

Getting Published

- Identifying the appropriate journal, pre-submission, working with editors (Tracey DePellegrin)
- peer review process (Stan Fields, Senior Editor, GENETICS)
- responding to reviewers and next steps (Aimee Dudley, Associate Editor, G3[®] Genes | Genomes | Genetics)
- writing to get published (Raeka Aiyar)



*discover.
understand.
inform.*

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Journals, Journals everywhere.....

so how do we choose one to submit
our research?



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How do YOU choose?



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What's Important?

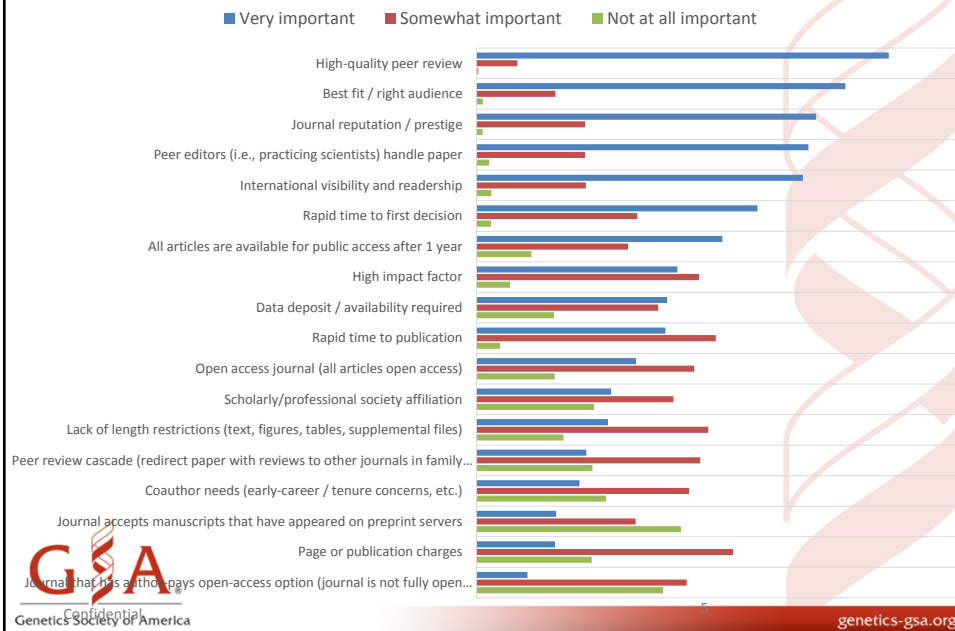
Authors say they consider TWO primary factors in deciding where to submit:

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
- Note: Few interviewees indicated “impact factor” as a specific term, usually referring to the “tier” or “profile” of the journal. That said, their perception of “tier” closely correlates with impact factor.



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Rate the items in terms of their importance in influencing your decision about where to submit a manuscript for publication



- 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 MEDLINE/related publications?
- What journals are publishing papers related to this topic?

[Added by Beth Ruedi:

<http://journalfinder.elsevier.com/>

Provides suggestions for journals, but limited to only Elsevier journals]

What should I ask?

- Editors – do I recognize them? How are they editors chosen? Are they my colleagues and peers? What kinds of interactions do I (and have my peers) have with editors at a particular journal?
- Quality of peer-editing/reviews– are the reviews useful in improving my paper and its impact? Are the comments constructive? Does the editor parse the reviews and offer guidance on what we need to do in a revision, or reasons why the ms was not suitable?
- Speed – how long to first decision? to final decision? to publication? Early Online?



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What.... (cont'd)

- Visibility – Opportunity for highlights, promotion on FaceBook, Twitter, social media, to your institutions, scientific press, cover art
- Stats like article metrics (downloads) and alt+metrics (social media activity, facebook, twitter, news stories)
- Cost of publishing – how important is this to me and my lab?
- Short- and Long-lasting impact – is my paper going to be read and cited soon? for years to come?



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What.... (cont'd)

- Imprimatureur – who publishes the journal? Society, non-profit, 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?



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How can I make the process easier?

- Read the Instructions for Authors! Saves time, decreases the chance of rapid rejection, informs you of process.
- Don't be afraid to contact the editorial office if you need guidance
- Data – is it all there? Is it submitted in machine-readable 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, cite! Ensure that the literature is fully covered in your references section



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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



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**Sticky
wickets....**

©Cartoonbank.com



"This is a very important book. In fact, it's too important to publish."



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Sticky Wickets.....

