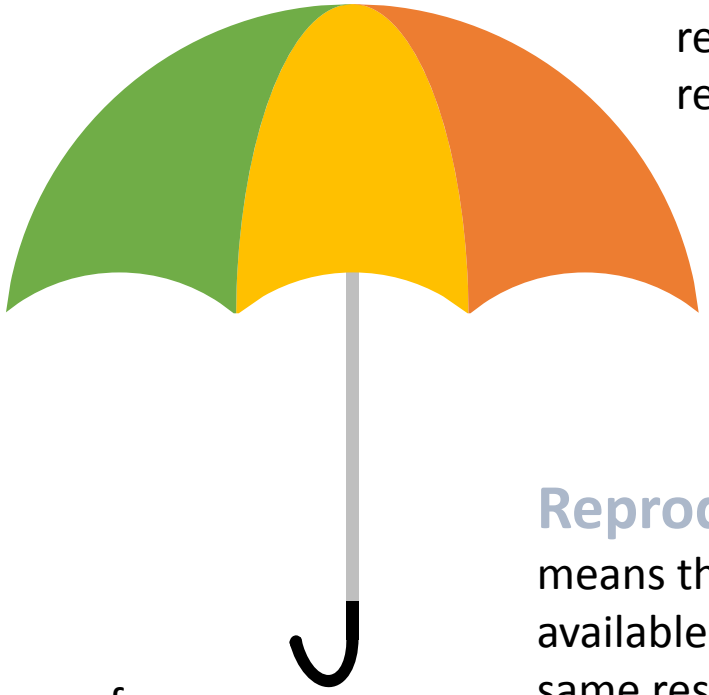
means that research publications like articles and books can be accessed online, free of charge by any user, with no technical obstacles

Open Data

can be freely accessed, reused, remixed and redistributed, for academic research and teaching purposes and beyond

Open Code/Notebooks

refers to the use and development of software for analysis, simulation, visualization, etc. where the full source code is available



Open Educational Resources

are teaching, learning and research materials that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions

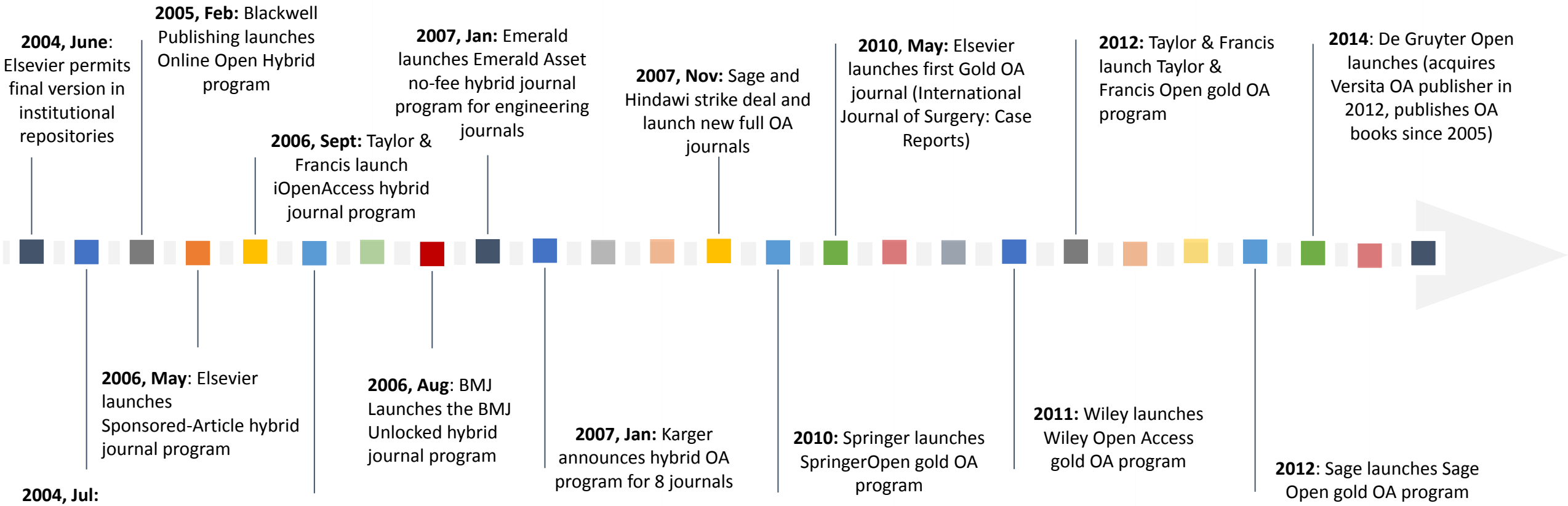
Reproducible Research

means that research data and code are made available so that others are able to reach the same results as are claimed in scientific outputs

