



# Our mission is to speed up science by harnessing the power of peer review

### Agenda

- Why did we start Publons?
- How does Publons work?
- Interesting problems we've had to solve
- A couple of insights from the data
- How can this help editors?



# Peer review is the best method we have for evaluating research



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# Journal of publication is the best indicator we have for outcome of peer review



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# Journal of publication is the best indicator we have for outcome of peer review

Every journal article needs to be peer reviewed



Massive pressure to publish



Minimal incentive to review



#### Massive pressure to publish



- Increasing submissions
- Increasing rejections
- Reviewer fraud

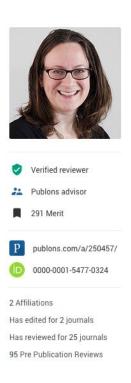


- Slow review process
- Reviewer fatigue





## Providing an incentive to peer review is the first step to solving these problems



#### Elisabeth M. Bik

Research Associate - Department of Medicine, Stanford University & Editorial Board Member - ISME Journal & Editorial Board Member - Frontiers in Microbiology &

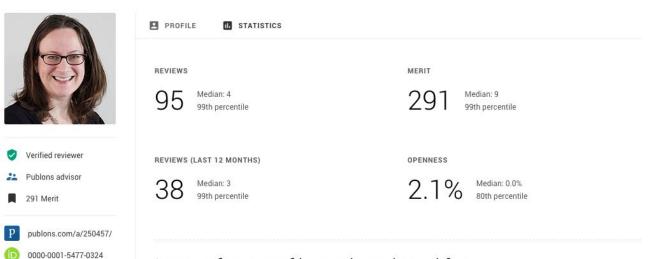
#### BIO

Elisabeth Bik is a Research Associate at the Department of Medicine, Division Infectious Diseases, at Stanford University's School of Medicine. She currently works on the microbiota analysis of marine mammals and children with inflammatory bowel diseases.

#### HAS EDITED FOR The ISME Journal Frontiers in Microbiology npg HAS REVIEWED FOR 0. PLOS ONE npg The ISME Journal Journal of Applied Microbiology 60 Pediatrics WILEY Dental Research Journal npg Clinical and Translational Gastroenterology Show more ....

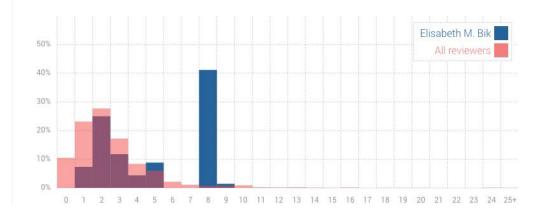
#### PRE PUBLICATION REVIEWS

- Aug 2015 ✓ Reviewed for PLOS ONE
- Aug 2015 ✓ Reviewed for Clinical and Translational Gastroenterology
- Aug 2015 ✓ Reviewed for Pediatrics
- Aug 2015 ✓ Reviewed for The ISME Journal
- Aug 2015 ✓ Reviewed for PLOS ONE



#### Impact factors of journals reviewed for

The distribution of the impact factors of journals Elisabeth M. Bik has reviewed for.



2 Affiliations Has edited for 2 journals Has reviewed for 25 journals 95 Pre Publication Reviews

#### Add to your CV

#### ...and your LinkedIn

Verified Peer Review Record PREPARED BY PUBLONS ON SEPTEMBER 18TH 2015 <sup>•</sup>publons

#### Dr. Pierre Rêveur

https://publons.com/a/0

#### Peer Review Summary

Reviewed 56 manuscripts for journals including Journal of Biological Chemistry and Journal of Agricultural and Food Chemistry, placing in the 97th percentile for verified review contributions on Publons as at September 2015.

