Bootcamp: The Publishing Edition

'Everything you always wanted to ask an editor about publishing your work'

24 June 2015 | UCLA 20th Int'l C. Elegans Meeting

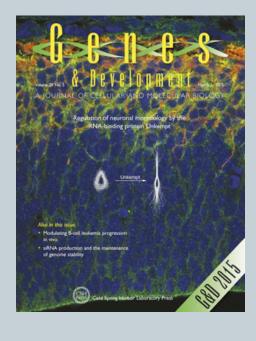


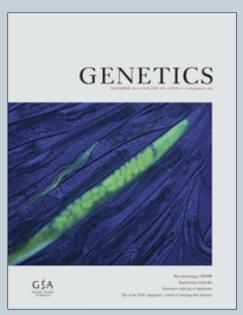
discover. understand. inform.

Let's chat about...

- ► How do I choose a journal?
- >Impact
- ➤ Peer-review (MJ)
- ► How to become an effective reviewer (MJ)
- Decisions and next steps
- $\triangleright Q/A$
- ➤ Road-trip to set of Avengers: Age of Ultron

Development









Why publish at all? The process seems kind of unfun...

- ➤ Disseminate & share your research contributions
- **▶** Validate your findings via peer-review
- **►**Improve the impact of your work
- >Cultural expectation (to publish) part of academic role

How do I choose a journal where I'll submit my work?

- 1. **Fit** − Where does the paper best fit/find the right audience?
- **2. Impact factor** If coauthor is seeking promotion/tenure, this jumps to #1

A few considerations: editorial board

- > are they my colleagues and peers?
- ➤ what kinds of interactions do I (and have my peers) have with editors at a particular journal?
- ➤ does the editor offer guidance on revisions, or reasons why the ms was not suitable?
- how are the editors chosen?

choosing.... (cont'd)

- > where are the articles in my **Bibliography** published?
- what are my peers/PI reading?
- where do my peers/PI/competitors publish?
- > what do I see in **PubMed/related publications?**
- what journals are publishing papers related to this topic?
- **speed** how long to first decision? final decision? publication? Early Online?
- ➤ quality of peer-review are the reviews useful in improving my paper and its impact? Are the comments constructive?

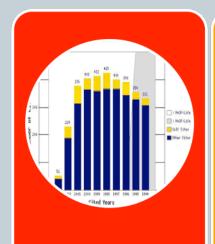
choosing... (cont'd)

- ➤ Visibility Opportunity for highlights, promotion on FaceBook, Twitter, social media, notice to your institutions, scientific press, cover art, article & Alt+Metrics
- ➤ Cost of publishing how important is this to me & my lab?
- ➤ Short- and Long-lasting impact is my paper going to be read and cited soon? for years to come?

choosing.... (cont'd)

- Imprimateur who publishes the journal? Society, nonprofit, for-profit, specialized v. general, how long in existence, business model? Who owns the publisher?
- Process submission, review, appeals is it clearly explained on the IFA, or will the editorial office or editor fill you in?
- Does journal comply with funder access policies (e.g. open access option or freely available after 12 months, etc.) and deposit your article into PubMedCentral on your behalf?

Impact – measuring?



Journal Level Metrics



Article Level Metrics



Usage Metrics



New Metrics

Altmetrics: the Big Picture

Every researcher is a communicator...

Within academia

Within society

Speaking at public events
Books for general audiences
Press

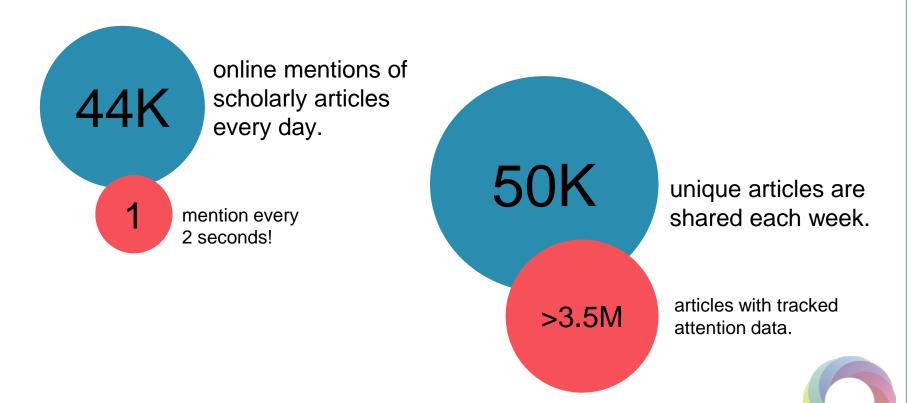
Social media

Blogs

How can we measure both academic and societal research impact?



