



General considerations on ethics of scientific publication and malpractices

Since what is usually considered to be the first scientific publication, made in London in 1665 and which appeared in *The Philosophical Transactions of the Royal Society*, the academic peer review of manuscripts submitted for publication in scientific journals of different kinds has been a fundamental procedure to assess the quality of the work of the authors and the institutions that support the research groups. *The Journal of the Colombian Academy of Exact, Physical and Natural Sciences* adheres to the international regulations defined by the Committee on Publication Ethics (COPE).

Some rules can be found at:

COPE Core practices

<https://publicationethics.org/core-practices><https://publicationethics.org/core-practices>

Developed in 2017 and replacing the COPE *Code of conduct*

Of special interest are considerations about retractions

<https://publicationethics.org/files/retraction-guidelines.pdf>

The purpose main of the retraction is correct the literature and assure his integrity in place of punish the Authors.

The Retracts Can Used to alert readers to



- Cases of publication redundant
- Plagiarism
- Manipulation of Reviews by Pairs of data without authorization
- Infringement of rights of author
- Other legal issue (e.g., defamation, privacy, illegality)
- Unethical research
- Failure to disclose an important competing interest that would have unduly influenced interpretations or recommendations.

Below are some general considerations about the role of each of the participants in the editorial process: general editor, associate editors, authors and reviewers

General Editor and Associate Editors

The general editor and associate editors of the Academy's journal ensure the objective management and fulfillment of the editorial work. Confidentiality is its most important criterion. Being a multidisciplinary journal, the associate editors in each of the seven disciplines in which the journal publishes constitute the editorial committee of each of the sections, with autonomy to decide on the content of articles in each discipline.

Authors

Currently, authors can find abundant information on how to publish an article following ethical principles; however, the editorial committee of the *Journal of the Colombian Academy of Exact, Physical and Natural Sciences*, asks authors to take



into account the following ethical aspects related to the publication of articles, aspects that summarize the regulations accepted by various scientific journals of international circulation, as well as a call to avoid bad practices in publications.

Authorship of the manuscript submitted for publication: all authors of a manuscript must meet the four criteria established by the International Committee for Medical Journal Editors (ICMJ <http://www.icmje.org/>); they are

- Substantial contribution in the conception and design of the work, or in the collection, analysis, or interpretation of the data
- Participation in the writing of the document or in its critical review
- Final approval of the version sent for publication
- Agreement of responsibility for all aspects of the work, to ensure that questions related to the accuracy or completeness of any part of the work are properly investigated and resolved

If any of them do not meet this definition, they would be incurring fictitious authorship.

Recognition of the contributions of other researchers: in the text of the manuscript the authors must properly cite the texts, works and methodologies of other researchers who allowed to design the project, obtain, and discuss the results of the submitted manuscript. **In case of omitting these contributions, plagiarism actions would be incurred.**

Duplicate publications: authors should not publish the same article in more than one journal, to avoid duplication or self-plagiarism.



Public access of the original data: the authors must be willing to provide the original data obtained during the research to be reviewed editorially, so that they are available to the public as annexes to the published article and for other researchers to check the reproducibility of the results by using the same experimental conditions.

Originality of the manuscript: The authors must express in writing that the results of the submitted manuscript are original, that the manuscript is not being submitted simultaneously to publication in another journal, that all authors are aware of the results and that they agree with them, to avoid subsequent conflicts between authors.

Recognitions and thanks: the appropriate recognition of institutions that supported the development of the work is important. When it comes to thanks to other researchers, formal acceptance, in writing, of the researcher receiving the thank you is required.

Conflicts of interest: All authors should disclose potential conflicts of interest associated with publication. If authors or co-authors, editors, or reviewers (evaluators) have any conflict of interest that may in any way influence the transparency or objectivity in the peer review and publication process, such conflict must be declared.

The most obvious conflicts of interest are the so-called financial conflicts, resulting from employer-employee relationships, funding, and patents, as well as



fees, consultancies, research paid by companies that depend on the research results, among others.

Recognitions and thanks: the appropriate recognition of institutions that supported the development of the work is important. When it comes to thanks to other researchers, formal acceptance, in writing, of the researcher receiving the thank you is required.

Errors admitted in published articles: when any author discovers an error in the work already published that could affect the validity of the results, he will be obliged to immediately communicate it to the editor of the journal and cooperate so that the article is retracted or corrected.

Statements on minimum risk to human health or minimum environmental impact: if the investigation involves the use of chemical substances, equipment or procedures that present risks to human health, or to the environment, the authors must declare compliance with the regulations to minimize the risk of the use of said substances or procedures.

Human or animal testing for research: the participation of humans or animals in research projects must be governed by national and international regulations and, in all cases, the approval of the respective ethics committees must be obtained, as well as the corresponding informed consents, in accordance with current regulations.



Access to genetic resources and traditional knowledge: whether the work being published has had access to genetic resources or knowledge

The authors must attach a declaration indicating compliance with the regulations in force in the country.

