AN EMERGING CONSENSUS ON RESEARCH PUBLISHING IN AN OPEN ACCESS ENVIRONMENT

Michael D. Mills, Ph.D., Editor-in-Chief
Journal of Applied Clinical Medical Physics

Special thanks to Matteo Cavalleri; Publisher – at Wiley
1 Some implications of Open Access
   - San Francisco Declaration on Research Assessment  (Resource: https://sfdora.org/read/)

2 Transitional (or Transformational) Agreements
   - What are they and how do they work?  (Resource: Wiley)
   - What does this mean for authors and readers?  (Resource: Wiley)

3 Author Copyright Retention and the cc Licensing for Open Access Articles
   - Predatory Journals  (Resource: Wiley)

4 Education Articles, Summary and Conclusions
There are some clear advantages when you choose to publish open access:

- On average, open access articles are downloaded more than three times as often as subscription articles.
- Open access articles are cited 50 percent more compared to subscription articles.
- Open access articles receive nearly three times the Altmetric Score as subscription articles.

What metrics are important to authors? (From a Wiley white paper):

1. Usage
2. Citations
3. Altmetric Attention Scores
### Article performance four years after publication across all publication models:

<table>
<thead>
<tr>
<th>Category</th>
<th>Subscription articles</th>
<th>Articles in a fully open access journal</th>
<th>Open access articles published in a hybrid journal</th>
<th>Delayed open articles (free to read after an embargo period)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average full-text download per article</strong></td>
<td>658</td>
<td>1,686</td>
<td>2,581</td>
<td>1,043</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+156%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+292%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+59%</td>
</tr>
<tr>
<td><strong>Average citations per article</strong></td>
<td>13</td>
<td>17</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+31%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+92%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+23%</td>
</tr>
<tr>
<td><strong>Average Altmetric score per article</strong></td>
<td>6</td>
<td>12</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+250%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+50%</td>
</tr>
</tbody>
</table>
DECLARATION ON RESEARCH ASSESSMENT

21,810 INDIVIDUALS AND ORGANIZATIONS IN 158 COUNTRIES HAVE SIGNED DORA TO DATE. WILEY SIGNED THE DORA AGREEMENT IN APRIL, 2022

- sfdora.org
- @DORAssessment
DORA THEMES

- the need to eliminate the use of journal-based metrics, such as Journal Impact Factors, in funding, appointment, and promotion considerations;
- the need to assess research on its own merits rather than on the basis of the journal in which the research is published; and
- the need to capitalize on the opportunities provided by online publication (such as relaxing unnecessary limits on the number of words, figures, and references in articles, and exploring new indicators of significance and impact).
When involved in committees making decisions about funding, hiring, tenure, or promotion, make assessments based on scientific content rather than publication metrics.

Wherever appropriate, cite primary literature in which observations are first reported rather than reviews in order to give credit where credit is due.

Use a range of article metrics and indicators on personal/supporting statements, as evidence of the impact of individual published articles and other research outputs.

Challenge research assessment practices that rely inappropriately on Journal Impact Factors and promote and teach best practice that focuses on the value and influence of specific research outputs.
Promotes value of all scholarly outputs
- Journal articles
- Preprints
- Datasets
- Software
- Protocols
- Research materials
- Well-trained researchers
- Societal outcomes and policy changes

Focuses on the merits of the work
- Reduces JIF (Journal Impact Factor) chasing
- Facilitates Open Science practices
- Improves rigor and reproducibility
- Enhances collaboration
WHAT IS THE MEANING OF OPEN ACCESS?

- You do not find paywall restrictions when you conduct research
- You do not need to subscribe to an array of journals or have access to a university library in order to conduct research
- When you seek funding or collaboration, the process is easier when the ultimate goal is to publish the article open access
- The research is more likely to be downloaded, cited and discussed when it is published open access
- Publishing open access makes it possible for high impact articles to be published in journals with lower impact factors without penalty respecting promotion and tenure
- It is reasonable to expect the importance of the Journal Impact Factor to diminish in importance over time
WHAT IS A TRANSFORMATIONAL AGREEMENT?

- **What?** TAs allow researchers unlimited read access to a portfolio of journals, plus funding to cover article publication charges (APC) when choosing to publish open access.

- **Why?** As policy and funder mandates increasingly favor routes towards open access, the subscription model faces pressure. TAs allow the migration of funding from reading towards publishing, whilst recognizing that the subscription model remains an important part of the agreement.

- **How?** A TA is a partnership between a consortium and publisher, to enable large-scale transition to open access.
WHERE ARE WILEY’S TRANSFORMATIONAL AGREEMENTS?

We are accelerating the transition to open access with agreements in countries including:

- Africa
- Australia and New Zealand
- Austria
- Finland
- France
- Germany
- Hungary
- Ireland
- Israel
- Italy
- Norway
- South Korea
- Spain
- Sweden
- Switzerland
- The Netherlands
- United Kingdom
- United States
# An Overview of the Types of U.S. Transformational Agreements at Wiley

<table>
<thead>
<tr>
<th>Consortium</th>
<th>Date of expiry</th>
<th>Institutions</th>
<th>Read access</th>
<th>OA publishing in hybrid open access journals</th>
<th>OA publishing in fully gold journals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carnegie Mellon University</td>
<td>2022-2024</td>
<td>1</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Carolina Consortium</td>
<td>2022-2024</td>
<td>41</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Iowa State University</td>
<td>2021-2024</td>
<td>1</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Johns Hopkins University</td>
<td>2021-2023</td>
<td>1</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Massachusetts Institute of Technology</td>
<td>2022-2024</td>
<td>1</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Texas State University</td>
<td>2022-2024</td>
<td>1</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>US Department of Energy</td>
<td>2022-2026</td>
<td>3</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Virginia's Academic Libraries (VIVA)</td>
<td>2022-2024</td>
<td>56</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>
TWO CATEGORIES OF TRANSITION OR TRANSFORMATIONAL AGREEMENTS

- 1 - Full and Immediate Transition (e.g. Wiley - Projekt DEAL agreement). This “publish and read” approach covers researchers to publish uncapped numbers of articles in fully Gold OA and hybrid journals, and access all Wiley journal content.

