

The Peer Review Process



Purpose of Peer Review

Check the manuscript for

- Mistakes in procedures or logic
- Conclusions not supported by the results
- Errors or omissions in the references
- Compliance with ethics standards
 - Has the protocol been approved by an appropriate Ethics Committee?
 - Animal research: e.g. “Guiding Principles in the Care and Use of Laboratory Animals”
 - Human research: Most recent “Declaration of Helsinki”
- Originality and significance of the work

Suggest potential reviewers

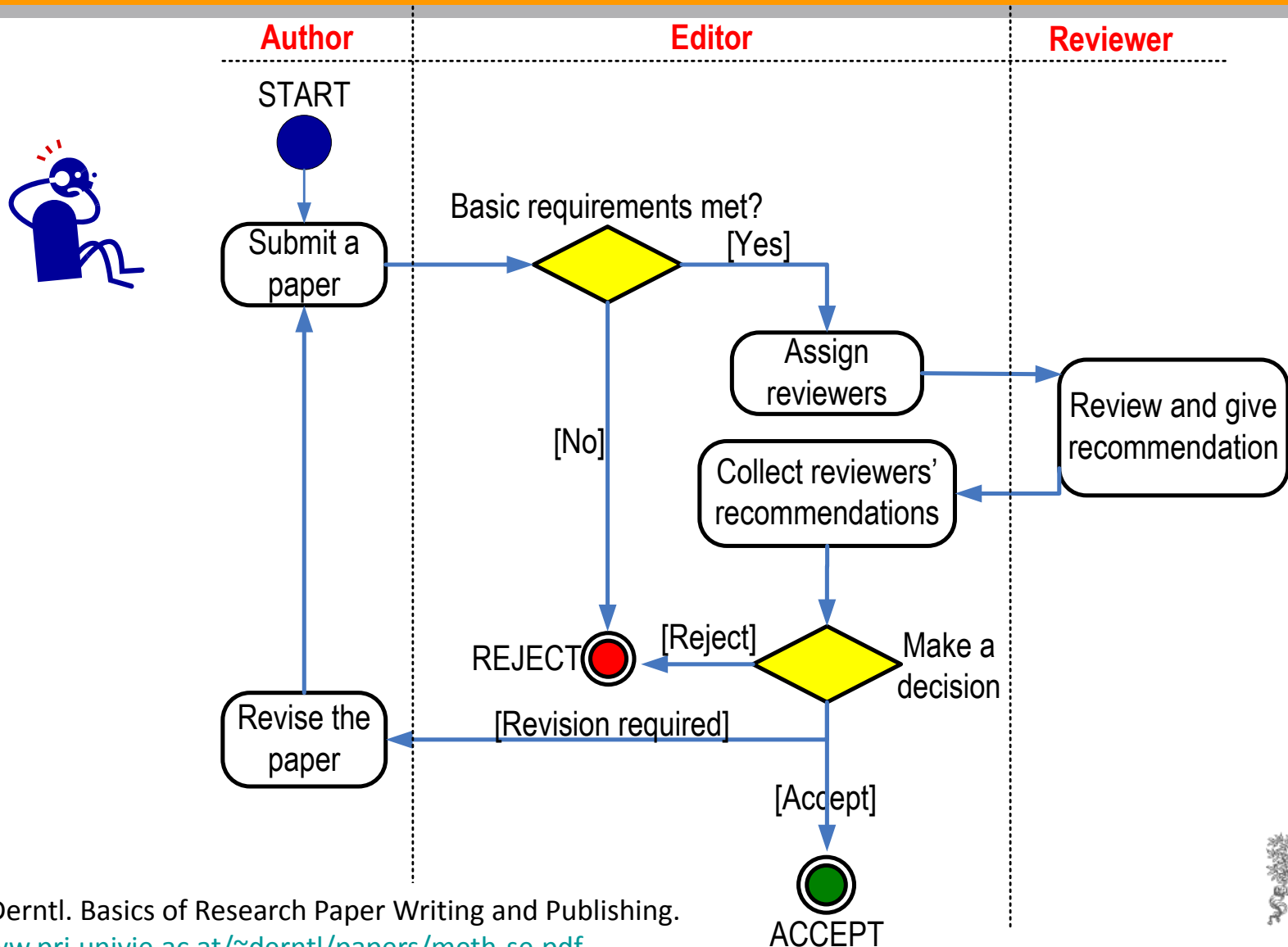
- Your suggestions will help the Editor to move your manuscript to the review stage more efficiently.
- You can easily find potential reviewers and their contact details from articles in your specific subject area (e.g., your references).
- The reviewers should represent at least two regions of the world. And they **should not** be your supervisor or close friends.
- Be prepared to suggest 3 -6 potential reviewers, based on the Guide to Authors.