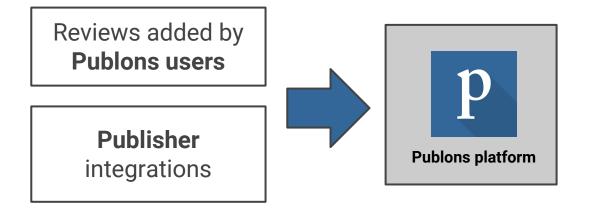
200 11	Journal of Biological Chemistry
100	
3	Journal of Agricultural and Food Chemistry
<u> </u>	Bioscience Reports
	Frontiers in Plant Science
- T	Plant Proteomics
5	Frontiers in Plant Physiology
🔶 🔤	Journal of Proteome Research
AL 2	Journal of Proteomics
<b>2</b>	Cell Stress and Chaperones
2	Plant Physiology
Q 1	PLOS ONE
2	Acta Physiologiae Plantarum
冠 1	Trends in Plant Science
2 1	Biochemical Journal
• <b>)</b> 1	Critical Reviews in Biotechnology
Θ 1	Functional Plant Biology
711 1	Gene
<b>2</b>	Plant Cell Reports
冠 1	South African Journal of Botany
0	Biochemistry Research International
- 1	Plant Systems Biology

p	Andrew R. H. Preston Publons Peer Review Profile
	Andrew R. H. Preston 📃 Global average
Revi	ews performed in the last 12 months
Publ	ons merit
Jour	nals reviewed for
AIP	JOURNAL OF APPLIED PHYSICS
	RADIATION PHYSICS AND CHEMISTRY
© 2015	Publons

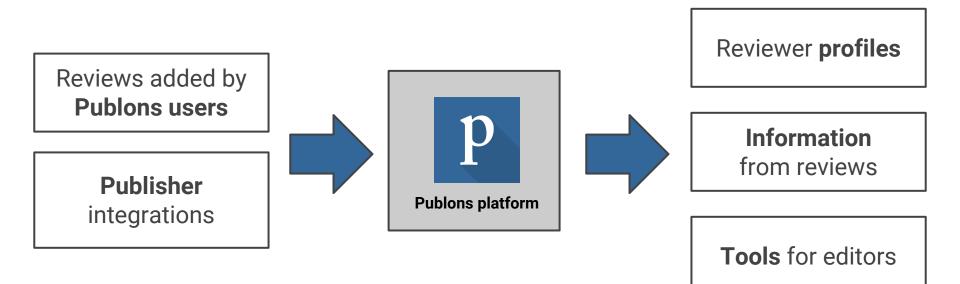
### **Top reviewers**

Reviewers			CLEAR ALL
Name		General research field Physics and Astronomy	•
University		Specific research field Condensed Matter Physics	•
REVIEWER	RESEARCH FIELD	UNIVERSITY	MERIT ¥
Nam-Trung Nguyen	Materials Science, Condensed Matter Physi	Griffith University	528
Marco Rossi	Materials Science, Condensed Matter Physi	Sapienz University of Rome	518
Thomas Walther	Condensed Matter Physics	University of Sheffield	420
Ivan C. Christov	Mathematics, Condensed Matter Physics	Purdue University	414
MF Mariana Fraga	Engineering, Condensed Matter Physics	Instituto Tecnológico de Aeronáutica	375
DK Daniel Kiener	Materials Science, Condensed Matter Physi	Montanuniversität Leoben	357
Timm Krueger	Condensed Matter Physics	University of Edinburgh	342
PE Patrice Estellé	Engineering, Condensed Matter Physics	Université Rennes I	321

# Publons collects reviews and turns them into a verifiable, measurable research output



# Publons collects reviews and turns them into a verifiable, measurable research output



<b>50k</b>	<b>220k</b>	<b>7k+</b>
reviewers	reviews	journals

## **4,000+** organic reviews last week









## **100+** integrated journals

### Key challenges

- Verification
- Privacy settings
- Reviewer identity

2015	✓ Reviewed for Scientific Reports
Oct 2015	✓ Reviewed for Journal of Molecular and Genetic Medicine
2015	✓ Reviewed for Future Microbiology