Evolution in research communication has changed the scholarly landscape



Source: Altmetric internal data, March 2015

Citations: Lagging indicators

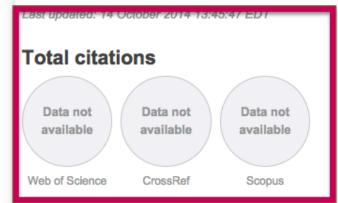
Article metrics for:



The evolution of cichlid fish egg-spots is linked with a cis-regulatory change

M. Emília Santos, Ingo Braasch, Nicolas Boileau, Britta S. Meyer, Loïc Sauteur, Astrid Böhne, Heinz-Georg Belting, Markus Affolter & Walter Salzburger

Nature Communications 5, Article number: 5149 (2014) | doi:10.1038/ncomms6149





This Altmenticle is:

- in the 99 percentile (ranked 281st) of the 38,911 tracked articles of a similar age in all journals
- in the 94 percentile (ranked 14th) of the 274 tracked articles of a similar age

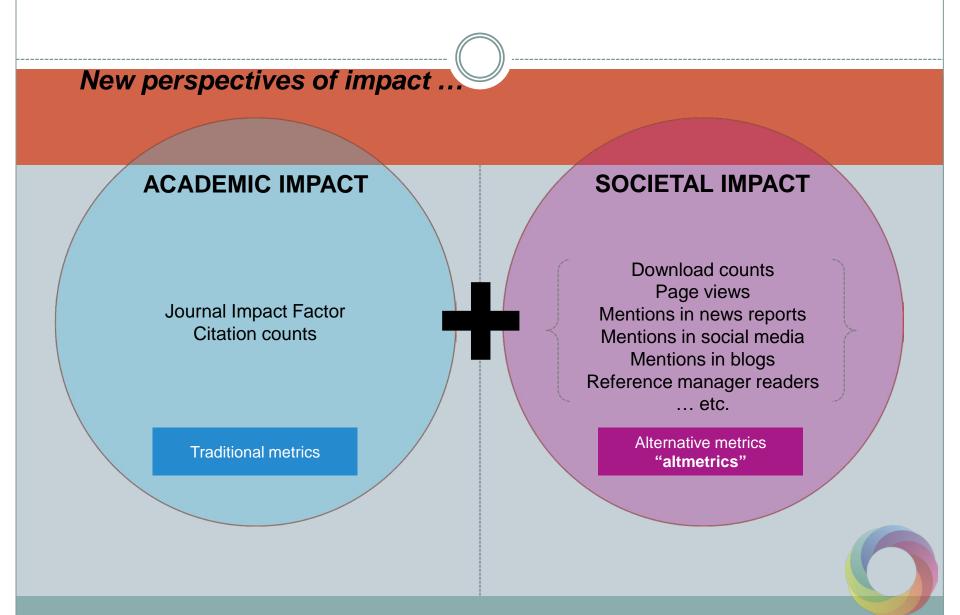


The cichlids egg-spots: How evolution creates new characteristics Daily News

The evolution of new traits with novel functions has normally posed a challenge to evolutionary biology. Studying the colour mar ..



Altmetrics: the Big Picture



What are altmetrics?



How can I make the process easier?

- ➤ Read the Instructions for Authors! Saves time, decreases the chance of rapid rejection, informs you of process.
- Does the journal offer presubmission inquiries?
- Don't be afraid to contact the editorial office if you need guidance
- ➤ Data is it all there? Is it submitted in machinereadable formats (not as a figure or PDF)?
- ➤ Apps or software: most journals want to have access to that, including simulation data. Test your software!
- Cite, cite! Ensure that the literature is fully covered in your references section

How can I help my paper to stand out, and make the editor's job easier?

Tell the story of your research and findings

Write a compelling cover letter and author summary — tell the editors why your paper is interesting and important, and how it stacks up against the journal's scope and criteria for acceptance

Write the abstract (and the paper) **concisely**, in plain language — make **it understandable**, **clear**, **accessible**; don't overstate your conclusions

Sticky wickets....

Should I recommend or exclude reviewers?

What's going on with my paper? I **really** need a decision for my (fill-in-blank: tenure committee, promotion committee, PhD, last month at this Univ., competitive situation)!

What defines a conflict of interest (with choosing an editor or recommending or even acting as a reviewer)?