Open Access Models

Type:	Article Level	Journal Level	Who?	Where?	When?	Cost to Author?	Fulfill OA funder requirements?	Funding?	License used/ is copyright retained?
Gold (APC-based)	gold	gold	publisher	~5K APC-based open access journals	simultaneous with publication	1-5500 USD	always	sometimes funder or institutional OA-fund	choose CC-license, often keep copyright
Hybrid (APC-based)	gold	hybrid	publisher	almost all subscription journals	simultaneous with publication	~1000-11000 USD	always, but discussed now	sometimes funder / included in big deals	often CC in exclusive license for publishe
Diamond (APC-based)	gold	gold	publisher	~12K diamond open access journals	simultaneous with publication	none	always	not applicable	choose CC-license, often keep copyright
Green (Self-Archiving)	green	not applicable	author	institutional or subject repository	upon acceptance, but often embargo	none	often, but often not if embargoed	not applicable	publisher determined license or no license
Self Publishing	green	not applicable	author	web: http URI	at any stage	almost zero	mostly not	personal	any, copyright retained
Preprint	green	not applicable	author	preprint archives	before/around submission to journal	none	mostly not	not applicable	choose CC-license,

Commercial Publishers and Hybrid Open Access Journals



Commercial Publishers and fully Open Access Journals

2000: Open access publisher Faculty of 1000 (F1000) is launched, does peer-review by invitation after publication (acquired by Taylor & Francis in Jan 2020)

2000, Jan: Open access publisher BioMed Central is launched, charges fees to author for readers to have free online access (Springer Nature in 2008)

2002, Dec: Open access publisher Public Library of Science receives grant, launches PLOS Biology in 2003, PLOS Medicine in 2004, PLOS One in 2006

2003: Open access publisher Dove Medical Press is launched, added to Beall's list in 2012, later removed (acquired by Taylor & Francis in Sept. 2017)

2007, Feb: Hindawi Publishing converts final journals to become OA only publisher (acquired by Wiley in Jan. 2021, removal of Hindawi name in Dec. 2023)

2007: Open access publisher Frontiers is launched (acquired by Nature Research in 2013) on Bealls list in 2015, later removed

2007: Open access publisher Bentham Open launches, high spam count, on Beall's list in 2014

2008: MDPI publishing converts all journals to become OA-only publisher

2010: elife open access journal is launched, in 2023 will only review papers that are already published as preprints and publish public reviews and an eLife assessment

2011 Nov: PLOS One becomes largest peer-reviewed journal in world

2013: PeerJ open access mega journal is launched (acquired by Taylor & Francis in March 2024)

Advancements for Open Access

2002, May: Creative Commons launched

2003, May: Directory of Open Access Journals is launched

2008, Oct: First International Open Access Week

2008, Oct.: Open Access Scholarly Publishing Association (OASPA) is launched

2014, May: Authors Alliance is founded to support authors' rights and balanced copyright policies

Associations and small publishers

2006, Aug: American Chemical Society launches Author Choice hybrid journal program

2007, Apr: American Geophysical Union launches hybrid OA for 19 journals

2003: Association of Learned and Professional Society Publishers (ALPSP) released a statement encouraging society publishers to experiment with open access

2006, Aug: American Physical Society Launches Free To Read hybrid journal program

2008, Oct: Open Access Scholarly Publishing Association (OASPA) is launched

Monographs and Open Access

1971: Project Gutenberg established to make literary works in public domain open on web

2004: Google launches Google Print Initiative as precursor to Google Books

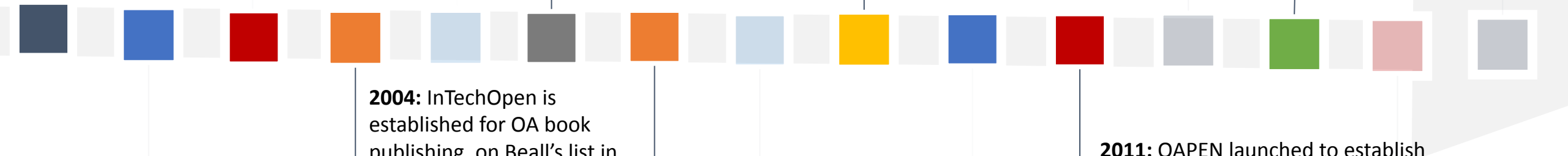
2004: InTechOpen is established for OA book publishing, on Beall's list in 2012 and later removed, and journals were moved to Sage in June 2016.

2005: *De Gruyter initiates open access for scholarly books*

2009, Aug: Open Humanities Press begins publishing OA book series

2011: OAPEN launched to establish sustainable model for OA Books in Humanities and Social Science

2017: Toward an Open Monograph Ecosystem (TOME) launches 5 year pilot for OA publishing in Humanities and Social Science



Who pays for open access ….

