



American Society of Plant Biologists

Cultivating a better future through plant biology research

ASPB and Open Peer Review

Jennifer Regala

Managing Editor, *The Plant Cell* and *Plant Physiology*

OPEN PEER REVIEW: IS IT FOR US?



IS OPEN PEER REVIEW FOR US?

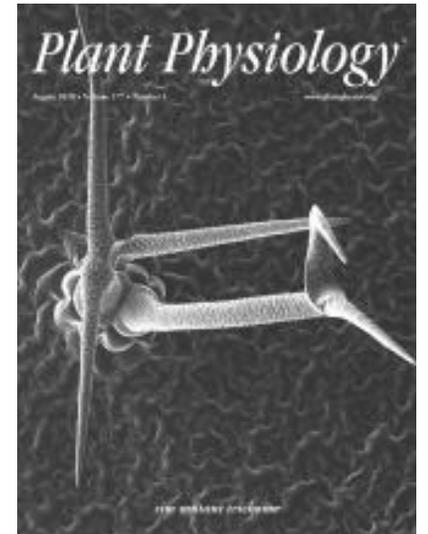
There Are Many Questions To Ask...

1. What are the costs involved?
2. What is required of your journal staff?
3. What does your journal's editorial board think?
4. How will your organization define "open peer review"?
5. Will you seek permission to publish peer review reports from reviewers and authors, or will sharing of these reports be a condition of publishing in your journal?
6. What are your competitors doing?
7. What do your authors, readers, and members of your community at large want?



Plant Physiology[®]

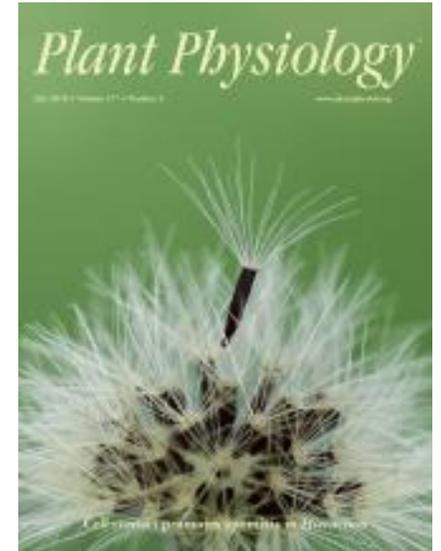
- *Plant Physiology* is a monthly journal
- ASPB's largest publication (volume)
- Most frequently cited plant biology journal
- *Plant Physiology* does not offer open peer review as of April 2019
- The editorial board of *Plant Physiology* keeps open peer review as a standing item on its agenda (to be discussed June of 2019)



Plant Physiology[®]

WHY Doesn't *Plant Physiology* Currently Support Open Peer Review?

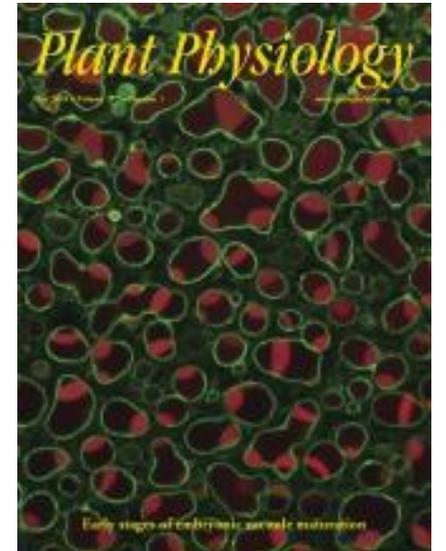
- The editorial board of *Plant Physiology* has the general feeling that publishing reviews might cause reviewers to avoid more critical (and more useful) analysis of submissions, particularly early career reviewers, even if anonymous
- Per Mike Blatt, the Editor-in-Chief of *Plant Physiology*: *“The most meaningful review content would not be included for a substantial percentage of papers (roughly 50-60% of accepted papers): manuscripts that are given a ‘decline with encouragement to resubmit’ will be likely to include reviews that refer to earlier reviews of previous submissions; without the context of these earlier reviews (and note that these will be of different manuscript submissions and therefore almost impossible to cross-reference and reconstruct for any reader), the published reviews will often be uninformative.”*



Plant Physiology[®]

WHY Doesn't *Plant Physiology* Currently Support Open Peer Review (continued)?