Can I deposit my manuscript in a preprint server (bioRxiV, arXiv)?

What if I'm worrying about getting scooped? Can I ask for the journal to rush?

What if I do get scooped while my paper is in review?

It is ethical to.....

check COPE http://publicationethics.org/

offers International Author Standards/Guidelines:

- ✓ authorship and acknowledgment
- ✓ honesty, balance, originality
- √ transparency
- ✓ accountability and responsibility
- ✓ adherence to peer review and publication conventions

Peer Review

Why and How



discover. understand. inform.

Peer Review Purpose

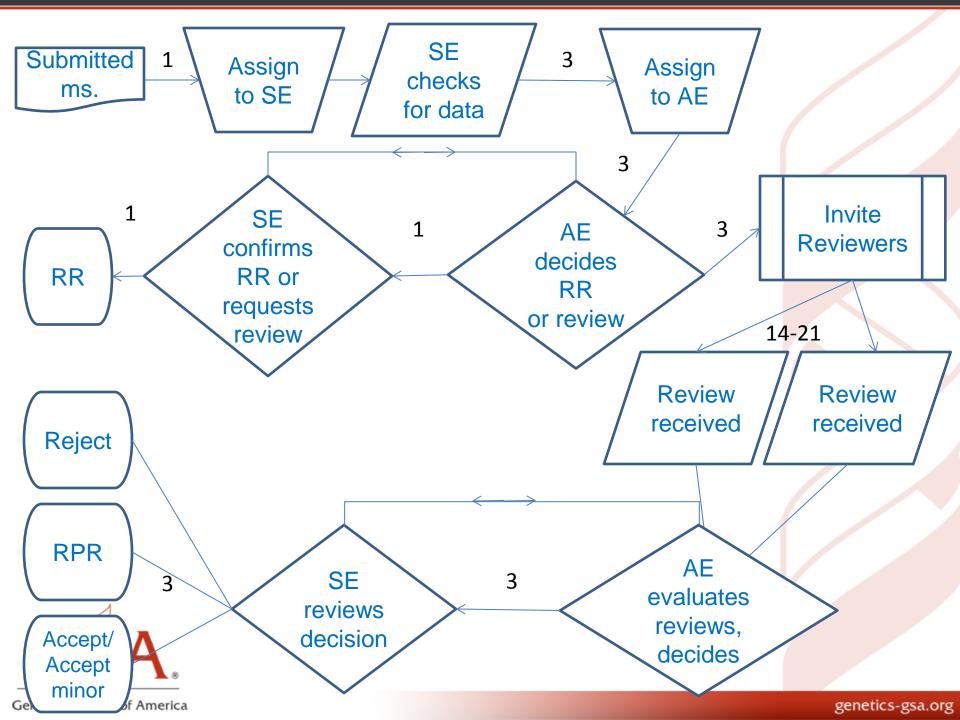
- Aims to ensure that the paper is:
 - significant (validation)
 - high-quality (integrity)
 - conclusions are justified (integrity)
 - literature is fully covered (scholarship)
 - data are available (reproducibility)
 - understandable
- Can identify errors or gaps authors may have overlooked.
- Editors and reviewers can help improve accessibility.