Reviewers or academic peers

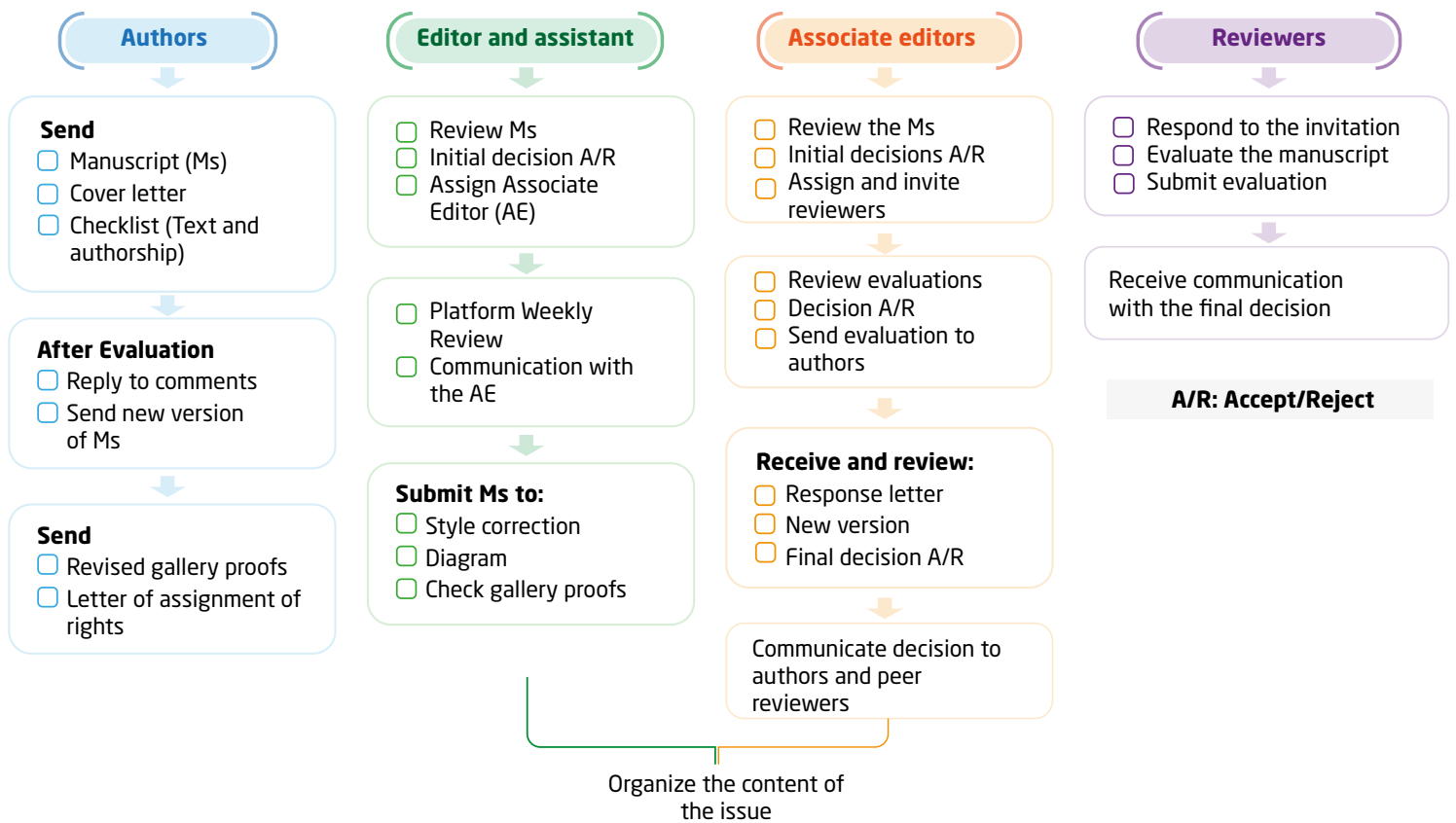
The reviewers or academic peers, anonymous to the authors, are the ones who review the manuscripts, analyze, and consider their originality, as well as the validity of the methodology and the importance of the results obtained. On the other hand, academic peers or reviewers should consider that science and scientific communication are elements that rest on trust, since the scientific community understands that the authors of a research have observed the principles of scientific integrity and respected the ethics of the publication.

Role of the reviewers: the revision of the manuscript by anonymous reviewers will avoid any type of influence that the authors could exert themselves. The reviewer may not share with third parties the manuscript submitted for review, nor the information it contains until the article has been published. If its publication is not accepted, the reviewer must maintain confidentiality in this regard. On the other hand, the reviewer may not use the information contained in the manuscript for his own benefit until it is in the public domain.

The following is a summary of the activities of each of the participants in the



publication of an article in the Journal of the Colombian Academy of Exact, Physical and Natural Sciences:





Summary

This document has presented considerations on editorial malpractice listed below:

- Authorship of the manuscript submitted for publication
- Recognition of the contributions of other researchers
- Duplicate publications
- Public access of the original data
- Originality of the manuscript
- Conflicts of interest
- Errors supported in published articles
- Statements on minimum risk to human health or minimum environmental impact
- Human or animal testing for research
- Access to genetic resources and traditional knowledge