

# Authorship(저자됨)

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# **Why Authorship Matters ?**

# ICMJE 의 저자됨

저자는 아래 3가지 조건을 모두 만족시킨다.

- 학술적 개념과 계획(design) 혹은 자료의 수집(acquisition)이나 분석 (analysis) 혹은 해석(interpretation)을 하는데 있어 상당한 공헌함
- 논문을 작성하거나 중요한 내용을 수정함
- 출간될 원고를 최종적으로 승인

# Principle of authorship

- The Committee on Publication Ethics (COPE), whose membership includes more than 4000 journals from all research fields, acknowledges that “there is no universally agreed definition of authorship, although attempts have been made ... As a minimum, authors should take responsibility for a particular section of the study.

# Principle of authorship

- Identification of authors and other contributors is the responsibility of the people who did the work (the researchers) not the people who publish the work (editors, publishers).
- Researchers should determine which individuals have contributed sufficiently to the work to warrant identification as an author. Individuals who contributed to the work but whose contributions were not of sufficient magnitude to warrant authorship should be identified by name in an acknowledgments section.
- All individuals who qualify for authorship or acknowledgment should be identified. Conversely, every person identified as an author or acknowledged contributor should qualify for these roles.
- Individuals listed as authors should review and approve the manuscript before publication. Editors should require authors and those acknowledged to identify their contributions to the work and make this information available to readers. The ultimate reason for identification of authors and other contributors is to establish accountability for the reported work.

# 저자됨의 문제점

- 승진
- 보직 및 보상
- 연구비 수혜
- 독자의 관심
- 연구의 일관성에 대한 신뢰
- 기타

# Changes of ICMJE criteria for authorship

2008	2013
Substantial contributions to the conception <b>and</b> design, acquisition of data, or analysis, <b>and</b> interpretation of data for the work	Substantial contributions to the conception <b>or</b> design of the work; <b>or</b> the acquisition, analysis, or interpretation of data for the work; AND
Drafting the <b>article</b> or revising it critically for important intellectual content	Drafting the <b>work</b> or revising it critically for important intellectual content; AND
Final approval of the version to be published	Final approval of the version to be published; AND
	<b>Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved</b>

# Changes of ICMJE criteria for authorship

- In addition to being accountable for the parts of the work he or she has done, an author should be able to **identify** which co-authors are responsible for specific other parts of the work. In addition, authors should have confidence in the integrity of the contributions of their co-authors.



# 저자의 책임

- Confidentiality
- Originality
- Disclosure
- Copyright Assignment
- Permission
- Multiple submissions
- Data sharing
- Registration of clinical trials
- Public access requirements of funding agencies
- Human subject research
- Animal research
- Cell line authentication

# Non-Author Contributors (Collaborators)

- who meet fewer than all 4 of the above criteria for authorship
- should not be listed as authors, but they should be acknowledged
- Examples of activities that alone (without other contributions) do not qualify a contributor for authorship are acquisition of funding; general supervision of a research group or general administrative support; and writing assistance, technical editing, language editing, and proofreading.
- Acknowledged individually or together as a group under a single heading (e.g. "Clinical Investigators" or "Participating Investigators"), and their contributions should be specified (e.g., "served as scientific advisors," "critically reviewed the study proposal," "collected data," "provided and cared for study patients", "participated in writing or technical editing of the manuscript").
- Because acknowledgment may imply endorsement by acknowledged individuals of a study's data and conclusions, editors are advised to require that the corresponding author obtain written permission

## Order of Authors

- The order of authors in the byline is a collective decision of the authors or study group. Disagreements about author order should be resolved by the authors before the article is submitted for publication. Disputes that arise after submission could delay or prevent publication. Authors should not expect editors to become embroiled in disputes among authors over name placement in the byline.
- Much has been written about the meaning of each place in the byline listing, particularly among the 1st 6 authors. Some journals specify how many authors they will accept in the author byline.

# First author in by-lines

- Usually junior researcher (students, postdocs, etc)
- Make the greatest contribution to the work
- Equal authorship;
  - Those who equally contributed to the study
  - Usually first and second authors
  - No clear definition
  - May be used for academic promotion

## THE AUTHOR LIST: GIVING CREDIT WHERE CREDIT IS DUE

**The first author**  
Senior grad student on the project. Made the figures.

**The third author**  
First year student who actually did the experiments, performed the analysis and wrote the whole paper. Thinks being third author is "fair".