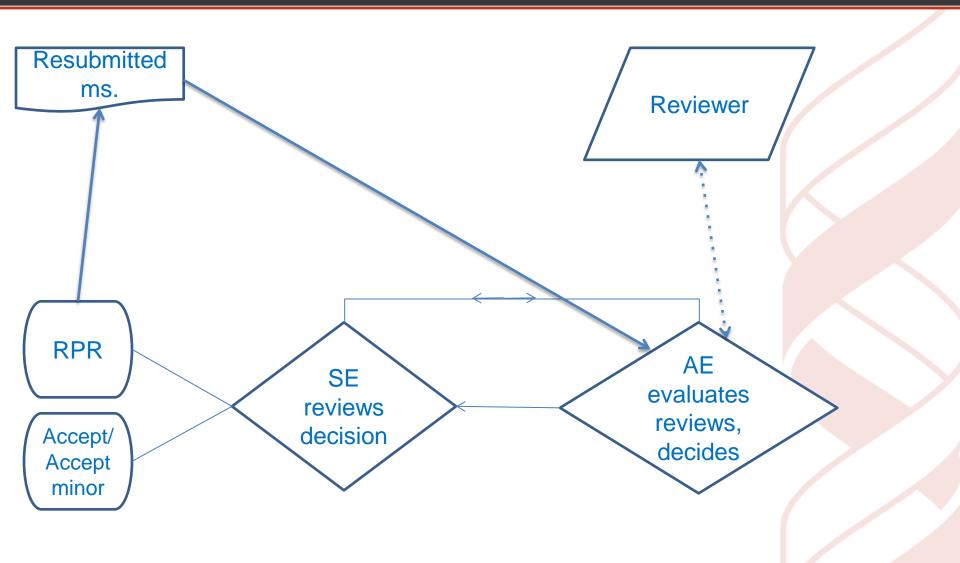


Peer Review Purpose

- varies among journals (single-blind, open, transparent)
- editors and reviewers help improve accessibility
- may facilitate discussion around a research topic
- journal's diligence assures readers that the paper is high-quality, significant, correct, results are reproducible, data is available









Peer Review Process

- AE evaluates reviews.
 - consults with SE and/or others if necessary



- AE synthesizes reviews into decision letter, detailing what authors need to do to make paper acceptable, or rejects paper (explaining why).
 - GENETICS editors may determine that paper would be more appropriate for G3 (referring it there after consultation with G3).



• SE reviews and approves AE's decision, or discusses the options with AE and/or others.



Decision is finalized; authors notified.

How to review a manuscript

- Several things need to be evaluated:
 - Rigor of the science
 - Clarity of the presentation figures and writing
 - Strength of the conclusions are they justified by the results?
 - Impact of the results on the field
- Journal clubs are good practice
- Ask if you can review a paper alongside your advisor, and discuss the evaluation



Provide your expert opinion

- The editor needs guidance on which to base a decision about accepting or rejecting the paper
- Your comments will be most helpful if they are clear
- Point out the strengths, the advance, the level of interest to the field
- Also point out the shortcomings there always are some!
- The editor's decision will be influenced by the balance of strengths and weaknesses you point out

Genetics Society of America genetics-gsa.org

Develop you own way to review

- Manuscripts still come double spaced with the figures at the end
- Awkward for reading
- I use annotation tools on my computer rather than printing the pages
- Helpful to duplicate the file so you can view figures in one file and text in the other



Be critical, but not unreasonable

- Every paper is part of a larger story
- There are ALWAYS more experiments that could be done
- Focus on whether the experiments presented support the conclusions and constitute an interesting advance in the field
- You can point out things that can be done to improve the paper



The reviewer's charge

'a reviewer should judge the work by whether the experiments were properly designed, competently performed, and the conclusions supported by the data, and not by whether the authors carried out the experiments the reviewer would have performed had the reviewer done the work'

--Jim Crow, paraphrased by Dan Hartl in "James F. Crow and the Art of Teaching and Mentoring" GENETICS December 2011 189:1129-1133



GUIDELINES FOR REVIEWERS

Please assess how well the manuscript meets our criteria for publication. We'd like your opinion of:

- the importance of the questions the manuscript addresses;
- how significant you judge the advance in the field the authors are reporting.

If you think the manuscript has major deficiencies, please provide a clear description of the *specific* problem(s) in a way that will benefit the authors. If you identify "make-or-break" issues for publication please make them clear in your review.

In your comments for the authors, please *do not indicate whether you think the manuscript should be accepted or rejected*; please provide that recommendation only in your confidential comments to the Associate Editor.

Please also include in your review any suggestions on the manuscript's writing, structure, exposition, scientific accuracy, scholarship, length, and suggestions for ways to improve the paper. (If the exposition is poor there is no need to edit the entire manuscript, but please cite one or two specific examples.)

Most manuscripts are revised before being accepted for publication. To shorten the review process and decrease the burden on reviewers, many revised manuscripts will not be sent back to reviewers. If you feel it's important that you see a revised version, please indicate that in your comments to the Associate Editor.

Comments to the editor

- Give a recommendation about whether to publish the paper
- If you recommend publication, say why it is exciting
- If you recommend rejecting, explain the flaws
- If you recommend revision, be clear about why they are needed



Comments to the author

- Short summary of the paper in your own words, including where it fits in the field
- Paragraph stating your evaluation strengths and weaknesses
- List any major things you think need to be addressed before publication
- List of minor comments typos, unclear sentences, inconsistencies, etc.
- Be fair, be respectful



Possible Outcomes of Submitting a Manuscript.....

Editorial Rejection (without sending out for reviews)

Rejection (based on reviews)

Major Revisions

Minor Revisions

Immediate Acceptance

It's decision letter day!!

