9-24-2024

Open Access for Student Researchers in STEM

Denise Brush
Rowan University, brush@rowan.edu

Open Access for Student Researchers in STEM

Library Workshop 9/24/24
Denise Brush, Librarian
Researcher Support Services

Workshop ground rules

- This presentation will be recorded

- Please keep yourself on Mute during the presentation

- You may turn your camera off if you prefer

- If questions occur to you during presentation, put them in Chat

- I will answer questions from Chat at the end

- Slide deck and recording will be posted online in Rowan Digital Works

- Library Workshops page: https://rdw.rowan.edu/libraryworkshops/

Rowan University
LIBRARIES

Learning outcomes for workshop

1. Understand what Open Access is

2. Understand implications of OA for formal publication and commercialization

3. Know when opting for OA is appropriate, and when it is not

RowanUniversity
LIBRARIES

What is Open Access?

Let's watch this great video from Piled Higher and Deeper PhD Comics: Open Access Explained

Open Access & government funding

U.S. government support of Open Access

- Since 2013, U.S. government working toward goal of making results of taxpayer-supported research *immediately* available to everyone for free

- Rules apply to federal agencies with over $100M in annual research expenditures, and <u>university research funded by those agencies</u>, like many of you are doing

AGENCY PUBLIC ACCESS PLANS (DUE IN 2025) SHOULD INCLUDE:

- No 12-month publication embargo

- Requiring articles & data be freely available and publicly accessible in agency-designated repositories

https://www.science.gov/Submissions-Public-Access.html

Happening very soon, all need to get ready to comply!

Related workshops offered by Rowan University Libraries

RowanUniversity

LIBRARIES

Federal agencies that have already published their public access plans as of 2024:

- **U.S. Department of Education**, **U.S. Department of Energy** (DOE)
- **National Aeronautics and Space Administration** (NASA)
- **National Institute of Standards and Technology** (NIST)
- **National Science Foundation** (NSF)
- **National Institutes of Health** (NIH)
- **U.S. Geological Survey** (USGS)

(But NOT the Department of Defense)

Example: current NIH open access policy

- "The NIH Public Access Policy requires scientists to submit final peer-reviewed journal manuscripts that arise from NIH funds to PubMed Central immediately upon acceptance for publication."

    - PubMed Central : https://www.ncbi.nlm.nih.gov/pmc/?db=PMC

        - Previously: within 12 months of publication

    - Some publishers will deposit manuscripts in PMC for authors

NASA's Public Access Plan
for Increasing Access to the
Results of Scientific Research
(Digital Scientific Data, Software, and Peer-Reviewed Publications)

February 21, 2023

Revisions

This section highlights the significant changes to this document since the original plan was released in 2014. To wit:

- There shall be no publication embargo period for peer-reviewed publications

- Data that support peer-reviewed publications shall be made available in a public archive at the time of publication

- Software should be included as part of Open Access, , subject to NASA software release requirements

- Software used to generate research findings/results should be made available in a public archive at the time of publication

- Other data products beyond peer-reviewed publications and software should be considered as part of Open Access

Example: NASA Public Access Plan 2023

OA Journals and licensing

How to locate Open Access journals

- Use the <u>Directory of Open Access Journals</u>
  - Avoid journals **not** in DOAJ, they may be "predatory"
- First OA publisher PLoS now has several spin-offs
- Many prominent scientific publishers (Springer, Wiley, Elsevier) have fully open access journals
- Swiss publisher <u>MDPI</u> has only OA journals

How Open Access works for the author

- With "hybrid" journals, author pays Article Processing Charge, which may be quite expensive

- Solutions include grant funding, library OA fund, publisher Read & Publish Agreements

- With "gold" OA journals, OA publishing is free - a good way for new researchers to get work out there

- Just make sure faculty advisor(s) are OK with it!

RowanUniversity

LIBRARIES

Copyright and licensing

- If you choose a gold Open Access journal, be sure co-authors retain Copyright, not publisher

- Copyright is an important legal right to own the work you created ->do you have it?

- Find out or choose <u>Creative Commons</u> license – CC-BY-4.0 is most common, see next slide for options

Creative Commons Open Access Licenses

CC-BY: Allows most re-use of content as long as <u>attribution</u> is given to original creator.

CC-BY-SA: May re-use only if you license any modified material under <u>identical terms</u>.

CC-BY-NC: Only <u>noncommercial</u> uses are permitted.

CC-BY-NC-SA: combines first three licenses

CC-BY-ND: No derivatives or adaptations are permitted.

CC-BY-NC-ND: Combines first 3 licenses, plus ND: No derivatives or adaptations of the work are permitted. Strictest license.

Implications of Open Access

"Open Access is the ==free, immediate, online availability== of research articles combined with the ==rights to use== these articles fully in the digital environment." (SPARC)

What are some possible issues with research results being freely available online?

Rowan University

LIBRARIES

Possible problems with Open Access

- Other researchers (anywhere in the world) could steal or take credit for your results

- They could claim they actually found them first, and/or publish them as their own

- They could file a patent before you do, or start organizing a company to commercialize results first

RowanUniversity
LIBRARIES

But professionals don't behave that way, do they?

- Unfortunately yes, some do –
- Sadly, there are unscrupulous people in every field of human endeavor
- STEM faculty are aware of potential for abuse
- Advisors should say if research is valuable enough to require precautions against theft
- *Faculty are busy, so you need to bring it up*

RowanUniversity

LIBRARIES

How to not publish Open Access

How do I "decline" Open Access?

- You're responsible for reading everything you sign: don't sign anything without reading it!

    - This includes online agreements with no actual signature, such as when submitting your thesis or dissertation or an article to a journal

- Talk to your research advisors before you agree, and follow their advice — maybe Open Access is fine, but maybe it isn't!

RowanUniversity

LIBRARIES

Embargoes on Theses and dissertations

- Your thesis or dissertation must be archived in Digital Dissertations & in Rowan Digital Works

  - Should you request an embargo?

- Embargo options are **6 months, 1 year, or 2 years**; can be further extended with university permission

- Your work will be unavailable to read or download until specified time period is up

Other ways to avoid Open access

- Postpone publication until you've had a chance to file a patent application, if necessary

- Don't select a "Gold OA" journal for publication

- Decline Open Access publication option if offered (many journals are "hybrid" now)

- Opt not to archive research poster in RDW if asked

Alternative way to publish Open Access

- Many publishers will let you put pre-publication copy of work in a public repository - called "Green Open Access"

- Rowan Digital Works is our local option for archiving "accepted manuscripts"

- Preprint repositories (ArXiv and others) exist online for most science and social science fields

Summary

- Consider Open Access publication, but be cautious

- Once Google chatbots index something, it is always findable – even if it's been taken down

- Don't assume it's OK to make your research publications open to the world – always talk to your advisor first

- Ask your faculty advisor if your research has commercial potential or if there are plans for journal publication

Rowan University
LIBRARIES

Time for Q & A

Rowan University
LIBRARIES