**The second-to-last author**  
Ambitious assistant professor or post-doc who instigated the paper.

Michaels, C., Lee, E. F., Sap, P. S., Nichols, S. T., Oliveira, L., Smith, B. S.

**The second author**  
Grad student in the lab that has nothing to do with this project, but was included because he/she hung around the group meetings (usually for the food).

**The middle authors**  
Author names nobody really reads. Reserved for undergrads and technical staff.

**The last author**  
The head honcho. Hasn't even read the paper but, hey, he got the funding, and his famous name will get the paper accepted.

## **Last author in by-lines**

- Usually senior researcher
- Head of the department, often corresponding author
- Guarantor of the integrity of the whole research work who guide throughout research and writing
- Sometimes 'guest' or 'gift' author

# Corresponding author

- takes primary responsibility for communication with the journal ; reviewers' comments, the proofs, publication process
- Usually senior researcher
- respond to editorial queries in a timely way
- Contact details do not change over long period of time
- should include postal and electronic addresses, phone & fax, valid and active email is a must

# Author inflation

- Average number of authors on Wellcome-Trust-associated papers

	2006	2007	2008	2009	2010
Genetic papers	10.21	16.73	14.09	17.17	28.82 (1-505)
All papers	6.28	6.78	6.70	7.39	8.32

- Collaborative, big science
- Stimulus of national research assessment exercise

# Multi-author Group

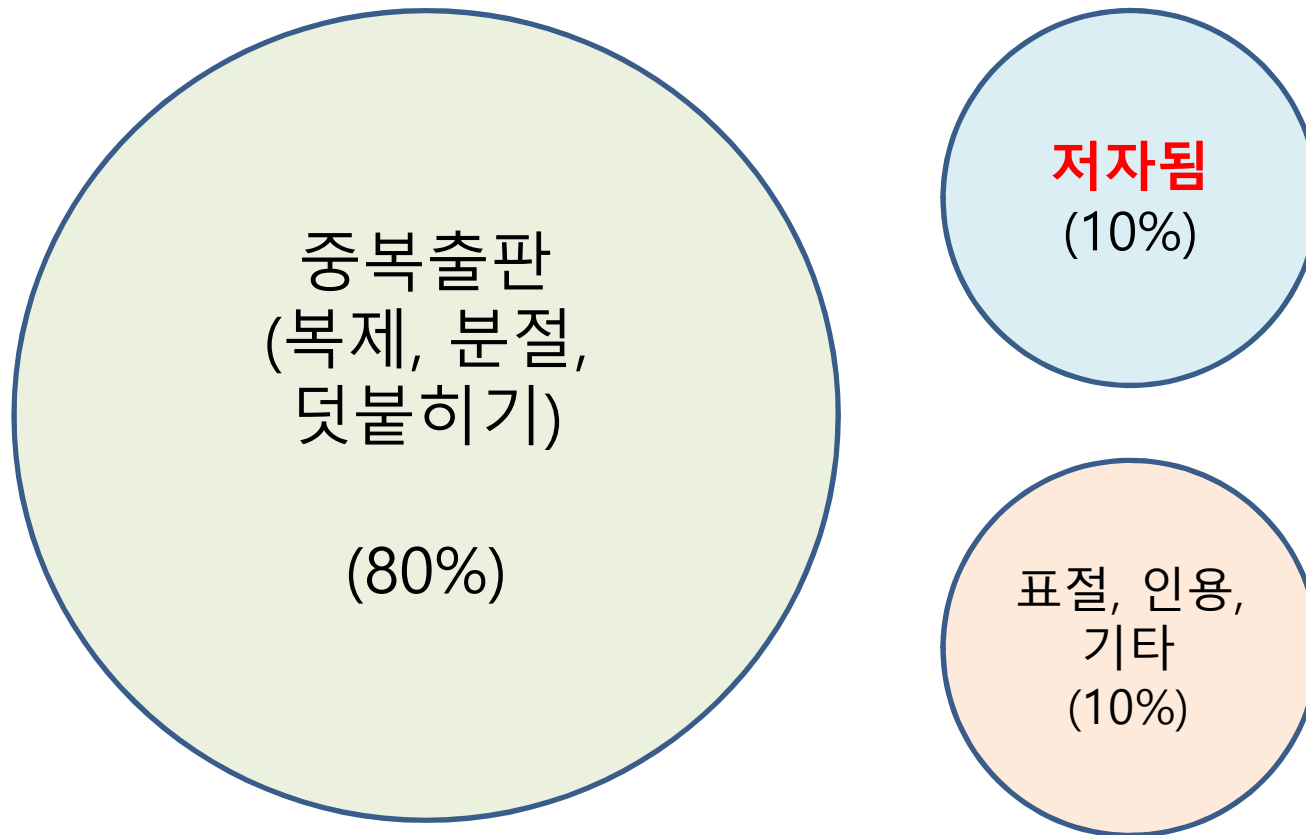
- in large multi-author group, the group should decide who will be an author before the work is started and confirm who is an author before submitting the manuscript for publication.
- Some large multi-author groups designate authorship by a group name, with or without the names of individuals.
- When submitting a manuscript authored by a group, the corresponding author should specify the group name if one exists, and clearly identify the group members who can take credit and responsibility for the work as authors. The byline of the article identifies who is directly responsible for the manuscript, and MEDLINE lists as authors whichever names appear on the byline. If the byline includes a group name, MEDLINE will list the names of individual group members who are authors or who are collaborators, sometimes called non-author contributors, if there is a note associated with the byline clearly stating that the individual names are elsewhere in the paper and whether those names are authors or collaborators.