2001: Open Journal Systems (OJS) is launched by the Public Knowledge Project (PKP) which can support institutional or consortium-level journal publishing

2002: Biomed Central begins author fee waiver for authors originating from 90 developing countries

2003: Public Library of Science (PLoS) begins fee waiver for authors who apply and are approved; also introduces tiered pricing based on country of author

2012: The U.K.-based **Finch Report** is published and recommends that Research Councils of the UK (RCUK) use public funds to pay full-price APCs for open access bli ning

2012: eLife begins publishing with APCs covered by a consortium of funders (Howard Hughes Medical Institute (HHMI), the Wellcome Trust, Max Planck Society)

2013: Library Publishing Coalition is launched to support library-based publishing with assistance from the Educopia Institute

2015: European Commission report on **Alternative Open Access Publishing Models** is published and suggests that APCs should be paid through libraries or institutions joining together as a consortium

2015: The Max Planck Digital Library **Open Access Policy White Paper** is published and controversially posits that reallocating existing library and institutional subscription budgets to pay for an APC-based open access model could be budget-neutral or potentially lower overall costs

2016: "Pay It Forward" report is published by the University of California Libraries and highlights that high-output large research funding institutions may face significant financial burdens transitioning from subscription-based models to funding open access via APCs which can be mitigated through institutional funds, cost-sharing models, and market competition

Driver: Economic Incentives

Profit Motive

- Predatory publishers exploit the APC model with high fees and minimal services.

Excessive Fees

- **Unusual APCs:** Fees may be unusually high or low without clear institutional or funder financial support for the journal.
- **APC at Submission:** Full APC required upfront, unlike standard nominal submission fees.
- **Expedited Review Fees:** Extra charges for speed without guaranteed quality.
- **Rejection Fees:** Fees for review or editorial processes even if rejected.

Lack of Transparency

- Misleading policies on fees, editorial standards, and peer review.

Low Operational Costs

- Minimal overhead due to digital operations.

2020 Jan: The **Price Transparency Framework** is published by Information Power, supported by ten publishers (Annual Reviews, Brill, The Company of Biologists, EMBO, European Respiratory Society, F1000 Research, Hindawi, Institute of Physics Publishing, PLOS, and Springer Nature) and approved by cOAlition S leadership.

2022: cOAlition S developed and implemented the freely available Journal Comparison Service (JCS).

Testing the quality of Open Access Journals

2013: Open Access Scholarly Publishers Association (OASPA) developed its "Principles of Transparency and Best Practice in Scholarly Publishing"

2013: Bohannon submits fake publication to 304 OA journals, 52% of journals accepted the paper

2015: Directory of Open Access Journals (DOAJ) launches new 50 question criteria

Governments and Funders and Open Access

2003, Oct: The Wellcome Trust commissions report called the "Economic analysis of scientific research publishing", comes out in favor of OA

2004, Sept: U.S. National Institutes of Health issues notice on Enhanced Public Access to NIH Research Information (receives 6,000 comments)

2005: The Wellcome Trust entered into an agreement with Blackwell Publishing, Oxford University Press, and Springer for OA publishing

2006: the Research Councils UK (UKRI) issued their open access policy:

2008, April: U.S. National Institutes of Health Public Access Policy goes into effect

2008: Canadian Institutes of Health Research (CIHR) implemented an open access policy

2008: SHERPA/JULIET launches for information on publisher policies regarding the deposit of articles in repositories

2013, Feb : U.S. Office of Science and Technology Policy publishes the Holdren Memo to support public access of research

2022, August: U.S. Office of Science and Technology Policy publishes the Nelson Memo to support public access of research

2024, Jun: U.S. National Institutes of Health (NIH) publishes request for information for feedback on draft of Public Access Policy

Note: cOAlition S covered on later slide

Institutional Repositories and Open Access

1999: Bepress DigitalCommons (formerly Berkeley Electronic Press, co-founded by academics Robert Cooter and Aaron Edlin) is launched as an institutional repository software (acquired by RELX Group in Aug. 2017)

2000: Eprints is launched as open-source repository software developed at the University of Southampton

2000: Fedora Commons is launched as an open-source project from a collaboration between the University of Virginia and Cornell University's existing Fedora Repository project (Fedora began in 1997 at Cornell university)

2002: eScholarship Repository launched by California Digital Library (CDL)

2002: SPARC issues report called "The Case for Institutional Repositories"

2002: Dspace open-source repository software launched by MIT Libraries and the Hewlett-Packard Company

2003: ROARMap is launched to track funder and institutional OA policies worldwide

2005: Directory of Open Access Repositories (OpenDOAR) launched by JISC to track available repositories worldwide