### **Key challenges**

- Verification
- Privacy settings
- Reviewer identity

Privacy	
Show journal & article title	•
Choose whether review content should be displayed by	default
shouse whether review content should be displayed by	uerault.
Content	

Now factor in:

- Reviewer preference
- Author preference
- Journal preference



### **Author interactivity**

Follow publications to track their activity			
Publication Title		Publication DOI	
I am an author of this publication			ADD
TITLE *	JOURNAL	ACTIVITY	
The Future of Academic Research DOI:10.6084/m9.figshare.871466	Figshare	★員⊙目	Remov
-Readers Are More Effective than Paper for Some with Dyslexia OI:10.1371/journal.pone.0075634 Ioles: Author	Plos One	公口收口	Remov Hide review conter
trategies for containing Ebola in West Africa 01:10.1126/science.1260612 oles: Author	Science	☆□⊗□	Remov Show review conter

### Key challenges

- Verification
- Privacy settings
- Reviewer identity

Add any email addresses you would like to send review receipts from. If we ever need to contact you we will do so via your primary email address.		
EMAIL	PRIMARY	VERIFIED
andrew.preston@gmail.com	۲	~
andrew@preston.co.nz	0	~
andrew@publons.com	0	~

#### Reviewers have added up to 9 different email addresses



#### How is this a network?

Reviewers

Authors

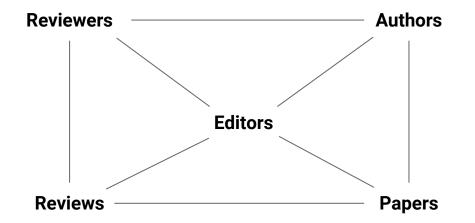
Editors

**Reviews** 

Papers



### How is this a network?







## Insights

### Published and unpublished reviews

	Unpublished	Published	
Word count	518.6	586.1	
Positive sentiment	3.2%	3.5%	
Negative sentiment	2.6%	2.8%	
Self-citation rate	4%	6%	

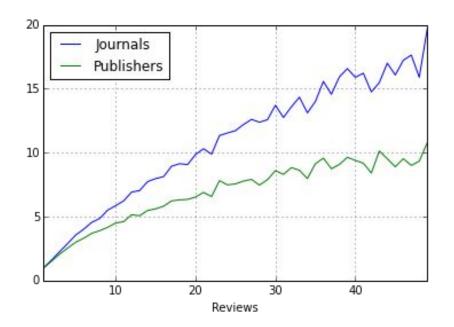


2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

#### **Reviewers are publisher agnostic**

For reviewers who have done 10 reviews:

- they reviewed for 5.9 different journals
- they reviewed for 4.5 different publishers





### The editor perspective

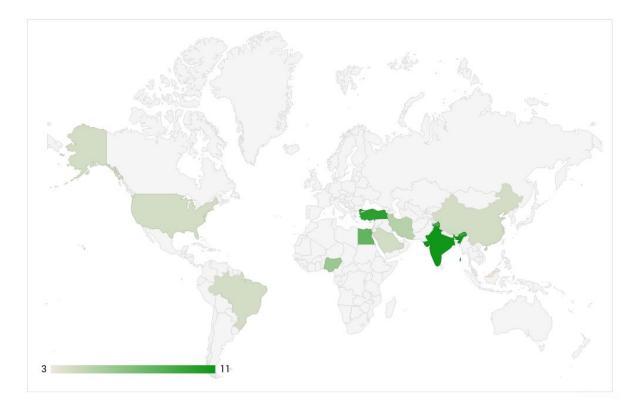
#### Journal overview

A brief overview of your journals. Click each journal to see more details.