- Should I recommend or exclude reviewers? What about editors?
- What defines a conflict of interest (with choosing an editor or recommending or even acting as a reviewer)?
- Can I deposit my paper in a repository (such as ArXiv or bioRxiv) prior to submitting?



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Sticky Wickets.....

- Help! 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)!



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Is it 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



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Resources

ICMJE (Int'l Committee of Med. Journal Editors)
<http://www.icmje.org/>

NIH Public Access Policy
<http://publicaccess.nih.gov/>

Wellcome Trust Public Access Policy
<http://www.wellcome.ac.uk/About-us/Policy/Spotlight-issues/Open-access/index.htm>

Writing Instruction
https://www.training.nih.gov/writing_courses

Peer Review Process
http://www.senseaboutscience.org/data/files/resources/99/Peer-review_The-nuts-and-bolts.pdf



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Resources

- > COPE (Committee on Publication Ethics)
<http://publicationethics.org/>
- > ICMJE (Int'l Committee of Med. Journal Editors)
<http://www.icmje.org/>
- > NIH Public Access Policy
<http://publicaccess.nih.gov/>
- > Wellcome Trust Public Access Policy
<http://www.wellcome.ac.uk/About-us/Policy/Spotlight-issues/Open-access/index.htm>
- > Writing instruction
https://www.training.nih.gov/writing_courses
- > Peer Review Process
http://www.senseaboutscience.org/data/files/resources/99/Peer-review_The-nuts-and-bolts.pdf



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The Peer-Review Process

Stan Fields
HHMI / University of Washington

Submitting Your Manuscript

- Files for submission

- Text
 - Figures
 - Tables
 - Supplemental files

Follow rules of the journal regarding
words/characters/pages; figures (colors; resolution); tables; supplemental files

- Cover letter

- Choices of editor / reviewers (non-reviewers)

Cover Letter

- Why is this work important?
- Why is this work appropriate for this journal?

“Authors are strongly encouraged to provide a detailed cover letter describing their work and placing it into a broad context. Cover letters should describe the potential

impact of the work and clearly explain why the article is of interest to the broad readership of *GENETICS*.

This is distinct from the article summary, which should explain the key scientific findings of the work to a general audience. The cover letter and the article summary are used in conjunction with the article abstract to determine whether an article is within the scope of the journal.”

- The number of words in the text of the paper, the number of display items (figures and tables), supplementary information
- Editor / Reviewer choices

Choosing an Editor and Reviewers

- Academic editors vs. Professional journalists
- Reviewers who are fair and known people in your field (not people who you think like you or are friends of previous advisors, etc.)

Don't include people who technically may not be ineligible but in gray area (e.g. close friends)
Usual statute of limitation for former collaborators, mentors is 4 years
- Requesting that some people *not* review your manuscript?

Will Your Manuscript Be Reviewed?

- Major hurdle is to get past the editorial triage
As many as 2/3 of submissions are rejected without review
- Not just *Nature*, *Science*, *Cell*
Subjournals of these
PNAS, *Genome Research*, *PLoS journals*, others
GENETICS: rapid reject for 27% of manuscripts
- If returned to you unreviewed, should you appeal / argue?

What Are Reviewers Looking For?

From *Nature*:

- Who will be interested in the new results and why;
- Any technical failings that need to be addressed before the authors' case is established

From *PNAS*:

- Research is well designed and executed.
- Presentation of methods will permit replication.
- Data are unambiguous and properly analyzed.
- Conclusions are supported by data.

Other considerations:

- Have you put work into appropriate context?
- Do you cite relevant literature?

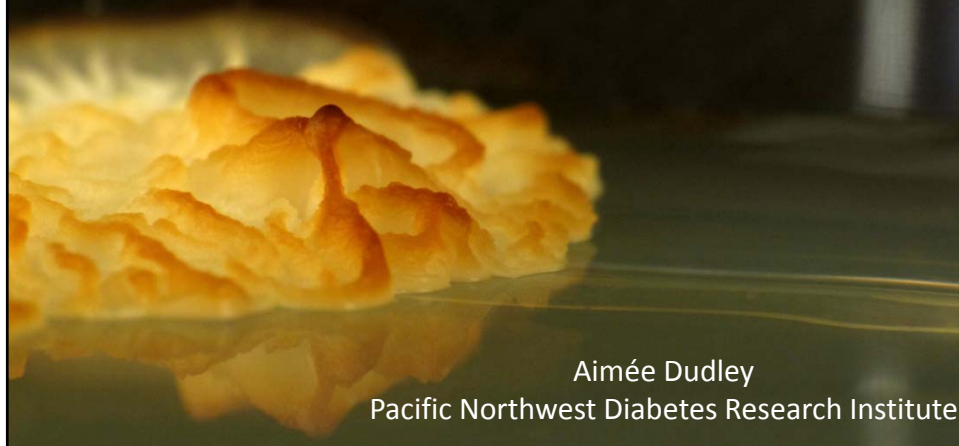
Significance criterion:

- How do reviewers assess a manuscript in the context of the journal to which it is submitted?

