The University is committed to maintaining the highest standards of ethics and integrity in its research, and places ethics and integrity at the heart of its decision making. As a component of this commitment, the University requires that all research projects undertaken under the auspices of the University observe a commitment to good research conduct with regard to authorship practices.

Background

Authorship confers credit and has important academic, social, and financial implications. Authorship also implies responsibility and accountability for published work. Listing the authors tells readers who did the work and should ensure that the right people get the credit - and take responsibility - for the research.

The guidance from the International Committee of Medical Journal Editors (ICMJE) states that authorship credit should be based only on:

1) substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;
2) drafting the article or revising it critically for important intellectual content; and
3) final approval of the version to be published
4) 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.

Correct authorship of research publications matters because authorship confers credit, carries responsibility, and readers should know who has done the research. Denying authorship to somebody who deserves it denies recognition and academic credit since publications are used to assess academic productivity. Including an undeserving author is unfair since this person gets credit for work they have not done. Omitting a deserving author from an author also list misleads readers (including journal editors) and may mask conflicts of interest.

1 International Committee of Medical Journal Editors: Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals (2017)
2 UK Research Integrity Office: Good practice in research – authorship (2017)
It is important that researchers do not simply following local customs and practice, but instead strive to meet the principles outlined below. These principles have been taken from guidance produced by the Committee on Publication Ethics, International Committee of Medical Journal Editors, and the UK Research Integrity Office; with the aim of helping researchers to minimise the likelihood of authorship problems.

**Principles**

*Start discussing authorship when you plan your research*

Raise the subject of authorship right at the start of planning your research, ensuring that you gather the views of all team members.

*Decide authorship before you start each article*

Many authorship difficulties arise because of misplaced expectations and poor communication. So it is important that, before you start to write up your project, you confirm in writing who will be doing what - and by when. Every team should have a written authorship agreement before the article is written, as this will reduce the chances of disputes arising at a late stage.

Continue to discuss ideas about authorship as the research evolves, especially if new people become involved. Keep a written record of your decisions.

*Acknowledgements*

All others who contribute to the work - but who do not qualify for authorship - should be named in the ‘Acknowledgments’ section; and what they did should be described.

Because acknowledgment may imply endorsement by the acknowledged individuals of a study’s data and conclusions, it is best practice to for the Corresponding Author to obtain written permission to be acknowledged from all acknowledged individuals.

*Contributionship*

Authors should state their contribution to the project by providing a description of what each author contributed.
Role of the Corresponding Author

The Corresponding Author is the individual who takes primary responsibility for communication with the journal during the manuscript submission, peer review, and publication process; and typically ensures that all the journal’s administrative requirements, such as providing details of authorship, ethics committee approval, clinical trial registration documentation, and gathering conflict of interest forms and statements, are properly completed.

Research teams should take the views of all authors at an early stage, and decide in advance who will be the Corresponding Author. Ideally, choosing somebody whose contact details are not likely to change in the near future.

Ghost authorship or denial of authorship

Ghost authorship is when somebody who has made a substantial contribution to a research project or publication, and who therefore meets accepted authorship criteria for the discipline, is omitted from an author list or is denied the opportunity to contribute to a publication.

All persons designated as authors should qualify for authorship, and all those who qualify should be listed.

Guest, gift or honorary authorship

Gift authorship is when somebody who has not contributed substantially to a research project or publication, and does not meet accepted authorship criteria for the discipline, is listed as an author.

This could occur in situations where a senior member who has not contributed is added to boost the impact; or in situations where colleagues agree to add each other on all articles to boost publication rates.

All persons designated as authors should qualify for authorship, and all those who qualify should be listed.
Order of the authors

Although conventions vary between disciplines (e.g. some use alphabetical listing), and there is considerable variation in conventions about last authors, the credit or reward attached to different positions in the author list often vary.

The order of authorship, should be a joint decision of the co-authors. Authors should prepare a note to explain the order in which authors are listed.

Conflicts of interest

A conflict of interest exists when professional judgment concerning a primary interest (such as patients’ welfare or the validity of research) may be influenced by a secondary interest (such as financial gain). Perceptions of conflict of interest are as important as actual conflicts of interest.