Do everything to make your submission a success

- **No one gets it right the first time!**
 - Write, and re-write
- **Suggestions**
 - After writing a first version, take several days of rest. Come back with a critical, fresh view.
 - Ask colleagues and supervisor to review your manuscript. Ask them to be highly critical, and ***be open to their suggestions.***

The Peer Review Process – not a black hole!



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Review Process

Regular articles are initially reviewed by at least two reviewers

When invited, the reviewer receives the Abstract of the manuscript

The editor generally requests that the article be reviewed within reasonable time (varies per field), limited extensions sometimes acceptable

Articles are revised until the two reviewers agree on either acceptance or rejection, or until the editor decides that the reviewer comments have been addressed satisfactorily

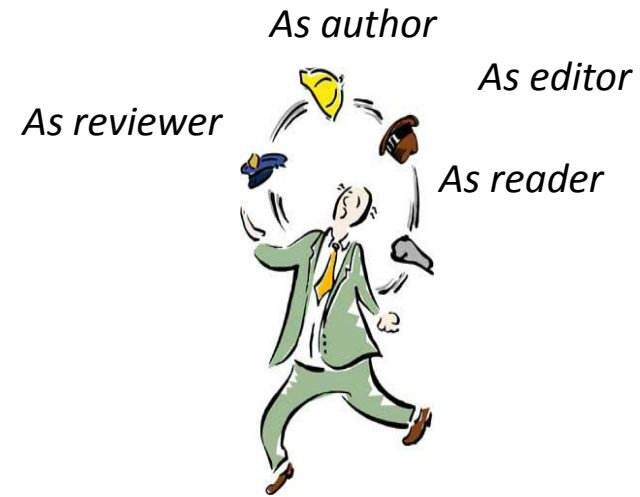
The reviewers' reports help the Editors to reach a decision on a submitted paper

- **The reviewer recommends; the editor decides!**



Review Process (iii)

- Reviewers do *not* communicate directly with authors
- All manuscripts and supplementary material must be treated confidentially by editors and reviewers
 - The manuscript cannot be distributed outside this small group
- The aim is to have a “first decision” to the authors as fast as possible after submission of the manuscript
- Meeting these schedule objectives requires a significant effort on the part of the Editorial staff, Editor and Reviewers
- If reviewers treat authors as they themselves would like to be treated as authors, then these objectives can be met



**As a researcher,
you wear many
hats!**



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Initial Editorial Review

Many journals use a system of initial editorial review. Editors may reject a manuscript without sending it for review

Why?

- The peer-review system is **grossly overloaded** and editors wish to use reviewers only for those papers with a good probability of acceptance.
- It is a **disservice** to ask reviewers to spend time on work that has clear and evident deficiencies.



Rejection without External Review

The Editor-in-chief evaluates all submissions, and determines whether they go into the review process or are rejected by the editor

Criteria

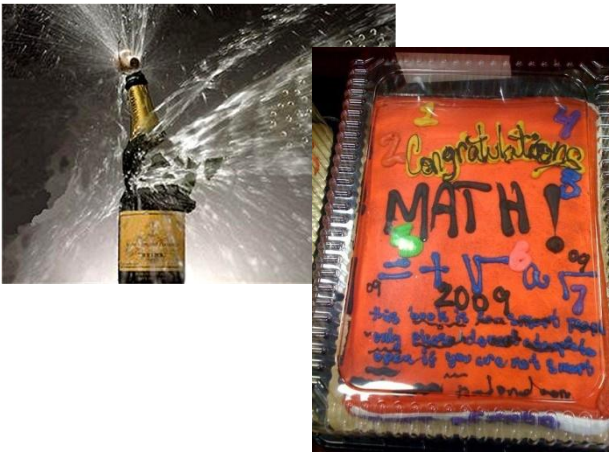
- Example – “Rules-of-Three” in the European Journal of Pharmaceutics and Biopharmaceutics
 - Out of scope
 - Too preliminary
 - Lack of Novelty } each with specific examples
- English language is inadequate
- Prior publication of (part of) the data
- Multiple simultaneous submissions of same data
- Etc.,



First Decision: “Accepted” or “Rejected”

Accepted

- Very rare, but it happens

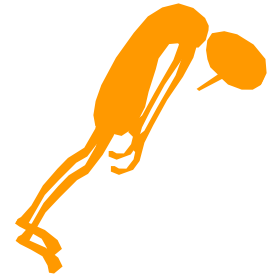


- **Congratulations!**

- Cake for the department
- Now wait for page proofs and then for your article to be online (and in print)

Rejected

- Probability 40-90% ...
- Do not despair
 - It happens to everybody
- Try to understand WHY
 - Consider reviewers' advice
 - Be self-critical
- If you submit to another journal, begin as if it were a new manuscript
 - Take advantage of the reviewers' comments
 - They may review your manuscript for the other journal too
 - Read the Guide for Authors of the new journal, again and again.