How Long Does the Review Process Take?

- Editorial consideration can take a few days; generally under a week
- Journals often ask for reviews in 10 days or 2 weeks once they've opted to review
- Many times one reviewer will hold up the process despite reminders
- Typical time for a good response is about a month
GENETICS: average time to first decision in 2014 is 33.86 days

Responding to Reviewers and Being a Good Reviewer



Aimée Dudley
Pacific Northwest Diabetes Research Institute

Possible Outcomes

Editorial Rejection (without sending out for reviews)
Rejection (based on reviews)
Major Revisions
Minor Revisions
Immediate Acceptance

Anatomy of a Review

Section 1: Comments from the editor

- summarizes their decision and (briefly) the reasons for that decision & sometimes gives 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

Section 2: Comments from each reviewer

- a paragraph summarizing what they thought the paper was about
- will not explicitly recommend acceptance or rejection
- major comments (points that weren't clear, requests for new analysis or experiments, significant issues that they disagree with or want to see addressed)
- minor comments (things that should be easily fixed like typos or suggestions that they are not going to hold you to)

Interpreting the Decision Letter

1. Quickly get to the main point (clearly accepted? clearly rejected? or asking for revisions?)
2. If it was an acceptance at *Nature*, call your mother.
3. Forward the letter to your co-authors.
4. 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. Dudley,

Thank you for submitting your manuscript to Yeast.

It has been evaluated by experts in the field whose comments appear below.

The referees have recommended publication, but also suggest some minor revisions to your manuscript. I therefore invite you to respond to the referees' comments and revise your manuscript accordingly. Please review the attached document listing the file requirements for your revision.

Accepted or Rejected?

Dear Dr. Fields,

Thank you very much for submitting your manuscript entitled [Title] for review at PLOS Genetics. Your article has been evaluated by the journal's senior editors, by an Associate Editor, and in this case your article has also been evaluated by independent peer reviewers. As you will see, there is one positive and two negative reviews. While the reviewers respected the work, they felt the significance and novel finding will come in subsequent studies rather than the present one.

Based on the reviews, we regret to say that we will not be able to accept this manuscript for publication in PLOS Genetics. We are sorry that we cannot be more positive on this occasion, but hope that you appreciate the reasons for this decision and that you will consider PLOS Genetics for other submissions in future.

Accepted or Rejected?

Dear Dr. Dudley,

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.

Reviewer Comments

Reviewer #1:

This is a manuscript that describes...

This is a compelling and fun story to read. The yeast community has been dying for automated tetrad dissection. This is the first method I've seen that really solves the problem. I think this story will also be generally interesting to investigators because it shows how a problem of spatial relationships can be solved by random barcoding and sequencing, a principle that will generalize beyond tetrad dissection.

I have no major criticisms regarding the technical quality of the experiments or the analysis. I do think that Figure 1 could be improved by Figure 2 might be slightly improved by...

Reviewer Comments

Reviewer #2:

This interesting paper describes...

The method has substantial merit and could be implemented by most yeast geneticists. There are a few issues that the authors might address:

3. The numbers of events shown in Table 1 are not impressive. This would take a trained scientist about 2 hr, which, I suspect is faster than HTA as implemented in this MS.
4. Claims of "first" as in Discussion are best left to historians.
5. The statements about *Neurospora* and *Chlamydomonas* are at best debatable and at worst contentious. Wouldn't it be more helpful to discuss how HTA could be applied to other organisms? This could make the paper more interesting to non-yeast investigators.

Crafting a Response Letter

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 for the Editor 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.

- Depending on the journal, you may be allowed to provide a revision that has line numbers (if so refer to those in the letter as well).
- Some journal 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 it in the letter.

4. Keep in mind that the editor is going to send your rebuttal and the revised manuscript back to the same editors. They will evaluate whether or not you've met their concerns.

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 the reviewer, but try to keep these 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 get to you, your goal is to get your paper published.

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.

Common Myths

"You shouldn't spend much time correcting grammar and spelling, the reviewers will take care of that."