- Why did my article get rapidly rejected or rejected?
- ➤ Should I start calling and emailing the editor right away
- How do I appeal or rebut a decision?
- Can I resubmit a paper that was rejected?
- What should we do to satisfy the editor and the reviewers
- ➤ How do I write a good response to the reviewers?
- ➤ Will this editor EVER be satisfied?

Anatomy of a Decision

Decision Letter from the Editor

- summarizes the decision and (briefly) reasons for that decision
- should give guidance on the parts of the reviewers comments that the editor thinks are important
- states the next steps
- boiler plate details about file formats for figures & copyright

Comments from each reviewer

- paragraph summarizing what they thought the paper was about
- will not explicitly recommend acceptance or rejection
- major comments (requests for new analysis or experiments, significant issues that they disagree with or want to see addressed)
- minor comments (easily fixed like typos or rewriting for clarity)

Interpreting the Decision Letter

- 1. Quickly get to the main point (clearly accepted? clearly rejected? or asking for revisions?)
- 2. Forward the letter to your co-authors.
- 3. Now, take a deep breath & carefully re-read the letter:
 - What are the reviewers really asking for?
 - Is there a small, targeted experiment that will address the concern?
 - Are some of the reviewers asking for or confused by the same thing? (If so, correcting it will really improve the paper)
 - If a request is unreasonable or unfeasible (at least for you), what are they really getting at and can you offer some other solution?

Accepted or Rejected?

Dear Dr. X,

Your Article, "Title", has now been seen by 2 referees. As you will see from their comments (below), although the referees find your work of considerable potential interest, they have requested [an experiment].

We agree with the reviewers that the method shows potential but this potential is not shown in an application.

We would therefore like to invite you to revise your manuscript to address these concerns, and include data from new experiments.

Crafting a Response to Reviewers

- 1. Start out positive and upbeat.
- 2. Remind the editor what the main concerns were and summarize (briefly) how you've addressed them.

Dear Dr. Rusk,

Attached you will find the revised version of our manuscript "Title" (Reference ##). We were pleased that reviewers appreciated the work and also provided some helpful suggestions, which we have incorporated.

The only significant change suggested (by reviewer 2 and yourself) was that we pilot the method on a scale beyond what can be done easily by the conventional method. We agreed that this would significantly strengthen the paper. In response, we have...

Make it Easy to Find Your Changes

In the response letter, repeat the reviewers comments and respond directly to each point.

1. (Reviewer 1) I think that Figure 1 could be improved by the addition of a panel (or two) that diagrams the way colonies are arrayed into microtiter plates for genotyping.

We have added an additional panel (E) to Figure 1 to underscore this fact.

- Some journals request/allow a marked up copy where you can highlight or underline changes.
- Make sure that you have actually made the changes discussed in the letter to the manuscript itself!

Crafting a Response Letter

- 3. You do not need to do everything that the reviewers suggest, but you do need to respond to each comment.
- 4. Keep in mind that the editor is going to send your rebuttal and the revised manuscript back to the same reviewers.
- 5. Be polite and appreciative, but don't gush.

We appreciate the reviewer's suggestion...

We agree with the reviewer that this section of Methods was not clearly written, and we have revised it accordingly.

6. It is okay to disagree with a comment, but try to keep to a minimum.

We respectfully disagree with the reviewer on this point We apologize if this figure legend was unclear, what we meant to communicate was that...

Take the High Ground

Don't let a flip comment bother you – your goal is to publish this paper!

- 5. (Reviewer 2) *The numbers of events shown in Table 1 are not impressive*. A new pilot cross was performed in which 3,725 tetrads were processed by one person in 3 hours (discussed above).
- 6. (Reviewer 2) Claims of "first" as in Discussion are best left to historians. The words "first" and "exciting" have been removed from the first and last sentences of the discussion, respectively.
- 7. (Reviewer 2) The statements about Neurospora and Chlamydomonas are at best debatable and at worst contentious. Our mention of these organisms was in fact an attempt to draw the attention of non-yeast researchers. However, we have instead followed the reviewer's suggestion. Specific references to application of BEST in Neurospora and Chlamydomonas (originally sentence 2 of the Introduction and sentence 4 of the Discussion) have been removed.

Responding to Reviewers, Editors

"Thank you again for your expeditious and scholarly handling of our paper......We feel strongly that the suggested edits have strengthened the paper and truly appreciate your efforts."

"The reviewer charly chose to misunderstand the point of the work."

Question Time!

Acknowledgments



Aimee Dudley
Pac-NW Diabetes Institute, *G3* Editor



Betsy Donahoe Digital Science



Joelle Mascuilli Thomson Reuters/Web of Science

Thank you for attending!

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