- *Plant Physiology* submissions have much discussion via confidential consultations after review. How would such discussion be included in open peer review? How would this allow editors to gather the most useful support from reviewers?
- *Plant Physiology* is mindful of the costs and manpower ASPB would incur as a result of the labor that accompanies open peer review (anonymizing reviews/editor comments/etc.)
- *Plant Physiology* continues to discuss open peer review frequently. At some point in the future, it is entirely possible that the editorial board will elect to share peer review reports



Plant Direct



WILEY



Plant Direct is an open access, sound science journal published by Wiley on behalf of the Society for Experimental Biology and the American Society of Plant Biologists.



Plant Direct's Editor-in-Chief, Ivan Baxter, on why the journal supports open peer review:
"This is who we are, and this is what we are doing."

Volume 1, Number 6, August 2014

Plant Direct



WILEY

- Plant Direct posts peer review reports for each research article published
- Peer review reports are not completely open – reviewers remain anonymous
- Peer review reports do not publish until a paper is accepted

WHY Publish These Reports?

Plant Direct



WILEY

- To provide transparency and a clear record re: publication decisions and how criteria are applied in this process
- To use as mentoring/teaching tools
- To change the culture of peer review: This open record, in theory, allows progress to continue and be checked

HOW Are These Reports Published?

Plant Direct



WILEY

- Peer review reports are not edited in any way
- A condition for both authors and reviewers of the journal is that ALL reports will be published



Plant Direct uploads each peer review report as part of each article's "Supporting Information"

Supporting Information



Filename	Description
pld381-sup-0001-Supinfo.pdf	PDF document, 2.2 MB
pld381-sup-0002-Reviewer_Comments.pdf	PDF document, 162.3 KB



Sample of Actual Editors Comments from *Plant Direct*

Volume 1, Number 6, August 2014
Plant Direct



WILEY

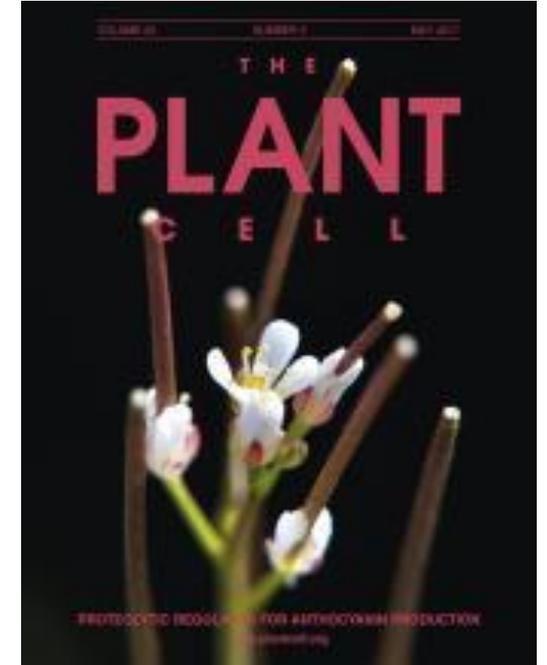
Editors comments	
<p>Reviewer #2 has two major comments about the lack of statistical tests undermining the stated conclusions, suggesting that the review criteria "results support the conclusions" has not been full met. These points must be addressed in your response.</p>	<p>We did not include these analyses in the original version because them main aim of the manuscript is to compare, in a given condition, the responses in between genotypes with a differing level of Tre6P. We were worried that too much discussion of differences between treatments in a given genotype would distract from this main aim We have nevertheless, in response to the request of the reviewer, added all the additional statistics analyses. The way we present them is slightly different from that requested by the reviewer because we do want to focus the readers attention on differences between genotypes in a given condition. We have modified the text where necessary. This has not affected any of our conclusions</p>
<p>The reviewers also have many other critiques that could improve the manuscript but aren't required to be addressed</p>	<p>We have followed the majority of these suggestions (see below for details)</p>