Reviewers look at:

- Importance and clarity of research hypothesis
- Originality of work
- Delineation of strengths and weaknesses of methodology, experimental / statistical approach, interpretation of results
- Writing style and figure / table presentation
- Ethics concerns (animal / human)



Quality of the work

Are the methods appropriate and presented in sufficient detail to allow the results to be repeated?

Are the data adequate to support the conclusions?

Methods ←————→ Results ←————→ Conclusions

1. Do all “methods” have a “results”?
2. Have all “results” been described in the “Methods”?

1. Are all “conclusions” based on “results”?



Reviewer comments to the Editors

- Comment on novelty and significance
- Recommend whether the manuscript is suitable for publication or not, usually
 - Accept / Minor revision / Major Revision / Reject



Reviewer makes a recommendation



Editor makes the decision

- Confidential comments will not be disclosed to author(s)!

Reviewer Checklist

Confidential checklist meant for editor's eyes only

Rating Scale

Top 10%____ Top 25% ____ Top 50%____ Lower 50%____ For each of Experimental Design, Data Quality, Originality, Overall priority

Manuscript Length

OK _____ E(xpand) _____ S(horten) _____
For each of Abstract, Introduction, Methods, Results, Discussion, References

Recommendation to editor

Accept / Minor revision / Major Revision / Reject

Reviewer Checklist

Confidential checklist meant for editor's eyes only

	Yes	No					
Is the article within the scope of the journal?	<input type="checkbox"/>	<input type="checkbox"/>					
Would the article be more appropriately published in a specialist journal?	<input type="checkbox"/>	<input type="checkbox"/>					
Can the article be condensed?	<input type="checkbox"/>	<input type="checkbox"/>					
• If so, where: <input type="checkbox"/> Figures <input type="checkbox"/> Figure legends <input type="checkbox"/> Tables <input type="checkbox"/> Text							
Is the language acceptable?	<input type="checkbox"/>	<input type="checkbox"/>					
Are there portions of the manuscripts which require further clarification?	<input type="checkbox"/>	<input type="checkbox"/>					
• If so, where? _____							
On a scale from 1 (poor) to 5 (outstanding), how do you rate	Poor	1	2	3	4	5	Outstanding
• Novelty, New knowledge in xyz		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Experimental design		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Evaluation of data		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Discussion of results		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Clarity of presentation		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
The article should be							
Accepted without change <input type="checkbox"/>	Accepted after minor revision <input type="checkbox"/>	Accepted after condensation <input type="checkbox"/>					
Reconsidered after major revision <input type="checkbox"/>	Rejected <input type="checkbox"/>						

Confidential comments to the editor: [free text]



What can you get back from peer review?

- Accepted without change (very rare!)
- Accepted after minor revision (means you will have to change a few things)
- Accepted after consideration (means you will have to rewrite a few things, possibly sections, figures, provide more data, etc)
- Reconsider after mayor revision (means you will have to dares some fundamental shortcomings – possibly doing additional research and certainly rewriting big sections)
- Rejection (means the manuscript is not deemed suitable for publication in that journal)



Reviewer comments to Authors

- **Provides specific comments on the design, presentation of data, results, and discussion**
 - Do not include recommendations for acceptance / rejection
- **Reviewers should ensure that that the comments to the author(s) are consistent with recommendations to the editors**

Manuscript Revision

- **Prepare a detailed Response Letter**
 - Copy-paste each reviewer comment, and type your response below it
 - State specifically which changes you have made to the manuscript
 - Include page/line numbers
 - No general statements like “Comment accepted, and Discussion changed accordingly.”
 - Provide a *scientific* response to comments to accept,
 - or a convincing, solid and polite rebuttal when you feel the reviewer was wrong.
 - Write in such a manner, that your response can be forwarded to the reviewer without prior editing
- **Do not do yourself a disfavour, but cherish your work**
 - You spent **weeks** and **months** in the lab or the library to do the research
 - It took you **weeks** to write the manuscript.....

.....Why then run the risk of avoidable rejection
by not taking manuscript revision seriously?

Increasing the likelihood of acceptance

All these various steps are not difficult

You have to be consistent.

You have to check and recheck before submitting.

Make sure you tell a logical, clear, story about your findings.

Especially, take note of referees' comments.

This should increase the likelihood of your paper being accepted, and being in the 30% (accepted) not the 70% (rejected) group!



What leads to acceptance ?

- Attention to details
- Check and double check your work
- Consider the reviewers' comments
- English must be as good as possible
- Presentation is important
- Take your time with revision
- Acknowledge those who have helped you
- New, original and previously unpublished
- Critically evaluate your own manuscript
- Ethical rules must be obeyed

– Nigel John Cook
Editor-in-Chief, *Ore Geology Reviews*