My experiences with open access publishing as an early-career researcher

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I began my research career here...

At many large research universities, researchers don’t see the access problem.
...then I graduated and things changed

Many students and postdocs lose access when they graduate or change jobs.
I moved to Puerto Rico to work with students
Students struggled to access literature for their research
Real emails from my students needing access

To: "Prof. Erin McKiernan" <emck31@gmail.com>
Tue, Feb 14, 2012 at 1:22 AM
Hi Erin! I found this article and I want to read it, but I have to pay for it. Can you download it for me?

To: "Prof. Erin McKiernan" <emck31@gmail.com>
Thu, Mar 15, 2012 at 4:26 AM
Hi Erin. I need help, can you download these two articles for me? Its for my other research.

To: "Prof. Erin McKiernan" <emck31@gmail.com>
Sat, Mar 17, 2012 at 5:37 PM
Hi Erin. Another download, please? I feel ashamed asking you again, but I can't download them. I tried going through UPR Library but it didn't work.
Then I moved to Mexico...
Some institutions in Mexico have insufficient access

The National Institute of Public Health is a federal research institute.

~300 researchers, ~700 students

Access at INSP:

- **139** journals in total accessible via institute
- 88 journals in total with electronic access
- 66 journals with electronic access via paid subscriptions
- 22 journals with free electronic access provided by publisher
- 51 print-only journals (e.g. Cell, Nature, Science)
- access to select journals through consortium (CONRiCyT)

Photo: Delmoral815, via Wikimedia

Thanks to Edgar Aguilar Vera at INSP for info.
High costs of subscriptions are prohibitive

Researchers in the institute study Chagas’ disease, cholera, dengue, HIV, influenza, malaria, tuberculosis...

INSN does **NOT** have access to:

- Annual Reviews of Medicine
- Current Biology
- Nature Medicine
- Nature Immunology
- PNAS
- ...and MANY more

What is the limiting factor? **COST**.

Photos: Erwin Huebner (top); Jamas Gathany (middle); C. Goldsmith (bottom) via Wikimedia Commons
The last time I will ever do this
What can I do as an individual researcher to improve access?
My pledge to be open

- I will not edit, review, or work for closed access journals.
- I will blog my work and post preprints, when possible.
- I will publish only in open access journals.
- I will not publish in Cell, Nature, or Science.
- I will pull my name off a paper if coauthors refuse to be open.

If I am going to 'make it' in science, it has to be on terms I can live with.
Concerns of early-career researchers

Early-career researchers: What would you like to know about #openaccess? What concerns you about #OA? What resources help you be open?
Cost is a concern

@emckiernan13 @CitizenAcademic

cost! Especially for non funded research.
Don’t have $$$ for high APCs? Neither do I

...and your first born child.

John R. McKiernan, CC BY-NC-ND
So I went with PeerJ

I could pay one-time $99 fee out of pocket as a highschool math teacher.

Effects of manipulating slowpoke calcium-dependent potassium channel expression on rhythmic locomotor activity in *Drosophila* larvae

**Erin C. McKiernan**

*Published* March 26, 2013

*PubMed 23638395*

November 29, 2013: *(Minor Correction)* The author would like to identify a typo. In Table 1 (pg. 8) in the last column to the right, the p-value for the statistical comparison of burst duration between groups says >0.05. It should say <0.001. It is correct in the text description of the results (pg. 10)
Being open doesn’t have to break the bank

- Many OA journals do not charge.
- Journals like PeerJ have one-time low-cost membership fees.
- Many journals have waivers.
- Many institutions have OA publisher memberships.
- Many institutions have OA publishing funds.
- Some funders pay for APCs.
- Self-archiving costs nothing.

★: I’ve used this option to go OA.
Quality is a concern

@liedra @emckiernan13 @CitizenAcademic Sadly many many people say "OA is great but I don't want to do it because it looks bad"

@emckiernan13 My experience has been less critical peer review from OA-only journals, though I do support OA whatever the journal!
Is peer review in open access journals broken?

Image: Gideon Burton via flickr
Publishers give their 'evidence'

Who's Afraid of Peer Review?
John Bohannon

A spoof paper concocted by Science reveals little or no scrutiny at many open-access journals.

Academics criticize Bohannon piece:
svpow.com/2013/10/03/john-bohannons-peer-review-sting-against-science/
Where is our evidence that it doesn't look like this?
The evidence is in the reviews

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You can read every criticism and every change!

