Science communication, reputation and quality

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STM Innovations, Dec 2nd 2015
Let’s get this bit out of the way first...

The best way to build a good reputation is to do good work.
Online reputation

• Build your personal brand as a researcher
  – Competition for grants, positions is tough
  – Finding collaborators can be a bit of a crapshoot
  – Equivalent of conference networking, but without the travel budget

• You can do this online, offline or both, but if you don’t do it at all your career will suffer

• Promoting your own work (speaking, poster sessions, online) is part of this
Should / do researchers expect journals to do all of the dissemination & promotion of their work?

Back in the summer of 2012, I wrote a post outlining 60 things journal publishers do (with many of these applying to publishers of books and other scholarly formats, as well). The post was written because journal publishers have been under pressure to prove that they add value beyond managing peer-review and doing some basic copy editing and
A word like “Huh?”—used when one has not caught what someone just said—appears to be universal: It is found to have very similar form and function in languages across the globe. This is one of the findings of a major cross-linguistic study by researchers Mark Dingemanse, Francisco Torreira and Nick Enfield, at the Max Planck Institute for Psycholinguistics in Nijmegen, the Netherlands. The study was published in the journal PLOS ONE.


If you want to know more about the study, we recommend reading the paper itself. Here we provide the following:

1. a quick overview of our key findings and methods
2. an FAQ covering some misinterpretations we encountered
3. a selection of the media coverage our work has generated
Influence

“Our paper was rejected by the first two journals we submitted to”
“Our aim [was] increasing public awareness of consensus”
Raised funds for OA fee by crowdfunding on Skeptical Science blog

Ninety-seven percent of scientists agree: #climate change is real, man-made and dangerous. Read more: OFA.BO/gJsdFp

@dgrwhippet this paper examines 11,944 climate abstracts, 97.2% suggest that humans are causing climate change iopscience.iop.org/1748-9326/8/2/...
"Many published reports were based on tertiary sources and most of the "reporters" have never read the original article, although it is freely accessible in the internet. The message of our article was reduced to the statement that dogs prefer to face northwards when defecating. (Something we never claimed.)"
As publishers we should...

- Recognize that online reputation is important for many authors and that not all kinds of attention are equal
- Help authors see what others are saying and where
- When actually promoting work, attention ≠ influence ≠ impact, ask what is the author after?
Quality
"A downy mildew effector attenuates salicylic Acid-triggered immunity in Arabidopsis by interacting with the host mediator complex"

Comments (27):

1

Unregistered Submission: (March 3rd, 2014 8:24pm UTC )

Although the story presented in this PLoS Biology paper is quite interesting it falls short in terms of controls and data presentation. The following points were picked up in our journal club:

i) The same image has been used for Fig 4C (a-HA) and Fig 5A (a-HA). According to the labels these blots show different protein samples and different treatments with proteasome inhibitor.

ii) The predicted mw of the GFP-Med19A fusion protein is ~55 kDa (29 kDa GFP + 26 kDa Med19A). In Fig 2G the authors show that GFP-Med19A is detected as multiple bands between 50-70 kDa. Therefore the decision to cut the a-GFP membrane in Fig 5A in two with one showing free GFP and one showing 70 kDa band only is problematic since the 55 kDa region (expected mw) is probably not shown. One would assume that the 55 kDa signal correlates with 70 and 25 kDa signal. But there's already a difference between 25 and 70 kDa bands in lane 2 compared to lane 1.

iii) The colP in Fig 5A lacks an 'input' blot for GFP.
Dear PubPeer readers

Many thanks to some of you for pointing mistakes in Caillaud et al (2013), and to those of you who made constructive criticisms.

I am pleased to be able to tell you that the corrections to Caillaud et al (2013) have now been published online.
10.1371/journal.pbio.1001909

It is highly embarrassing to discover a mistake from one’s lab getting into the literature, and I apologise for that. Plos Biology was meticulous in screening all the figures for any other errors, and we, and they, are satisfied that the mistakes were confined to Fig 5.

The data presentation errors were confined to the controls. In Fig 5A we had to change all the panels except the one that showed the significant experimental result (with an arrowed band) showing coIP of MED19 with HaRxl44, but not mutant HaRxl44. In the course of reassessing the figures, Dr Caillaud came back to Norwich and repeated the experiment 3 times, and came up with much nicer blots, but the journal wanted to keep the original experiment that was published. We are rock-solid certain that Rxl44 interacts with MED19 and destabilizes it (blocked by MG132), and a mutated Rxl44 does neither.

You can never be too careful

Best wishes for your science

Jonathan Jones
Peer 1: (December 5th, 2014 12:02am UTC)

The commentator's claims have been repeatedly shown to be false by many experts in the field, most notably by the distinguished editorial board of the International Journal of Theoretical Physics (which includes at least four Nobel Laureates). It is well known to many scholars that the commentator's misconceptions about the cited paper stem from his inability to understand basic physics and his poor grasp of elementary mathematics. For a detailed refutation of his nonsensical claims please see http://arxiv.org/abs/1203.2529. For explicit computer simulations verifying the author's theoretical analysis (and for other pertinent information) please see http://www.sciphysicsforums.com/spfbb1/viewtopic.php?f=6&t=115.
Are publishers in a position to help?

• Routine, useful post publication review is missing:
  – Incentive: why do it at all?
  – Context: who is saying it and why?
  – Curation: how do you remove the unhelpful comments?

• This seems like our business.
Real names, associated with a (sort of) independent profile, invite only groups by person hosting the session.
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• This seems like our business.
  Treat as a valid research output, using existing scholarly infrastructure?
  Allow researchers to build reputation by using channels / presence (blog, Twitter account...) that they control?

Initiatives like ORCID?

Curated by the journals themselves?
Do we have a responsibility to the scholarly record to show negative reviews?
Thanks!

@stew / @altmetric

Special thanks to

the
WINNOWER