Open Access Ambassadors. Dec. 3-4, 2014. Munich, Germany.

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

#### Erin C. McKiernan

Postdoctoral Fellow Department of Psychology Wilfrid Laurier University

Visiting Scholar Institute of Mathematics National Autonomous University of Mexico

# I began my research career here...

At many large research universities, researchers don't see the access problem.



University of Arizona; Photo: Huperphuff via Wikipedia, CC BY 3.0

# ...then I graduated and things changed

Many students and postdocs lose access when they graduate or change jobs.



Image: retrographix.com

# 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: "Profa. Erin McKiernan" <emck31@gmail.com>

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: "Profa. Erin McKiernan" <emck31@gmail.com>

Hi Erin. I need help, can you download these two articles for me? Its for my other research.

Sat, Mar 17, 2012 at 5:37 PM

To: "Profa. Erin McKiernan" <emck31@gmail.com>

Hi Erin. Another download, please? I feel ashamed asking you again, but I cant download them, I tried going through UPR Library but it didn't worked.

Tue, Feb 14, 2012 at 1:22 AM

Thu, Mar 15, 2012 at 4:26 AM

# Then I moved to Mexico...



Photos: Tina Godoy

# Some institutions in Mexico have insufficient access



Photo: Delmoral815, via Wikimedia

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

 $\sim$ 300 researchers,  $\sim$ 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)

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...

INSP 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?



Storified by PLOSLabs at storify.com/PLOSLabs/what-can-openaccess-do-for-you?

### Cost is a concern



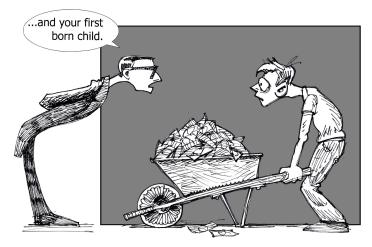


# @emckiernan13 @CitizenAcademic cost! Especially for non funded research.



7:05 PM - 6 Nov 2014

# Don't have \$\$\$ for high APCs? Neither do I



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 calciumdependent 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)

#### > Author and article information

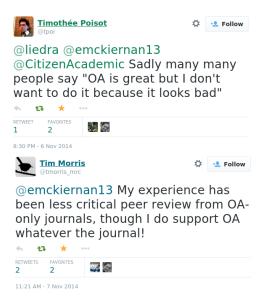
> Abstract

# 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. ★
- $\star$ : I've used this option to go OA.



# Quality is a concern



# Is peer review in open access journals broken?



Image: Gideon Burton via flickr

# Publishers give their 'evidence'



#### 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?



Image: John R. McKiernan, CC BY-NC-ND

# The evidence is in the reviews



Effects of manipulating slowpoke calciumdependent potassium channel expression on rhythmic locomotor activity in *Drosophila* larvae

Erin C. McKiernan

Published March 26, 2013 PubMed 23638395

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



(GIGA)<sup>n</sup> SCIENCE

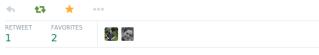
ROYAL SOCIETY OPEN SCIENCE

# Making an impact is a concern





@liedra @emckiernan13
@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



Image: John R. McKiernan

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

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

# 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.



Introduction
Methods
Results
Discussion
Conclusions
Supplemental Information
Additional Information and Declarations

Effects of manipulating slowpoke calciumdependent potassium channel expression on rhythmic locomotor activity in *Drosophila* larvae

Erin C. McKiernan

PubMed ID: 23638395



# So let's change evaluation criteria

# San Francisco

**Declaration on Research Assessment** 



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/

# Coauthor and mentor opinions are concerns

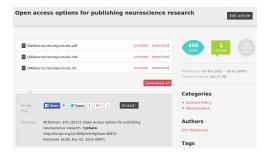


# Discussing OA with your mentor

- 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



#### **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

#### Categories

- Artists
- Developing world
- Fossil preparators
- Independent Researchers
- Nurses
- Patient Groups
- Patients
- Research facilitators
- Research organizations
- Researchers
- Small businesses
- Teachers
- Translators

