

Research and publishing ethics

Authorship, plagiarism and responsibilities

What does it mean to be an author?

“An “author” is generally considered to be someone who has made substantive intellectual contributions to a published study.”

Remember

- Being an author comes with credit but also responsibility
- Decisions about who will be an author and the order of authors should be made before starting to write up the paper

Types of authorship

- First author:** the person who conducts or supervises the data collection, analysis, presentation and interpretation of the results and also puts together the paper for submission
- Co-author:** makes intellectual contributions to the data analysis and contributes to data interpretation, reviews each paper draft, must be able to present the results, defend the implications and discuss study limitations

Avoid ghost authorship: excluding authors who participated in the work

Avoid scientific writers and gift authors: including authors who did not contribute to the work

What happens when there is a dispute?

- It must be resolved by authors
- Editors cannot adjudicate or act as judge
- It delays publication as the editor has to get agreement from all authors about any changes
- After publication it can be published as a correction but needs agreement from all authors with justification

Key author responsibilities

Authorship:

- Report only real, unfabricated data
- Originality
- Declare any conflicts of interest
- Submit to one journal at a time

Avoid:

- Fabrication:** making up research data
- Falsification:** manipulation of existing research data
- Plagiarism:** previous work taken and passed off as one's own



What is plagiarism and how is it detected?

“Plagiarism is the appropriation of another person's ideas, processes, or words without giving appropriate credit, including those obtained through confidential review of others' research proposals and manuscripts.”

Federal Office of Science and Technology Policy, 1999

- CrossCheck is a huge database of 30+ million articles, from 50,000+ journals, from 400+ publishers.

- The software alerts editors to any similarities between your article and the huge database of published articles.

- Many Elsevier journals now check every submitted article using CrossCheck.



Work that can be plagiarised includes...

Words (language)	Computer programs	Lectures
Ideas	Diagrams	Printed material
Findings	Graphs	Electronic material
Writings	Illustrations	Any other original work
Graphic representations	Information	

Correct citation is key

Declare conflicts of interest

Conflicts of interest can take many forms:

- Direct financial:** employment, stock ownership, grants, patents
- Indirect financial:** honoraria, consultancies, mutual fund ownership, expert testimony
- Career and intellectual:** promotion, direct rival institutional
- Personal belief**

The consequences

Consequences vary depending on the misconduct and the journal, institutions, and funding bodies involved.

Authors could:

- Have articles retracted (carrying a note why they were retracted, e.g. for plagiarism)
- Have letters of concern or reprimand written to them
- Institutes and funding bodies could carry out disciplinary action

How to review manuscripts

Peer review, your role and responsibilities

Researcher Academy

Peer review

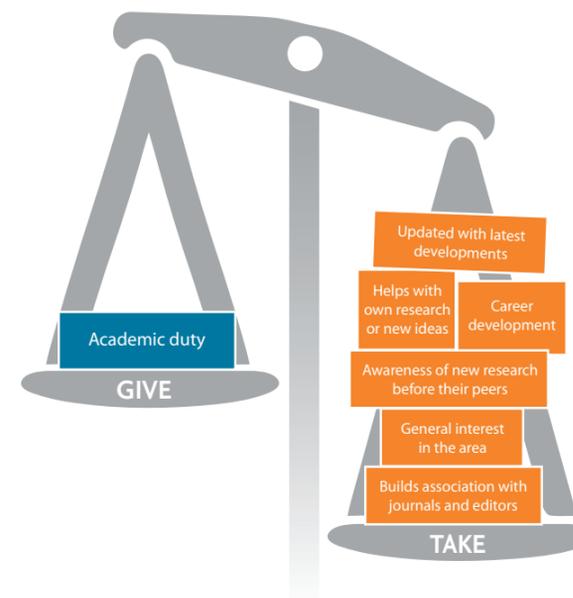
...is critical because it

- 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

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)

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