<p>Reviewer 1</p>	
<p>be clear whether the terms "starch breakdown", "starch degradation", "starch mobilization" and "starch turnover" refer to the same thing. If yes, I</p>	<p>We now use mobilization consistently rather than degradation.</p>

THE PLANT CELL

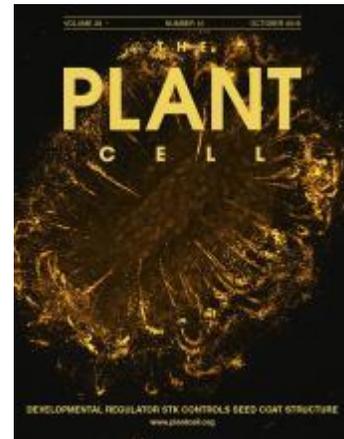


- *The Plant Cell*, ASPB's flagship journal, publishes novel research of special significance in plant biology, especially in the areas of cellular biology, molecular biology, genetics, development, and evolution
- Top primary research journal in plant biology
- *The Plant Cell* celebrates its 30th anniversary this year





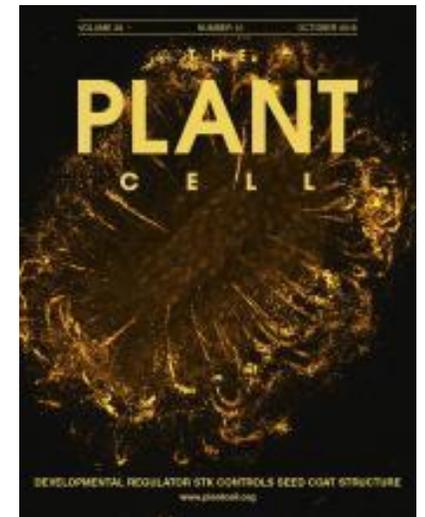
- *The Plant Cell* announced its decision to adopt a form of open peer review in an October 2016 editorial by Editor-in-Chief Sabeeha Merchant: “The Plant Cell *Begins Opt-in Publishing of Peer Review Reports*”
- From the editorial: “*Reviewer anonymity will be strictly maintained. The reports will include the major comments from reviewers and the editors’ decision letters along with the authors’ response to reviewers for each submission of the manuscript (including original, revised, and previously declined versions), as well as a timeline documenting the path of the manuscript from submission to publication. The decision letters typically include the substance of comments from any post-review consultation among editors and reviewers.*”





WHY Did *The Plant Cell* Make This Decision?

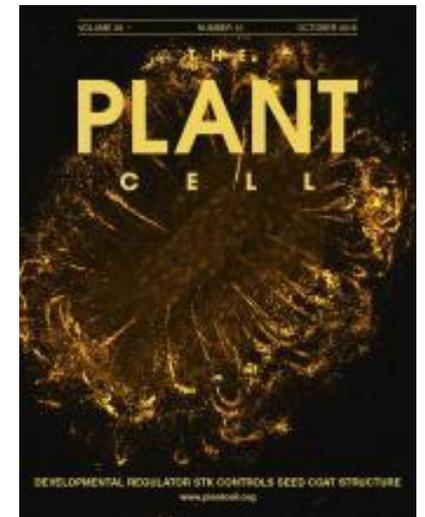
- To demonstrate transparency in the review process and the criteria used for evaluating papers
- To use for journal club discussions
- To use as training tools for students/post-doctoral researchers and professionals in the early stages of their careers
- NOTE: Dr. Merchant's editorial stated that feedback and access/download statistics would be monitored for a period of 2 years as a pilot project (ending in October of 2018). Although feedback suggests that these reports are being used, we continue to work with HighWire to determine usage statistics, which has proved challenging because reports are included in Supplemental Data





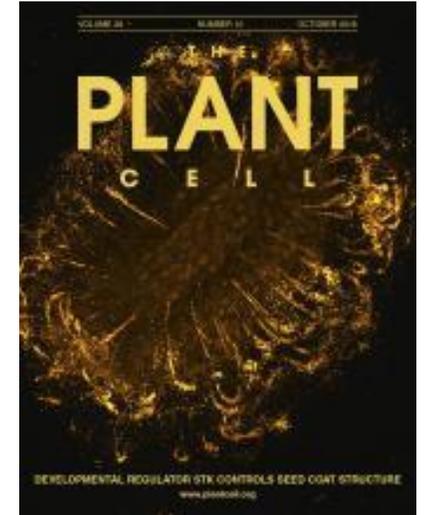
HOW Does *The Plant Cell* Handle Open Peer Review?

