Dear editor,

We thank the two reviewers for their comments on our paper. Our response to the editors is below; our revised manuscript is marked up with changes in italics and margin notes where appropriate.

Stephen Eglen

Reviewer 1

> This article covers several important developments and describes them clearly. However you do not present a narrative link between the items that explains why you chose these items and not others. I was left wondering what the point of this article was - why you had chosen the items you did? It would make the article stronger (and more interesting) if you explained why and how the items you present help to improve science reporting (and research itself).

The first revision was written very much under tight word constraint constraints; with thanks to the editor for relaxing these constraints, we have now expanded on the points (see margin note R1a).

> Underpinning this problem with the article focus, the title is also too generic and does not clearly explain the contents of the article or the rationale of the article.

We have revised the title with this comment in mind (R1b).

Specific items/comments/questions:

1. The introduction (and the later section on Open Access) feels out of scope of the article - the criticism of greedy publishers at the start and the discussion of open access with the throwaway statement that one of the authors has experienced problems in obtaining APC funds feels polemical rather than a dispassionate discussion which is presented elsewhere in the article. (If this introduction is meant as an abstract it needs to better describe the rationale of the article and what you discuss - with you key conclusions - much as a regular abstract for a research article.)

The introduction was very much meant to be "passionate" respecting our views on the current state of publishing. We have however removed the sentence later int he erport about difficulties of obtaining APC funds to improve the flow of that section of the document.

2. You say that traditional publishing must take responsibility for low levels of reproducibility - why?

See edit R1.2.

3. Preregistration papers - it is important to state that acceptance of the preregistration article does not guarantee acceptance of the subsequent results-based article.

See edit R1.3.

4. Reproducible manuscripts - you may also want to reference Cloud Ocean which allows for sharing and embedding (I think) code within articles - it recently announced a pilot with Nature - see https://medium.com/codeocean/nature-journals-pilot-with-code-ocean-a-developer-advocate-s-perspective-d1f9f35f896e

Added, thank you (edit R1.4).

5. Other recent innovations - this feels like a checklist - it would add value to explain why you have included ORCID - what does it add to ensuring reproducible science? The other items would benefit from a little more explanation of what they contribute (rather than simply what they are)

Done (edit R1.5a, R1.5b, R1.5c, R1.5d, R1.5e).

6. You have not mentioned reporting guidelines and journal policies that advocate the use of these - e.g. the Equator initiative which aims to support authors, editors, peer reviewers on better reporting of science - https://www.equator-network.org - surely this would be included under initiatives to support reproducible science?

TODO. Science TOP?

7. And initiatives to publish negative results? (although there is nothing formal so far as I am aware - are the authors aware of anything about this topic?)

This was effectively inlucded in our first revision where we described an increase in null results reported (ref 7) from pre-registered studies.

Reviewer 2

p3, last line of 'Funder mandates…'. The authors cite 'green and diamond OA'. Don't they mean 'green and gold OA'? In any event, it would be helpful here to provide an explanatory sentence about these different forms of OA.

TODO