2006: Association of Research Libraries (ARL) surveys members on institutional repository practices

2006: Invenio (now InvenioRM) launches as open-source software for large-scale repositories by CERN ,the European Organization for Nuclear Research

2006: Islandora is launched as a repository solution that combines Drupal with Fedora Commons by the University of Prince Edward Island's Robertson Library

2006: SHERPA/ROMEO launched for information on publisher policies regarding self-archiving

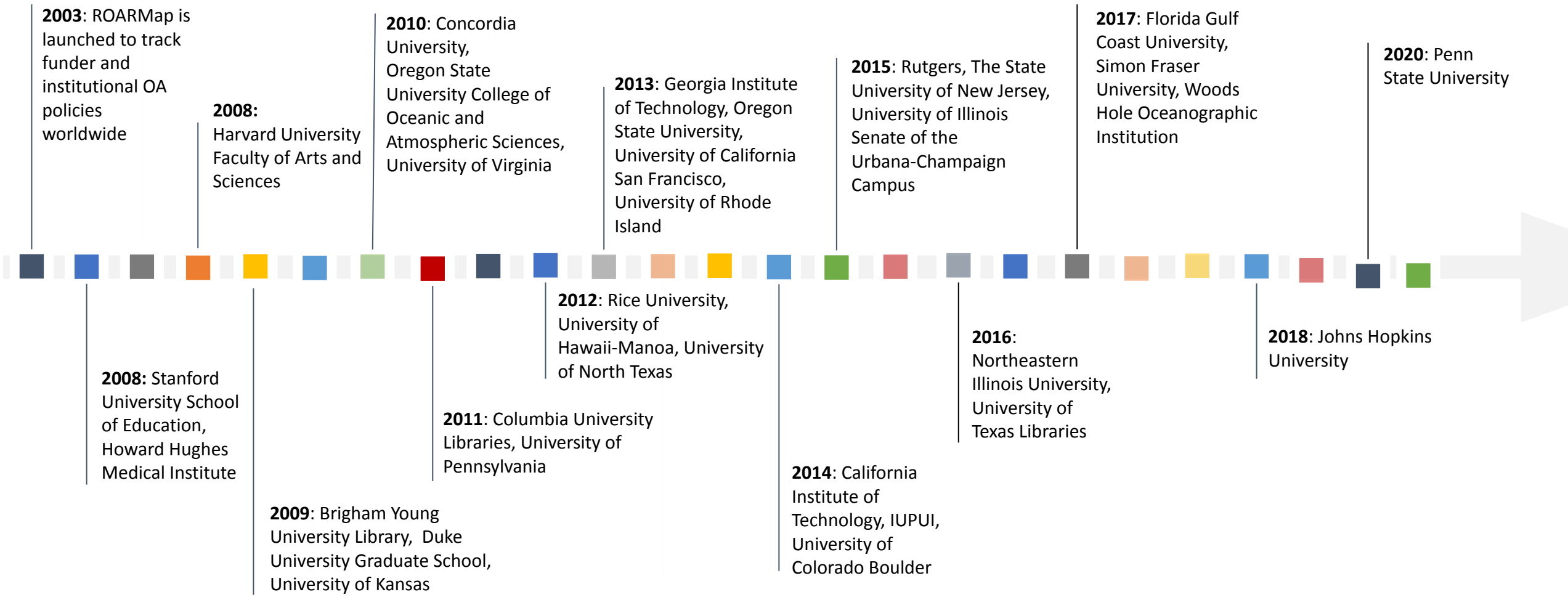
2008: Samvera (originally known as Hydra) open-source repository software is launched as a collaboration between Stanford University, the University of Virginia, the University of Hull, and Fedora Commons. It leverages Fedora Commons for storage and Blacklight for discovery interfaces

2009: DuraSpace is formed as merger of the DSpace Foundation and Fedora Commons

2011: Figshare is launched as an open access repository by Mark Hahnel and since 2012 is a portfolio businesses supported by Digital Science, a subsidiary of Springer Nature

2018 May: Zenodo is launched and uses InvenioRDM as a general-purpose open repository developed under the European OpenAIRE program and operated by CERN

U.S. Universities and Open Access Mandates



Driver: Inadequate institutional or funder support

2001: Emergence of Open Access Funds at various institutions to defray the cost of Article Processing Fees (APCs) according to the Open Access Directory

2009: COPE, Cornell, Dartmouth, Harvard, MIT, UC Berkeley begin the "**Compact for Open-Access Publishing Equity"** which commits the universities to "the timely establishment of durable mechanisms for underwriting reasonable publication charges for articles written by its faculty and published in fee-based open-access journals and for which other institutions would not be expected to provide funds."