# 다기관 연구에서 저자선정

시기	권고 및 원칙
연구 시작 전	<ul style="list-style-type: none"><li>•저자 정하기</li><li>•저작의 책임 분담</li><li>•참여한 연구원, 통계학자, 프로그래머 등에서 저자됨 관심 유무를 확인</li></ul>
원고 작성 후 투고 전	<ul style="list-style-type: none"><li>•기여자 목록을 만들고 기여도 결정</li><li>•저자 순서 정하기</li><li>•Guarantor정하기</li><li>•책임저자 정하기</li><li>•이해관계 천명</li></ul>

# 의편협 출판윤리위원회에서 받는 출판윤리관련 질문



# 저자관련으로 접수된 흔한 질문 들

- 저자의 순서
- 저자에서 제외된 문제
- 투고 중, 심사 중, 출판 후 저자 수정 문제
- 학회지의 원저논문의 저자 수는 어느 정도로 제한을 두는 것이 올바른지에 대해서?
- 다기관 공동연구에서 저자 수 문제
- 다년간 지속연구에서 저자 문제
- 제1저자, 책임저자의 수에 관해서
- 교과서 재판에서 저자됨: 원 저자와 신 저자
- 특허권 관련 논문
- 가이드라인 공동게재 시 저자 문제

# Type and Description of authorship abuse

Type of Authorship Abuse	Description
Coercion authorship	Use of intimidation tactics to gain authorship. Arguably a serious form of scientific misconduct
Honorary, guest, or gift authorship	Authorship awarded out of respect or friendship, in an attempt to curry favor and/or to give a paper a greater sense of legitimacy.
Mutual support authorship	Agreement by two or more investigators to place their names on each other's papers to give the appearance of higher productivity.
Duplication authorship	Publication of the same work in multiple journals.
Ghost authorship	Papers written by individuals who are not included as authors or acknowledged.
Denial of authorship	Publication of work carried out by others without providing them credit for their work with authorship or formal acknowledgment. A form of plagiarism and therefore scientific misconduct.

## Honorary and ghost authorship in high impact biomedical journals: a cross sectional survey

Joseph S Wislar, Annette Flanagan, Phil B Fontanarosa, Catherine D DeAngelis

- Annals of Internal Medicine, New England Journal of Medicine, JAMA, Lancet, Nature Medicine, PLoS Medicine in 2008
- Self reports with ICMJE criteria (n=896), responded 70.3%
- Honorary authorship (19.3%, 1996 – 17.6%, 2008)
- Ghost authorship (11.5%, 1996 – 7.9%, 2008;  $p < 0.023$ )

Prevalence of honorary and ghost authors in articles published in six general medical journals in 2008, by article type