- Invitations to review a manuscript include information about the peer review report
- Reviewers remain anonymous in peer review reports (the editorial board believes that anonymity is integral to this process)
- After manuscript acceptance by the reviewing editor, a peer review report is prepared by the science editor handling the paper (WITH author approval). Science editors are paid per report (compilation, formatting, posting of report)
- Reports follow a standard format and are lightly edited (to remove miscellaneous correspondence, for instance); authors APPROVE their reports
- To be added to August 2019 Editorial Board Meeting discussion: publishing peer review reports for ALL articles





***The Plant Cell* Includes Peer Review Reports with Supplemental Data**



PEER REVIEW REPORT

Files in this Data Supplement:

[Peer Review Report](#)



What Does a Peer Review Report Look Like in *The Plant Cell*?

Protein Phosphatase 2Cs and Microtubule-Associated Stress Protein 1 Control Microtubule Stability, Plant Growth, and Drought Response

Govinal Badiger Bhaskara, Tuan-Nan Wen, Thao Thi Nguyen, Paul E. Verslues

Plant Cell. Advance Publication December 23, 2016; doi:10.1105/tpc.16.00847

Corresponding author: Paul Verslues paulv@gate.sinica.edu.tw.

Review timeline:

TPC2016-00466-RA	Submission received:	June 6, 2016
	1 st Decision:	July 23, 2016 <i>manuscript declined</i>
TPC2016-00847-RA	Submission received:	Nov. 8, 2016
	1 st Decision:	Dec. 5 <i>acceptance pending, sent to science editor</i>
	Final acceptance:	Dec. 22, 2016
	Advance publication:	Dec. 23, 2016

REPORT: (The report shows the major requests for revision and author responses. Minor comments for revision and miscellaneous correspondence are not included. The original format may not be reflected in this compilation, but the reviewer comments and author responses are not edited, except to correct minor typographical or spelling errors that could be a source of ambiguity.)

TPC2016-00466-RA 1st Editorial decision – *declined*

July 23, 2016

Your submission has been evaluated by members of the editorial board as well as expert reviewers in your field, and we regret to inform you that we are not able to recommend publication of this manuscript.



What Does a Peer Review Report Look Like in *The Plant Cell* (continued)?

This decision stems from multiple concerns raised by both reviewers 1 and 3. In particular, the reviewers and the reviewing editor feel that protein-protein interactions assayed by BiFC should be validated using an additional method. Both reviewers were skeptical of the auto-phosphorylation activity as there is no data in the manuscript to support this. In fact reviewer 2, also commented on this. While these issues would be simple enough to address in a revision, there were deeper concerns regarding the quality of the phospho-proteomics data set, the statistics used to analyze these data, and the interpretation of these data since normalization against protein levels was not performed. Reviewer 3 has suggested additional epistasis tests that should help to support the authors' conclusions. Importantly, the authors should consider reviewer 3's point that the observed phenotypes may stem from ethylene insensitivity.

[Reviewer comments shown below along with author responses.]

TPC2016-00466-RA Submission received

June 6, 2016

Reviewer comments on previously declined manuscript and **author responses:**

Reviewer #1:

The manuscript is written well and the results clearly presented and appears technically sound. Overall the data presented supports the title and the conclusions of the manuscript.