2015: SPARC creates the Campus Open Access Fund guide for institutions

2018: Plan S launched as OA Science Publishing initiative by national resea agencies & funders from 12 European countries

2018-2019
Universitie
closing or r
their open
funds to su rt
transformative
agreements

Transformative Agreements

2014: ESAC Transformative Agreement Registry launched

2015: Theory of Transformative Agreements proposed in white paper by Max Plank Digital Library

The resurgence of preprint servers

2013, Nov: bioRxiv, hosted by Cold Spring Harbor Laboratory is launched as a preprint server for biological sciences

2017: PREreview is launched to provide open peer-review on prepints

2017, March: U.S. NIH issues notice encourages researchers to use preprints to speed dissemination and cite those works in grant reports

2019, June: medrxiv hosted by Cold Spring Harbor Laboratory is launched preprint server for health sciences

2020, June: PMC and PubMed launch Phase 1 pilot by indexing 3,300 preprints of NIH-funded COVID-19 research

2023, Jan: U.S. NIH launches Phase 2 pilot of preprints in PMC and PubMed for any NIH-funded research

Driver: Publish or Perish

1972: Eugene Garfield introduces the Journal Impact Factor

1980: Salami publishing or "least publishable unit" discussion happening in academic journals

1983: US News & World Report Annual College Rankings

2004: Times Higher Education (THE) World University Rankings

2005: Jorge Hirsch introduces the h-index

2008: Journal Citation Reports begins excluding citation cartels (journals with abundant self-citations)

2012, Dec: San Francisco Declaration on Research Assessment (DORA) created by a group of editors and publishers of scholarly journals during the Annual Meeting of The American Society for Cell Biology (ASCB) in San Francisco, CA.

2015: Leiden Manifesto for research metrics published as a comment in Nature

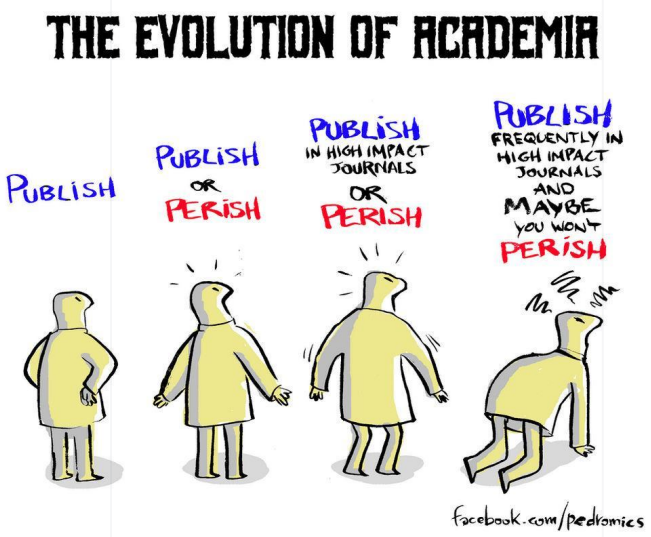
2015, July: The metric tide: review of metrics in research assessment report published by Research England

2017: First HuMetricsHSS workshops begin

2020: Paper Mills become a topic of discussion on COPE forum

2022, Feb: Walking The Talk report published by HuMetrics on interviews across Big Ten Academic Alliance

2022, Aug: Metrics Tide Revisited review published on current and potential uses of metrics



