Guidelines and templates for reviewers and associate editors

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WHY INSTITUTE A TEMPLATE FOR REVIEWS?
- Reviewer inexperience
- Even experienced reviewers miss important points
- Standardization of review elements

BACKGROUND: WHAT QUALITIES DISTINGUISH GOOD REVIEWS?

**Journal of International Business Studies**: Best reviews offer specific and constructive feedback to address problems, have a collegial tone (no harsh criticism).

**Annals of Behavioral Medicine**: Advocates that good reviews should be “respectful” and “offer corrective feedback” if the manuscript is eventually publishable.

**Molecular Biology of the Cell**: Be critical, but also provide constructive feedback. Be judicious about requiring extra work that is tangential to the manuscript’s objective.

**The Academy of Management Journal**: Bad reviews are characterized by reviewers focusing on uncovering flaws and aggressively highlighting them (very little positive or constructive feedback).

**AJR**: Looked at reviewer quality scores based on level of sophistication, quality of feedback for improvement, amount of detail, and punctuality. Younger reviewers from academic institutions scored highest.
In general:
- Collegial reviews that do not aggressively highlight flaws
- Positive and constructive feedback for improvement
- Judicious requirement of additional work
- Attention to detail

BACKGROUND: WHAT QUALITIES DISTINGUISH GOOD REVIEWS?

Dilemma:
- Incremental work: technically sound and hence may not be rejected by reviewers/associate editor.
- Promising but premature work: rejected from a technical perspective, but potentially high impact if given feedback for improvement.

Several journals use an importance scale with some acceptance threshold.

BACKGROUND: HOW TO ACCOUNT FOR REVIEWER PERCEIVED IMPORTANCE/IMPACT OF THE MANUSCRIPT?

Author-suggested reviewers vs. editor-suggested reviewers:

In general:
Select reviewers who are not biased one way or the other.

BACKGROUND: WHO SHOULD BE ASKED TO REVIEW?
BACKGROUND: CAN PUBLIC EVALUATION, IN ADDITION TO SINGLE-BLINDED REVIEWS, ENHANCE PEER REVIEW?

Some examples:
*Nature*: sent for peer review and posted to a website for signed comments. Despite advertising and soliciting key members of the scientific community to write comments, very few responded (“like ‘pulling teeth’ to obtain any comments”). On average only 3 comments per paper. Comments were generally unhelpful—low editorial and technical value.

*Atmospheric Chemistry and Physics*: First-stage review is conducted by reviewers and editors, then put on electronic discussion board for scientific community signed comments (second stage). Comments from scientific community added very little to those from blinded peer reviewers.

In general: public evaluation provides little added benefit.

BACKGROUND: IS THERE BIAS IN REVIEWER SELECTION?

Ideally:
- Reviewers who are experts in the subject matter

In reality:
- Reviewers are selected based on personal knowledge
- If associate editor searches for reviewers using a database, choices are usually alphabetically arranged—resulted in clear bias in AJR, where reviewers with last names at the beginning of the alphabet were twice as likely to be asked to review.

MEDICAL PHYSICS REVIEWER TEMPLATE

- Designed by WG1
- Will enter limited release testing phase soon
- Will be revised based on testing phase feedback before final release
- Divided into 2 major sections:
  1. Overall assessment (mandatory): free form review, suggestions for improving manuscript, importance scale.
  2. Section-specific feedback (optional): alerts reviewer to key elements in each section of the manuscript.
MEDICAL PHYSICS REVIEWER TEMPLATE

OVERALL ASSESSMENT
Rate the importance of this manuscript to other research: [ ] 1 – least important, [ ] 2 – medium importance, [ ] 3 – high importance, [ ] 4 – very high importance. Manuscrit after review suggestions are incorporated (enter number): [ ] Optional Comment:
Manuscript after review suggestions are incorporated (enter number): [ ] Optional Comment:
Recommendations for improving manuscript (please enter your name if you are a reviewer): [ ]

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