#### whoneedsaccess.org

# Early-career researchers can make a difference

# ECRs can advocate for change

TOPICS AUTHORS GRAIN & CHAFF

WINNOWER

SUBMIT

BLOG

ABOUT

#### Open Letter to The American Association for the Advancement of Science

Jonathan P. Tennant, Timathée Painst, M. Fahiana Kuhke, François Mitchonneau, Michael P. Tayler, Graham Steel, Jérémy Anguetin, Emily Ceyte, Benjamin Schwesninger, Erin C. McKiernan, Tom Pallari, Ainnee Zekert, Liz Allen, Dahmeet Singh Corvola, Elizabeth Silva, Nitobala Gardner, Nutham Cantley, John Dapuit, Christinn Pekas, Amy Buckland, Lenny Teytelman, Zen Faulkes, Robert J. Gay, Peter T. B. Brett, Andere Ekhand, Johannes Björk, William Guan, Philippe Degardins-Preuks, Jaseph R. Hanceck, Johna M. Nicholon, Scott Edminad, Steven Ray IVilon, Staart Buck, B. Arman Akoy, Nazeefa Fatima, Ross Maune, Heather Prevouer, Avinah Tisrmahal J, Jason Priem , Clayton Aldern, Marcus D. Harwell, Kristen L. Markaver, David Michael Roberts, Brinn Hole, Alexander Grossmann, David L. Yaux, John Martagb, Alexia Carter, Alex O. Hokomke, Ignairo Terres Aleman, Sarab Mulloy, John Lamp, Matthew Told, Anuaho Senevirathe, Guide Guidotti, Joseph McArthur, Carlos H. Grohmann, Jande Lezeuw , Jung H. Choi, Erneto Priego, Brian Pauley, Staty Konkid, Elizabeth HB Hellen, Raphael Levy, Paul Coxon, Nitika Pant Pai, David Carrell, Jacinto Dávila, Marce Arieli Mererna-Valkez, Juan Paklo, Alerin, Jan P. de Kuiter, Xiaruwen Ckon, Janneth Hatherill, Katharine Mullen, Pedro Bekinschetin, Quantin Groom, Karen Meijer-Klim, Petero Gatti-Lafranconi, Jeffrey Hellister, Lacklan Cain, MoeYaung Choi, Osar Patterson-Lomba, Rowena Ball, Daniel Swan, Stephen Curry, Abigai Noye, Jordan Ward, Ben Meghrehlinn, Ethan P. Wite, Sam R. Mulauhy, Sihole Faunts, Lerena A. Barba, Ed Tvelloep, Stephen Beckett, Andrew D. Steen, Mari Saro, Noam Ras, Erika Amir, Martin Paul Eve, Franco Cecki, Jason B. Colditz, Philip Spear, Mythil Menon, Matthew Calpaham, Karl W. Breman, Trage, Tom Crick, Diano F. Marrone, Jaopé Krau, Steven Barbé, Gacins Simpson, Callem Morgan, Kara Weo, Peter Marrow-Rut

The Winnower 1:e140813.35294 (2014). DOI: 10.15200/winn.140813.35294

# Open letters can have amazing reach



# 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



HOME NEWS

# 'Shock and derision' as Kent Anderson named Science publisher

28 AUGUST 2014 | BY PAUL JUMP

Open letter from researchers decries AAAS journal's high fees and points to Anderson's combative views on open access PRINT



 Home
 The Staggers
 Politics
 CityMetric
 Culture
 Blogs
 Business
 Events
 Per

 The Staggers
 | Cultural Capital |
 Mehdi Hasan |
 Laurie Penny |
 Helen Lewis |
 Musa

 Glosswitch |
 Caroline Crampton |
 Future Proof |
 Sarah Ditum |
 Jonn Elledge |
 Myria

# 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.

BY FIONA RUTHERFORD | PUBLISHED 29 AUGUST, 2014 - 13:22

# Keeping the pressure on

TOPICS AUTHORS GRAIN & CHAFF

WINNOWER

SUBMIT

BLOG

ABOUT

#### Open letter to the Society for Neuroscience

Erin C. McKiernan, Marce Arich Herrenz-Valdez, Christopher R. Madan, Philippe Deajardims-Poulik, Anders Ekland, Makiana Kubke, Alex O. Holombe, Concham Betel, Diano F. Marrone, Charles Oppenheim, Zen Faulkas, Jonathan P. Temmant, Valokas M. Gardner, Avinash Thirumalai, Tvavis Park, Ben Megherebian, Sean Kaplan, Chris Chamber, Johom M. Nichelson, Jaw Vetterop, Timothér Pointo, Jérémy Anguetin, Lizz Allen, Johanne Birr, Ross Mannee, Seett Edatumati, Mayde Craz-Aponte, Nazeefa Fatima, Nitika Pant Pai, Elizabeth Silva, Björn Brembs, Gerard Ridgeay, Pietro Gatti-Lafranconi, Xianwen Chen, Jacinto Dávila, Benjamin de Bivort, Stephen Beckett, Mythili Menon, Aldam Cheraziak, Grabam Triggs, Guillaume Dumas, Jeffrey W. Hollister, Célya Gruon-Daniel, Gary S. McDoveell, Pierre-Alexandre Klein, Julien Laroche, Alex Thome, Nicolas Guyon, Sibele Fausto, Nonie Finlayson, Dalmeet Singb Chavala, Jobn Wilbanks, David Carrell, Noelia Martínez-Molina, Maximilian Sloan, Stephen Eglen, Jayob F. Hunock

The Winnower 1:e140865.54468 (2014). DOI: 10.15200/winn.140865.54468

# Let's expect more from scholarly societies

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