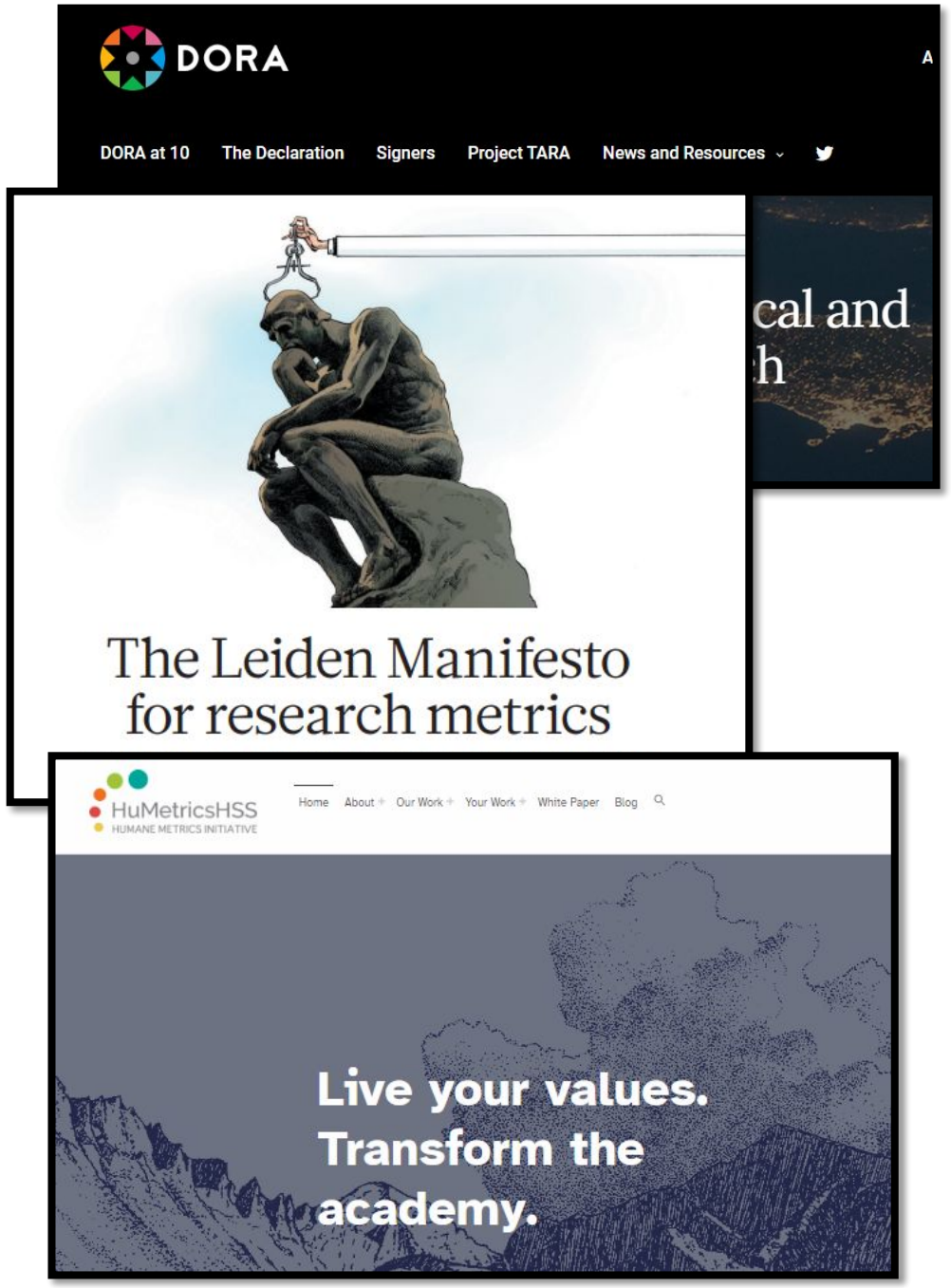
Driver: Metrics over Quality

Issues with Quantitative Metrics

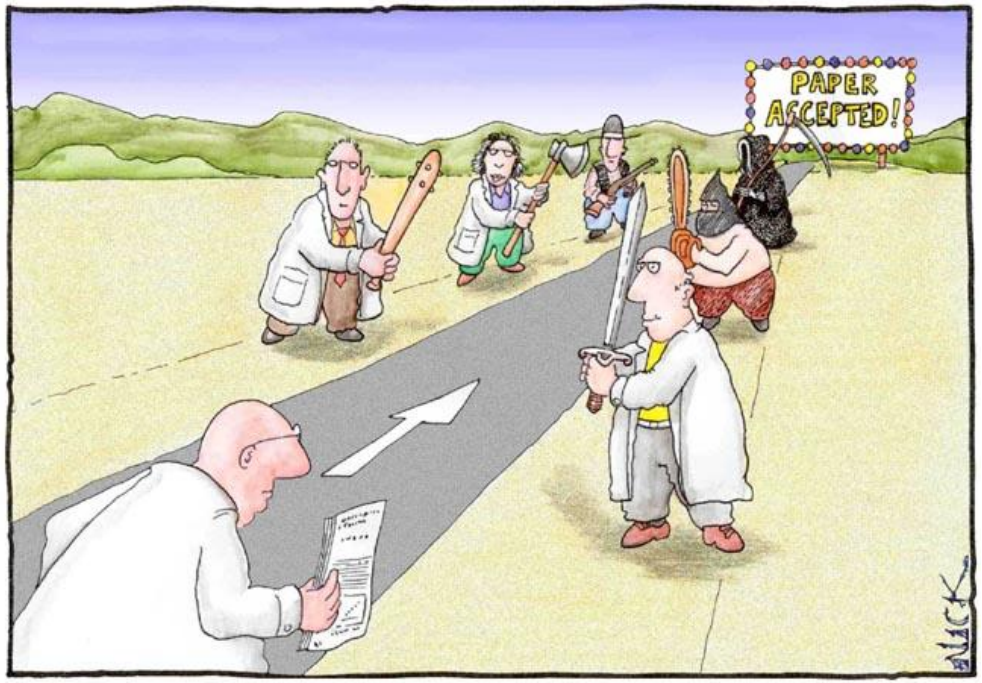
- Emphasis on publication count and impact factors over research quality.
- Incentivizes publishing in any outlet, including predatory journals.
- Predatory publishers inflate metrics to appear legitimate.
- Pressure from "publish or perish" culture.