If academics can read reviews, they can see for themselves that process is rigorous.
Use open reviews to your advantage

Establish timeline in transparent way:

Summary

- The initial submission of this article was received on December 7th, 2012 and was peer-reviewed by 2 reviewers and the Academic Editor.
- The Academic Editor made their initial decision on January 22nd, 2013.
- The first revision was submitted on February 24th, 2013 and was reviewed by the Academic Editor.
- The article was Accepted by the Academic Editor on March 5th, 2013.

Highlight positive comments:

“..this is an interesting study that adds value to the field”

“The experimental paradigm is clear and the analyses and methods are solid”

[From open reviews of my 2013 PeerJ article]
OA journals offering open peer review

- BioMed Central
- F1000Research
- PeerJ
- life
- BMJ
- GIGA
- ROYAL SOCIETY OPEN SCIENCE
Making an impact is a concern

@liedra @emckieriannan13 @CitizenAcademic Probably important to discuss impact and how it affects your chances to get a job.

8:30 PM - 6 Nov 2014
Too many institutions worship impact factor

More info: Stephen Curry occamtypewriter.org/scurry/2012/08/13/sick-of-impact-factors/

Also: Brembs et al., 2013. Frontier in Human Neurosci., doi: 10.3389/fnhum.2013.00291

Image: John R. McKiernan
Has OA publishing ever hurt my career?

YES. My PeerJ article didn’t count in evaluations because no journal IF.

Speaks to faulty evaluation criteria - this should NEVER happen.

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PubMed ID: 23638395
So let’s change evaluation criteria

500+ organizations and 12,000+ individuals have pledged:

- **not** to consider journal-based metrics (JIF) in hiring, promotion, or funding decisions
- the content of a paper will be weighed more heavily in evaluations than the journal in which it was published
- to consider the value and impact of all research outputs

Have YOU signed yet? [am.ascb.org/dora/](http://am.ascb.org/dora/)
Coauthor and mentor opinions are concerns

@emckiernan13 I love #open access! My coauthors aren't always convinced. How to convince them?

@emckiernan13 how can I persuade my boss/prof to publish in OA journals when they want to publish in their existing places

7:06 PM - 6 Nov 2014

10:05 AM - 7 Nov 2014
Discussing OA with your mentor

- Ask your mentor for a meeting to discuss publishing options
- Put together concise (15 mins max) presentation on benefits of OA
- Include data (lack of access worldwide, advancements made through open science, open citation advantage)
- Explain how your work and the lab could benefit from being open
- Create a list of OA options and share this list with your mentor
- If your mentor insists on a toll access journal, discuss submitting an author addendum (see SPARC)
- Start these discussions EARLY!!

From interview with ARCSCon at arcscon.tumblr.com/post/84942060277/advocating-for-openness
I’m sharing these lists with my PI and coauthors
Show them the stories of people without access

Who needs access? You need access!
Public access to scientific research makes all our lives better

Recent Posts
- Sunanda Shitole, agricultural officer
- Satyabrata Maiti, Director, Directorate of Medicinal and Aromatic Plants Research
- Niek Huizenga, young entrepreneur and IT specialist
- Christy Collins, mother and M-CM patient advocate
- AnnMaria De Mars, small business founder

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- Translators

whoneedsaccess.org
Early-career researchers can make a difference
ECRs can advocate for change

Open Letter to The American Association for the Advancement of Science


Opinion: OA Advocates Slam *Science Advances*

Proponents of open-access publishing question the newly announced terms of publishing in the American Association for the Advancement of Science’s forthcoming journal.

By Dalmeet Singh Chawla | August 13, 2014

Scientists criticise new “open access” journal which limits research-sharing with copyright

Restrictive copyright licenses and expensive submission fees have led to a significant number of scientists to criticise *Science Advances*, a new journal due to launch next year, for failing to live up to its open access principles.
Open letter to the Society for Neuroscience


Dear Dr. McKiernan:
We received your letter regarding eNeuro, the new open-access journal from the Society for Neuroscience.

In the ever-changing environment of scientific publishing, we appreciate your interest in the issues relating to launching an online-only journal. As we move forward with this new SfN effort, we are committed to taking into consideration all of the many facets of online publishing and how they affect the audiences concerned: the general public, scientists, authors, and the field.

With that in mind, we appreciate your letter and its contributions to the dialogue about eNeuro, and to the broader discussion of scientific publication in the digital age.

Sincerely,
Allen

Allen Segal
Senior Director, Communications & Public Affairs
You can make open access reality

“You all represent the future, and it is now” - Jon Tennant

“The revolution is launched” - Peter Murray Rust

“People making change for the better” - Ross Mounce

Photo: Aloysius Wilfred Raj, CC BY