There are several comments that need to be address or clarified by the authors:

Point 1. MASP1 is identified in a quantitative phosphoproteomics approach and the suggestion is made that MASP1 is a direct target of EGR1/2 by the fact that in the *egr1/2* double mutant there is a 1.8 fold ratio of a MASP1 phosphopeptide as compared to wildtype. The ratio observed could be the result of reduced dephosphorylation of MASP1 in the *egr1/2* mutant background, but it could equally represent a 1.8 fold increase in MASP1 protein levels in the *egr1/2* mutant background as a results of indirect regulation of MASP1 protein levels. The inclusion of gene expression data can not substitute for measurement of changes in protein abundance by mass spec and normalisation of the changes

LOOKING FORWARD



PERSPECTIVE

A proposal for the future of scientific publishing in the life sciences

Bodo M. Stern *, **Erin K. O'Shea***

Howard Hughes Medical Institute, Chevy Chase, Maryland, United States of America

* osheae@hhmi.org (EKO); sternb@hhmi.org (BMS)

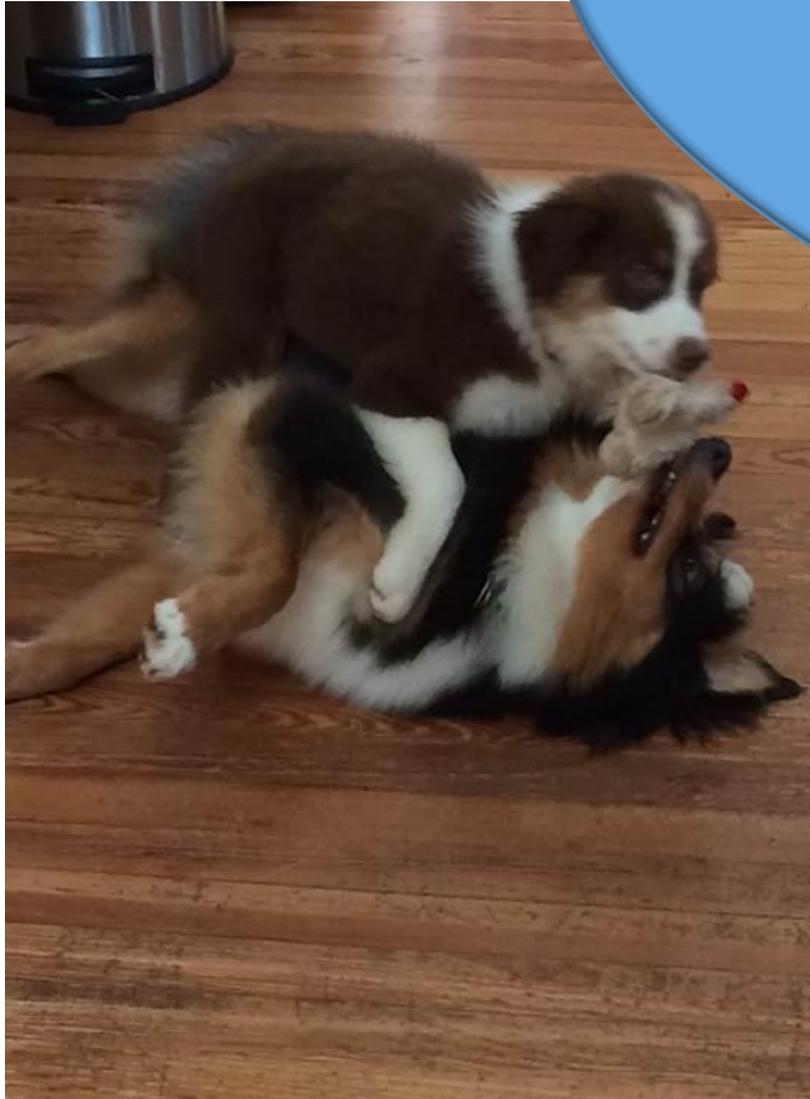
PLOS Biology | <https://doi.org/10.1371/journal.pbio.3000116>

February 12, 2019



ASPB's Open Peer Review To-Do List

- Publish peer review reports for PP and for all TPC articles?
- As the PLOS Biology article states: “One step toward recognizing peer reviewers would be to index peer reviews with their own digital object identifier (DOI), as some journals and Publons already do [10,11], making it possible to cite peer reviews and include them on the peer reviewer’s curriculum vitae (CV) or open researcher and contributor ID (ORCID) profile.
- Not on our immediate horizon but an important consideration: publishing peer review reports with the names of reviewers.



Jennifer is clearly posting this picture of us in a shameless attempt to avoid questions. Wonder if it will work? Ruff ruff

ANY QUESTIONS?