Responsible Metrics Movement

- Advocates for comprehensive evaluation of research quality and impact.
- Focuses on content, novelty, and significance.
- Values diverse scholarly outputs like data sharing, preprints, and open access.
- Promotes robust evaluation systems resistant to manipulation.

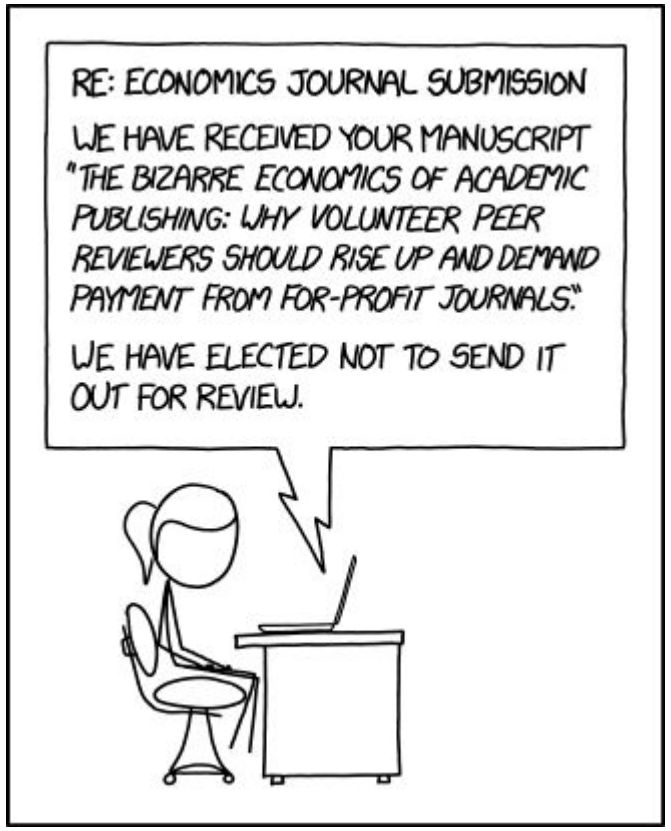


Driver: Quick Publishing Cycle and Poor Peer Review



Most scientists regarded the new streamlined peer-review process as "quite an improvement."

Improving and Recognizing Peer Review



Driver: Lack of Awareness

- Aggressive Solicitation: Target early-career researchers and those from developing countries who may be less familiar with reputable journals.
- Ease of Access: Use the internet to solicit manuscripts via email and social media, reaching a global audience.
- SEO Tactics: Utilize SEO to appear legitimate and increase visibility in search engine results, attracting unsuspecting researchers.

Jeffery Beall and the Predatory Journal List

2010: "Beall's list" of predatory OA journals begins (goes offline in 2017)

2010: Bentham Open added to Beall's list and never removed

2010: A subset of Hindawi journals are added to Beall's list but later removed

2011: Approximately 18 active predatory publishers

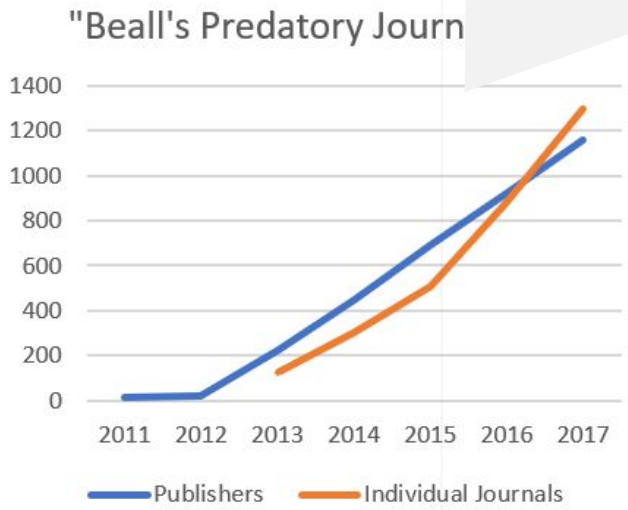
2012: Dove Medical Press added to Beall's list but later removed

2014: Approximately 477 active predatory publishers

2014: Multidisciplinary Digital Publishing Institute (MDPI) added to Beall's list but met OASPA Membership criteria that same year, removed in 2015

2015: Frontiers Media added to Beall's list despite of being a member of COPE, never removed