"It's better to submit a paper before a key experiment is finished. By the time the paper is back from review, you will have the results and then you can slot it in."

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, but there is a difference
- It is helpful to review a paper alongside your mentor while you are still a student or postdoc.

Provide Your Expert Opinion

- The editor needs guidance on which to base a decision about accepting or rejecting the paper (however many journals do not want you to include your opinion of whether to accept or reject in the main body of the review)
- 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 in a constructive manner
- The editor's decision will be influenced by the balance of strengths and weaknesses you point out
- Think carefully about suggesting further experiments.
- Edit for tone. If this was a review of your paper, would you consider it constructive criticism?
- Limit confidential comments to the editor– if the author doesn't know the specifics of your concerns/ criticisms, how can they respond to them?

Writing to get published

Lessons learned on manuscript preparation

Raeka Aiyar, Ph.D.

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Genetics Society of America

Trainee Bootcamp @ Yeast 2014



The Scribe, Arthur Szyk

Writing a good manuscript



3C's of manuscript craft

Centralize your ideas, data, protocols

Contextualize: interpret, hypothesize, sell

Criticize your claims, relevance, wording

Crafting a story: Define your selling points

- **Motivation:** Why is your study worth doing? Which areas of study could it potentially benefit?
- **Novelty:** What makes your study new and distinct from others in the field?
- **Implications:** What has your study contributed to the field, and what does that mean for others in related areas of study?

Manuscript quality control: how to revise like a pro

Clarity is king and accuracy is queen

Make sure your (few) key messages come across clearly and correctly, verbally and visually

Consistently re-evaluate your claims and how you support them

Includes providing data accordingly

External 'reviewers' (outside of your project/area)

Use lab meetings, department seminars, thesis advisors, friends,...

Don't be sloppy!

Reasons for rapid rejection include bad grammar

Referees are people too: extra effort to make things look nice helps!

Streamline your fonts, figures, formatting

How to avoid sticky situations

Competing interests (reviewers or authors)

Not only financial in nature

Consult publisher's guidelines

If it feels like it could be, then act as if it is

Plagiarism

Reword Methods sections even if 'self-plagiarism'

Cite your sources!!

Quotation marks should be used if >6 consecutive words are copied

Obtain permission from other authors/publishers to reproduce copyrighted content

Can now easily be detected electronically

Handling your data

Raw data

Centralize, make accessible pre- and post-publication, only publish once!

Transparency on analysis

Sweave / README

Statistical rigour and clarity required by more journals

Save yourself the trouble by justifying everything

Things that get missed in the rush to submit

Proper acknowledgements of contributors

People, funders, core facility support, affiliations (where the work was done), previous work that made the study possible (note your potential referees)

Proper finalization and authors' approval

Circulate WELL BEFORE submission, do NOT wait until proofs

Proper methods sections

Eliminating copy-paste, citing, clarity on what was actually done

Anticipation of the time required to submit

Familiarize yourself with submission system; double-check clarity, accuracy, formatting

Backup plan for rejections

Line up a few options to save time

Resources on preparing manuscripts

Guidelines and practices in manuscript writing

International Committee of Medical Journal Editors:

<http://www.icmje.org/recommendations/>

Committee of Publication Ethics: <http://publicationethics.org>

Plagiarism

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3558294/>

Viper for checking plagiarism: <http://www.scanmyessay.com/>

*Note: some checkers want to keep your text, so watch out!

Reproducibility and transparency

NPG Checklist: <http://www.nature.com/authors/policies/checklist.pdf>

Nature editorial: <http://www.nature.com/news/announcement-reducing-our-irreproducibility-1.12852>

PLoS Policy: <http://blogs.plos.org/everyone/2014/03/08/plos-new-data-policy-public-access-data/>

Resources on good scientific writing

Good writing style:

The Elements of Style, William Strunk, Jr. (1918) <http://www.bartleby.com/141/>
On Writing Well, William Zinsser

Online writing courses: www.training.nih.gov/writing_courses

San Francisco Edit: <http://www.sfedit.net/newsletters.htm>

The Guardian: <http://www.theguardian.com/higher-education-network/blog/2013/sep/06/academic-journal-writing-top-tips>

Internet resources (lists):

<http://pubs.acs.org/subscribe/archive/ci/31/i02/html/02inet.html>

<http://nihlibrary.campusguides.com/content.php?pid=380811&sid=3131386>

Thank you!

Writing to get published

Lessons learned on manuscript preparation

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