Articles should be published with statements or supporting documents stating:

- Authors’ conflicts of interest; and
- Sources of support for the work

Interdisciplinary collaborations

Difficulties may arise in interdisciplinary projects when it is unclear which conventions should apply. In such circumstances, researchers should follow the requirements of the target journal or publisher. It is therefore highly desirable to include an agreement about the publication strategy in the initial planning stages of such projects.

What should the correct author affiliation be for a researcher when they move institutions before a paper is accepted for publication by a journal?

Unless the journal in question gives specific guidance on this, the affiliation that should be given is where the work was done, irrelevant of the current institution. The new institution is noted (often in a footnote; but see the requirements of the journal in question) as the address / contact details of the author will have changed, but no further changes are made after the paper has been accepted.
Responsibilities

Researchers should:

- Discuss authorship at the earliest possible stage of the research
- Obtain agreement from the co-authors for any authorship matters
- Include all individuals who contributed to the research and who meet recognised criteria for authorship
- List individual contributions to the research, acknowledging those who contributed but don’t meet authorship criteria
- Omit any individuals who did not contribute to the research and who do not meet recognised criteria for authorship
- Regularly review the authorship agreements as the research progresses
- Document the decisions made about authorship. In many cases, informal written documentation – for example, in an email - is sufficient

Procedure

Disputes concerning authorship may come to light through a variety of means: informal channels, formal complaints to Supervisors or Managers, or allegations of research misconduct. It is recognised that disputes can occur, and these are often questions of interpretation, such as whether someone’s contribution was ‘substantial’ or not.

Raising concerns over authorship practices

It is appreciated that some researchers may feel unable to challenge authorship requests or decisions by more senior colleagues, or may fear the consequences if they do. It is important for researchers to know that they are able to question authorship decisions they regard as unfair or coercive without repercussions. This might be done confidentially through seeking guidance from the Head of Department or Head of School, or through the Research Ethics and Research Integrity team (integrity@liverpool.ac.uk); all of whom could give advice on what systems existed to consider the researcher’s concerns and what actions s/he might take.

Pre-publication

Where authorship concerns arise at the pre-publication stage, and where it is appropriate to do so, it is best practice to attempt to address the concerns with the research team before escalating the concerns.
When raising concerns amongst the research team, it can be made clear to the Corresponding Author that you are not disputing his or her right to make such a decision, but demonstrate dispassionately why you do not agree with the decision, explaining the fact that the suggested author list contravenes best practice. Support this with evidence, such as laboratory notebooks, manuscripts, the ICMJE statement, instructions to Authors etc.

If, following attempts to address the issues through the Corresponding Author, concerns with the authorship practices are unresolved, it would be appropriate to refer the matter to either the Head of Departmental or School; or the Research Ethics and Research Integrity team (integrity@liverpool.ac.uk). Where possible, it should be explained to the Corresponding Author that the concerns with the authorship decisions remain, and that you are intending to escalate the concerns for the purposes of obtaining a resolution.

Since authorship disputes often reflect breakdowns in relationships between researchers, or differences in power relations (e.g. between senior and junior team members), the Head of Department or School, or the Research Ethics and Research Integrity team will appoint an independent arbitrator to resolve these concerns. The arbitrator will be somebody who is familiar with the research field but who has had no involvement with the project in question and has no conflicts of interest in relation to the individuals or institutions involved. All parties in the dispute will agree on the suitability of the arbitrator.

When allegations are of a serious nature, or the arbitration process has been proven unsuccessful, then the research misconduct process will be initiated. Equally, an arbitrator may conclude that the matter cannot be resolved through arbitration and that the institution should initiate a misconduct investigation.

Post-publication

Authorship problems sometimes only surface after publication. If you have concerns about the authorship practices on a published paper, you should also contact the Research Ethics and Research Integrity team (integrity@liverpool.ac.uk) to explain the concerns.

The Research Ethics and Research Integrity team will contact the Corresponding Author and the journal where the work was published regardless of whether the cause was honest error, a disagreement between researchers, or potential research misconduct.
Some changes to a published author list do not necessarily require retraction of a publication but can generally be achieved through a correction. However, if the wrongful authorship constitutes potential research misconduct, or if there are other problems with the publication, then retraction may be necessary.

Contacts

This procedure will be regularly reviewed in the light of experience and revisions to codes of practice laid down by any relevant professional or learned society. Any comments should be sent to integrity@liverpool.ac.uk.