The peer review process: from submission to outcome

Bruno Frenguelli
School of Life Sciences
University of Warwick
Editorial Experience

Neuropharmacology
Associate Editor 2006 – 2011
Editor-in-Chief 2011 - (>1400 ms)
Who are the Editors?

- Researchers in the field
  You probably know many of them already

- Researchers who have other commitments
  Don’t have a lot of time - Make it easy for them

- Researchers with relevant expertise
  Remember, not necessarily in your sub-field - Make it easy for them

- Researchers you work with
  Take advantage – get advice
  What, where and when to publish
What to do before you submit

- Read the Instructions to Authors!
  - Available at the journal website; queries to EiC/Journal Office
- Confirm that the study is within the journal’s remit
  - Consult EiC if in doubt
- Make sure your manuscript conforms to journal style
  - Word counts; running titles; keywords; layout; references
What happens when you submit?

Author

Editor-in-Chief
Senior Editors
Handling Editors
Editorial Board
Reviewers
What do the Editors look at?

- **Title**: This is the first thing anyone will read – Make sure it is good!
- **Letter to Editor**: This is where you can help explain the significance to the Editor (may not be expert)
- **Abstract**
- **Figures**
- **Methods & Results**
- **Whole paper**

Make the decision on whether it’s good enough to send to review
Possible decisions

- **Triage**
  - rejection before peer review
- **Reject**
- **Reject (with option to resubmit)**
- **Major Revisions**
- **Minor Revisions**
- **Accept**
Why triage?

Outside Aims and Scope
Not novel enough
Inadequate methodology
Poorly written
All Editors can triage!

E.g. Too clinical
Not a sufficient advance for the journal; purely descriptive
No new scientific information; derivative or incremental
Poor experimental design; limited techniques
The point is unclear; poor language
What happens when you submit?

- Editor-in-Chief
- Senior Editors
- Handling Editors
- Editorial Board
- Reviewers
How does the Editor choose peer reviewers?

- **Author suggested reviewers**: Useful, but probably won’t pick them all/any
- **Author opposed reviewers**: Need a good reason to oppose reviewers – avoid excluding everyone in the field!
- **Personal knowledge**: Who is a good reviewer and who has the expertise – avoids fake reviewers!
- **Cited researchers**: Likely to be experts
- **PubMed search**: Useful if the Editor is not expert in the area
- **Normally pick 2 to 3**: Automated reminders/promotion of alternative reviewers
The peer review process can seem a bit intimidating….

Most scientists regarded the new streamlined peer-review process as “quite an improvement.”
What makes up a peer review?

Main recommendation
- Reject, major revisions, etc.

Scores/Specific Questions
- Technical quality
  - Novelty
  - Significance
- Reviewer can be frank as to why they made the recommendation; ethics, plagiarism...

Comments to Editor

Comments to Author
- What the author receives - Major and minor criticisms; steer from the Editor
What makes up a **good** peer review?

- **Having read the manuscript**
  - Summarise main findings, techniques, conclusions

- **Describe the study’s contribution to the field**
  - What does this study add (if anything) to our knowledge

- **Major issues**
  - Substantive issues that require attention – eg control expts, additional validation

- **Minor issues**
  - Formatting, language, presentation of figures, missing references etc
How does the Editor make a decision?

- Must combine all reviews
- Must determine if weaknesses can be easily fixed
- Must determine if the reviewer’s opinion is valid
- Must make a justifiable decision!

May send to another reviewer if there is a difference of opinion.
Arbitration – Editorial Board

If it’s outside the Editor’s area they rely heavily on the reviewers’ opinion.

Maybe the reviewer is wrong! This comes from experience.

Should be constructive to help the authors improve the manuscript – the best peer review.
Possible decisions

- **Triage**
- **Reject**
- **Reject (with option to resubmit)**
- **Major Revisions**
- **Minor Revisions**
- **Accept**

- Fix problems and submit to another journal
- Major changes are needed that may significantly alter the paper’s message – Re-review
- Large changes are needed but the fundamentals are sound – Re-review
- Small changes required – Editor may not send to re-review
- Celebrate!
Bruno Frenguelli

b.g.frenguelli@warwick.ac.uk

For further information visit www.elsevier.com/authors

Free webcast tutorials on publishing: www.elsevier.com/trainingwebcasts