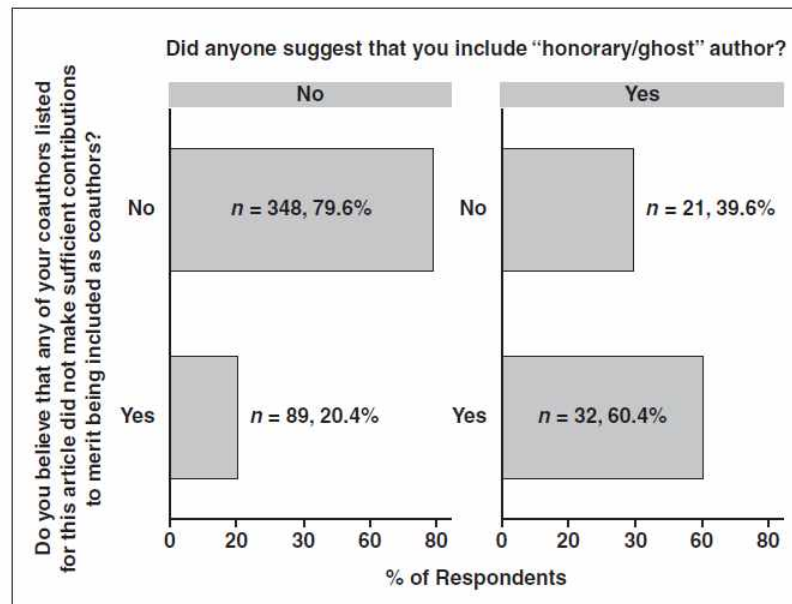
Article type	Honorary authors		Ghost authors	
	No of articles	% (95% CI) of articles	No of articles	% (95% CI) of articles
Research	55/220	25.0 (19.7 to 31.1)	27/226	11.9 (8.3 to 16.9)
Reviews	18/120	15.0 (9.6 to 22.6)	8/134	6.0 (2.9 to 11.5)
Editorials	23/205	11.2 (7.5 to 16.3)	14/262	5.3 (3.1 to 8.8)
Total	96/545	17.6 (14.6 to 21.0)	49/622	7.9 (6.0 to 10.3)

\*Honorary author analyses based on 545 articles with usable data; ghost author analyses based on 622 articles with usable data.

- Requiring author contribution

# Prevalence of honorary coauthorship in AJR

- 1333 original research corresponding author, AJR, 2003-2010
- Web-based self survey
- Results
  - Responded 490 (36.8%)
  - Knew ICMJE guideline (81.4%)
  - Not sufficient contribution (24.7%)
  - Factors: work environment



# Guest Authorship and Ghostwriting in Publications Related to Rofecoxib

## A Case Study of Industry Documents From Rofecoxib Litigation

Joseph S. Ross, MD, MHS

Kevin P. Hill, MD, MHS

David S. Egilman, MD, MPH

Harlan M. Krumholz, MD, SM

**A**UTHORSHIP IN BIOMEDICAL publication provides recognition while establishing accountability and responsibility. Guest authorship has been defined as the designation of an individual who does not meet authorship criteria as an author.<sup>1,2</sup> It was identified in 16% of research articles, 26% of review articles, and 21% of editorials in a survey of 6 peer-reviewed medical journals,<sup>3</sup> in addition to 41% of Cochrane reviews.<sup>4</sup> Ghostwriting has been defined as the failure to designate an individual (as an author) who has made a substantial contribution to the research or writing of a manuscript.<sup>1</sup> Ghostwriting was demonstrated in 13% of research articles, 10% of review articles, 6% of editorials, and 11% of Cochrane reviews<sup>3,4</sup>; other research has found similar rates.<sup>5</sup>

Two studies have characterized the practices of guest authorship and ghostwriting using industry documents, one examining practices related to gabapentin by Pfizer Inc and Parke-Davis, Division of Warner-Lambert Company,<sup>6</sup> the other sertraline by Pfizer Inc.<sup>7</sup> However, these studies were focused on

**Context** Authorship in biomedical publication provides recognition and establishes accountability and responsibility. Recent litigation related to rofecoxib provided a unique opportunity to examine guest authorship and ghostwriting, practices that have been suspected in biomedical publication but for which there is little documentation.

**Objective** To characterize different types and the extent of guest authorship and ghostwriting in 1 case study.

**Data Sources** Court documents originally obtained during litigation related to rofecoxib against Merck & Co Inc. Documents were created predominantly between 1996 and 2004. In addition, publicly available articles related to rofecoxib identified via MEDLINE.

**Data Extraction** All documents were reviewed by one author, with selected review by coauthors, using an iterative process of review, discussion, and rereview of documents to identify information related to guest authorship or ghostwriting.