Period: 2015 | Jan '15 | Feb '15 | Mar '15 | Apr '15 | May '15 | Jun '15 | Jul '15 | Aug '15 | Sep '15 | Oct '15 | Nov '15

JOURNAL	CONTENT	PRIVACY	REVIEWERS	REVIEWS	UNVERIFIED	SIGNED	PUBLISHED	CLICKS	ENDORSE
Human & Experimental Toxicology	Unpublished	Journal	24	99	1	1	2	31	5
Volecular Ecology	Unpublished	Journal	20	32	0	0	0	33	3
Publons			0	0	0	0	0	1	0
otal			44	131	1	1	2	65	8

### Where do our reviewers come from?



### Where else do they publish?

ANK	JOURNAL	PUBLISHER	SIMILARITY
	Proceedings of the Royal Society B: Biological Sciences	The Royal Society	3
	The ISME Journal	Nature Publishing Group	3
	Applied and Environmental Microbiology	American Society for Microbiology	2
	Environmental Science and Pollution Research	Springer	2
	BMC Evolutionary Biology	BioMed Central	2
	Biological Conservation	Elsevier	2
	Global Change Biology	Wiley	2
	Science Advances		1
	Biodiversity and Conservation	Springer	1
0	Graelisia	Instituto Espanol de Entomologia del Consejo Superior de Investigaciones Cientificas	1

#### Who are they? And who else should I be considering?

#### Top reviewers

#### Most engaged reviewers over this time period.

REVIEWER	REVIEWS	ALL REVIEWS
Ahmed E. Abdel Moneim	3	12
ADIL MEHRAJ KHAN	3	20
Mahmoud Ghazi-khansari	2	6
Ali Shalizar Jalali*	2	106
Lesley Ann Stanley	1	2
Milena Veskovic	1	17
Mustafa Erboga	1	5
Afshin Mohammadi-Bardbori	1	1
Abdel-Rahman B. Abdel-Ghaffar*	1	2
Ione Stanley	1	71

#### Suggested reviewers Calculated based on review history. REVIEWER MERIT CONTACT Jaspinder Kaur 196 Contact Toru Watanabe 1406 Contact Andrea Borghini 145 Contact Alexander Berezin 240 Contact Sandro Percario 233 Contact Ashish Anand 299 Contact Sahar Mohamed Kamal 171 Contact Dr Triveni Krishnan 306 Contact Mario Ciampolini 105 Contact

Mohamod M Abdal Daim

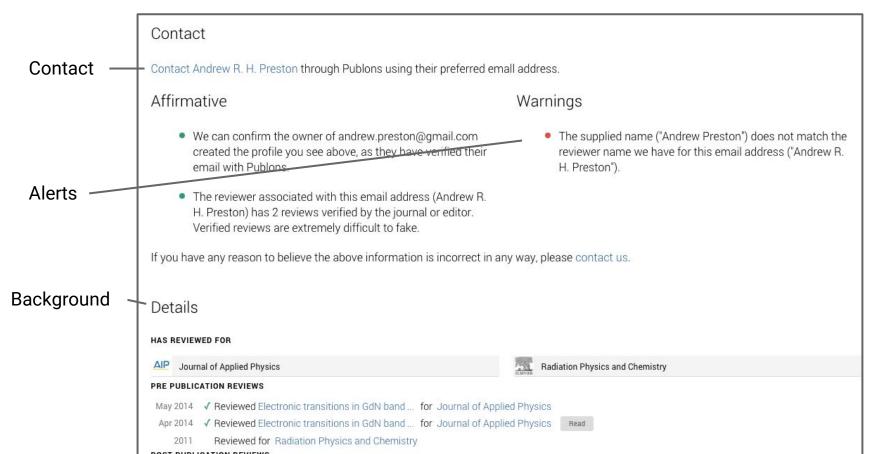
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Contact

### **Can I trust this reviewer?**

creen reviewer		
ook a condidate reviewer's histor	y by optoring their email address	
eck a candidate reviewer's histor	/ by entering their email address.	
eck a candidate reviewer's histor	y by entering their email address.	

#### **Can I trust this reviewer?**



Happy to collaborate on research projects

### (We have an API)





## Publons Speeding up and evaluating research

### andrew@publons.com @arhpreston