

# How to review manuscripts

## Peer review, your role and responsibilities

### Peer review

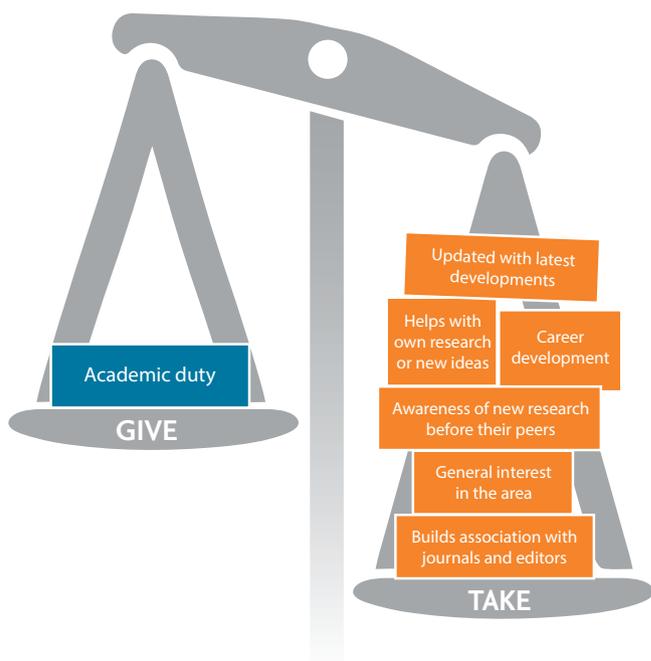
#### ...is critical because it

- Improves the quality of the published paper
- Ensures previous work is acknowledged
- Determines the importance of findings
- Detects plagiarism and fraud
- Plays a central role in academic career development

#### ...adheres to the principles that

- It is a well understood concept
- Without it there is no control in scientific communication
- Journal editors evaluate and reject certain articles prior to external peer review

#### Why should you review?



### Editors' view: what makes a good reviewer?

- Provides a thorough and comprehensive report
- Submits the report on time
- Provides well-founded comments for authors
- Gives constructive criticism
- Demonstrates objectivity
- Provides a clear recommendation to the editor

### Your ultimate checklist for reviewing a paper

#### First impressions

- Is the research original, novel and important to the field?
- Has the appropriate structure and language been used?

#### Abstract

- Is it really a summary?
- Does it include key findings?
- Is it an appropriate length?

#### Introduction

- Is it effective, clear and well organized?
- Does it really introduce and put into perspective what follows?
- Suggest changes in organization and point authors to appropriate citations.
- Be specific – don't write "the authors have done a poor job"

#### Methodology

- Can a colleague reproduce the experiments and get the same outcomes?
- Did the authors include proper references to previously published methodology?
- Is the description of new methodology accurate?
- Could or should the authors have included supplementary material?

#### Results and discussion

- Suggest improvements in the way data is shown
- Comment on general logic and on justification of interpretations and conclusions
- Comment on the number of figures, tables and schemes
- Write concisely and precisely which changes you recommend
- List separately suggested changes in style, grammar and other small changes
- Suggest additional experiments or analyses
- Make clear the need for changes/updates
- Ask yourself whether the manuscript should be published at all

#### Conclusion

- Comment on importance, validity and generality of conclusions
- Request toning down of unjustified claims and generalizations
- Request removal of redundancies and summaries
- The abstract, not the conclusion, summarizes the study

#### References, tables and figures

- Check accuracy, number and citation appropriateness
- Comment on any footnotes
- Comment on figures, their quality and readability
- Assess completeness of legends, headers and axis labels
- Check presentation consistency
- Comment on need for colour in figures

### Comments to the editor

**1** Comment on novelty and significance

**2** Recommend whether the manuscript is suitable for publication

**3** Confidential comments will not be disclosed to the author(s)