**Data Synthesis** Approximately 250 documents were relevant to our review. For the publication of clinical trials, documents were found describing Merck employees working either independently or in collaboration with medical publishing companies to prepare manuscripts and subsequently recruiting external, academically affiliated investigators to be authors. Recruited authors were frequently placed in the first and second positions of the authorship list. For the publication of scientific review papers, documents were found describing Merck marketing employees developing plans for manuscripts, contracting with medical publishing companies to ghostwrite manuscripts, and recruiting external, academically affiliated investigators to be authors. Recruited authors were commonly the sole author on the manuscript and offered honoraria for their participation. Among 96 relevant published articles, we found that 92% (22 of 24) of clinical trial articles published a disclosure of Merck's financial support, but only 50% (36 of 72) of review articles published either a disclosure of Merck sponsorship or a disclosure of whether the author had received any financial compensation from the company.

**Conclusions** This case-study review of industry documents demonstrates that clinical trial manuscripts related to rofecoxib were authored by sponsor employees but often attributed first authorship to academically affiliated investigators who did not always disclose industry financial support. Review manuscripts were often prepared by unacknowledged authors and subsequently attributed authorship to academically affiliated investigators who often did not disclose industry financial support.

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www.jama.com

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# 학술지에 따라 차별화된 규정

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EDITORIALS

## Box 1 ICJME criteria for authorship

Substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data

Helped draft the article or revise it critically for important intellectual content

Final approval of the version to be published

## Box 2 *Neurology's* authorship policy

Criteria for qualification (intellectual contributions):

- Design or conceptualisation of the study
- Or analysis or interpretation of the data
- Or drafting or revising the manuscript

All authors acknowledge all versions

Those who do not qualify as authors are listed as co-investigators or contributors

Any paid medical writer who wrote the first draft or responded to the reviewers' comments must be included in the author byline

All authors must complete and sign authorship forms with roles and contributions, disclosure forms listing all sources of potential bias, and copyright transfer agreements; author contributions and disclosures are published in the journal



## 저자됨 관련 분쟁을 줄이는 방법

- 각 학술지, 기관마다 형식화된 저자됨 기준이 있을 것
- 기관마다 계층을 망라한 신뢰할 수 있는 “저자됨 분쟁조정위”를 구성할 것
- 연구기관은 저자됨 분쟁에서 결정을 내리는 것이 아니라 전문가적인 견지에서 새로운 시각을 부여.
- “저자됨 분쟁조정위”는 저자됨을 위반한 근거가 있으면 권고안을 낼 수 있는 권위가 있을 것
- 강압적 저자됨, 저자됨의 부정은 과학적 부정으로 처리하고 기관내 기구의 추가 조사와 조치를 권유
- 투고시 모든 서류에 저자됨 확인서류를 비치, 역할과 서명날인하게 할 것
- 논문에 공동저자의 역할을 명기할 것, 공동저자의 역할을 위조하는 경우도 과학정 부정행위로 간주할 것
- 조금이라도 저자됨에 이상이 있으면 최선을 다할 것, 연구 시작전 저자됨에 대한 논의를 하고 연구 중에도 지속적인 논의를 할 것

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# 의학논문 출판윤리 가이드라인

/ 제2판

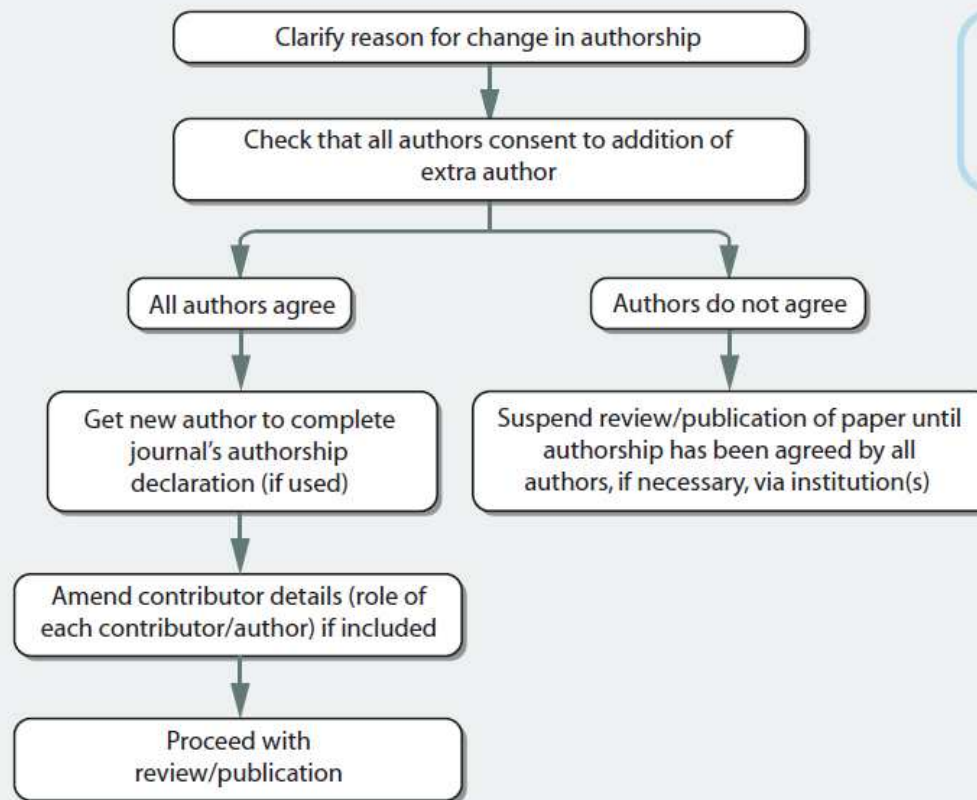
Good Publication  
Practice Guidelines  
for Medical Journals