2017: Cabell's Predatory Reports launches



Industry response to the increase in Predatory Publishing

- **DOAJ**: https://doaj.org/
- **COPE Member List**: https://publicationethics.org/members
- **ICMJE List of Journals**: http://www.icmje.org/journals-following-the-icmje-recommendations/
- **Retraction Watch:** http://retractionwatch.com/
- **Think, Check, Submit**: https://thinkchecksubmit.org/

The Problem with OMICS

2008: OMICS Publishing Group is launched

2013: OMICS director Gedela threatens to sue Beall for $1 billion

2020: U.S. Court of Appeals for the Ninth Circuit upholds summary judgment against OMICS

2013: The U.S. National Institutes of Health sent a cease-and-desist letter to OMICS

2013: OMICS publications removed from PubMed Central

2016: U.S. Federal Trade Commission files lawsuit against OMICS

2019: FTC wins suit against OMICS for $50 million in damages

cOAlition S and Plan S

2018: Plan S launched as OA Science Publishing initiative by national research agencies & funders from 12 European countries

2020: Springer Nature announces that many of its journals (including Nature) will become compatible with Plan S

2021, Feb: More than 50 publishers, including Elsevier, Wiley and Springer Nature, and ACS announced their opposition to the rights retention strategy of Coalition S

2022: Two-thirds of the 2,3000 journals in a program to transition from open access failed to meet the target, leading cOAlition S to remove the journals from the initiative, ending funding for their publication fees by 2023

Artificial Intelligence and Scholarly Writing

Better
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grammarly

Paperpal

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Activity 1: General Discussion

1. What do you understand by the term 'scholarly publishing'? How has it evolved over time?
2. What are the differences between open access and standard subscription-based publication?
3. What were some of the issues that Bohannon and Beall had with some open access journals?
4. What do you feel were some of OMICS most egregious practices? Why do you think researchers are still publishing in OMICs journals?
5. What are some of the drivers that contribute to the rise of predatory journals?

Activity 2: Case Study Discussion 1

1. Take a few minutes to read the case study:

   Hawkins D. 2017. Our Lives as Editors of A Predatory Journal: Lessons Learned Publishing a Scholarly Open Access Journal. Available at: https://www.charleston-hub.com/2017/11/our-lives-as-editors-of-a-predatory-journal-lessons-learned-publishing-a-scholarly-open-access-journal/

2. Answer these questions as a small group:
   a) What do you think motivated the authors to present this at the Charleston Conference in 2017?
   b) What specific predatory practices did the journal engage in, according to the article?
   c) What ethical challenges did the editors face? How did their experiences reflect broader issues in predatory publishing?
   d) What responsibilities, challenges, or pressures do you think the journal's editors experienced and how do you think those things contributed to the journal's practices?
   e) What were the consequences for researchers who published in this journal?
   f) How do the experiences of the editors challenge our understanding of predatory publishing?

3. Report back to the larger group

Activity 2: Case Study Discussion 2

1. Take a few minutes to read the case study:

   Masic, I. 2017. Predatory Publishing – Experience with OMICS International. Med Arch. 71(5): 304-307. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5723186/

2. Answer these questions as a small group:
   a) What initial offer did the researcher receive regarding the "Journal of Forensic Anthropology"? How was researcher's role and involvement presented on the journal's website?
   b) What responsibilities, challenges, or pressures do you think the researchers experienced or why do you think the researchers responded to the journal's requests for an editorial?
   c) What steps did the individual and their colleagues take to withdraw their names from the journal's website? How did the OMICS group respond to their requests for removal?
   d) What ethical issues are raised by the journal's continued use of the individual's and their colleagues' names without consent?
   e) How did the predatory practices of the OMICS group affect the reputation and credibility of the individuals involved?
   f) How could the misuse of editorial board members' names affect the overall integrity of academic publishing?

3. Report back to the larger group

Activity 2: Case Study Discussion 3

1. Take a few minutes to read the case study:

   Brainard, J. 2023. Fast-growing open-access journals stripped of coveted impact factors. Available at: https://www.science.org/content/article/fast-growing-open-access-journals-stripped-coveted-impact-factors

2. Answer these questions as a small group:
   a) What was the main reason for the journals being stripped of their impact factors?
   b) What does the removal of impact factors mean for a journal's reputation and its authors?
   c) What responsibilities, challenges, or pressures do you think the publishers exploited, or that the special editors and authors experienced and how did that impact their willingness to publish in these special issues?
   d) How did the journals and the academic community respond to the revocation of impact factors?
   e) How does the loss of an impact factor affect the journal's authors and their published research?
   f) What role do impact factors play in the broader context of academic publishing and research evaluation?

3. Report back to the larger group

Pre-reading: Day 2

- Day 2: Beall, J. Predatory publishers are corrupting open access. Nature 489, 179 (2012). https://doi.org/10.1038/489179a

Re-use of slides

Authors: Karen Gutzman and Annie Wescott

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