- 2 - Stepped Transition (e.g. Norway, Hungary, Sweden, Finland and the UK). Investment migrates from read to publish over the contract term. Researchers receive full access to Wiley journals and can publish OA, however there is an annual cap for publishing OA - if this cap is reached, OA article publication will cease for the remainder of that year.
WHY DO YOU NEED TO KNOW ABOUT TRANSITIONAL AGREEMENTS?

- Simple process - You don’t need to arrange payment (publishing charges are paid centrally by your institution)
- Increased readership - Researchers at any of the participating institutions are able to read, cite and share your research
- Subject coverage is broadened - Transitional agreements are a way to create parity towards OA for all fields of research – not just those that traditionally offered APC funding
- Compliance with funder mandates - Transitional agreements open routes to publishing OA in line with the increasing number of funder mandates
Copyright is a law that gives the owner of a work the right to say how other people can use it.

Copyright licenses detail the rights for publication, distribution and use of research. Read your journal’s author guidelines for details on the journal’s specific copyright agreement.

JACMP articles are published under the Creative Commons Attribution 4.0 International (CC BY 4.0) license. Under this agreement, you are free to:

- Share – copy and redistribute the material in any medium or format
- Adapt – remix, transform and build upon the material for any purpose, even commercially
- This is the least restrictive of the Creative Commons Attribution licenses.

Wiley uses three types of Creative Commons Licenses for its journals: CC-BY, CC-BYNC, and CC-BY-NC-ND.

If you publish Gold OA with Wiley, you will retain the copyright under a Creative Commons license, so you do not need to transfer the copyright.
Scholarly journals today

**SUBSCRIPTION JOURNALS**

Author normally required to transfer the copyright to the journal Publisher:
- Allows the Publisher to protect the author's rights
- Allows the Publisher to coordinate permissions for reprints or other use

Reuse of article is possible by licensing often arranged via the Copyright Clearance Center

**OPEN ACCESS JOURNALS**

The articles are freely accessible online without cost to readers
Users can read, download, copy, distribute, print, search, these articles; author retains copyright

Encourages sharing and reuse via various license types:
- CC BY
- CC BY-NC
- CC BY-NC-ND
# Types of Creative Commons Licenses Used by Wiley

<table>
<thead>
<tr>
<th>Licence type</th>
<th>Read, download, print</th>
<th>Share, distribute</th>
<th>Reuse, build-on (non-commercial)</th>
<th>Tweak, remix, translate</th>
<th>Reuse commercially</th>
<th>Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC-BY - Attribution.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Most</td>
</tr>
<tr>
<td>CC-BY-NC – Attribution, Non-commercial.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CC-BY-NC –ND Attribution, Non-commercial, No derivatives.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>Least</td>
</tr>
</tbody>
</table>

*https://creativecommons.org/

---

Open access: Helping researchers share their work with the world  
www.wileyopenaccess.com
Beware of predatory journals

**PREDATORY JOURNALS**

- Use the Open Access publication model (Most Open Access journals are okay)
- Do not provide legitimate writing, peer-review, and publishing services
- Send frequent spam messages
- Sometimes use names of researchers without their consent
- Look carefully at the publishing company, the affiliated scholarly society and the journal indexation

**INFORM/DEFEND YOURSELF**

- Beall’s List of Predatory Journals and Publishers: [https://beallslist.net/](https://beallslist.net/)
- Cabells’ Journal Blacklist: [https://www2.cabells.com/about-predatory ($)](https://www2.cabells.com/about-predatory ($))
- Useful Appraisal Tool: [https://thinkchecksubmit.org/](https://thinkchecksubmit.org/)
- Directory of Open Access Journals: [https://doaj.org/](https://doaj.org/)
Types of Education Articles the JACMP is Planning to Publish

Article Categories
- Original Medical Physics Education Research Articles
- Innovations in Medical Physics Education
- Teaching and Learning – Theory and Methods
- Case Studies

Format of Education Articles
- **Abstract:** Introduction of the case
- **Learning Objectives:** 1-3 learning objectives for the case being presented. Recommended to use framework such as Bloom’s Taxonomy [3] for developing robust learning objectives
- **Narrative:** Written description of the case
- **Discussion Questions:** Several open-ended questions for facilitators to use to generate conversation aligning with the learning objectives
- **Optional:** The authors may choose to embed an assessment link for the educational material (TBD)
It has been almost 20 years since the beginning of open access publishing and almost 25 years since the first conception of the JACMP.

Open access has taken a long time to emerge, longer than many of us expected.

There is now a consensus that the benefits of open access publication are irresistible and substantial transition to this model is likely inevitable.

The journal Impact Factor will likely decrease in importance over the next few years.

Where the article is published is less important than article specific metrics: downloads, citations and social media impact.

Transformational agreements will leverage the transition to open access publication.

Creative Commons licensing has proven to be essential infrastructure to the open access movement.

Beware of predatory journals and protect yourself against them.