2<sup>nd</sup> Edition

대한의학학술지편집인협회  
Korean Association of Medical Journal Editors, KAMJE

### Changes in authorship

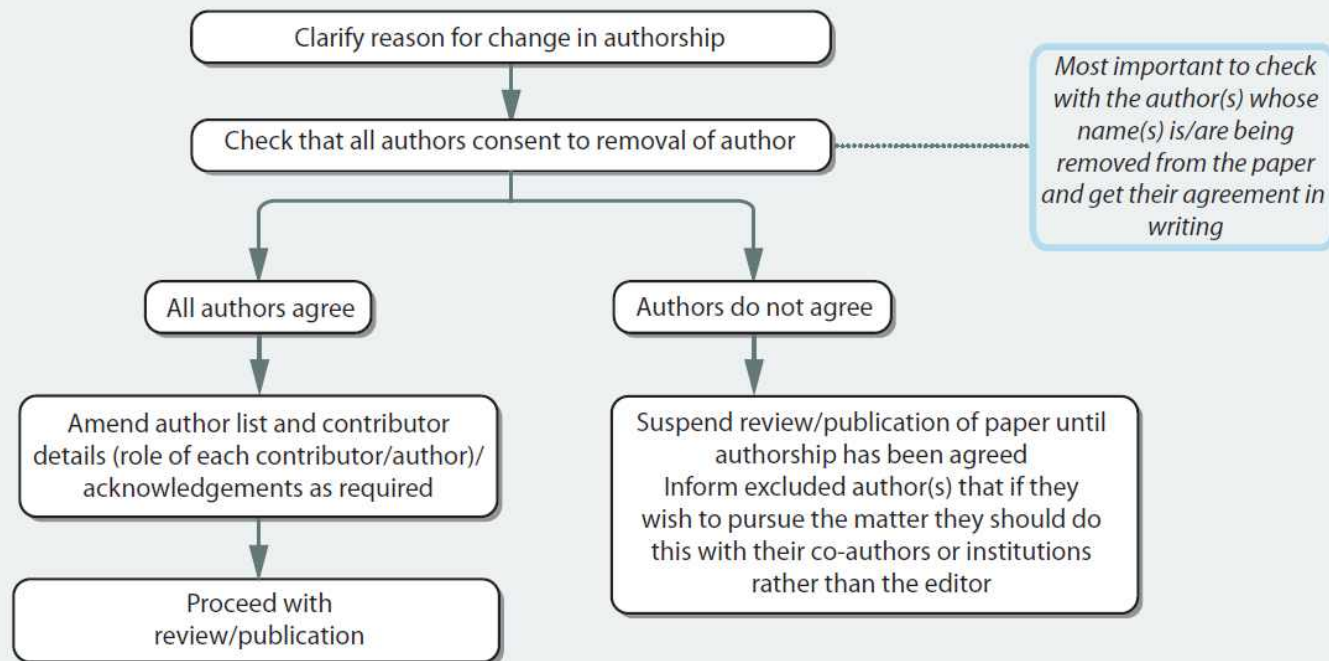
(a) Corresponding author requests addition of extra author before publication



*Note: major changes in response to reviewer comments, e.g. adding new data might justify the inclusion of a new author*

### Changes in authorship

(b) Corresponding author requests removal of author before publication



Changes in authorship

(d) Request for removal of author after publication

